THE STATE OF PAKISTAN'S ECONOMY

2020-21

Second Quarterly Report of the Board of Directors

State Bank of Pakistan

SBP BOARD OF DIRECTORS

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LETTER OF TRANSMITTAL

State Bank of Pakistan
Karachi.
June 03, 2021

Dear Mr. Chairman,

In terms of Section 9A(2) of the State Bank of Pakistan Act, 1956, the Second Quarterly Report of the Board of Directors of the State Bank of Pakistan on the State of the Economy for the year 2020-2021 is hereby enclosed for submission to the Majlis-e-Shoora (Parliament).

With warm regards,

Yours sincerely,

(Dr. Reza Baqir)
Governor
Chairman Board of Directors

Muhammad Sadiq Sanjrani
Chairman
Senate
Islamabad

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(Dr. Reza Baqir)
Governor
Chairman Board of Directors

Asad Qaiser
Speaker
National Assembly
Islamabad

Acknowledgement

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3.	Inflation and Monetary Policy	Sajawal Khan; Fatima Khaliq; Junaid Kamal; Umar Mashhood
4.	Fiscal Policy and Public Debt	Asma Khalid; Syed Zulqernain Hussain; Hira Ghaffar; Muhammad Ijlal Khan; Romail Ahmad Khan
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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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1 Overview

The economic recovery that became visible in the first quarter of FY21, strengthened in the second quarter (**Table 1.1**). Business activities continued in a mostly undisrupted manner, as the country navigated the second wave of Covid-19 without needing to impose the strict mobility restrictions of early 2020. In particular, industrial output gained momentum as the year progressed and estimates of major *Kharif* crops – with the notable exception of cotton –exceeded their targets. The pick-up in economic activity was also reflected in services sector indicators and a steady improvement in business confidence. At the same time, headline inflation moderated during the period.

These favorable economic outcomes were facilitated by the continuation of the liquidity support measures introduced after the Covid-19 outbreak, as well as by the introduction of supportive sector-specific policies in H1-FY21. On the monetary side, interest rates were left unchanged at low levels, which helped contain debt financing and debt servicing costs for firms and households. At the same time, multiple refinance schemes were also introduced by the SBP to support critical activities such as payroll payments, fixed investment, and balancing, modernization and replacement (BMR), while regulatory interventions allowed restructuring of loans and deferment of principal repayments. These measures helped ease liquidity constraints of firms and households and prevented insolvencies. Furthermore, an exclusive financing facility was provided for the uplifting of the healthcare sector. Collectively, the estimated cash flow impact of these schemes for businesses and households was equivalent to nearly 5 percent of GDP (**Figure 1.1**).

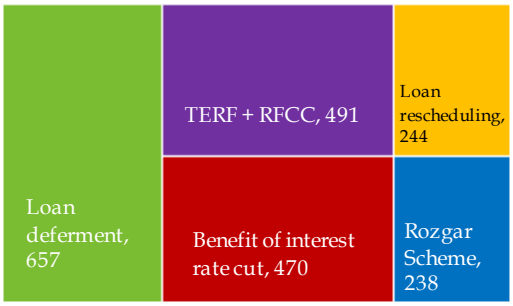
Selected Economic Indicators **Table 1.1**

	FY20		FY21		
	Q2	H1	Q1	Q2	H1
Growth rate (percent)					
LSM [a]	0.1	-2.7	5.0	11.0	8.2
National CPI [a]	12.1	11.1	8.8	8.4	8.6
Private sector credit [b]	3.5	3.2	-1.1	6.2	5.0
Money supply (M2) [b]	4.5	5.2	1.2	4.3	5.6
Exports [b]	7.4	4.6	-10.7	0.7	-4.8
Imports [b]	-11.5	-15.2	-5.7	4.4	-0.5
Ex. rate (+app/-dep %) [b]	1.0	3.3	1.4	3.7	5.1
FBR tax revenue [c]	2.7	5.0	2.2	2.6	4.9
Policy rate (end period) [b]	13.25	13.25	7.0	7.0	7.0
billion US$					
Change in SBP reserves [b]	3.4	4.1	0.02	1.3	1.3
Remittances [b]	5.9	11.4	7.1	7.1	14.2
FDI in Pakistan [b]	0.8	1.4	0.5	0.4	0.9
FX loans (net) [b]	4.2	5.3	0.02	1.5	1.5
percent of GDP					
Fiscal balance [d]	-1.7	-2.4	-1.1	-1.4	-2.5
Primary balance [d]	0.002	0.7	0.6	0.2	0.7
Current acct. balance [b]	-2.6	-2.6	1.3	0.5	0.9

Sources: [a] Pakistan Bureau of Statistics; [b] State Bank of Pakistan; [c] Federal Board of Revenue and [d] Ministry of Finance

Liquidity Impact of SBP's Major Relief Measures (as on Mar 15, 2021)* **Figure 1.1**

Rs billion



* The overall size of SBP support is Rs 2,101 billion.
TERF: Temporary Economic Refinance Facility
RFCC: Refinance Facility for Combating Covid-19
Source: State Bank of Pakistan

In addition, exports and construction sectors were also facilitated. Exporters were provided support by expanding the eligibility criteria under the existing Export Finance Scheme (EFS), expediting the disbursement of refunds, and allowing them additional time to bring back export receipts. Meanwhile, mandatory targets were set by the SBP for banks to increase their housing and construction loans to 5 percent of their overall private sector credit portfolio by December 2021.

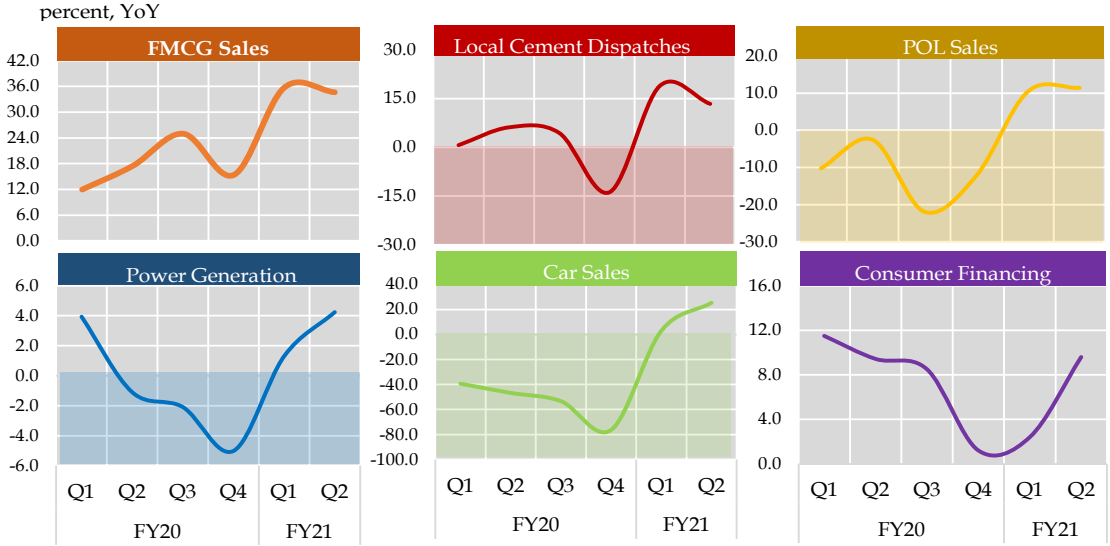
Furthermore, on the regulatory side, efforts were aimed at boosting the healthcare sector by easing the import procedures to facilitate timely imports of needed medical equipment and supplies. Simultaneously, macroprudential regulations, including those related to the capital conservation buffer, were adjusted to allow banks to meet the urgent credit requirements of firms and individuals.

On the fiscal side, despite the overall consolidation, targeted support was visible, in the form of tax concessions for the construction industry; disbursement of pending refunds; and a broader policy effort to lower input costs for businesses and farmers through concessions on energy prices, tax exemptions on imported raw materials, and subsidies and higher minimum support prices. Direct cash support for the economically vulnerable segments also continued for part of the period under review, to sustain households' consumption patterns.

This coordinated policy support was instrumental in enabling firms to meet the growing demand for industrial raw materials and consumer goods after the gradual easing in mobility restrictions from the start of FY21. Sales of products such as cement, petroleum items and fast-moving consumer goods (FMCGs), as well as power generation, all recorded higher YoY growth during H1-

Growth in Demand Indicators **Figure 1.2**

percent, YoY



* FMCG Sales are based on the financials of 19 listed companies.

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

FY21, as economic activities resumed (**Figure 1.2**). At the same time, external demand for major products exported by Pakistan – especially high value-added textile items, non-basmati rice, cement and pharmaceutical products – also recovered, leading to a significant uptick in export volumes of these industries. With favorable domestic and external demand-side dynamics, local firms' need for imported inputs, such as iron and steel, chemicals, plastic, industrial fuels, and cotton, picked up as well.

To finance this growing activity, firms' credit requirements also increased, especially in the second quarter. The overall credit to the private sector nearly doubled in H1-FY21 on a YoY basis, with disbursements in Q2 more than offsetting the retirements in the first quarter. In this regard, the SBP's concessionary refinance schemes played a major role, as the offtake under these schemes was substantially higher than last year. The textile and rice industries utilized the Export Finance Scheme (EFS) for most of their short-term credit needs. As for the fixed investment loans, multiple industries utilized the Long-Term Finance Facility (LTFF), including the Temporary Economic Relief Facility (TERF), to pursue capacity expansions and BMR activities. Meanwhile, consumer financing also increased over last year. Apart from a sizable uptick in personal and car financing, there was also renewed interest in housing loans.

Importantly, the pick-up in economic activity and the facilitative policies did not result in a widening in the macroeconomic imbalances. First, the country's external account improved significantly in H1-FY21, as the 24.9 percent surge in remittances and contractions in the services and primary income deficits were sufficient to offset the 4.4 percent widening in the trade gap. As a result, the current account was in surplus in the first five consecutive months in the period, with the cumulative surplus in H1-FY21 reaching US$ 1.2 billion. On the external financing side, inflows were available from multilateral, bilateral and commercial sources, whereas the G-20's Debt Service Suspension Initiative (DSSI) helped ease the repayment obligations. Thus, the current account surpluses, along with the available FX inflows, led to a US$ 1.3 billion increase in the SBP's reserves during H1-FY21, and a 5.1 percent appreciation in the PKR against the US Dollar during the period.

Second, the fiscal account also showed signs of improvement, as tax revenues rose relative to last year and the economy started to gain momentum. Tax collections increased from import-dependent sectors, such as steel, POL, edible oil, tea and automobiles. Import volumes and prices (in PKR terms) of all these items were greater than last year, and contributed to the uptick in collections during the period. The contribution to overall revenues from direct taxes also remained higher than last year. The higher revenues from these sources more than offset the impact of concessions on customs duties on many raw material imports. Similarly, on the expenditure side, non-interest expenses declined in both quarters, including on development, defence, pensions and the running of civil government. As a result, the primary balance remained in surplus in both quarters of FY21, while the overall fiscal deficit was almost unchanged at last year's level in terms of percent of GDP.

Meanwhile, on the inflation front, the overall national CPI inflation fell to 8.6 percent during H1-FY21 from 11.1 percent in the same period last year. This outcome largely

reflected the softening in underlying price pressures – as captured by core inflation – across both urban and rural areas. The weakening in core inflation was enabled by the relative stability in the exchange rate, reduction in energy prices during the period and the presence of spare capacity; all these factors kept firms' input costs from rising markedly.

However, despite these improvements in the overall macroeconomic indicators, a few trends will need to be monitored. First, while the national CPI inflation for FY21 is still lower than last year and within the SBP's projection of 7-9 percent, the role of supply-side challenges across multiple agriculture commodities, especially food items, has become more prominent in driving the recent inflationary outcomes. For instance, while the headline inflation across urban and rural areas was 7.3 percent and 10.6 percent, respectively, in H1-FY21, inflation in the food and non-alcoholic beverages segment was much higher (14.0 percent and 16.2 percent, respectively). As such, there is a need to implement effective supply management and early warning systems, to ensure the availability of accurate and timely data on stocks of key commodities, and to monitor prices at the retail level. The government should also redress the hurdles that cause delays in the import of essential commodities, and ensure better coordination between federal and provincial food departments.[1]

Second, debt servicing continues to be a challenge, as revenue generation in the country is currently insufficient to finance the bulk of the mark-up payments. During H1-FY21, nearly 23 percent of the interest payments was financed via the accumulated primary surplus; rest was financed via additional debt accumulation. This indicates the need to expand the revenue base, notably by accelerating the ongoing documentation drive and plugging leakages in tax collection.

And third, import pressures are building up, in the wake of the pickup in economic activity and rising global commodity prices. Furthermore, shortfall of agricultural commodities in the domestic market, such as cotton, sugar and wheat, have necessitated their imports and pushed up overall import payments. So far, it is the surge in workers' remittances that has been offsetting the impact of these payments, as export receipts are still lower than last year.

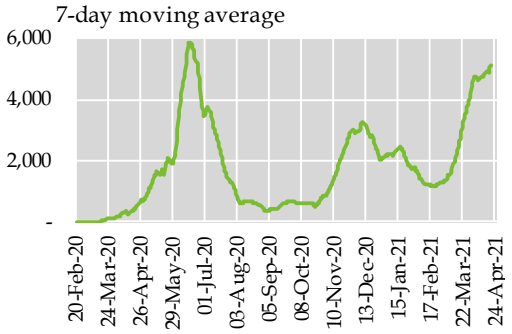
Economic Outlook[2]

With half of FY21 now passed, the recovery in economic activity is becoming more visible. As such, it is likely that real GDP growth will exceed the target of 2.1 percent, and the SBP has revised its real GDP forecast for FY21 upwards, to 2.0-3.0 percent, from the earlier range of 1.5-2.0 percent provided in the First Quarterly Report of FY21 (**Table 1.2**). This revision mainly incorporates the continuation of recent trends in economic activities, including manufacturing; effective control of Covid's second wave (**Figure 1.3**); positive base effect from the Covid-caused slump in LSM in Q4 of FY20; and better prospects for wheat output. However, as

[1] For details, see SBP's Staff Note 02/20, titled Price Stabilization Mechanism in Pakistan's Food Market: Exploring Issues and Potential Challenges (April 2020).
[2] The macroeconomic analysis and projections in this section, including those in **Table 1.2**, were current as of April 30, 2021, when the Board of Directors of the State Bank of Pakistan had accorded approval to the State of the Economy Report for the Second Quarter of FY21.

before, the downside risk to the forecast primarily stems from a resurgence in Covid-19 cases with the onset of the third wave, which might necessitate the reimposition of mobility restrictions.

Trend in Daily Covid-19 Cases Detected in Pakistan* **Figure 1.3**



*As of April 27, 2021
Source: World Health Organization

The SBP's full-year CPI inflation projection is unchanged, in the range of 7-9 percent. The main upside risk to this assessment would come from a substantial increase in international commodity prices. Deepening in any domestic supply-side challenges for food items or utility tariff hikes, may also lead to higher inflation outturns.

The current account deficit is now projected to be in the range of 0-1.0 percent of GDP, against the earlier projected range of 0.5-1.5 percent shared in the First Quarterly Report of FY21. Based on the recent trend in forex receipts and payments, some factors have changed the projections for remittances and imports. The forecast for remittances has been increased by around 10 percent, based on two main factors. First is the continued surge in inflows across all the major corridors, despite initial apprehensions that inflows might subside as migrants return to Pakistan. And second is the welcome turnaround in the trend of Pakistanis going abroad for work: work-related emigration

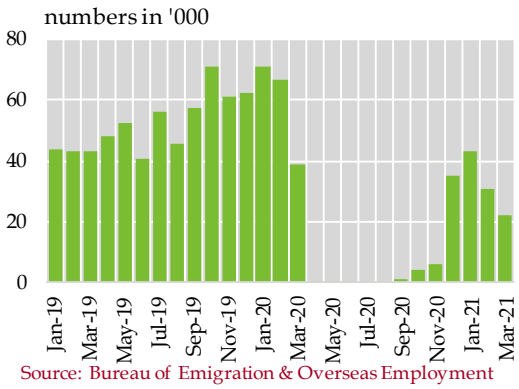
Key Macroeconomic Targets and Projections **Table 1.2**

	FY20	FY21	
		Target [1]	SBP Projections [2]
	percent growth		
Real GDP	-0.4	2.1	2.0 -3.0
CPI (average)	10.7	6.5	7.0 - 9.0
	billion US Dollars		
Remittances	23.1	21.5	26.5 - 27.5
Exports (fob)	22.5	22.7	23.0 - 24.0
Imports (fob)	43.6	42.4	47.0 – 48.0
	percent of GDP		
Fiscal deficit	8.1	7.0	6.5 - 7.5
Current a/c deficit	1.7	1.6	0.0 - 1.0

Source: [1] Ministry of Finance; Planning Commission; [2] SBP

from Pakistan rebounded in December 2020, and the trend has continued since then (**Figure 1.4**). Moreover, the services account is projected to improve further, amid deeper drop in travel services imports after the reimposition of mobility restrictions in some advanced economies in response to the third wave of Covid-19.

Trend in No. of Pakistanis Going Abroad for Work **Figure 1.4**



Source: Bureau of Emigration & Overseas Employment

At the same time, the SBP's projections for import payments have increased by roughly 9 percent from the projection provided in the First Quarterly Report of FY21. This upward revision in the forecast mostly reflects the

momentum in economic activity, additional imports of wheat and sugar, and the increasing trend in global commodity prices, especially crude oil. Arab Light prices have risen sharply from their end-June 2020 levels and are now close to their pre-Covid level.[3] With import volumes of all energy products – crude oil, POL products, LNG and coal – already higher than last year, rising oil prices from December 2020 onwards have been contributing to the rise in import payments. A positive development in the external sector is the growing interest of overseas Pakistanis in the newly launched Roshan Digital Accounts (RDA). An SBP initiative to provide a completely digital banking solution to non-resident Pakistanis, the RDAs allow remote customer on-boarding and provide access to a wide range of banking services in Pakistan as well as the opportunity to invest in special government bonds (Naya Pakistan Certificates), the stock market, and real estate. These accounts also have a simplified tax treatment and are fully repatriable. Within the first seven months of their launch, inflows into the RDAs have surpassed US$ 1.0 billion.

In the fiscal sector, the SBP's projection for the budget deficit is unchanged, reflecting balanced risks. On the downside, the receipt of the Gas Infrastructure Development Cess (GIDC) payments after the apex court's decision would improve the overall fiscal balance.[4] Meanwhile, the upside risk stems from some unbudgeted expenses that the government could likely incur in the remaining part of FY21. The largest of these is the government's recent MoUs with multiple independent power producers (IPPs), which may entail a sizable upfront payment. While clearing the outstanding dues of IPPs is a step in the right direction, holistic and deep-rooted reforms are also needed in the country's fragmented energy sector. In this regard, this report includes a special section dedicated to the LNG market dynamics in Pakistan, which discusses in detail how the current regulatory and operational framework is leading to sub-optimal outcomes in terms of planning, purchasing and supplying the imported commodity. In a positive development, the government has recently allowed private sector importers to utilize the excess capacity of the existing terminals. Greater private sector involvement would help accelerate the adoption of the cheaper fuel in the economy and smoothen supply-chain dynamics by streamlining procurement processes and enabling market-based price discovery.

To sum up, the macroeconomic outlook for the current fiscal year has improved, after taking into account the developments during the first two quarters of FY21. Further impetus to the current economic momentum could come from a successful rollout of vaccines in the coming months. Business confidence has also been steadily improving, as indicated by the continuation of the upward trajectory in positive sentiments across four consecutive waves of the IBA-SBP survey till March 2021. Finally, the resumption of the IMF program is expected to unlock additional external financing and also support the country's progress on the structural reform agenda.

[3] Arab Light prices have increased 75.2 percent between end-June 2020 (US$ 35.2 per barrel) and April 7, 2021 (US$ 61.7 per barrel).

[4] In its decision in November 2020, the Supreme Court asked the government to recover the outstanding collections under GIDC from industrial and commercial entities over a period of 60 months, from the earlier allowed timeframe of 24 months.

2 Real Sector

An accommodative monetary policy environment, targeted fiscal support and the adoption of smart lockdowns to contain the Covid-19 crisis led to a pick-up in economic activity during H1-FY21. The nascent recovery observed in the first quarter of the fiscal year became more tangible in the second quarter. Within industry, the growth in food processing and construction-allied segments of large-scale manufacturing stood out. In agriculture, the preliminary data for the Rabi season related to inputs and area sown for the wheat crop is encouraging. The services sector benefitted from the buoyancy in the commodity-producing sectors, with proxy indicators reflecting an overall improvement. Similarly, provincial industrial surveys reported a growth in manufacturing employment, which appeared to be broadly on course to recovery towards the pre-Covid levels.

2.1 Economic Growth

Halfway through FY21, the economy was on track to return to its pre-Covid trajectory. For industry, this was evident from the pick-up in large-scale manufacturing (LSM) activity and a recovery in the manufacturing sector's employment numbers to pre-Covid levels in Punjab and Sindh. In agriculture, meanwhile, most of the *Kharif* crops remained on course to perform better than last year. And the services sector's prospects, based on proxy indicators, were also promising as compared to the last quarter of FY20.

It is worth mentioning that the country went through the second wave of the pandemic during Q2-FY21, which posted a challenge for the economic recovery. Nonetheless, the government fine-tuned its lockdown approach, in line with the evolving needs. Specifically, after limiting the spread of the virus during the first wave using strict lockdowns, the government later shifted towards smart and micro lockdowns to allow economic activity to pick up at a prudent pace. Moreover, it rolled out packages for the construction and agriculture sectors as an added stimulus, and also expedited the processing of sales-tax refunds to export-oriented sectors.

For its part, the central bank has also remained proactive since March 2020. The SBP lowered its policy rate by 625 basis points in a short span of time to hasten the economic recovery. Investment and production activities were also supported by the concessional short- and long-term financing schemes, including the Temporary Economic Refinance Facility (TERF), and by the enhancement of limits under the Export Finance Scheme (EFS). Also, the SBP's Rozgar Scheme provided timely liquidity support to help protect millions of jobs.

These coordinated measures facilitated the economic recovery, which began in Q1-FY21 and strengthened in Q2. The rebound in the industrial sector was noteworthy, as the LSM posted its highest growth since FY14 on the back of an improvement in food processing and construction-allied industries. The food processing industry, driven by expansions in the output of sugar, tobacco and wheat milling sub-sectors, posted an impressive growth during the period. Meanwhile, the construction package announced by the government during the peak-Covid period to spur rapid

recovery in the sector, also had a positive impact. In addition, the export-oriented industries, in particular textiles, performed well in response to the coordinated policy measures taken by the government and the SBP. At the same time, the automobile sector picked momentum as the year progressed, and its output growth turned positive in Q2-FY21.

In the agriculture sector, most of the *Kharif* crops, except for cotton, have surpassed last year's production level, due to an increase in the area under cultivation. On the flipside, the estimates of cotton production were revised further downward to 7.7 million bales, which can be traced to its lowest area under cultivation since FY82, as well as a decline in yields. For the *Rabi* crops in general and wheat in particular, the government put in place a comprehensive package – comprising subsidies for fertilizer, fungicides and weedicides, together with an increase in the support price of wheat. Preliminary data captures an increase in the area under wheat cultivation in Punjab – which typically accounts for nearly three-fourths of wheat production in the country – and suggests that the policy initiatives are likely to support the crop sector growth further.

In turn, better outcomes in the commodity-producing sector and an increase in international trade had positive spillovers for the services sector, especially the *wholesale and retail trade* and *transport* segments. Specifically, growth in commercial vehicle sales and POL sales for the transport sector implies that transportation-related services are reviving. Meanwhile, the increase in internet usage highlights the improvement in the telecom sector, and is also facilitating work-from-home (WfH) arrangements across the sectors.

The employment numbers in the manufacturing industry started showing signs of improvement during the review period, when compared with the dip witnessed during the earlier strict lockdowns. Gauging from the employment data for the manufacturing sectors of Punjab and Sindh, the labor market is approaching the pre-Covid levels in the two provinces despite the second wave of the pandemic; this development was primarily facilitated by the shift to smart lockdowns. In the December 2020 wave of the SBP's Business Confidence Survey, the employment index remained stable, after showing recovery in the October 2020 iteration where it had risen above the pre-Covid level. Furthermore, there was a reported increase in the wages of pharmaceutical, fertilizer, cotton textile, and cigarette manufacturing workers in Punjab.

2.2 Agriculture

The preliminary outlook for the *Rabi* season was largely positive during the review period. On the input side, the prospects of wheat – the major crop of the season – received a boost from subsidies on inputs and an increase in the support price. In addition, the irrigation water supply and the timing of rains remained broadly favorable. Moreover, the agriculture credit disbursements picked up during Q2-FY21 from last year, mainly reflecting the increase in farm sector loans availed for development

purposes, such as the development of cold storage facilities.

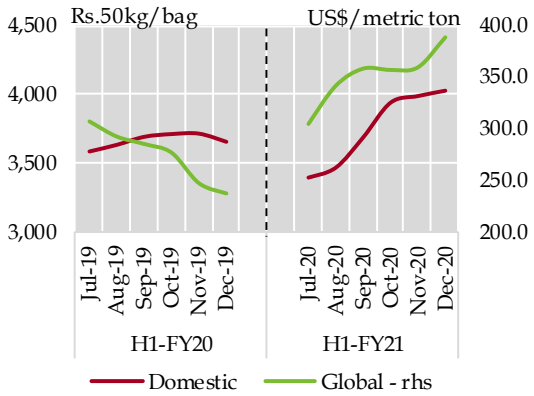
Inputs

On the input side, the policy support for the agriculture sector in the second quarter came from the Prime Minister's package for *Rabi* crops, especially wheat. The package's salient provisions included a subsidy of Rs 1,000 per 50 kg bag of fertilizer (DAP, phosphate and potassic), as well as a per-acre subsidy of Rs 250 on weedicides and Rs 150 on fungicides. In addition to the package, the Economic Coordination Committee (ECC) raised the minimum support price (MSP) of wheat from Rs 1,400 per 40 kg bag last year to Rs 1,650 per 40 kg for the current season.[1]

The subsidy on DAP fertilizer had a positive impact on its offtake. The average domestic price of DAP during H1-FY21 (excluding subsidy) was 2.3 percent higher compared to the same period last year. This occurred since DAP is primarily imported, and its domestic price is sensitive to variations in the global DAP price, which witnessed an uptick during H1-FY21 (**Figure 2.1**).

Nonetheless, the subsidy on DAP, which was distributed directly to the growers, lifted its offtake above last year's level.[2] Specifically, DAP offtake during H1-FY21 clocked in at around 1.57 million tons, which was 13 percent higher than the 1.39 million tons last year.

DAP Prices **Figure 2.1**



Source: NFDC; World Bank

In case of urea, prices had moderated since February 2020 after the ECC's January 2020 decision to waive Rs 400 off the Gas Infrastructure Development Cess (GIDC) in order to make cheaper fertilizer available to farmers. Subsequently, urea prices remained 14.6 percent lower during H1-FY21 on YoY basis, which facilitated the offtake of 3.4 million tons of the fertilizer during the period.[3]

On the financing side, the total disbursement of agriculture credit was marginally higher during H1-FY21 from last year (**Table 2.1**). During Q2-FY21 specifically, the improvement came from higher

[1] Source: Finance Division press release no. 396, dated November 6, 2020.
[2] In Punjab, the subsidy was distributed through vouchers inside the fertilizer bags. Registered farmers could avail the subsidy by sending the hidden voucher numbers, along with their CNIC, to a short code and collect the subsidy from the designated branchless banking operators. In this way, the benefit of the subsidy was passed on directly to the growers, without affecting the market price of the DAP fertilizer.
[3] Specifically, urea offtake for H1-FY21 was 3.368 million tonnes, which was 0.8 percent higher compared to the 3.340 million tonnes offtake recorded in H1-FY20.

Agriculture Credit Disbursements **Table 2.1**

billion Rupees

	Q1-FY20	Q1-FY21	Q2-FY20	Q2-FY21P	H1-FY20	H1-FY21P
Farm sector						
A. Production	103.8	113.9	175.6	175.7	279.4	289.6
B. Development	9.3	5.6	13.2	34.1	22.5	39.7
of which:						
i. High quality seed processing	1.1	1.0	5.8	5.0	6.9	6.0
ii. Cold storage	0.8	1.0	0.5	1.9	1.3	2.9
iii. Tractor	0.7	0.6	0.8	1.0	1.5	1.6
C. Total farm sector (A+B)	113.1	119.5	188.8	209.8	301.9	329.3
Non-farm sector						
Livestock/dairy	77.8	71.2	81.1	89.6	158.9	160.8
Poultry	64.3	49.5	62.9	52.5	127.2	102
Other	8.1	14.4	18.3	10.4	26.4	24.8
D. Total non-farm sector	150.2	135.1	162.3	152.5	312.5	287.6
Total agri (C+D)	263.3	254.7	351.1	362.3	614.4	617

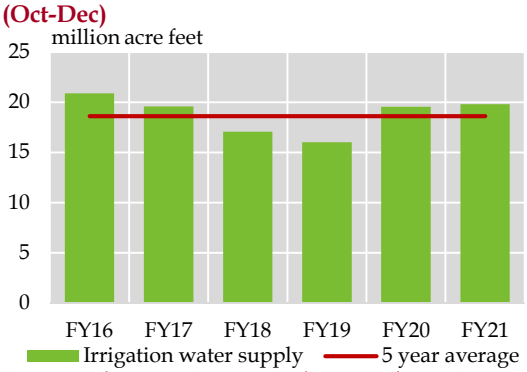
p=provisional

Source: State Bank of Pakistan

disbursement of development loans to the farm sector. Within this sub-segment, there was an increase in loans availed for development of cold storages, which especially help preserve perishable items and thereby limit the associated losses and price volatility. By contrast, while the Rs 5.0 billion uptake of credit by high-quality seed processing firms was relatively lower during Q2-FY21 on YoY basis, it was still a significant amount in absolute terms. This is important, because seed processing firms have an important role to play in the availability of quality, certified seeds, since gaps in the availability of quality seeds tend to be associated with low crop yields.

Meanwhile, in the non-farm sector, the disbursement of credit to the poultry segment remained lower during H1-FY21. During Q1-FY21, this was partially attributed to the lower demand for poultry products, given the reduced frequency and scale of weddings in marriage halls and large public gatherings in the wake of Covid-19.[4] However, while the demand recovered somewhat in the subsequent quarter, the level of credit availed by the

Irrigation Water Supply in Q2 (Oct-Dec) **Figure 2.2**



Source: Indus River System Authority; Pakistan Space and Upper Atmosphere Research Commission (SUPARCO)

[4] The lower demand was reflected in the poultry segment's YoY deflation of 14.5 percent during Q1-FY21, compared to 44.4 percent inflation during Q1-FY20.

Cotton Crop Estimates **Table 2.2**

		FY21		Growth (percent)	
	FY20	Target	FY21 *	FY20	FY21
Area ('000 hectares)					
Punjab	1,879.6	1,600.0	1,546.0	-0.4	-17.7
Sindh	598.7	640.0	615.0	33.6	2.7
Pakistan	2,517.0	2,310.0	2,217.9	6.1	-11.9
Production ('000 bales)					
Punjab	6,306.6	6,000.0	4,900.0	-7.6	-22.3
Sindh	2,746.0	4,600.0	2,500.0	-6.5	-9.0
Pakistan	9,149.0	10,897.5	7,700.0	-7.2	-15.8
Yield (kg/hectares)					
Punjab	570.7	637.8	539.1	-7.2	-5.5
Sindh	780.1	1222.5	691.4	-30	-11.4
Pakistan	618.3	802.4	590.5	-12.6	-4.5

* second estimates for production

Source: Ministry of National Food Security and Research

poultry segment remained lower during Q2-FY21 on YoY basis. Supply-side factors dominated on this occasion, given that poultry farmers had suffered losses during the lockdowns, and were relatively more cautious about availing credit.[5]

In terms of water availability, irrigation water supply during Q2-FY21 was marginally higher over the same period last year, as well as the Q2 average of the previous five years (**Figure 2.2**). Meanwhile, in rainfed wheat-producing regions, the spells of rain broadly occurred at timely intervals during Q2-FY21, which bode well for the prospects of wheat output.[6]

Output

Cotton: Second estimates

The second estimates for the cotton crop indicate that its output was the lowest on record since FY86 (**Table 2.2**).[7] The decline was pronounced in Punjab, where the output fell by around 22 percent from last season to 4.9 million bales.

As documented in more detail in the SBP's First Quarterly Report for FY21, the area under cotton – at 2.2 million hectares – was the lowest on record since FY82. The diversion of area away from cotton cultivation over time is a symptom of the crop's declining competitiveness relative to

[5] Anecdotal evidence suggests that around 30 to 35 percent of poultry farms remained closed in the last few months of 2020.

[6] Source: SUPARCO 'Pakistan: Satellite-based Crop Monitoring System' Bulletin, Volume XI, Issue 01, Serial No. 121, January 2021.

[7] There is a possibility of further downward revision of the cotton estimates, given that the cotton arrivals in factories had amounted to around 5.6 million bales as of March 15, 2021, which were nearly 34 percent lower than arrivals of 8.6 million bales as of March 15, 2020 (source: Pakistan Cotton Ginners' Association, Arrival Report, dated March 18, 2021).

Targets for Wheat Crop **Table 2.3**

area in thousand hectares, production in thousand MT, growth in percent

	FY20 Achievement		FY21 Target		Targeted growth	
	Area	Production	Area	Production	Area	Production
Punjab	6,515.0	19,402.0	6,560.0	20,000.0	0.7	3.1
Sindh	1,115.0	3,852.0	1,200.0	4,000.0	7.6	3.8
KP	760.0	1,130.0	900.0	1,700.0	18.4	50.4
Balochistan	417.0	865.0	550.0	1,300.0	31.9	50.3
Pakistan	**8,807.0**	**25,249.0**	**9,210.0**	**27,000.0**	4.6	6.9

Source: MNFSR

competing crops, such as sugarcane and rice. Meanwhile, yields continued to fall in both the main cotton-growing provinces of Punjab and Sindh, with severe monsoon rains having an outsized impact on the yields during *Kharif* FY21.

Rabi season

Wheat

Keeping in view the below-target production of wheat last year, and the subsequent need to import the commodity to plug shortages and subdue escalating prices, the targets for the FY21 *Rabi* season envisioned an increase in both the area and the production of the crop (**Table 2.3**). In growth terms, much of the increase in the area under wheat cultivation was expected to come from KP (18.4 percent) and Balochistan (31.9 percent), with the increase in Punjab – the dominant wheat-growing region – envisaged at a relatively modest 0.7 percent.

However, in Punjab, the estimated area under wheat cultivation has surpassed its target, with an increase of around 3.5 percent during *Rabi* FY21 from a year earlier (**Table 2.4**). While the data on area sown in other provinces remained forthcoming, its growth in Punjab is encouraging, since the province accounts for nearly three-fourths of wheat production in the country.[8] Moreover, within the province, the growth in the area under cultivation was broad-based, with eight out of nine divisions reporting growth over last year. The increase in wheat area was mainly attributed to the policy support via the increase in support price and availability of subsidized inputs.

First Estimate of Area for Wheat Crop in Punjab **Table 2.4**

thousand hectares

Division	2019-20	2020-21	Growth
Bahawalpur	995.9	1,024.6	2.9
DG Khan	1,020.2	966.4	-5.3
Gujranwala	868.0	939.3	8.2
Faisalabad	715.5	785.9	9.8
Multan	730.0	758.4	3.9
Sargodha	730.0	735.7	0.8
Rawalpindi	615.1	630.9	2.6
Lahore	498.2	517.6	3.9
Sahiwal	342.4	387.3	13.1
Punjab	**6,515.3**	**6,746.0**	**3.5**

Source: Crop Reporting Service, Government of the Punjab

[8] Specifically, the area dedicated to wheat in Punjab accounted for 75 percent of the total wheat area of Pakistan during FY11 to FY20, while the province's wheat output accounted for 76 percent of the country's wheat production during the same period.

Minor Crops (*Rabi*) **Table 2.5**

Area in '000 Hectares; production in '000 MT; growth in percent

	FY20 Output		FY21 Target		Targeted growth (%)*	
	Area	Production	Area	Production	Area	Production
Potatoes	177	4,428	191.6	4,871	8.2	10.0
Onion	148.17	2,122.0	165.0	2,220	11.4	4.6
Gram	943.8	497.6	989.0	560	4.8	12.5
Tomatoes	40.1	445.7	51.9	625	29.6	40.2

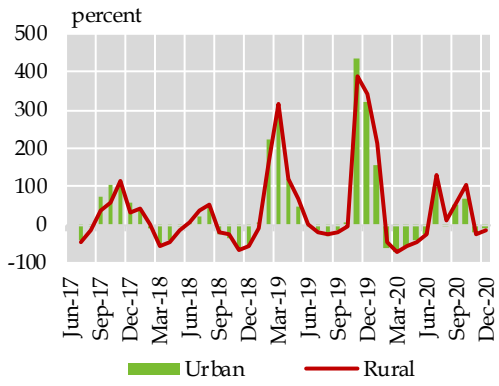
* FY21 target/FY20 output

Source: Ministry of National Food Security and Research

Minor Crops

Among the minor crops, the targets for the tomato crop for the FY21 *Rabi* season underscored the emphasis on scaling up its domestic production. Specifically, an increase of 29.6 percent in terms of area, and 40.2 percent in terms of production, was targeted for the current season (**Table 2.5**). The envisioned increase in production may help in the management of demand and supply gaps, which have contributed to the volatility in tomato prices, especially since FY19 (**Figure 2.3**).

Tomatoes (YoY Inflation) **Figure 2.3**



Source: Pakistan Bureau of Statistics

For the gram crop, the first estimates of area under cultivation in Punjab showed a decline of 6.7 percent from last year. This may pose a challenge to the achievement of gram's overall targets for the year, given that Punjab accounted for around 90 percent of the area and 87 percent of the country's production of gram during the last season.

Livestock

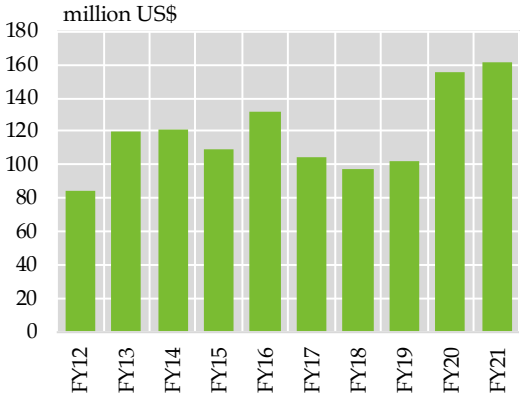
The livestock sector represented 60.6 percent of value addition in agriculture and 11.7 percent of GDP in FY20, and contributed around 3.0 percent to the total export earnings; livestock production also engages nearly 8 million rural households, making it an important sector in terms of employment outcomes.[9]

The promising rise in the exports of meat and meat preparations is an indicator of the pickup in livestock production. Specifically, Pakistan's annual meat exports have doubled over the last decade, from US$ 152.4 million in FY11 to US$ 304.2 million in FY20. More recently, in H1-FY21, exports of meat and meat preparations have grown by 3.6 percent to US$ 161.5 million from US$ 155.8 million in H1-FY20 (**Figure 2.4**).

[9] Pakistan Economic Survey, 2019-20.

Therefore, at the half-way mark of the fiscal year, it appears that this segment is on track to improve on its performance observed during last year.

Meat Exports, H1 (Jul-Dec) **Figure 2.4**



Source: Pakistan of Bureau of Statistics

As highlighted in earlier SBP reports as well, a livestock census is due, given that the production is currently being estimated based on intercensus growth rates of the Livestock Census 1996 and 2006. On this note, the Mouza (village) Census 2020 has been completed recently, according to the Pakistan Bureau of Statistics (PBS). The findings of this census are anticipated to feed into the sampling frame of an Integrated Agricultural Census, which would then capture the current growth trends in the livestock population.[10]

2.3 Large-Scale Manufacturing

The LSM grew by 7.6 percent in H1-FY21, as compared to a contraction of 2.7 percent during the same period last year (**Table 2.6**). The contrasting performance is reflective of the difference in the policy environment during the two periods. In H1-FY20, the growth in the industrial sector was restrained largely owing to the necessary stabilization policies that had been implemented to put the economy on a sustainable growth trajectory. By contrast, accommodative monetary policy, targeted fiscal intervention and related support packages in H1-FY21 to counter the impact of Covid-19, helped speed up the economic recovery. As a result, most of the industries in the LSM picked up pace in H1-FY21. **Figure 2.5** highlights the growth dynamics within the LSM sector with a frequency distribution chart. Industries posting growth greater than 10 percent have increased from 17 in H1-FY20 to 26 in H1-FY21. Meanwhile, industries witnessing double-digit contraction decreased to 22 in H1-FY21 from 27 last year.

When compared with H2-FY20, when the manufacturing sector was adversely affected by the strict lockdowns, the revival in the LSM in H1-FY21 came with a transition towards smart lockdowns and the continuation of the conducive policy environment. The smart lockdowns proved to be effective in countering the adverse impacts of the second wave of the pandemic in Q2-FY21.

On QoQ basis, the LSM growth accelerated towards the end of Q2-FY21, which can largely be attributed to the impact of

[10] In its previous iteration, the Mouza Census of 2008 was followed by an Agriculture Census in 2010, i.e. within two years.

LSM Growth **Table 2.6**

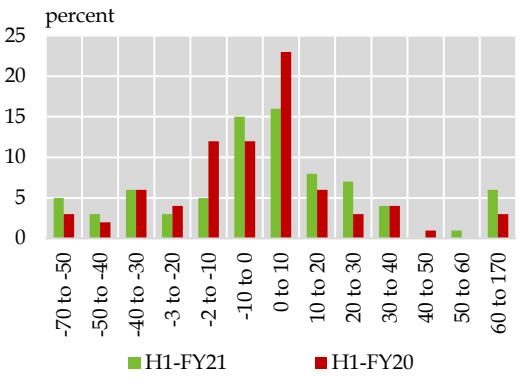
percent, YoY

	wt.	H1		Q1		Q2	
		FY20	FY21	FY20	FY21	FY20	FY21
LSM	70.3	-2.7	7.6	-5.5	4.5	0.1	10.4
Textile	20.9	0.3	2.6	0.2	2.2	0.5	2.9
Cotton Yarn	13	0.1	0.1	0.2	0.1	0.0	0.1
Cotton Cloth	7.2	0.2	-0.1	0.1	-0.1	0.3	0.0
Jute Goods	0.3	-5.3	1.3	-14.8	10.7	3.5	-5.8
Food	12.4	4.5	20.2	-9.0	13.4	16.7	25.0
Sugar	3.5	97.1	72.1	N/A	N/A	97.1	72.1
Cigarettes	2.1	-29.2	14.6	-34.5	31.2	-24.3	0.9
Vegetable Ghee	1.1	5.4	-3.2	2.0	-5.6	8.8	-0.9
Cooking Oil	2.2	7.0	1.4	0.0	3.2	13.9	-0.2
Soft Drinks	0.9	-8.9	0.6	-14.1	7.6	-0.4	-9.4
POL	5.5	-10.3	5.0	-14.5	2.7	-5.9	7.2
Steel	5.4	-12.3	-1.2	-17.0	-8.1	-6.8	6.0
Non-Metallic Minerals	5.4	2.9	20.1	-0.9	22.2	6.3	18.3
Cement	5.3	2.7	20.8	-1.4	22.8	6.3	19.2
Automobile	4.6	-37.2	11.2	-34.6	-5.7	-40.1	31.2
Jeeps and Cars	2.8	-46.4	5.1	-38.6	-21.1	-54.6	42.6
Fertilizer	4.4	4.9	7.4	15.9	2.0	-5.1	13.3
Pharmaceutical	3.6	-6.2	13.1	-11.9	14.4	-0.7	12.0
Paper	2.3	7.2	-2.7	-1.3	-2.2	16.0	-3.2
Electronics	2	-3.3	-20.9	11.0	-20.4	-15.7	-21.4
Chemicals	1.7	9.8	10.6	4.9	10.5	14.7	10.7
Caustic Soda	0.4	47.1	3.8	35.0	2.5	60.5	5.1
Leather Products	0.9	11.2	-42.7	6.3	-44.5	16.0	-41.0

Source: Pakistan Bureau of Statistics

favorable economic policies. While some of these measures were taken in the preceding quarters, the impact of the initiatives became more visible in Q2-FY21. In particular, the support package for the construction industry, coupled with the energy bill relief provided to the industries,[11] started to show results, as LSM output expanded by 10.4 percent in Q2-FY21 – the highest quarterly growth since Q4-FY07. Importantly, the increase in production was broad-based, as 9 out of 15 industries posted growth in the

Frequency Distribution of LSM Growth **Figure 2.5**

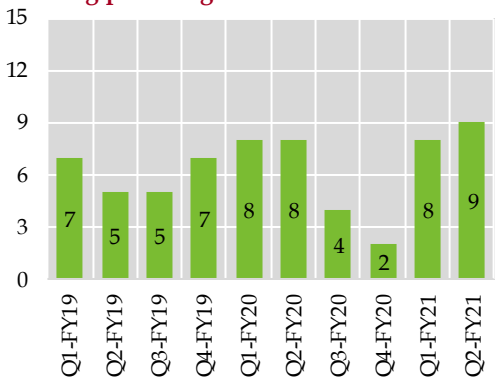


Source: Pakistan Bureau of Statistics

[11] Source: Ministry of Energy, Power Division (https://www.mowp.gov.pk)

quarter, as compared to 8 in the preceding quarter (**Figure 2.6**).

Number of LSM Industries showing positive growth **Figure 2.6**



Source: Pakistan Bureau of Statistics

The impetus to growth mainly came from the construction-allied and food processing industries. Initiatives for the construction industry resulted in the highest-ever cement production in H1-FY21, and a recovery in the production levels of steel sector. Meanwhile, the sugar industry benefited from an early start of sugarcane crushing and higher indicative prices of the raw materials. The output of the automobile and petroleum industries also expanded in H1-FY21 after contracting during the same period of the past two years.

Construction-allied Industry

The incentive package led to a further growth in the output of the construction-allied industry (see **Table 2.7** for the list of incentives provided under various schemes). Accordingly, cement and steel industries performed well despite public development expenditures registering a dip during H1-FY21. Higher output of cement and flat-steel may be explained by a pickup in construction activities in the private sector.

The increase in the private sector housing projects in urban areas can be attributed largely to the Prime Minister's construction package. Under the incentive package, 348 real estate developers had already registered 389 projects worth Rs 157 billion by November 2020.[12] Meanwhile, the increase in quantum imports of steel scrap by 30 percent during H1-FY21, compared to a decline of 20.4 percent during the same period last year, shows the pickup in demand from the real estate builders and developers.

The SBP complemented the efforts of the government through multiple measures. These included: (i) mandatory targets for banks to increase construction financing to at least 5 percent of total private sector credit by December 2020; (ii) introduction of incentive/penalty mechanism for achievement/failure of meeting the mandatory housing finance targets; (iii) facilitation of mark-up subsidy of Rs 36.0 billion for affordable housing scheme; (iv) risk coverage of up to 40 percent under the Credit Guarantee Scheme; and (v) new regulatory incentives to promote low-cost housing finance.[13]

[12] Source: Federal Board of Revenue (fbr.gov.pk/pr/pms-construction-package-in-full-swing-fbr/152640)
[13] The SBP revised the prudential regulations for housing finance by relaxing the limits on liquid securities/another residential property of the borrower to meet the prescribed 15 percent equity

Incentives for the Construction Industry **Table 2.7**

Fixed Tax Regime	New fixed tax regime (optional) for builders and developers for the sale or purchase of new projects, instead of net income basis 90 percent temporary reduction in the fixed tax rate
Exemption of Withholding Tax	Exemption of withholding tax for the builders and developers on purchase of building materials (except cement and steel)
Relaxation in Withholding Tax for buyers	Withholding tax rate is reduced from 10 percent to 5 percent for buyers of property
Exemption of Capital Gains Tax	Capital gains received by an individual on the sale of residential property (personal/family) house or flat, have been exempted from income tax
Promotion of Housing Finance	Mark up subsidy, ranging from 3 percent to 9 percent, based on multiple loan tiers (Rs 2 million to Rs 10 million) for a maximum of 10 years, is allowed for houses/flats up to 250 square yards/2,000 square feet The SBP's mandatory target for banks to ensure that the financing for housing and construction of buildings shall be at least 5 percent of their domestic private sector credit by December, 2021.[14]
New Pakistan Housing Scheme	Subsidy of Rs 0.3 million for the first new 100,000 homes
Amnesty for Investors	Investors in the construction industry would not be required to declare source of funds for new projects

Source: Federal Board of Revenue

Resultantly, the demand for credit for construction reached 26.8 billion in Q2-FY21, up from Rs 3.2 billion in Q1-FY21. Moreover, housing loans increased by Rs 6.4 billion during H1-FY21 against net retirements of Rs 3.3 billion during the same period last year.

Cement

The cement sector continued to perform well, as its output rose sharply by 20.8 percent in H1-FY21 compared to a 2.7 percent growth last year. According to the All Pakistan Cement Manufacturers Association (APCMA) data, the YoY increase in the domestic sales and exports was 15.9 and 14.6 percent, respectively (**Figure 2.7**). For cement exports, this level represented a six-year high.

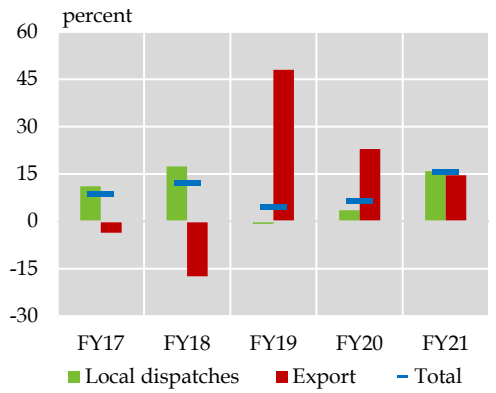
The growth was predominantly driven by domestic demand. The increase in domestic offtake accounted for 83.5 percent of the overall growth, whereas last year its contribution stood at 46.0 percent. Almost 73 percent of all dispatches in the North

contribution of the borrower. Moreover, the SBP's regulatory restrictions were also relaxed through a change in the definition of low-cost housing and also the Debt Burden Ratio under low-cost housing finance. Source: circular numbers 12 and 13 of 2020, Infrastructure Housing and SME Finance Department, State Bank of Pakistan.

[14] For further details, see State Bank of Pakistan, Infrastructure, Housing & SME Finance Department, Circular No. 03 of 2021, dated March 25, 2021 (https://www.sbp.org.pk/smefd/circulars/2021/C3.htm)

were made for the local market; this represented a growth in domestic sales in the region by 16.1 percent in H1-FY21 against 11.7 percent last year. Offtake in the South also increased by 14.0 percent, in contrast to a 27.4 percent dip last year.

Cement Offtake **Figure 2.7**



Source: APCMA

Average cement prices, however, fell by 3.1 percent in H1-FY21 on YoY basis. This was partly attributed to a reduction in FED on several types of cement in the Budget 2020-21 in the wake of the Covid-19 outbreak.[15] In addition, the fall in cement price was also linked to the decrease in price of coal, which is an input in cement production. International price of coal declined 11.2 percent during H1-FY21 on YoY basis.[16] As a result, the domestic producers may have been forced to pass on the benefit of lower input price to the consumers.

On the export front, the quantum increase in sales came solely from the South region, where the dispatches grew by 28.7 percent in H1-FY21, as compared to 41.9 percent last year. Export growth in cement and clinker exports remained strong due to demand from non-traditional destinations, such as China and Sri Lanka. China's renewed focus on infrastructure developments to revive its economy in the aftermath of Covid-19 led to an increased reliance on imported cement products. Meanwhile, demand for cement in Sri Lanka largely emanated from an Asian Infrastructure Investment Bank (AIIB) financed development project. In contrast to South, the producers in the North saw their exports of cement and clinker decline by 14.7 percent in H1-FY21, after a 3.8 percent contraction observed during the same period last year.

Steel

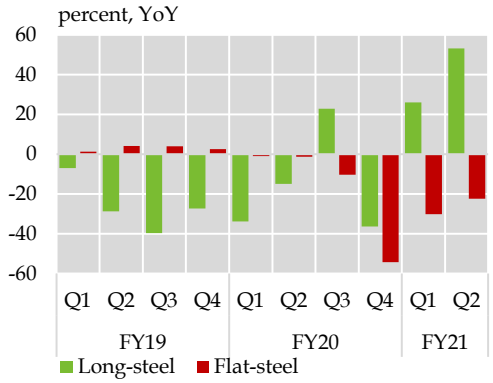
While the steel sector was unable to register a growth in H1-FY21, its contraction narrowed significantly as the year progressed. Meanwhile, analysis of the sector on a quarterly basis reveals that the output of the sector grew by 6.0 percent in Q2-FY21 against a decline of 6.8 percent in the same period last year. However, this rebound in Q2-FY21 was not enough to offset the decline in the preceding quarter, which resulted in a slight overall contraction during the first half of the fiscal year.

Demand for billets, primarily used in the construction industry, remained strong. This led to a 39.1 percent expansion in the

[15] Specifically, the FED on Portland cement, aluminous cement, slag cement, super sulphate cement and similar hydraulic cements was reduced in the Budget 2020-21 from Rs 2.0/kg to Rs 1.75/kg.
[16] Source: Bloomberg

output during H1-FY21 compared to a contraction of 25.9 percent in same period last year. On the other hand, the demand for flat steel products remained subdued owing to a drop in the production of appliances in the country. However, robust demand from the automobile sector compensated for some of the losses from the appliances segment. The increase in demand from the vehicle industry aided in narrowing the contraction in the flat steel production from 30.1 percent in the preceding quarter to 22.4 percent in Q2-FY21 (**Figure 2.8**).

Long vs Flat Steel Production Growth **Figure 2.8**



Source: Pakistan Bureau of Statistics

Food

The highest contribution to the LSM growth during H1-FY21 came from the food processing industry; its output expanded 20.2 percent in the period, against a growth of 4.5 percent recorded last year. Compared to the preceding quarter, the sector gained further traction, as it posted a QoQ growth of 56.1 percent in Q2-FY21. The increase in the output is largely attributed to the performance of tobacco, wheat milling, and sugar industries.

The production of the tobacco industry expanded by 14.6 percent in H1-FY21, against a contraction of 29.2 percent during the same period last year. The decision to keep last year's duty structure intact, along with the continued drive against illicit and counterfeit tobacco products, helped scale up its production.[17] That said, the growth decelerated in Q2, largely because the Q1 growth was very high due to the base effect.[18]

Meanwhile, the wheat milling industry contributed 1.2 percent to the overall LSM growth. The sharp increase in the output appears to be coming from an increase in the number of reporting units in the *Monthly Survey of Industrial Production & Employment in the Punjab* from 686 units in June 2019 to 738 units in August 2020.

The production of edible oils, on the other hand, remained subdued during H1-FY21; ghee saw a contraction of 3.2 percent whereas output of vegetable oil grew by 1.4 percent during the period on YoY basis. A significant jump in the price of a key input, palm oil, slowed down the operations of the edible oil processing firms. The decline in global palm oil stocks amid supply disruptions in major producing countries caused the global price of the commodity to jump by 34.9 percent YoY during Q2-FY21.[19]

[17] Source: Federal Board of Revenue (fbr.gov.pk/pr/fbr-intensifies-operations-against-illicit-an/152654)
[18] Tobacco production had contracted by 34.5 percent YoY in Q1-FY20 due to an increase in the FED.
[19] Source: Commodity Markets, The World Bank

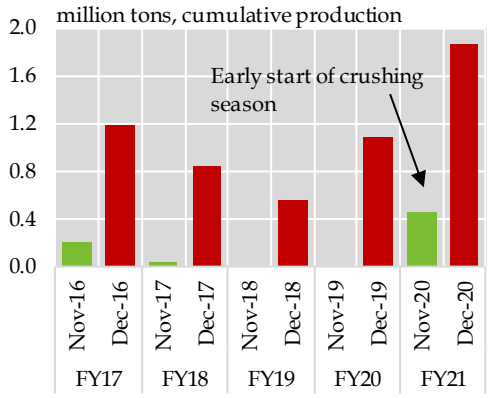
As a result, domestic edible oil processing industry (small firms in particular) opted to import lower volumes. Specifically, the import volumes of palm oil fell by 17.4 percent during Q2-FY21 on YoY basis.

Edible oil prices in the domestic market also increased, in line with the rise in the cost of the raw material, which may have also adversely affected the market. The price of ghee and vegetable oil increased by 16.0 and 10.7 percent, respectively, during Q2-FY21 on YoY basis. Higher cost and lower revenues may have also led to the erosion of profit margins of the industry, according to anecdotal evidence.

Sugar

The sugar industry's output expanded by 72.1 percent during H1-FY21, after growing by 97.1 percent during the same period last year. The industry's output received a boost from the earlier start of the crushing season in FY21 as compared to last year (**Figure 2.9**). The provincial governments ordered the sugar mills to start crushing earlier to overcome domestic scarcity and alleviate the need for imports. In addition, sugar production was also helped by a 12.3 percent growth in sugarcane production, a Rs 10 per 40 kg increase in the indicative price of sugarcane (to Rs 200 per 40 kg for the FY21 season), as well as declining domestic sugar stocks and a sharp increase in sugar prices in the country. These factors encouraged millers to increase the production volumes.

Sugar Production **Figure 2.9**



Source: Pakistan Bureau of Statistics

According to the United States Department of Agriculture (USDA), Pakistan's sugar stocks fell to their lowest level since FY13 at the beginning of the current season.[20] Consequently, the price of sugar began to rise in the domestic market, increasing substantially by 21.7 percent on average in H1-FY21. Lower stocks and higher prices, in turn, necessitated the import of the commodity to meet the excess demand. It was the first time in almost ten years that the country imported any noticeable quantity of sugar.[21]

Automobile

The automobile sector's production increased by 11.2 percent during H1-FY21, after declining by 37.2 percent in the same period last year. The largely broad-based turnaround in production was achieved in the second quarter – the first time the sector

[20] Source: Foreign Agricultural Service, United States Department of Agriculture (USDA)
[21] Compared to the average imports of US$ 6.1 million during FY11 to FY20, the H1-FY21 imports of sugar stood at US$ 126.6 million.

Automobile Sector Production, H1 **Table 2.8**

				Growth (in percent)		
	FY19	FY20	FY21	FY19	FY20	FY21
All Cars	103,883	57,151	58,374	7.9	-45.0	2.1
Cars <800 cc	22,298	24,707	12,734	-5.1	10.8	-48.5
Cars between 800-1000 cc	29,108	13,470	12,037	13.5	-53.7	-10.6
Cars >1000cc	52,477	18,974	33,603	11.3	-63.8	77.1
Sports Utility Vehicles	3,926	2,094	4,107	-44.2	-46.7	96.1
Light Commercial Vehicles	22,198	11,525	12,465	-15.9	-48.1	8.2
Trucks	3,751	1,747	1,557	-16.9	-53.4	-10.9
Buses	515	326	281	25.9	-36.7	-13.8
Tractors	25,969	16,671	23,237	-20.4	-35.8	39.4
Motorbikes	914,860	809,607	949,750	-2.8	-11.5	17.3

Source: PAMA

posted a positive growth after registering contraction in the past 9 quarters.

The *car and jeep* segment was the major contributor towards this growth in Q2-FY21. Multiple factors, including decrease in interest rates, stable exchange rate, and an increase in competition due to new entrants, had a positive impact on this segment. Lower interest rates contributed to an increase in vehicle financing to Rs 45.3 billion in H1-FY21, against a marginal retirement of Rs 166 million in H1-FY20. The stability of exchange rate also facilitated the output of the automobile sector, as it kept the costs of imported components in check. Meanwhile, the models introduced by new entrants in the market generated interest, especially in the *car and jeep* segment. That said, the growth of the automobile industry may have been underreported in the last few quarters, as the production data from some of these new players has not yet been made part of the LSM index.

The *two- and three-wheelers* witnessed a significant growth in FY21. In fact, the overall output of the automobile industry was primarily driven by this segment (**Table 2.8**). This growth can be attributed to the pent-up demand; increased remittance inflows; and an increase in rural economic activity.

Another category which saw a revival during H1-FY21 was tractors. The output of the segment registered a double-digit growth. This expansion can be attributed to multiple factors. First, the provision of subsidy of Rs 1.5 billion against sales tax for locally manufactured tractors by the government supported the tractor market.[22] This was further aided by low-interest rates, which led to an increase of Rs 0.2 billion in agricultural credit offtake during Q2-FY21. The pickup in economic activities (especially

[22] Source: Federal Board of Revenue (https://download1.fbr.gov.pk/SROs/2020112313115933622SRO1248OF2020DATED23.11.2020--TRACTORSUBSIDY.pdf)

in the construction sector) may also have contributed to increased demand, as tractors are used in excavation as well as the transport of building materials and agriculture commodities.

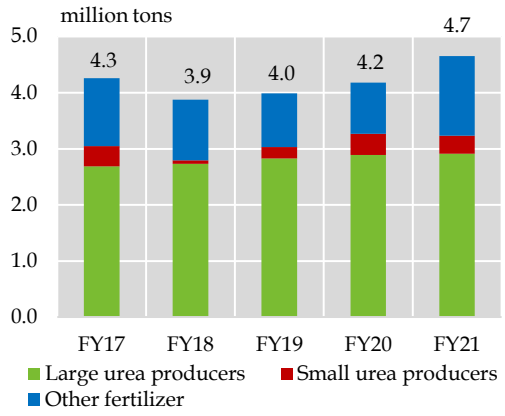
Fertilizer

The growth in the fertilizer industry accelerated to 7.4 percent in H1-FY21 from an increase of 4.9 percent during the same period last year. The output was driven by non-urea fertilizers, as urea production registered a marginal decline (**Figures 2.10a and 2.10b**).

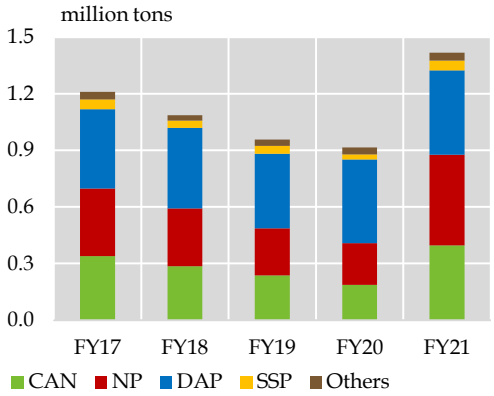
Driven by 117.6 percent and 112.0 percent YoY increases in the production of Nitro Phospate (NP) and Calcium Ammonium Nitrate (CAN) products, respectively, the non-urea fertilizer production rose by 54.8 percent during H1-FY21, after declining by 4.4 percent during the same period last year.

By contrast, urea output remained subdued during H1-FY21, as it witnessed a contraction of 1.0 percent compared to a growth of 7.8 percent last year. The lower production owed largely to a deceleration in the output of larger urea units and a significant decline in the output of smaller urea units. The growth in the production of larger units slowed down to 0.6 percent in H1-FY21 from 2.3 percent last year. All the large producers were operating nearly at full capacity, making the marginal growth in output understandable. On the other hand, production at smaller LNG-based urea plants underwent a double-digit contraction of 13.8 percent during H1-FY21, against an

Overall Fertilizer Production H1 **Figure 2.10a**



Fertilizer Production (except urea) H1 **Figure 2.10b**



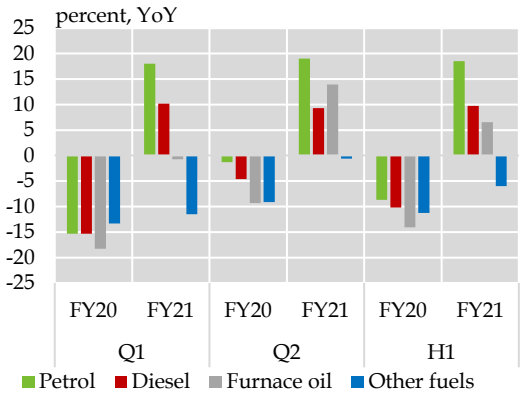
Source: NFDC

84.2 percent expansion last year. Disruption in gas supplies to these units resulted in the below-par production during H1-FY21; in contrast, no major gas shortages were seen last year.

POL

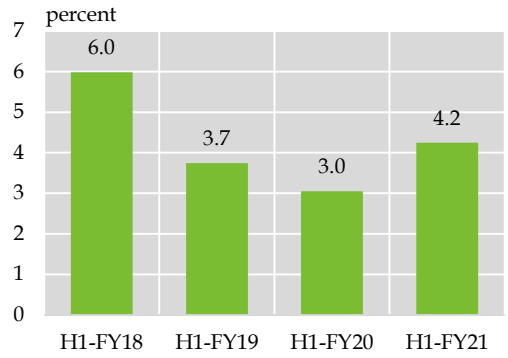
The output of the petroleum industry grew by 5.0 percent in H1-FY21, against a 10.3 percent decline during the same period last year. The production of petrol, diesel, and furnace oil in H1-FY21 grew by 18.5 percent, 9.7 percent, and 6.5 percent, respectively,

Petroleum Production Q1 vs Q2 **Figure 2.11**



Source: Pakistan Bureau of Statistics

Share of Furnace Oil in Electricity Generation **Figure 2.12**



Source: NEPRA

compared to the declines of 8.7 percent, 10.2 percent, and 14.1 percent last year. Together, these three products account for almost 80 percent of the total output of the POL industry. The increase in transportation activities and robust sales of automobiles explain the growth in production of these items.

While the production of petrol and diesel increased overall in H1-FY21, the acceleration in the overall POL production from Q1-FY21 to Q2-FY21 (**Figure 2.11**) can largely be traced to furnace oil. Its production jumped by 13.9 percent in Q2, against a 0.7 percent contraction in the preceding quarter. Lifting of restrictions on utilizing furnace oil for electricity generation in the wake of gas shortages supported the recovery in this segment. This is also evident from an increase in furnace oil's share in the power generation mix and a simultaneous drop in the share of gas during the review period (**Figure 2.12**).

The transition towards Euro-5 standard fuel and curbs on furnace oil for electricity production has created a challenging situation for the refineries,[23] and has contributed to the 47.6 percent growth in import volumes of POL products during H1-FY21; the second-highest imports of petroleum products ever recorded (behind only H1-FY17).

Textile

The textile sector's production in H1-FY21 posted a notable growth of 2.6 percent compared to a marginal growth of 0.3 percent in H1-FY20. It was the highest recorded growth in H1 since FY14. The impetus to growth came primarily from the woolen segment, whereas growth of cotton-based textile products remained muted. As with the wheat milling segment, the increase in the number of reporting firms has pushed up the growth in this segment.

[23] Impact of Euro-5 fuel regulations on the POL industry is highlighted in Chapter 2 of the SBP's First Quarterly Report on the State of Pakistan's Economy 2020-21.

Meanwhile, cotton yarn and cloth production remained subdued during H1-FY21. One factor that has dragged the segment's growth prospects in FY21 is the below-par domestic cotton output. Scarcity of locally produced cotton has forced the relatively costlier imports of raw cotton in H1-FY21, which surged in quantum terms by almost six times from their last year's level. In addition, the imports of yarn also surged by 11.7 percent, as the exporters were to some extent compelled to rely on imported inputs to meet their export orders. To keep the domestic textile industry competitive, and to promote textile exports, the government had exempted additional customs duty on raw cotton imports, which aided growth in the exports of high value-added textile items.

2.4 Services

The leading indicators of the services sector continued to show improvement during H1-FY21. In particular, the growth in LSM and expansion in imports led to a pick up in the activities of the *wholesale and retail trade* segment (**Table 2.9**). Bank lending to wholesale and retail traders also witnessed a sharp recovery, with a net increase in lending of Rs 30.2 billion in H1-FY21 compared to the net retirements of Rs 35.7 billion in the corresponding period of last year. The lending was largely concentrated in petroleum and fertilizer sectors, which availed credit to meet the increase in demand for POL and fertilizer products.

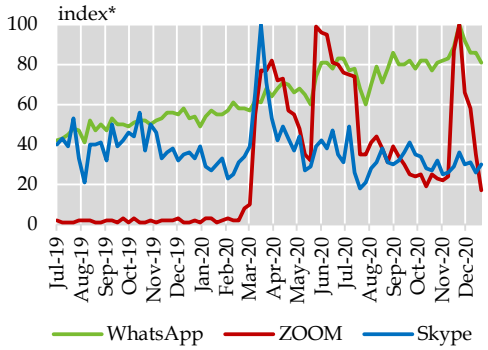
Within the transport segment, the demand for commercial vehicles rose by 24.4 percent in H1-FY21 as compared to a contraction of 53.0 percent last year. As mentioned earlier, the increase in vehicle sales also contributed to the rise in fuel consumption during the review period (**Table 2.9**). The pickup in economic activities after the ease in

Selected Services Sector Indicators in H1 **Table 2.9**

	FY20	FY21
Wholesale and Retail Trade		
Sectoral credit off take*- flow (billion Rs)	-35.7	30.2
Petroleum products[1]	1.2	17.6
Fertilizer and Agro.	6.5	10.3
Other	-43.4	2.3
Imports (billion US$)[a]	23.2	24.5
LSM (YoY growth)	-2.7	7.6
Agriculture credit (disbursements – Rs bn)	877.7	871.6
Transport, Storage and Communication		
POL sales to transport sector (million MT)	6.9	7.7
o/w Road transport	6.8	7.6
Railways	0.09	0.06
Commercial vehicle sales (units)	11,488	14,295
Cellular teledensity (%)	78.2	82.3
Broadband users (million)	78	93
Finance and Insurance		
Assets (billion Rs)*	21,991	25,124
Deposits (billion Rs)*	15,953	18,519
ROA** (percent)	0.8	1.0
ROE** (percent)	11.3	13.8
Profit** (billion Rs)	88	118
Infection ratio (percent)	8.6	9.2
Other Private Services		
Net ICT exports (million US$)	486.9	668.3
General Government Services		
Expenses on general govt. & defense***	749.2	682.0

Note: Values in brackets are sectoral shares in GDP, as of FY20.
[a] PBS data
[1] Solid, liquid, gaseous fuels and related products
* Stocks, as of end-December 2020 ** After tax ***
Includes only current expenditure of government
Source: SBP, [a] PBS, OCAC, PAMA, PTA and MoF

Interest in Video Conferencing Apps in Pakistan **Figure 2.13**



* Index score represents search interest relative to the highest point on the chart for the given region and time. A value of 100 is the peak popularity for the term. A value of 50 means that the term is half as popular. A score of 0 means there was not enough data for this term.
Source: Google Trends

lockdowns also had a positive impact on the transport sector.

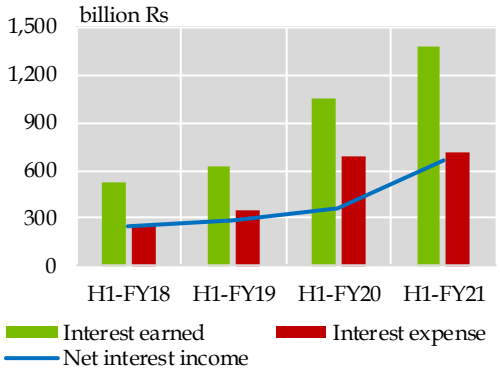
Meanwhile, in the communication sub-segment, the demand for internet services continued to rise, as the start of the second wave of Covid-19 necessitated continued implementation of remote-working and online-education arrangements. This shift has given a considerable boost to the usage of video conferencing apps such as Zoom, WhatsApp and Skype in Pakistan (**Figure 2.13**). The significant rise in demand for such apps has also led to a commensurate increase in cellular teledensity and the number of broadband users in the country (**Table 2.9**).

Likewise, in the *other private services*, the net ICT exports rose by 33.3 percent to US$ 649.2 million in H1-FY21, compared to US$ 486.9 million in the same period last year. Within ICT services, the growth mostly originated from software- and hardware-related services, including software exports and consultation services related to both software and hardware installation and operation. As in the communication sector services, the rise in global demand for computing services, such as cloud computing, network security, and software consultancy, led to an increase in ICT exports (for details, see **Chapter 5**).

The general government expenditures, meanwhile, witnessed an overall contraction during H1-FY21 on YoY basis. A decline in defense and pension expenditures was also observed during the review period (**Chapter 4**).

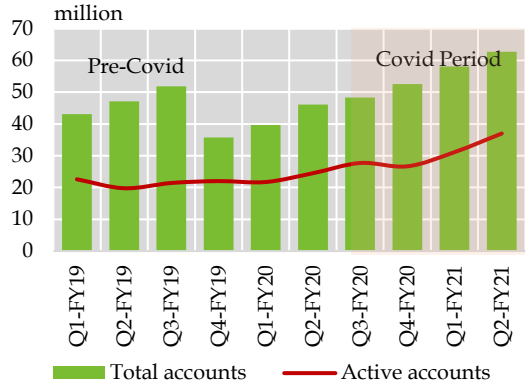
In the *finance and insurance* segment, the banking sector posted a healthy YoY improvement during H1-FY21. The profit after tax of the banking sector grew by 34 percent to Rs 118.0 billion in H1-FY21, from Rs 88.0 billion last year. Profitability indicators, such as return on assets (ROA) and return on equity (ROE), also improved

Interest Income and Expense of Scheduled Banks **Figure 2.14**



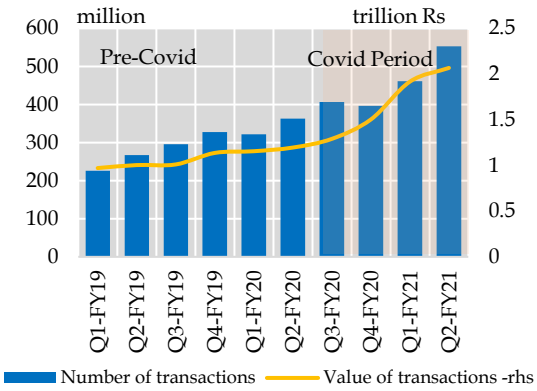
Source: State Bank of Pakistan

Number of Branchless Banking (BB) Accounts **Figure 2.15a**



Source: State Bank of Pakistan

Transactions via Branchless Banking Accounts **Figure 2.15b**



over the same period. The rise in profits of the banking sector was primarily driven by an increase in the net interest income and capital gains on government securities arising from the lowering of interest rates (**Figure 2.14**).

Meanwhile, within the banking sector, branchless banking (BB) witnessed expansion during the Covid-19 period in terms of both the number of accounts (**Figure 2.15a**) and the volume of transactions (**Figure 2.15b**). This considerable increase in the use of BB accounts could be traced back to multiple factors. First, the mobility restrictions to contain the spread of Covid-19 induced people to switch to digital channels. Second, many BB service providers and commercial banks integrated online shopping services (purchase of airtime, data bundle, bills, fee payments, salary transfer and money transfer) within the m-wallet apps, which may have further reinforced this digital transition.

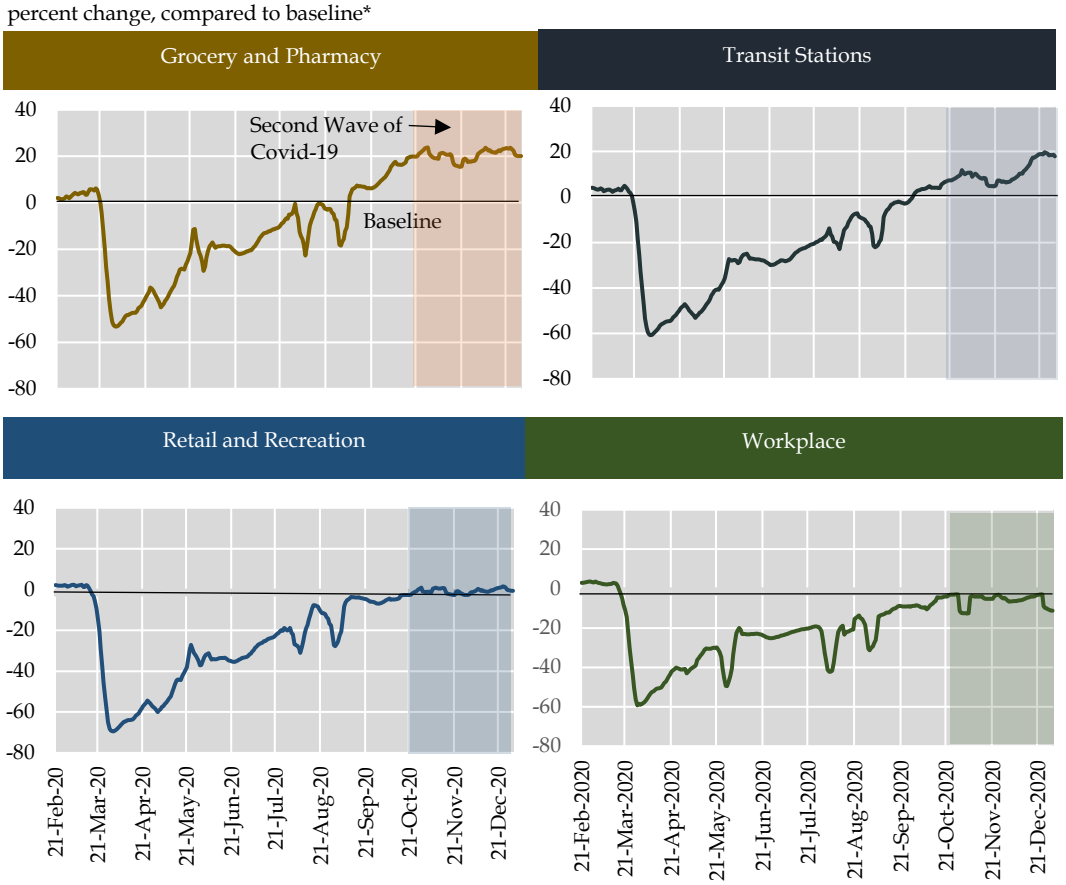
Furthermore, in order to push digital payments and to reduce the risk of Covid-19 spread due to biometric verification, the SBP took several measures to encourage increased usage of digital banking services. For instance, the central bank allowed BB customers to withdraw/deposit cash up to Rs 25,000 per month, up from Rs 15,000 previously for level 0 accounts, without biometric verification.[24] Moreover, the Authorized Financial Institutions (AFIs) were instructed to waive service charges on fund transfers through m-wallet accounts.[25] Further, with the objective to promote digital payments and increase financial inclusion in the country, the SBP has

[24] Level 0 is a basic m-wallet account for individuals with low Know Your Customer (KYC) requirements and transaction limits.

[25] BPRD Circular Letter No. 10 of 2020, "Measures to Combat COVID 19 Pandemic – Branchless Banking Operations", March 26, 2020. These measures were further extended till December 31, 2020 via BPRD Circular Letter No. 33 of 2020.

Google Mobility Changes in Pakistan (7-Days MA) **Figure 2.16**

percent change, compared to baseline*



*The baseline (pre-Covid) is the median value for the 5- week period (Jan 3–Feb 6, 2020). the negative value represent activity is down while positive value represent activity is up from the baseline.

Source: Covid-19 Community Mobility Report

recently introduced the country's first instant payment system, "Raast". This system is aimed at providing instantaneous payments with low transaction costs for individuals, businesses and government entities.[26]

Besides these indicators, the Google mobility data, which provides insights into mobility in four segments that are closely associated with the services sector, points toward continuing improvement in the country (**Figure 2.16**).[27] Disaggregated analysis shows that by end-December 2020, mobility

[26] For more details on Raast, visit https://www.sbp.org.pk/dfs/Raast.html.

[27] Google mobility indicators are being shared since mid-February 2020, when the Covid-19 crisis turned into a pandemic. As such, comparable numbers for H1-FY20 (Jun 2019-Dec 2020) are not available.

in two out of four segments, *grocery and pharmacy* and *transit stations*, had risen above the pre-lockdown levels. The government's smart lockdown policy exempted the vendors of essential food items, pharmacies and grocery shops from closure. The *grocery and pharmacy* segment covers visits to grocery markets, food warehouses, farmers markets, food shops, drug stores, and pharmacies; this largely explains the marked improvement in this mobility segment.

Multiple factors evidently led to an improvement in the number of visits to *transit stations*, which covers visits to places like public transport hubs, bus stops, train stations, and sea ports. Easing of Covid-19 restrictions benefited this segment, reflecting the rise in inter-city and inter-provincial travelling and resumption of tourism services. Moreover, the increase in POL sales (**Table 2.9**) also indicates a broader recovery in the transportation sector, with a spillover impact on activity at transit stations.

Further, the mobility in the *retail and recreation* and *workplace* was close to the pre-lockdown level.[28] The slower pace of recovery in the *retail and recreation* segment was due to restrictions imposed on recreational places, such as restaurants, cafes, shopping centers, museums, libraries, and movie theaters amid the second wave of the pandemic. Specifically, restaurants were instructed to close their indoor dining facilities and were asked to serve food in open areas and/or offer takeaway options. The decrease in seating capacity for some restaurants may have led to people ordering food online rather than visiting the restaurants. In addition, the government instructed the public and private companies to enhance work-from-home arrangements, which resulted in lower visits to workplaces, as evident from Google mobility data.

2.5 Labor Market

The recovery in employment continued in H1-FY21, in line with the positive gains in LSM and the services sector. Employment data for the manufacturing sector of Punjab and Sindh displayed continued improvement, while the SBP's Business Confidence Survey (BCS) results also reinforced the pattern displayed by manufacturing employment data with an increasing trend for employment index in the industrial sector. The BCS further revealed that the employment index for the services sector also carried on an upward trend for October 2020 wave, with a slight hint of downward movement in December 2020. The growth in wages for the construction industry also remained positive, with a nominal decrease in the magnitude of growth in Q2-FY21 when compared to Q1-FY21. It is worth mentioning that there is spare capacity in the economy, and activity in general remains below pre-Covid levels.

[28] The visits to grocery stores, pharmacies, and transit stations, were up by 25 percent, 19 percent and 4 percent, respectively. Meanwhile, mobility in the workplace segment was down by 7 percent compared to the baseline (pre-Covid).

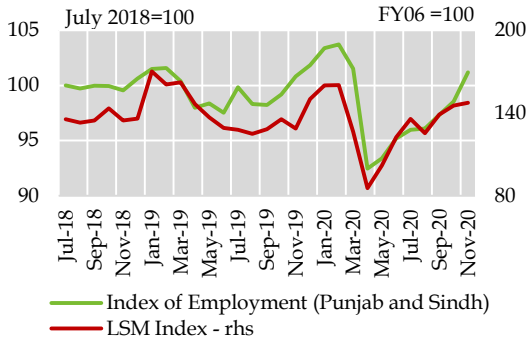
Employment

The employment index for Sindh and Punjab, based on the data from Monthly Survey of Industrial Production and Employment on the manufacturing sector, shows that the trend for employment continued to improve for the first two months of Q2-FY21 (**Figure 2.17**). Overall employment growth also turned positive and stood at 0.9 percent for Jul-Nov FY21, in contrast to a contraction of 0.3 percent for Jul-Nov FY20.[29] The same results are depicted in the Special Survey for Evaluating Socio-Economic Impact of COVID-19 published by the PBS (**Box 2.1**).[30]

On the provincial level, the data indicates an increase in employment numbers for the province of Punjab. For Jul-Nov FY21, employment in Punjab grew by 1.6 percent, in contrast to a 3.9 percent contraction in the same period of the preceding fiscal year (**Figure 2.18a**). Moreover, the growth in the first two months of Q2-FY21 was 2.3 percent higher over Q1-FY21. This is due to the increasing level of activity in the industrial sector of Punjab, which grew by 3.8 percent in Q1-FY21 and 5.0 percent during Oct-Nov FY21.

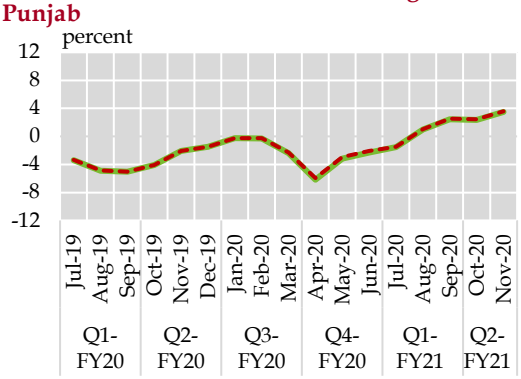
In Sindh, the manufacturing sector's employment growth was negative during

Combined Sindh and Punjab Industrial Employment and LSM Index **Figure 2.17**



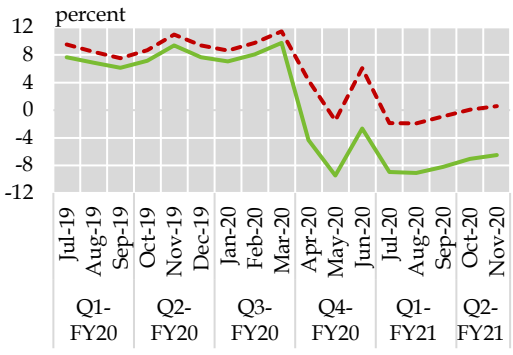
Source: Bureau of Statistics, Punjab and Bureau of Statistics, Sindh

YoY Employment Growth For Punjab **Figure 2.18a**



Source: Bureau of Statistics, Punjab

YoY Employment Growth For Sindh **Figure 2.18b**



Source: Bureau of Statistics, Sindh

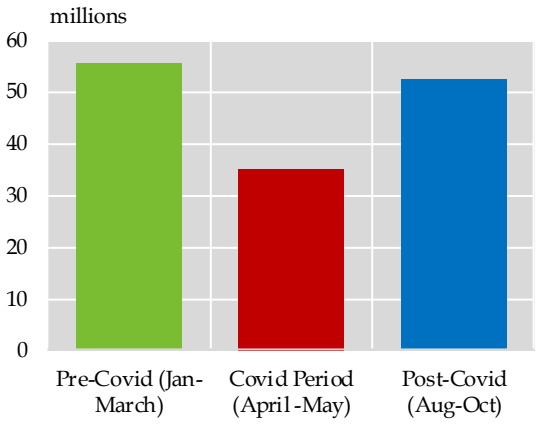
[29] Growth is calculated by excluding the data for the steel industry.
[30] Source: https://www.pbs.gov.pk/content/special-survey-evaluating-impact-covid-19

the review period. Nonetheless, it is important to note two points here. First, the magnitude of contraction has constantly decreased since the start of FY21. Second, the negative growth is explained by the loss in employment in the steel industry, which constitutes around 8 percent of the total employment reported for the province. The data for the steel industry was not recorded for the months of April-September 2020, and when the reporting resumed, it depicted a negative 97.5 percent growth for the Oct-Nov FY21 period. The reason behind this reduction could be the layoffs in the Pakistan Steel Mills (PSM),[31] which accounted for the majority of the steel industry data, available in the monthly industrial survey. Excluding the data for steel industry, employment for Sindh shows an increase of 0.3 percent during the first two months of Q2-FY21 (**Figure 2.18b**).

Box 2.1: Special Survey on Evaluating the Impact of Covid-19

In an interview-based survey of 6,000 households, the PBS ascertained the impact of Covid-19 at national and provincial level. It reflects upon the working situation of individuals before and after the lockdown, and identifies the most affected industries and occupations. The survey reveals that the total employment was at 55.7 million workers before the imposition of lockdowns, and fell to 35 million when the constraints on movement were at their peak – a decrease of 37 percent. However, since then, with ease in restrictions and gradual restoration of economic activity, total employment recovered to 52.5 million (**Figure 2.1.1**). The PBS survey further shows that along with the employment loss, around 6.7 million employees experienced a fall in their income as well.

Total Employed **Figure 2.1.1**



Source: Pakistan Bureau of Statistics

The survey also presents the distribution of affected workers by industry. It shows that employment in the construction sector was most affected due to the lockdowns: 59 percent of the working population involved in the sector faced jobs losses, and 21 percent experienced reduction in their income. The survey reveals that employment in the construction sector had not made full recovery by October 2020.

Source: Pakistan Bureau of Statistics (2020). *Special Survey for Evaluating Socio-Economic Impact of COVID-19 on Wellbeing of People.* Islamabad: Pakistan Bureau of Statistics

[31] Source: (PR No. 428) and (PR No. 405), Ministry of Finance (https://www.finance.gov.pk/press_releases.html)

From a sectoral standpoint, cotton textile, which showed a negative employment growth during Jul-Nov FY20, recorded a 0.4 percent growth during Jul-Nov FY21 (**Table 2.10**). The pace of growth also improved between Q1-FY21 and Q2-FY21, in line with the pickup in the textile sector growth in the LSM index. Cotton textile constitutes around 50 percent of the total employment reported for Punjab and Sindh in the Monthly Survey of Industrial Production and Employment; therefore, the improvement in the overall employment numbers is being primarily driven by the growth in this sector. Employment in the sugar industry, meanwhile, also depicted a growth of 12.6 percent; this was mainly due to an early start of the crushing season in the country.

In addition to cotton and sugar, employment in the automobile and pharmaceutical sectors recorded growth during Jul-Nov FY21. The positive developments are consistent with the growth in output of these industries: output of the pharmaceutical and automobile sectors grew by 12.9 and 6.0 percent respectively in the same period. Furthermore, employment in the wheat milling segment also picked up pace in Punjab during the period.[32] The YoY employment growth was 0.7 percent in Jul-Nov FY20, which rose to 17.1 percent in Jul-Nov FY21. However, the primary reason for this jump was the increase in the number of reporting mills in the dataset.

The employment indices taken from the SBP's BCS reinforce the trends depicted from the industrial data of Sindh and Punjab. In the December 2020 wave of the survey, 50.5 percent of the industrial units reported an increase in employment for the past six months compared to 46.0 percent in the August 2020 wave. Moreover, the recent wave indicates that industrial firms are optimistic about the future increase in employment as well (**Figure 2.19a**). This may be explained by the positive growth depicted in the LSM sector.

YoY Employment Growth for Sectors **Table 2.10**

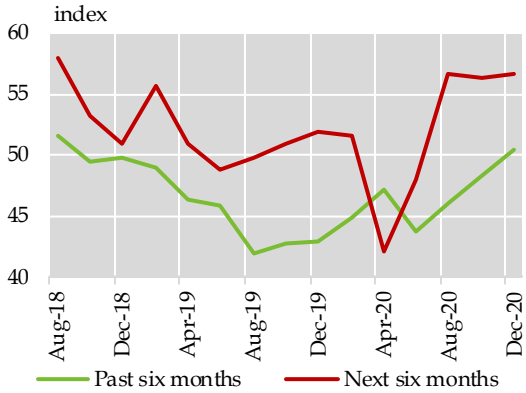
	Jul-Nov	
	FY20	**FY21**
Sugar	-17.7	12.6
Wheat milling	0.7	17.1
Edible oil	6.4	9.3
Cigarettes	18.7	5.8
Automobile	-	3.9
Pharmaceuticals	-17.3	4.8
Leather tanning	1.1	3.6
Fertilizers	2.6	1.4
Cotton textiles	-4.2	0.4
Petroleum products	-1.7	-7.8
Steel bars/angles	-9.3	-89.4

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

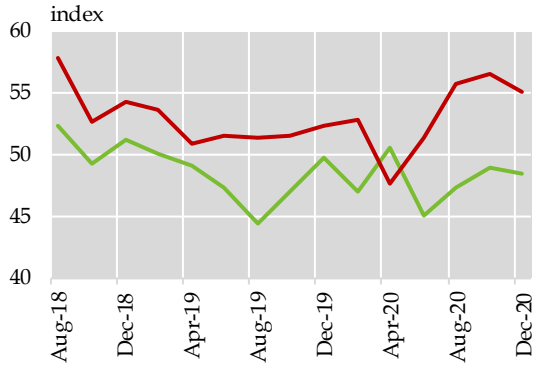
In addition, the BCS reveals that there was a marginal decrease of 0.4 percent point in the current employment index for the services sector in the December 2020 wave, indicating no significant shift in employment for the underlying period. The future employment index showed that a majority of businesses (55.1 percent) expected employment to increase in the

[32] Employment data for wheat milling and cigarette industries is not reported for Sindh.

BCS Employment Index for Industries **Figure 2.19a**



BCS Employment Index for Services **Figure 2.19b**



Source: State Bank of Pakistan

future. However, a gradual deterioration in the confidence about the future of employment in the services sector can be observed between October and December 2020 (**Figure 2.19b**). One reason could be the second wave of Covid-19 in the country. However, the future employment index (next six months) is still visibly higher than the April 2020 level, which was the first wave period. This is mainly because, rather than imposing a complete lockdown, the government tackled the second wave by imposing smart and micro lockdowns. Moreover, with the prospective availability of vaccination, unpredictability surrounding the pandemic has somewhat reduced.

Wages

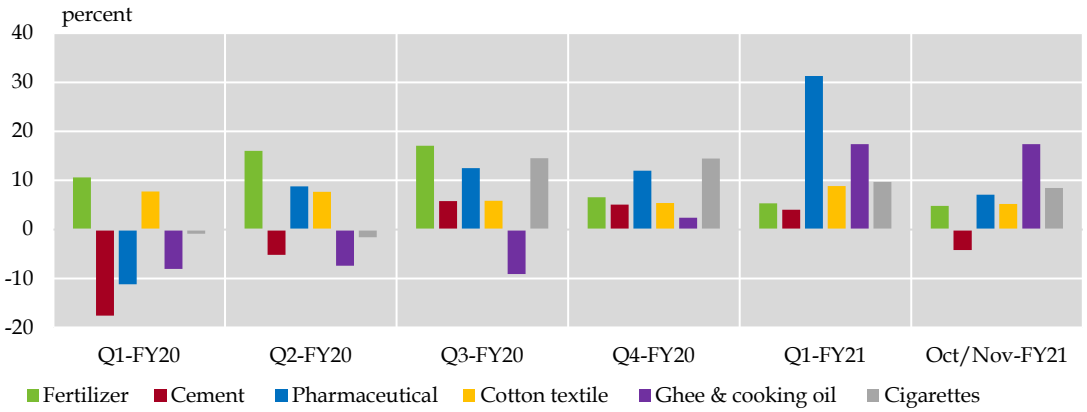
The data for wages from the Monthly Survey of Industrial Production and Employment for Punjab shows an overall growth for the reported sectors.[33] The salaries for workers in the pharmaceutical industry increased by 31.3 percent in Q1-FY21, followed by 7.1 percent growth in Oct-Nov FY21. This can be attributed to a surge in demand for medical supplies because of the ongoing pandemic, which in turn led to an increase in the demand for labour in the industry. Wages in the fertilizer, cotton textile and cigarette manufacturing industries also increased during the Jul-Nov period (**Figure 2.20**). However, cement industry wages, after exhibiting a growth of 4.0 percent in Q1-FY21, posted a negative growth in the first two months of the second quarter.[34]

The wage-rate index for the construction sector taken from the national CPI dataset of PBS shows that YoY growth in wages for

[33] The wages are reported for the fertilizer, cement, pharmaceutical, cotton, ghee & cooking oil, and tobacco industries.

[34] Negative growth in wages for the cement industry is due to the base effect: the wages for the Oct-Nov 2020 period were the highest since February 2020.

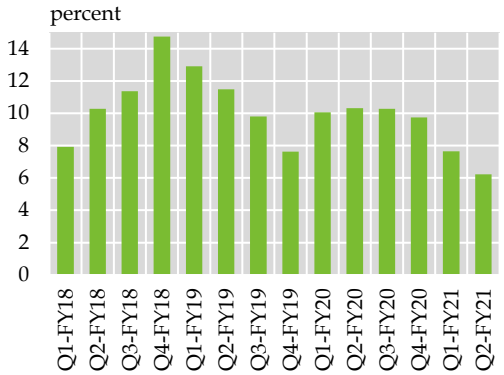
YoY Growth in Wages for Punjab **Figure 2.20**



Source: Bureau of Statistics, Punjab

H1-FY21 was 6.9 percent.[35] However, despite the constant increase in nominal wages of the construction workers, the growth in wages has decelerated since Q4-FY20, the period with lockdown restrictions (**Figure 2.21**). This could be due to the excess labour supply, including the forced repatriation of migrant workers due to Covid-19.[36]

Growth in Construction Sector Wages **Figure 2.21**



Source: Pakistan Bureau of Statistics

Support to employment, in addition to smart lockdowns, accommodative monetary policy, and targeted fiscal measures, came from the SBP's concessionary schemes. For employment protection, the Refinance Scheme for Wages to Prevent Layoffs (also known as the SBP Rozgar Scheme) focused on helping businesses pay their wage bills. Under the scheme, the SBP received applications from 3,494 businesses comprising 1.9 million employees. Around 85 percent of the applications were approved with an average approval time of 25 days, which allowed businesses to receive the funds in time. Under the scheme, Rs 238.2 billion for 2,959 business units, including 1,337 SMEs, was approved, which prevented the layoffs of almost 1.7

[35] The index represents the average of urban and rural construction wage rates reported in the Consumer Price Index (published by Pakistan Bureau of Statistics).
[36] For more information, refer to Box 6.1: Covid-19 and Forced Repatriation of Migrants in Pakistan: Government's Strategy and Challenges Ahead in the SBP's FY20 Annual Report on the State of Pakistan's Economy.

Refinance Scheme for Wages to Prevent Layoffs (SBP Rozgar Scheme) **Table 2.11**

	Requested				Approved			
	Amount (Billion)	Employees (Thousand)	Total Business Units	No. of SMEs	Amount (Billion)	Employees (Thousand)	Total Business Units	SME
Apr-20	76.3	527	775	238	16.2	115	124	32
May-20	36.3	356	682	351	42.3	366	584	224
Jun-20	18.7	131	537	353	21.4	220	529	280
Jul-20	96.3	557	624	208	51.0	275	461	217
Aug-20	27.3	186	389	187	64.4	397	509	174
Sep-20	21.3	174	473	290	29.9	218	455	248
Oct-20	0.1	1	14	8	12.7	103	290	161
Nov-20	-	-	-	-	0.3	2	7	1
Total	276.2	1,932	3,494	1,635	238.2	1,696	2,959	1,337

Source: State Bank of Pakistan

million employees (**Table 2.11**). The impact could be larger due to spillovers to the upstream and downstream industries.

Importantly, the number of SME applicants started to increase from May 2020 onwards, when the government announced the risk sharing facility for SMEs. It is important to note that small enterprises around the world remained more susceptible to the Covid shock.[37] The requirement of collateral limited their borrowing capacity, exacerbating their liquidity position. Owing to that, the SBP allowed SMEs to avail the Rozgar Scheme against corporate guarantees, and it went further to encourage the commercial banks to provide clean exposure to SMEs (without any collateral) for up to Rs 5 million.

[37] Source: OECD (https://www.oecd.org/coronavirus/policy-responses/coronavirus-covid-19-sme-policy-responses-04440101/)

3 Monetary Policy and Inflation

The SBP's Monetary Policy Committee decided to keep the policy rate unchanged at 7 percent during Q2-FY21. Further traction in the domestic recovery and well-anchored and contained inflationary expectations mainly guided the policy decision. Economic activity indicators, including high frequency demand-side data, posted recovery, whereas consumer and business sentiments strengthened as Covid-related uncertainty receded somewhat. Meanwhile, deposit mobilization remained strong, which, in turn, offset the liquidity pressures in the interbank market. Also, credit to the private sector posted an encouraging recovery amid the revival in economic activity and the availability of SBP's concessionary refinancing schemes. CPI inflation, on the other hand, weakened in Q2-FY21 on YoY basis as well as over the preceding quarter. While the measure of core inflation has remained broadly stable and energy inflation declined, the headline number was driven mainly by stronger food inflation in the non-perishable group.

3.1 Policy Review

Domestic economic activity gained traction throughout the first half of FY21. In particular, industrial activity gathered momentum, as large-scale manufacturing (LSM) posted a broad-based growth, especially in Q2-FY21. Also, high frequency demand indicators, such as auto sales, cement dispatches, POL sales, and electricity consumption, indicated a sustained recovery (**Figure 1.1 in Chapter 1**). The external and fiscal sector indicators continued to improve during the period under review, as both the current account and the primary balance posted surpluses. In the meantime, owing to stability in core inflation and the decline in energy components, the national CPI inflation softened (**Table 1.1**).

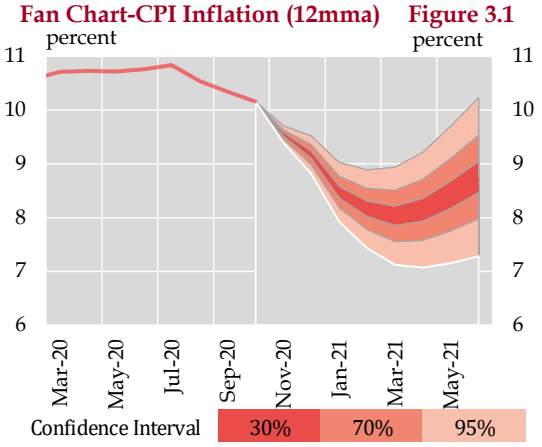
Due to the pick-up in overall economic activity as well as exports, the private sector credit posted a positive growth in Q2-FY21 after displaying a persistent negative trend since the third quarter of FY19. The uptick is mainly driven by a broad-based rise in working capital loans, largely supported by the SBP's concessionary refinancing schemes.

Notwithstanding the positive momentum in the economy, particularly during the second quarter of FY21, the overall demand-side inflationary pressures remained contained, partly owing to the existence of spare capacity in the economy.[1] Core inflation remained stable during the first half of the year (both in Q1 and Q2), whereas headline inflation decelerated. In particular, in Q2-FY21, headline inflation decelerated to 8.4 percent from 8.8 percent in Q1-FY21.

The YoY trend depicts that national headline inflation fell from 8.9 percent in October 2020 to 8.0 percent in December 2020 - the lowest rate since June 2019. This decline is mainly attributed to decreasing inflation in perishable food items and deflation in energy prices. Meanwhile, a significant increase in food prices was

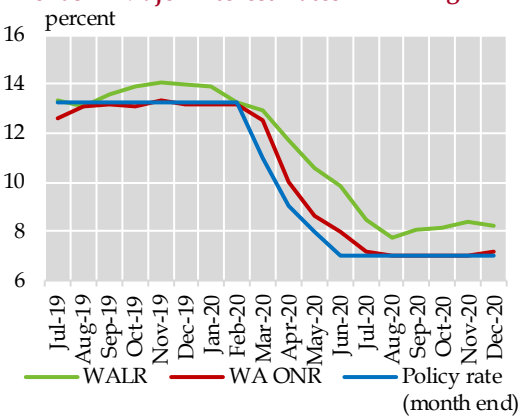
[1] For instance, in the auto sector, capacity utilization remained around 51.7 percent in cars, 40.1 percent in LCVs, 11.9 percent in buses, 10.9 percent in trucks and 76 percent in 2/3 wheelers, as per data taken from PAMA and Pakistan Economic Survey. In the cement sector, capacity utilization remained around 77 percent, whereas it was around 60 percent in the POL industry.

Fan Chart-CPI Inflation (12mma) **Figure 3.1**



Source: SBP staff estimates as of November,2020

Trends in Major Interest Rates **Figure 3.2**



Source: State Bank of Pakistan

recorded in October 2020 and November 2020 (on YoY basis) on account of non-perishable food items.

Nonetheless, the inflation projection for FY21 remained unchanged at 7-9 percent during the period, with the consideration of the favorable base effect and spare capacity in the economy. However, the range was subject to several risks. The upside risks included a potential increase in the food and energy prices, whereas the downward risks were associated with the second wave of the pandemic (**Figure 3.1**).

In view of the broadly unchanged outlook for growth and inflation during the period under review, the existing stance of monetary policy was deemed appropriate to keep the recovery on-track, as inflation expectations remained well-anchored. Therefore, the Monetary Policy Committee (MPC), in its meeting held in November 2020, decided to keep the policy rate unchanged at 7 percent (**Figure 3.**2).

3.2 Monetary Aggregates

The broad money grew by 5.6 percent during H1-FY21, compared to a slightly lower growth of 5.2 percent in the corresponding period last year. During Q2-FY21, both the Net Foreign Assets (NFA) and Net Domestic Assets (NDA) posted an expansion, unlike the trend observed in the preceding quarter where the entire increase in the money supply was driven by the NFA (**Table 3.1**).

Importantly, after a gap of 31 months, the NFA of the banking system turned positive in December 2020. This was on the back of an improvement in the current account balance and also due to a shift in the foreign liabilities from the SBP to the government, which in turn positively impacted the SBP's NFA.

During Q2-FY21, the NFA of the banking system expanded by Rs 271.5 billion, compared to an increase of Rs 618.4 billion during the same period last year. Bulk of this increase came from the improvement in the SBP's FX reserves position (**Figure 3.3**). In case of the NDA, the sharp increase in private credit offtake, along with higher government budgetary borrowings from the banking system

Monetary Aggregates[P] **Table 3.1**

billion Rupees

	FY20			FY21		
	Q1	**Q2**	**H1**	**Q1**	**Q2**	**H1**
M2 (A+B)	105.2	812.1	917.3	260.5	902.3	1,162.7
A. NFA	259.6	618.4	878.0	307.3	271.5	578.8
B. NDA	-154.4	193.7	39.3	-46.8	630.8	584.0
Budgetary borrowing*	156.0	30.6	186.6	285.2	152.1	437.3
SBP	-1,586.9	846.4	-740.5	-281.9	-304.0	-585.9
Scheduled banks	1,742.9	-815.7	927.1	567.1	456.0	1,023.2
Commodity operations	-15.6	-12.9	-28.5	-59.9	-19.4	-79.3
Private sector credit	-16.9	232.5	215.6	-76.6	420.1	343.5
PSEs	-2.0	-0.3	-2.4	-11.9	-17.4	-29.3
Other items net	-275.2	-58.8	-334.0	-184.7	91.7	-92.9
Reserve money	-207.4	372.6	165.3	-149.0	160.8	11.7
Currency in Circulation	289.1	40.8	330.0	-40.4	104.9	64.5
Deposits	-184.9	772.3	587.4	289.3	792.5	1,081.8

[P]: Provisional

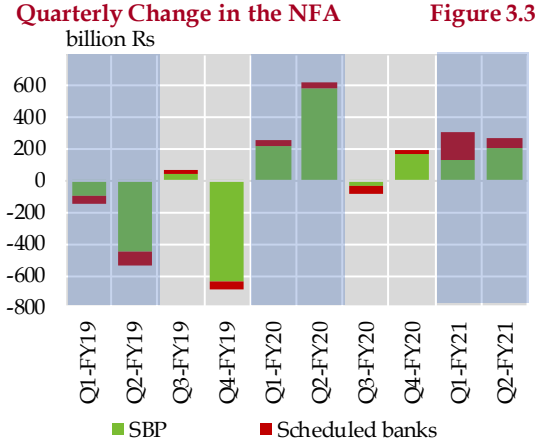
* These numbers are based on accrual basis. They do not tally with the amount of bank financing on cash-basis, as presented in **Table 4.1 in Chapter 4.**

Source: State Bank of Pakistan

during Q2-FY21, were the main drivers of the domestic assets of the banking system.

As far as the liability side of the broad money is concerned, the growth in currency in circulation re-emerged in Q2-FY21, as it recorded an expansion of Rs 104.9 billion, against a contraction of Rs 40.4 billion in the preceding quarter and an increase of Rs 40.8 billion in the corresponding period last year. On a cumulative basis, during H1-FY21, the deposits with the commercial banks grew by Rs 1,081.8 billion, compared to Rs 587.4 billion in the same period last year.[2] Despite the improvement in deposit mobilization, the overall currency to deposit ratio remained at an elevated level of 41.6 percent on average during H1-FY21, as compared to 41.5 percent in the same period last year.

Quarterly Change in the NFA **Figure 3.3**



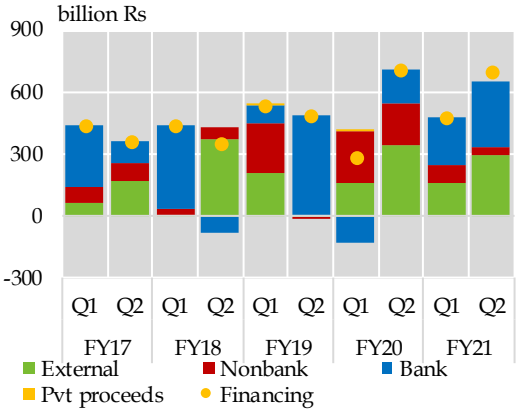
Source: State Bank of Pakistan

[2] Most of this YoY increase in deposits during H1-FY21 had originated in Q1 (Rs 289.3 billion), whereas mobilization had decreased by Rs 184.9 billion in the corresponding period last year. In Q2-FY21, the deposits expanded only slightly on YoY basis.

Government Borrowings

The government's borrowings from the banking system more than doubled during H1-FY21. This was partly due to an increase in the fiscal deficit in nominal terms, and also due to lower mobilization from non-bank sources (**Figure 3.4**).[3] In addition, given the government's commitment of zero deficit monetization, the reliance on commercial banks for budgetary support remained high.

Sources of Fiscal Deficit Financing **Figure 3.4**



Source: Ministry of Finance

During Q2-FY21, the government continued to set higher net-of-maturity targets for longer tenor bonds as compared to T-bills. Keeping in view the relatively low level of interest rates, the targets for floating rate PIBs were more than double that of fixed rate PIBs. Not only the pre-auction target for floaters were on the higher side, but the government also introduced new PIBs-Floating rate (PFL), with quarterly coupons (**Box 3.1**).

Box 3.1: A Recap of Recent Changes in the Floating-rate Bond Market in Pakistan

In May 2018, Pakistan's first floating rate government bonds were introduced. This 10-year instrument was launched primarily to provide an avenue to the market to invest in long-term bonds without taking exposure of the duration risk. Subsequently in June 2020, in a low interest rate environment, the government added new medium-term floaters, with maturities of 3 years and 5 years to its existing offering of floating rate bonds. Moreover, the coupon structure remained similar for all the maturities, i.e. a semi-annual coupon with the benchmark rate linked to 6-month T-bill yields and an additional margin (reflecting the term and liquidity premium of the bond).

List of Floating Rate PIBs **Table 3.1.1**

Coupon Frequency	Coupon Reset	Maturity	Benchmark*
Quarterly	Fortnightly	2-Year	3M T-bill
Quarterly	Quarterly	3-Years	3M T-bill
Quarterly	Quarterly	5-Years	3M T-bill
Quarterly	Quarterly	10-Years	3M T-bill
Semi-annual	Semi-annual	3-Years	6M T-bill
Semi-annual	Semi-annual	5-Years	6M T-bill
Semi-annual	Semi-annual	10-Years	6M T-bill

*benchmark is the weighted average yield of the most recent auction (near coupon reset date) of the respective security.

Source: State Bank of Pakistan

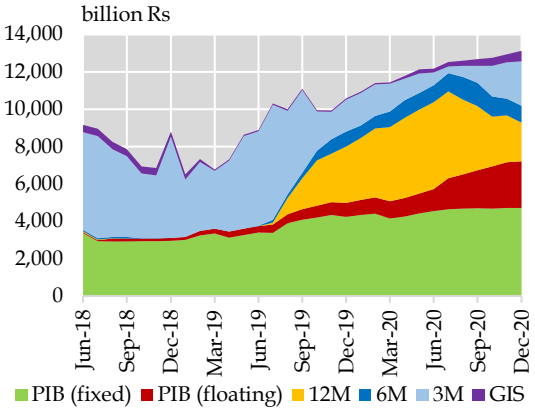
To further exploit the untapped potential of the floating rate bonds, the government introduced the new PFLs with more favorable features for the market in October 2020. This time around, however, not only a new maturity was added, but new coupon structures were also offered. The instruments with 3, 5 and 10-year maturities were now also offered with quarterly coupon and quarterly resets linked with the yields of the 3-month T-bill. Additionally, a 2-yr PFL was also introduced, with a unique coupon feature of fortnightly resets and coupon payments

[3] The nonbank financing fell to Rs 132.2 billion during H1-FY21 from Rs 439.4 billion and Rs 234.4 billion in H1-FY20 and H1-FY19 respectively.

on quarterly basis. In a nutshell, there are currently seven floaters available in the market, with maturities ranging from 2-yrs to 10-yrs. On the flipside, having a wide range of instruments is to some extent leading to an element of confusion in the market and is also disadvantageous in terms of improving liquidity of the floaters.

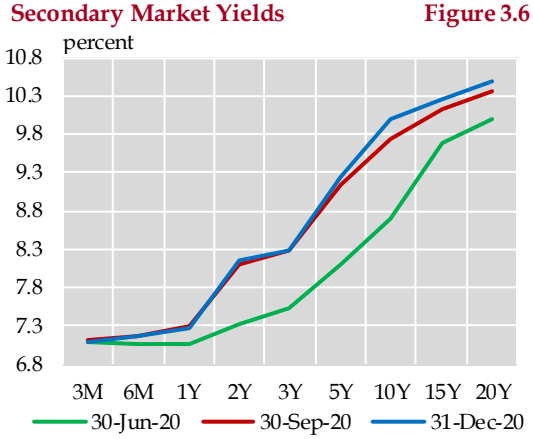
Besides this, in Q2-FY21, the government also made changes in the auction structure of the floating rate PIBs, with the objective to simplify and standardize the pricing of floaters. From October 16, 2020 onwards, in the fresh issuances of PFL, the primary dealers were directed to bid in terms of prices instead of margins; this effectively brought down margins to zero. However, the total return may have remained the same, with a compensatory adjustment in prices. From the secondary market's perspective, this change will make the price of the floaters more standardized, unlike previously, when prices also used to reflect the underlying quoted margin of the security. Meanwhile, the auctions for the floating rate PIBs have moved to a multiple price competitive bidding framework (from October 16, 2020 onwards) from a uniform price competitive bidding structure. This change should help the government take advantage of the bids offered below the cutoff rates and economize the debt servicing cost.

Outstanding Marketable Securities **Figure 3.5**



Source: State Bank of Pakistan

Secondary Market Yields **Figure 3.6**



Source: MUFAP

With the government's consistent efforts, the outstanding stock of government securities has not only become more diversified, but the average time to maturity has also improved (**Figure 3.5**). It is important to recall here that throughout FY20, the interest rate expectations presented favorable conditions for the government's objective of extending the maturity profile.[4] In the current scenario, however, the interest rate expectations are acting as a headwind. With a gradual steepening of the yield curve, it may become more challenging for the government to maintain a favorable maturity profile of marketable securities (**Figure 3.6**).

This is also evident from the increasing preference of the market for 3-month T-

[4] As the interest rates peaked out at 13.25 percent at the start of FY20 and the market's expectations of further rate hikes subsided after the July 2019 MPC decision, the longer tenor bonds became more attractive for the market (for more details, see Chapter 3 of the SBP's First Quarterly Report of FY20).

bills. As a result, the share of 3-month papers in the outstanding stock of government securities has started to increase – not in line with the government's borrowing targets. With no change in interest rates during H1-FY21, the market is concentrating its offers in the 3-month T-bills. Around 90 percent of the total competitive offers (for T-bills) received during Q2-FY21 were for the 3-month paper, against 45 percent in the preceding quarter. As a result, the total issuances of T-bills remained nearly Rs 500 billion higher as compared to the pre-auction target during Q2-FY21 (**Table 3.2**).

Meanwhile, the market's interest for fixed and floating rate PIBs remained on the lower side. The offers were not only lower compared to the preceding quarter, but also fell short of the government's pre-auction targets. In case of fixed rate PIBs, the government also remained reluctant to accept higher cut-offs; therefore, it was able to meet only 11 percent of the target for Q2-FY21. With a tough situation in mobilizing financing for longer tenor at fixed rates, the PFLs – with the unique variable coupon feature – remained a relatively important instrument for the government to maintain its maturity profile.

In order to further leverage on the favorable structure of the PFLs, the government introduced new floaters in Q2-FY21. The market also responded positively to the newly launched quarterly coupon (quarterly reset) PFL, to the extent that it nearly dried up all the offers for the

Instrument-wise Auction Summary for Q2-FY21 **Table 3.2**

billion Rupees

	Target	Maturity	Offered*	Accepted
T-bills	**2,750.0**	**3,493.9**	**4,725.1**	**3,249.4**
3M	950.0	1,457.5	4,231.8	2,920.4
6M	950.0	577.1	324.3	241.4
12M	850.0	1,459.3	169.0	87.6
PIBs (fixed)	**390.0**	**-**	**186.1**	**42.4**
3Y	150.0	-	32.1	4.8
5Y	110.0	-	53.8	-
10Y	85.0	-	48.2	-
15Y	30.0	-	25.5	15.0
20Y	15.0	-	26.6	22.6
PIBs (floater)	**930.0**	**-**	**622.7**	**455.1**
2Y – Quarterly	100.0	-	41.3	7.2
3Y – Quarterly	120.0	-	222.6	160.7
5Y – Quarterly	120.0	-	107.6	90.5
10Y – Quarterly	120.0	-	109.1	98.5
3Y – Semi Annual	170.0	-	85.6	64.2
5Y – Semi Annual	160.0	-	27.0	18.0
10Y – Semi Annual	140.0	-	29.5	16.0
GIS – VRR	**105.0**	**-**	**300.3**	**201.2**
GIS - FRR	**45.0**	**-**	**18.5**	**-**
Total	**4,220.0**	**3,493.9**	**5,852.7**	**3,948.1**

*competitive bids only

Source: State Bank of Pakistan

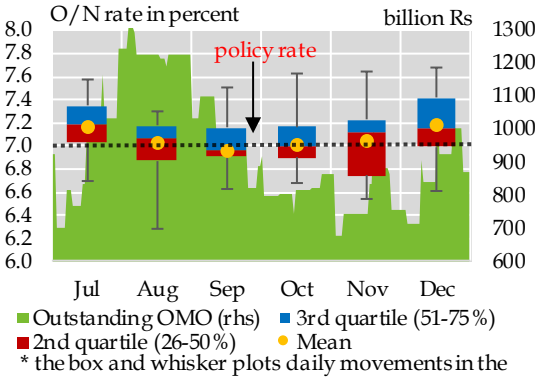
semi-annual PFLs. In contrast, the market's interest for another new addition of 2-year quarterly coupon PFL with fortnightly coupon reset remained dull. This was despite the fact that this instrument offers the lowest interest rate risk exposure as compared to other securities. Anecdotal evidence suggests that the relatively new structure of this bond is leading to lower participation. Going forward, once the back-end systems of market participants are upgraded, this may potentially become a useful asset for financial institutions to match their short-term liabilities.

Likewise, the government also continued to raise financing via Shariah-compliant instruments. The market also remained keen on investing in variable rental Sukuks by making cumulative offers nearly three-times the amount of the auction targets. In contrast, the participation remained muted in the fixed rental Sukuk. Moreover, the government also did not issue the fixed rental instruments, keeping in view the demand for higher cut-offs from the market with low bid volumes. Instead, higher issuances amounting to Rs 201.2 billion were made for variable rental Sukuks, as compared to the target of Rs 105.0 billion during Q2-FY21.

Interbank Liquidity

The interbank liquidity conditions required lower SBP support during H1-FY21 as compared to the same period last year. On QoQ basis, liquidity conditions eased up further in Q2-FY21 (**Figure 3.7**). The average OMO size fell to Rs 822.8 billion from Rs 1,048.3 billion in the

Interbank Liquidity Indicators **Figure 3.7**



* the box and whisker plots daily movements in the overnight rates (excluding outliers).

Source: State Bank of Pakistan

preceding quarter and Rs 912.8 billion in the corresponding period last year. Deposit mobilization played a key role in stabilizing the liquidity pressures. Besides this, the SBP's FX management, together with retirements made by Public Sector Enterprises (PSEs) and government procurement agencies, also provided additional liquidity support to the system.

The liquidity conditions initially improved during the first two months of the quarter, while pressures reemerged towards the end of the quarter. During October 2020, the government's borrowing needs from the commercial banks were lower, whereas pressures from the private credit offtake were also minimal. Moreover, the weekly deposit mobilization inflows and the SBP's FX management provided additional liquidity support. Consequently, the outstanding OMO injections decreased. In addition, higher activity on the corridor's floor compared to the ceiling also indicates comfortable liquidity conditions in the interbank market. Meanwhile, the average absolute deviation of overnight rates during October remained the lowest at 25 bps,

relative to the other two months in Q2-FY21.

In November 2020, the OMO injections reduced further to an average level of Rs 787.8 billion. The commercial banks utilized the SBP's repo facility on five occasions, compared to only one instance when banks had borrowed using the SBP's reverse repo facility. Meanwhile, the absolute deviation of overnight rates from the policy rate increased to 28 bps - up by 3 bps compared to October.

In contrast, during December 2020, the overnight rates were at a higher level, with liquidity pressures emanating from continued government borrowings from banks and an acceleration in the private credit offtake. For 18 days intermittingly, the overnight rates remained higher than the policy rate, with an absolute average deviation of 26 bps during the month. As a result, the SBP scaled up the OMO injections to Rs 860.4 billion.

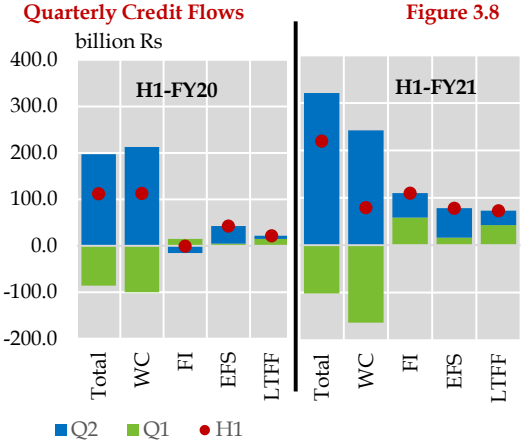
3.3 Credit to Private Sector

With a sharp increase in credit offtake during Q2-FY21, loans to private businesses almost doubled in the first half of FY21 on YoY basis. The higher offtake in Q2-FY21 more than offset the net loan retirements in the first quarter **(Figure 3.8).**

The rise in overall credit was primarily driven by working capital loans, particularly in Q2-FY21. This may be attributed to: (i) the pickup in industrial production as the year progressed; (ii) increased export-related activity in textiles and non-basmati rice; and (iii) utilization of the SBP's refinance facilities. Notably, around a quarter of the increase in the working capital loans during Q2-FY21 was contributed by the Export Finance Scheme (EFS).[5]

While the aforementioned favorable conditions prevailed during Q1-FY21 as well, credit did not pick-up during the quarter. This may be explained by the availability of surplus carry-over stocks, which had suppressed firms' working capital needs in the quarter.[6] In Q2, the uptick in working capital mainly owes to the seasonal demand in rice and sugar sectors, and inventory depletion in Q1 in some sectors such as textile, steel and footwear, which necessitated restocking activity and therefore increased the firms' credit needs.

Quarterly Credit Flows **Figure 3.8**



WC: Working Capital Loans; FI: Fixed Investment Loans; EFS: Export Finance Scheme; LTFF: Long Term Financing Facility
Source: State Bank of Pakistan

[5] Out of Rs 62.3 billion EFS loans in Q2-FY21, textile and rice processing sectors availed Rs 25.8 billion and Rs 19.7 billion, respectively.
[6] For details, see Chapter 3 in the SBP's First Quarterly Report for FY21 on the State of Pakistan's Economy.

Loans to Private Sector Businesses (H1) **Table 3.3**
(flow in billion Rupees)

	Total Loans*		Working Capital**		Fixed Investment	
	FY20	FY21	FY20	FY21	FY20	FY21
Private Sector Businesses	**111.9**	**219.5**	**112.8**	**79.4**	**-0.8**	**110.0**
o/w: EFS	42.5	78.2	42.5	78.2	-	-
LTFF (incl. TERF)	21.6	72.9	-	-	21.6	72.9
Manufacturing	122.7	83.7	107.5	14.9	15.1	67.6
Rice processing	26.6	57.2	26.1	55.8	0.6	1.3
Fertilizers	-0.1	23.3	-0.7	24.5	0.6	3.2
Refined petroleum	-14.2	18.4	-14.3	17.7	0.1	1.3
Textile	112.4	35.4	96.1	11.1	16.3	23.8
Basic iron and steel	10.4	15.3	3.0	9.5	7.4	5.8
Cement, lime and plaster	10.2	-0.6	12.8	-4.1	-2.6	3.5
Paper & paper products	-6.5	-3.4	-4.5	-5.5	-2.0	3.7
Vegetable and animal oils and fats	-10.3	-10.3	-10.7	-13.0	0.4	2.7
Motor vehicles	38.4	-17.4	36.2	-19.6	2.2	2.2
Sugar	-45.6	-46.0	-41.5	-54.0	-4.1	8.1
Power gen., trans., and dist.	21.6	40.4	23.8	-4.7	-2.2	45.2
Wholesale and retail trade	-38.8	25.2	-28.1	19.0	-10.7	5.8
Mining and quarrying	1.2	-3.4	-2.3	-7.3	3.4	3.9
Transportation and storage	17.2	0.2	21.9	-0.3	-4.7	0.5
Agriculture, forestry and fishing	4.8	11.5	5.2	13.7	-0.4	-2.2
Telecommunications	13.1	5.1	-2.9	10.0	15.9	-4.9
Real estate activities	5.2	-3.6	5.1	-1.5	0.0	-6.0
Construction	-26.1	13.4	-19.2	3.5	-6.9	-9.7

*Total loans in H1-FY21 include Rs 30.0 billion in construction financing after the revision in data on credit/loans from June 2020 onwards due to the inter-sectoral adjustment in private sector business. See IH&SMEFD Circular Letter No. 28 of 2020 for details. **Working capital includes trade financing
Source: State Bank of Pakistan

Fixed investment loans, on the other hand, increased by Rs 115.0 billion in H1-FY21, compared to a net retirement of Rs 0.8 billion in the corresponding period last year. Benefitting from the SBP's concessionary financing schemes, the power and textile sectors mainly borrowed long-term loans of Rs 45.2 billion and Rs 23.8 billion, respectively, during the period under review.

Working Capital Loans

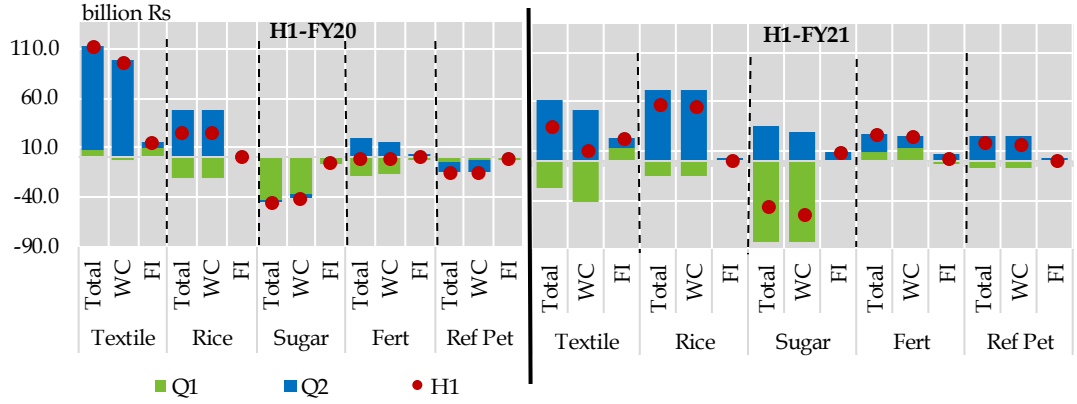
The increase in working capital loans during Q2-FY21 more than offset the net retirements in the preceding quarter.

Cumulatively, working capital loans rose by Rs 79.4 billion in H1-FY21, lower than an increase of Rs 112.8 billion in H1-FY20 **(Table 3.3).**

The higher demand for short-term loans during Q2-FY21 is explained by the broad-based growth in the LSM, seasonal credit offtake by rice processing and sugar businesses, and increased export-related activity in textile and non-basmati rice. The export-oriented sectors borrowed primarily from the SBP's concessionary Export Finance Scheme (EFS).

Rice and sugar businesses usually retire their short-term loans during the first

Loan Offtake by Major Sectors **Figure 3.9**



Source: State Bank of Pakistan

quarter and borrow in the second quarter, mainly to procure the raw material, as rice and sugarcane (being *Kharif* crops) are usually harvested during the second quarter of the fiscal year. In Q2-FY21, rice processing firms benefitted from the subsidized export refinance scheme and scaled up their exports, as reflected by an increase in exports of non-basmati rice during the quarter – both in terms of quantum and value (see **Chapter 5** for details).

Likewise, the sugar sector's short-term borrowings rose in Q2-FY21 after posting seasonal retirements in Q1. The increase in offtake during Q2 was consistent with the growth in sugar production, along with higher domestic prices. However, net retirements in Q1 overshadowed the borrowings in Q2 (**Figure 3.9**). Therefore, on a cumulative basis, the sector posted a net retirement of Rs 54.0 billion in H1-FY21, compared to a lower net retirement of Rs 41.5 billion last year.

In addition to the seasonal demand factor, inventory depletion in a few sectors in Q1 had increased the need for working capital loans in the subsequent quarter. After rising until June 2020, the inventory levels of a few sectors (such as textiles, steel, apparel, footwear and accessories design) declined in Q1-FY21. [7]

Meanwhile, the textile sector also benefitted from the EFS and borrowed short-term loans to scale up its exports (**Chapter 5**). Around half of the increase in working capital loans of the textile sector during Q2-FY21 came from the EFS.

In case of fertilizer, the revival in production raised the sector's short-term borrowings to Rs 24.5 billion in H1-FY21, compared to a marginal net retirement of Rs 0.7 billion last year.[8] The increase was more pronounced in Q1, when a 23.8 percent YoY growth in fertilizer imports had raised the manufacturers' short-term borrowing needs. However, in Q2, a 45.3

[7] On QoQ basis, inventories of *textiles*, *steel*, and *apparel, footwear & accessories design* segments declined by 12.5 percent, 35.6 percent and 16.9 percent respectively during Q1-FY21 (source: Bloomberg).
[8] Fertilizer production rose by 8.4 percent in H1-FY21, against an increase of 4.9 percent in H1-FY20.

percent YoY decline in fertilizer imports suppressed the working capital needs of the sector.

Refined petroleum borrowed Rs 17.7 billion in H1-FY21, compared to a net retirement of Rs 14.3 billion in the same period last year. The entire increase in offtake was concentrated in Q2, as major oil marketing companies in the country continued to borrow short-term loans mainly to meet the rising fuel demand amid accelerating economic activities in the country. This is in line with the 11.5 percent YoY growth in POL sales during Q2. On the other hand, wholesale and retail trade borrowed Rs 19.0 billion in H1-FY21, compared to a net retirement of Rs 28.1 billion last year. The increase was mainly concentrated in Q1, as sales of fuels inched up with the revival of economic activities in the country following the ease in lockdown restrictions.[9]

Fixed Investment Loans

The borrowings under fixed investment loans were Rs 110.0 billion in H1-FY21, compared to a net retirement of Rs 0.8 billion last year. The private sector took advantage of the LTFF and TERF schemes. In particular, disbursements under TERF were quite substantial during the second quarter, increasing to Rs 26.1 billion from Rs 4.5 billion in Q1-FY21.

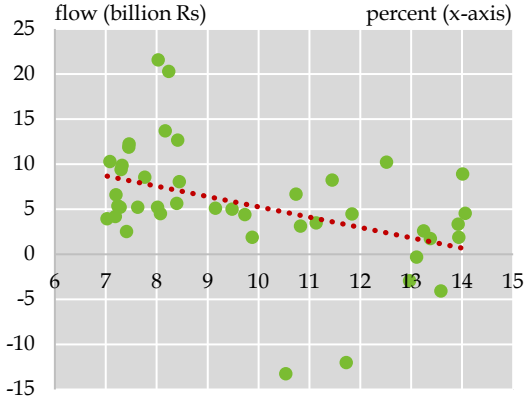
Within the manufacturing sector, textile businesses borrowed Rs 23.8 billion during H1-FY21, compared to an offtake of Rs 16.3 billion last year. By utilizing the concessional financing schemes, the textile sector borrowed long-term loans mainly to import textile machinery. This behavior was also consistent with the YoY growth in the import of textile machinery, particularly in Q2-FY21.[10]

Among non-manufacturing entities, power generation, transmission and distribution was the only major sector that availed higher fixed investment loans. Power firms mainly borrowed fixed investment loans for capacity expansion and to import power generating machinery.[11]

Consumer Financing

Consumer financing reported a cumulative flow of Rs 84.7 billion in H1-FY21 as compared to Rs 14.0 billion in the same period last year. The uptick in Q1-

Consumer Financing & WALR* **Figure 3.10**



* July 2017 - December 2020

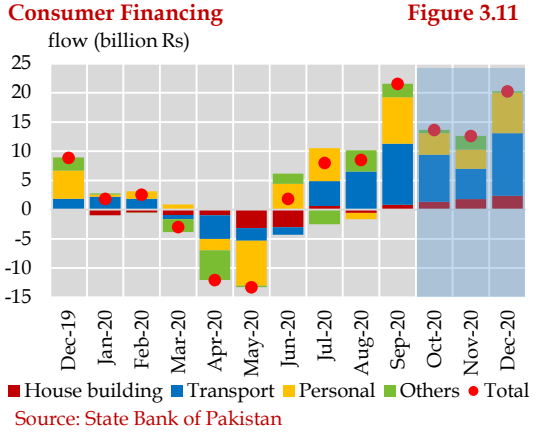
Source: State Bank of Pakistan

[9] For details, see Chapter 3 in the SBP's First Quarterly Report for FY21 on the State of Pakistan's Economy.

[10] According to PBS, the import of textile machinery rose by 33.1 percent in Q2-FY21 compared to a decline of 13.1 percent in Q2-FY20.

[11] Power generation machinery imports rose by 31.8 percent in H1-FY21, compared to an increase of 19.1 percent in H1-FY20, as per PBS data.

Consumer Financing **Figure 3.11**



Source: State Bank of Pakistan

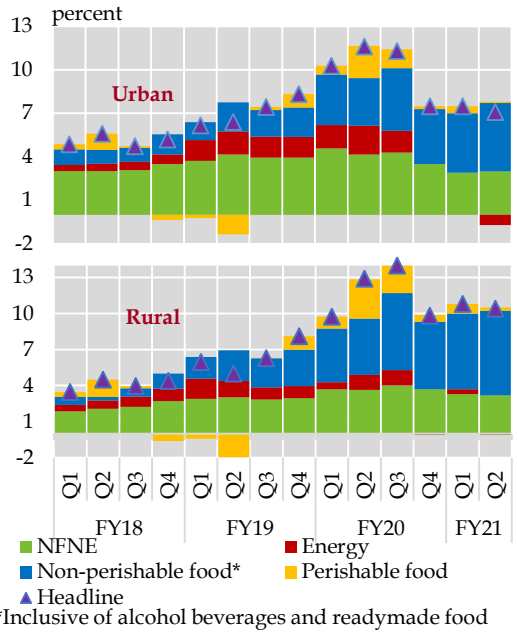
FY21 further gained momentum in the second quarter, when credit to consumers grew by Rs 46.6 billion, as compared to Rs 16.7 billion in Q2-FY20. The improvement is mainly attributed to auto and personal loans, as consumers took advantage of lower bank lending rates in H1-FY21 (**Figure 3.10**).

Also, there was a noticeable improvement in house building loans during the second quarter of this fiscal year (**Figure 3.11**). This is likely due to the mandatory targets set by the SBP for banks to increase their housing and construction loans to 5 percent of their overall private sector credit portfolio by December 31, 2021.

3.4 Inflation

The inflationary pressures continued to ease throughout the first half of FY21. In particular, national CPI inflation stood at 8.4 percent in Q2-FY21, compared to 8.8 percent in Q1-FY21 and 12.1 percent in Q2-FY20. The non-food non-energy (NFNE) inflation remained stable on account of spare capacity in the economy, and benign cost-push factors. Food inflation, however, remained high in both quarters

Composition of YoY CPI Inflation **Figure 3.12**

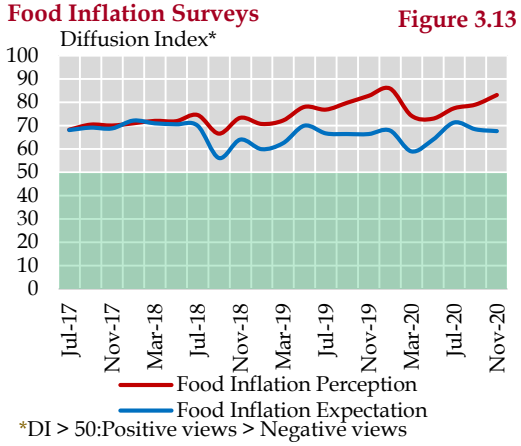


*Inclusive of alcohol beverages and readymade food

Source: Pakistan Bureau of Statistics

of FY21 compared to the preceding quarter due to non-perishable food items, whereas inflation in perishable food group eased (**Figure 3.12**). Stable prices of administered energy items during the quarter, on the other hand, slowed down the overall pace of inflation on a YoY basis,

Food Inflation Surveys **Figure 3.13**



*DI > 50:Positive views > Negative views

Source: State Bank of Pakistan

Average CPI Inflation and Contribution **Table 3.4**

Items	Urban						Rural					
	Wt.*	H1		Q2			Wgt.*	H1		Q2		
		FY20	FY21	FY20	FY21	Cont.*		FY20	FY21	FY20	FY21	Cont.*
Headline		11.0	7.3	11.6	7.1			11.3	10.6	12.9	10.4	
Food & non-alcoh. bev.	30.4	14.8	14.0	17.4	13.9	4.2	40.9	15.5	16.2	18.7	16.2	6.7
Wheat	0.6	12.5	37.7	15.3	37.1	0.2	3.5	13.3	38.7	17.2	38.5	1.2
Wheat flour	3.0	12.2	18.8	14.5	17.0	0.5	3.4	14.1	23.1	16.8	21.5	0.7
Chicken	1.4	12.2	12.5	-11.6	43.0	0.5	1.5	8.9	14.8	-9.2	39.0	0.5
Eggs	0.5	-2.4	45.2	-0.8	52.3	0.3	0.6	-3.3	44.7	-2.1	52.9	0.3
Non-perishable food	26.0	11.3	15.2	10.9	16.1	4.0	35.1	11.1	17.2	11.5	18.4	6.2
Perishable food items	4.5	34.9	8.1	57.6	4.3	0.2	5.8	40.1	10.2	62.9	6.4	0.5
Sugar	1.1	33.1	25.8	32.0	28.2	0.3	2.0	34.2	26.1	32.7	29.7	0.5
Condiments & spices	1.3	19.4	40.2	18.3	40.6	0.6	1.5	14.4	53.8	15.9	52.3	0.8
Alcoholic Bev., Tob.	0.9	22.6	5.9	17.3	6.5	0.1	1.3	25.9	5.6	21.2	5.4	0.1
Clothing and ft.wear	8.0	8.9	8.5	9.2	8.6	0.7	9.5	9.1	10.5	9.8	10.2	1.0
Housing, Elec., Gas	27.0	8.7	3.6	9.1	2.5	0.7	18.5	4.5	5.3	6.1	4.0	0.7
Furn' & HH equip.	4.1	11.8	6.3	11.3	6.4	0.3	4.1	10.1	9.9	10.2	9.9	0.4
Health	2.3	11.2	6.9	10.9	7.3	0.2	3.5	12.1	8.8	12.3	8.4	0.3
Transport	6.1	17.2	-3.3	16.0	-3.2	-0.2	5.6	14.9	-2.7	13.3	-2.6	-0.2
Communication	2.4	5.4	0.4	5.2	0.5	0.0	2.0	1.9	0.3	1.8	0.4	0.0
Recreation and culture	1.7	6.9	3.0	6.5	3.1	0.0	1.4	7.9	5.7	7.9	6.1	0.1
Education	4.9	6.6	1.0	6.3	1.1	0.1	2.1	5.2	1.6	5.2	2.1	0.0
Restaurants and hotels	7.4	5.1	8.5	5.0	9.4	0.7	6.2	7.9	8.8	8.3	9.3	0.6
Misc. goods & services	4.8	11.6	10.7	11.0	10.3	0.5	5.0	12.7	14.3	12.6	14.1	0.7
NFNE	53.7	8.0	5.5	7.6	5.6	3.0	42.6	8.4	7.7	8.4	7.6	3.2

*wgt. = weight and Cont.= Contribution for Q2
Source: Pakistan Bureau of Statistics

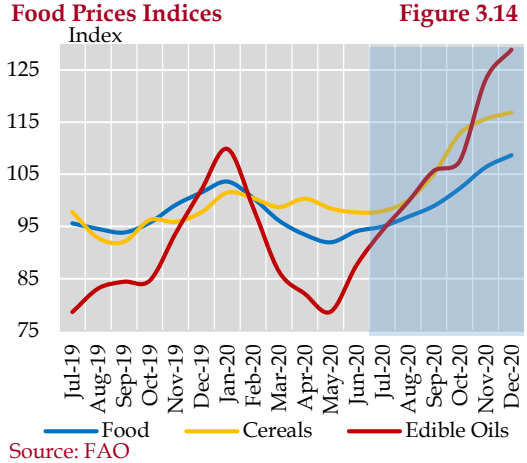
whereas other components of inflation remained almost unchanged during the second quarter. This trend suggests that inflation during this period was an outcome of supply-side issues as well as rising global food prices.

Nonetheless, with a considerably high share in the consumption basket, rising food prices kept the index of households' perception of food prices (which represents how they view current food prices compared to the previous 6 months) highly elevated as compared to previous waves. This represents elevated prices of mostly non-perishable items, whereas the index of households' expectation of food prices (which represents how they view food prices in the next six months compared to today) have remained broadly stable, as prices of wheat and sugar started to stabilize from November 2020 onwards (**Figure 3.13**).

Food continued to remain the major source of inflation

With around 37 percent weight in the urban CPI basket and 46 percent weight in the rural CPI basket, the increase in food prices, largely of non-perishable food items, in H1-FY21 remained a major challenge (**Table 3.4**). Among the non-perishable food items, particularly in Q2-FY21, the main pressure came from the

Food Prices Indices **Figure 3.14**



Source: FAO

poultry group (chicken and eggs), followed by the staple group (wheat and wheat flour and edible oil). Trends in agriculture and poultry production, supply-side issues and higher global food prices mainly led to higher prices in domestic markets (**Figure 3.14**).

The poultry index (both for urban and rural areas) rose by more than 40 percent during Q2-FY21 compared to declines recorded in the same period last year (**Figure 3.15**). In addition to a low base effect,[12] multiple factors contributed to this rise. For instance, demand for chicken rose significantly post-lockdowns, after the government allowed marriage halls and restaurants to reopen. Meanwhile, additional demand from the wedding season also emerged. On the other side, supply dipped, as many producers who had suffered lockdown-related losses over the previous few months did not replenish their sheds.[13] In addition to losses, uncertainty related to the second wave of Covid-19 also prevailed. While consumers were struggling with supply- and demand-related price pressures, poultry feed prices also surged, following the trend of international prices. As per industrial experts, poultry feed is around 70 to 75 percent of the total input cost of producing chicken and egg, while

Heat-map of Non-perishable Food Items (YoY Inflation) **Figure 3.15**

	Wt.	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20
Wheat-U	0.6	21.7	36.1	30.0	19.3	16.8	11.7	22.1	28.5	44.3	42.1	52.2	36.6	24.2
Wheat-R	3.5	22.2	32.2	33.7	24.3	21.9	13.9	20.7	30.4	41.1	45.1	51.1	37.9	28.1
Wheat flour -U	3.0	15.8	24.1	17.4	13.5	14.8	13.0	24.5	18.5	23.4	20.2	24.7	13.3	13.4
Wheat flour -R	3.4	18.3	25.2	20.7	18.0	18.1	14.9	23.2	21.6	26.2	26.7	29.4	19.6	15.8
Edible Oil-U	2.2	16.5	16.4	30.0	29.7	24.2	23.0	22.4	19.7	13.8	13.4	13.5	12.4	13.8
Edible Oil-R	3.0	19.1	26.0	32.1	32.1	28.9	27.7	26.2	21.9	18.8	16.6	16.6	17.1	17.8
Chicken -U	1.4	-17.2	22.6	14.5	4.2	-28.8	4.9	18.5	36.7	-38.3	-23.6	18.2	46.8	67.4
Chicken -R	1.5	-19.0	18.5	21.3	-2.4	-28.5	4.9	13.7	35.7	-27.0	-19.4	15.6	41.0	63.2
Eggs -U	0.5	2.0	18.1	-10.3	-0.1	44.2	19.6	44.9	43.1	28.6	38.6	43.3	48.7	64.4
Eggs -R	0.6	-1.3	12.7	-5.3	-3.1	29.3	17.5	28.0	41.1	30.4	33.2	43.7	49.3	65.3

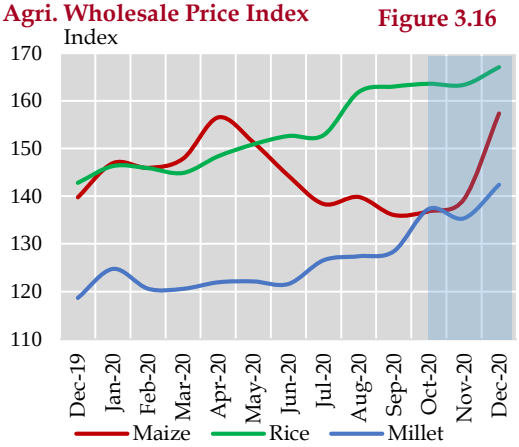
*Lighter shades depict lower and negative inflation and darker shades indicate higher inflation on YoY basis

Source: Pakistan Bureau of Statistics

[12] Prices had declined in Q2-FY20 amid supply correction after witnessing significant increase in Q1-FY20 due to suspension in production by some poultry farmers on account of rising input prices.
[13] Chicken prices had crashed significantly following the imposition of strict lockdowns in March 2020.

imported ingredients cost about 50-55 percent of the poultry feed.[14] Prices of most of the feed items increased in the Q2-FY21 (**Figure 3.16**).

Agri. Wholesale Price Index **Figure 3.16**



Source: Pakistan Bureau of Statistics

Wheat prices rose by more than 37 percent during Q2-FY21 both for the urban and the rural segments, whereas rural wheat flour inflation outpaced urban wheat flour inflation during the period under review. While analyzing the wheat flour index, the composition of the basket was identified as one of the reasons behind the inflation differential during the period,[15] in addition to the difference in weight of baskets and the impact of transportation cost on account of distance from point of retail markets/production to end-consumers (for details, see the SBP's Second Quarterly Report for FY20).

The quarter started with the elevated level of wheat prices, on account of the wheat crisis that had originated in the preceding months due to a shortfall in production as compared to the target as well as the constrained stock position with the public sector procurement agencies.[16] However, prices started to decline from November 2020 onwards as imported wheat landed at the ports, supplementing the domestic reserves as well as filling the current demand gap.[17] Wheat imports by the public sector (via Trading Corporation of Pakistan) and private sector, along with the government's efforts to timely release the wheat in the provinces by the procurement agencies to ensure steady supply, and provisioning of the commodity via utility stores and fair shops, all managed to assuage price pressures.

Similarly, despite sugar being a major contributor to the overall food inflation,

[14] Maize, soybean meal, rice tips, canola meal, sunflower meal and wheat bran are mostly used as poultry feed.

[15] The wheat flour index for urban areas comprises w*heat flour (fine/superior quality), wheat flour (average quality)* and *wheat flour bag*. The index for rural areas consists of *wheat flour (average quality)* and *wheat flour bag*. There were minor differences in inflation in the common commodities, i.e. *wheat flour (average quality)* and *wheat flour bag* in the urban and rural segments; however, inflation in *wheat flour (fine/superior quality)* in the urban basket was different. For some other food items as well, rural inflation was running much higher than urban inflation and differences in the consumption basket have been identified as one of the reasons behind the stark disparity.

[16] For details, see Chapter 3 in the SBP's First Quarterly Report for FY21 on the State of Pakistan's Economy.

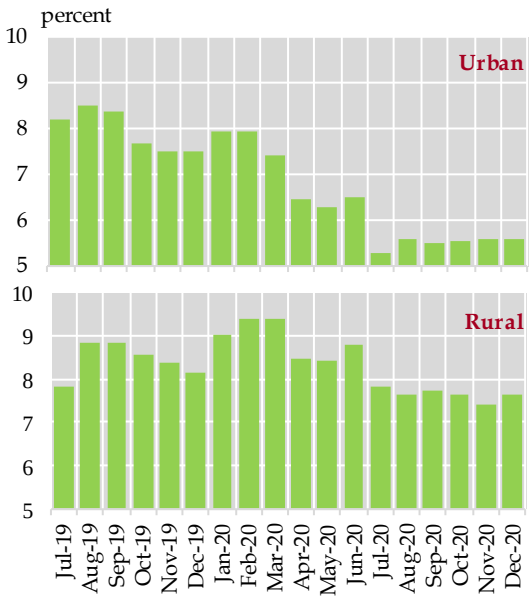
[17] Around 0.9 million MT of wheat was imported by the end of October 2020, whereas around 2.1 million MT was imported during Q2-FY21. This import was made against the initial estimates of shortfall of 1.6 million MT for consumption requirement during FY21.

the commodity's price softened from November 2020 onwards, after the import of around 250,000 MT of sugar during Q2-FY21. Meanwhile, edible oil also contributed significantly to the food inflation, following the rising trend in international prices. Palm oil and soybean prices have been on a steep rising trajectory since June 2020, amid sharp contractions in global inventory levels due to weather-related concerns in the major producing areas.

NFNE inflation continued to remain soft and stable

The inflationary pressures in the non-food-non-energy (NFNE) group, a measure to capture the underlying inflationary pressures, moderated in the first half of the year. In particular, NFNE remained stable in Q2-FY21 as compared to Q1, whereas it slowed down as compared to the same quarter last year for urban and rural areas (**Figure 3.17**). Almost half of the indices within urban NFNE registered lower inflation in Q2-FY21 as compared to the same period last year. This signifies that alleviation in cost-push pressures on account of muted fuel prices and tax relief measures announced for the construction industry in the Budget 2020-21 have proved largely effective. Moreover, the presence of spare capacity in the economy and orderly exchange rate conditions also helped pacify the underlying inflationary pressures.

NFNE - YoY Growth **Figure 3.17**



Source: Pakistan Bureau of Statistics

Within the urban NFNE, both the services and goods indices decelerated in Q2-FY21; however, the impact of the latter was more pronounced. Motor vehicles, construction inputs,[18] text books, newspapers and stationery mainly caused the decline in the overall goods index.

Within rural NFNE, both services and goods indices decelerated in Q2-FY21; however, the impact of the former was more pronounced. Marriage hall charges, motor vehicle tax (Covid-related relief in the budget by imposing no additional taxes) and education index (Covid-related concession by Sindh and Punjab

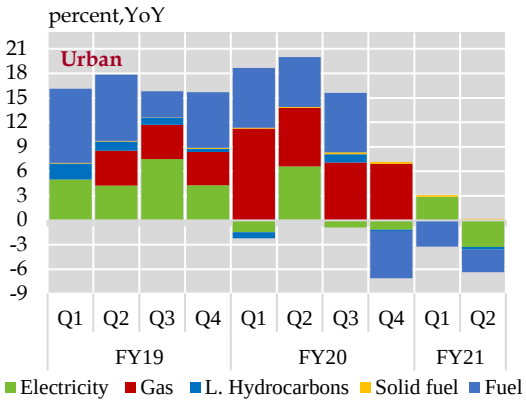
[18] The FED on Portland cement, aluminous cement, slag cement, super sulphate cement and similar hydraulic cements was reduced in the Budget 2020-21 from Rs 2/kg to Rs 1.75/kg in the wake of the Covid-19 outbreak.

governments in private sector fee) mainly slowed down the pace of inflation.[19]

Energy inflation continued to decline

Energy inflation remained subdued in H1-FY21, both for the urban and rural segments. Particularly in Q2, the urban energy index registered a 6.2 percent decline, whereas the rural index declined by 0.6 percent in the same period. Disaggregated analysis suggests that the largest impact on the urban energy index came from low domestic fuel prices, followed by electricity prices, on YoY basis (**Figure 3.18**).

Composition of Energy Inflation **Figure 3.18**



Source: Pakistan Bureau of Statistics

In case of motor fuels, prices remained almost stable, on average, during Q2-FY21 as compared to Q1-FY21. The MoM increase in fuel prices (0.2 percent and 0.7 percent in October 2020 and December 2020, respectively) was more than offset by the MoM dip of 1.8 percent in November 2020. However, deflation was registered on YoY basis in Q2-FY21. Soft international oil prices on YoY basis over the Covid-related sluggish global demand outlook and a stable domestic currency helped contain the inflationary impact in the motor fuel group.

In case of electricity prices, both the urban and rural areas posted slight increase during the quarter compared to previous quarter; however, 7.9 percent decline was observed on YoY basis in Q2-FY21. The rise in inflation during the quarter represented the impact of quarterly tariff as well as fuel cost adjustments to cover the cost of rising capacity payments and the sector's losses. It is important to recall here that these quarterly adjustments are part of the government's plan to address the issues pertaining to the accumulation of power sector arrears.

[19] For details, see Chapter 3 in the SBP's First Quarterly Report of FY21 on the State of Pakistan's Economy.

4 Fiscal Policy & Public Debt

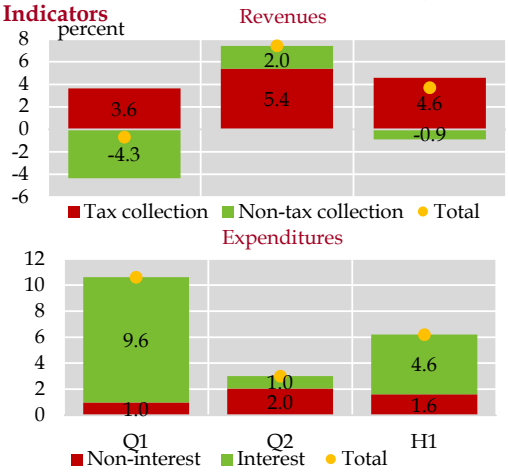
The primary balance recorded a higher surplus during H1-FY21, as the growth in revenue collection was strong enough to offset the weak momentum in non-interest expenditures. While the FBR's tax collection remained almost on target throughout the first half, non-tax revenues rebounded strongly in the second quarter after posting a YoY decline in the first quarter. Nonetheless, the fiscal deficit remained at almost last year's level, as higher markup payments, especially in the first quarter, offset the gains in the primary balance. This resulted in an increase in the stock of public debt; nonetheless, its pace remained slower as compared to last year, primarily due to lower volume of incremental government deposits with the banking system and revaluation gains on external debt in Rupee terms. With higher debt mobilization through flexible mark-up based long-term instruments, the government's repricing risk has increased.

4.1 Fiscal Trends and Policy Review

The rebound in economic activity and a slowdown in non-interest expenditures helped improve the overall fiscal position during the first half of FY21. The revenue momentum, which started building in the first quarter following the ease in lockdowns and resumption of economic activity, strengthened further in the second quarter, with collections accelerating from both tax and non-tax sources (**Figure 4.1**). While tax collections picked up as domestic manufacturing and imports gathered pace, the improvement in non-tax collections was attributed to the transfer of balance surplus profit of the SBP and the continued growth in revenues under the petroleum levy. On the expenditure side, the government exercised restraint on non-interest spending; the growth in total expenditures was driven primarily by mark-up spending during the period.

As a result, a primary surplus was recorded for the second consecutive quarter, against the deficit envisaged for the full-year. Although the surplus volume was quite low in Q2-FY21 as compared to the preceding quarter, its accumulation

Growth Contribution in Fiscal Indicators **Figure 4.1**



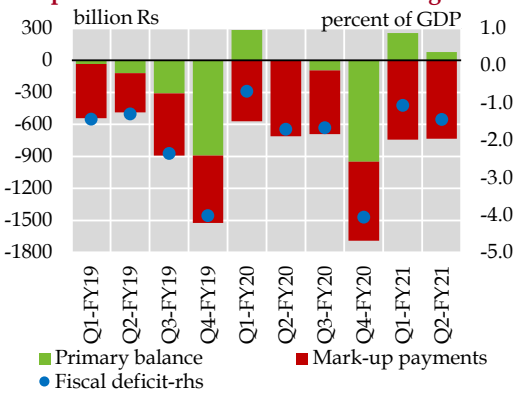
Source: Ministry of Finance

was much stronger than the same quarter last year (**Figure 4.2**). On a cumulative basis, therefore, the primary surplus recorded a 17.7 percent improvement in H1-FY21 over H1-FY20. In terms of GDP, the accumulated surplus stood at 0.7 percent during H1-FY21, which was a 17-year high.[1]

Importantly, mark-up payments, which had posted a significant year-on-year acceleration in the first quarter, stabilized

[1] The nominal GDP (at market price) envisaged by the Planning Commission for FY21 has been used to assess the performance of fiscal indicators.

Composition of Fiscal Deficit **Figure 4.2**



Source: Ministry of Finance

(albeit at an elevated level) during the second quarter. This helped improve the overall fiscal position (as well as the revenue balance) in Q2-FY21: the recorded deficit was 7.8 percent lower compared to last year.[2] As a result, the cumulative fiscal deficit was contained at 2.5 percent of GDP in H1-FY21, almost the same level as observed during the same period last year. Also, the first half deficit was only 35 percent of the target envisaged for the full year. This compared favorably with the past three years, when, on average, nearly 41 percent of the full-year deficit was recorded during the first half.

As a result, the pace of public debt accumulation during Jul-Dec FY21 remained almost unchanged from last year; however, on an annualized basis, the growth nearly halved from 22.8 percent in December 2019 to 11.1 percent in December 2020. The public debt to GDP ratio also posted a relatively moderate (1.4 percentage point) annualized increase and reached 82.2 percent by end-December 2020, against a sharp 8.5 percentage point increase a year earlier.[3]

While the external debt increased marginally (in Rupee terms), the domestic debt contributed the most to the nominal increase in the public debt. About two-thirds of the increase in domestic debt was meant for deficit financing; the rest was to maintain the preferred level of deposits/liquidity.

Gains emerging from reforms in public financial management and FBR's efforts

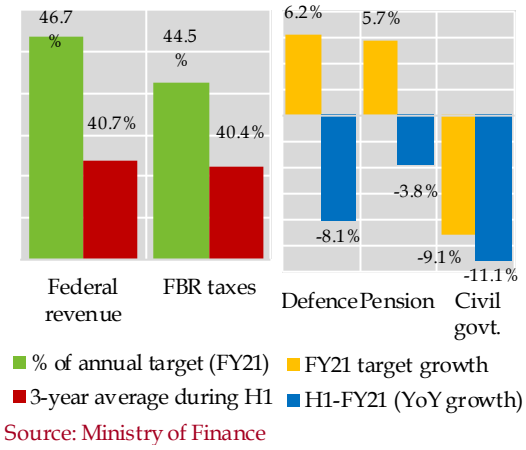
Developments in the fiscal sector during H1-FY21 were important from two aspects. First, in addition to exercising fiscal discipline similar to FY20, the FY21 budget also made provisions for Covid-related expenditures and to provide support to the vulnerable segments. Also, the government had lowered customs duties and announced construction-related incentives to stimulate the economy. These considerations were reflected in the budgeted deficit (of 0.5 percent of GDP) in the primary balance for the full year.

As it turned out, although the social transfers and other support measures increased government outlays, the activity-driven momentum in tax collection and the

[2] The revenue deficit, which stood at Rs 396.4 billion in Q2-FY20, declined to Rs 344.3 billion in Q2-FY21.
[3] It may also be noted that after touching 80.8 percent at end December 2019, the public debt to GDP ratio had increased further in Q4-FY20 to 87.2 percent by end-June 2020, reflecting the impact of Covid-19 on the fiscal position. The decline in the ratio between end-June and end-December 2020 stems primarily from the difference in GDP estimates: for the period ending December 2020, the ratio is based on the nominal GDP target set by the government for FY21, whereas for end-June 2020, the ratio is based on GDP estimates for the year FY20.

restraint on non-interest expenditures were strong enough to absorb them (**Figure 4.3**).

Fiscal Performance - H1-FY21 **Figure 4.3**



Source: Ministry of Finance

In fact, the FBR almost achieved its half-year target, whereas the proportion of full-year federal collections (actual or budgeted) realized in the first half remained notably higher as compared to the average of the past three years.

Second, the FBR's administrative efforts and progress on public financial management (PFM) reforms started to show gains in H1-FY21. On the FBR front, an important development was the steep rise in collections-on-demand. While the size of collections still remains low, this development implies that the Board has been able to make recoveries against notices issued to potential tax payers. Moreover, the number of taxpayers filing returns till end-December 2020 was 6.0 percent higher than the level observed during the same period last year.

Similarly, the impact of PFM reforms has also started appearing on the expenditure side. This is particularly evident in the decline in expenditures pertaining to pensions and the running of civil administration compared to last year. Perhaps a restraint on protocols (traveling-related, etc.) and better accounting practices and oversight, have facilitated the expenditure control.

But vulnerabilities continue to persist calling for expediting the reform process

Notwithstanding the improvement in revenue collection, it is important to note that the overall tax-to-GDP ratio continues to remain one of the lowest among the emerging market economies. Moreover, nearly 87 percent of taxes are still being collected under indirect mode (including via withholding taxes), of which nearly 60 percent is concentrated in import-related collections. Even within the formal sector, concessions and exemptions do not allow optimal collection and diversification of the revenue base.

Second, exercising cuts on development spending – or compromising project timelines – can prove costly. Not only does this limit the growth in productive (and debt repayment) capacity of the economy, it may also be seen as a constraint to private investment. Furthermore, delays can potentially escalate the cost of civil work. In this context, capacity constraints in relevant ministries need to be addressed, which could help expedite the execution of project-related tasks.

Finally, challenges with respect to public debt management have deepened. Interest payments are now consuming nearly half of the federal revenues and comprise around 53 percent of federal current expenditures. Also, the rollout of new debt instruments on flexible mark-up has

Consolidated Fiscal Indicators **Table 4.1**

billion Rupees, growth in percent

			YoY growth		Q1		Q2	
	H1-FY20	H1-FY21	H1-FY20	H1-FY21	FY20	FY21	FY20	FY21
1. Total Revenue (a+b)	3,231.9	3,351.2	38.9	3.7	1,489.0	1,478.7	1,742.9	1,872.4
(a) Tax Revenue	2,307.8	2,455.9	16.4	6.4	1,068.8	1,122.4	1,239.0	1,333.5
Federal	2,093.4	2,210.0	16.6	5.6	964.4	1,010.6	1,129.0	1,199.4
Provincial	214.4	245.9	14.2	14.7	104.5	111.8	109.9	134.1
(b) Non-Tax	924.1	895.3	168.7	-3.1	420.2	356.3	503.9	538.9
Federal	864.2	848.0	174.6	-1.9	389.3	336.3	474.9	511.7
Provincial	59.9	47.2	104.8	-21.2	30.9	20.0	29.0	27.2
2. Total Expenditure (a+b+c)	4,226.6	4,489.1	25.9	6.2	1,775.1	1,963.1	2,451.6	2,526.0
Non-interest expenditure	2,945.5	3,013.9	-20.2	-8.9	1,203.4	1,221.0	1,742.1	1,792.9
(a) Current Expenditure	3,721.4	4,029.3	24.7	8.3	1,582.2	1,812.6	2,139.2	2,216.8
Of which : Mark-up Payments	1,281.2	1,475.2	46.1	15.1	571.7	742.1	709.5	733.1
Defence	529.5	486.6	10.4	-8.1	242.6	224.5	286.9	262.1
Non-markup	2,945.5	3,013.9	18.8	2.3	1,203.4	1,221.0	1,742.1	1,792.9
(b) Development Expenditure & Net Lending	473.3	457.9	28.1	-3.3	147.2	215.2	326.1	242.6
(c) Statistical Discrepancy	32.0	1.9	884.3	-94.1	45.7	-64.7	-13.7	66.6
3. Overall Budget Balance	-994.7	-1,137.9	-3.4	14.4	-286.0	-484.3	-708.7	-653.6
4. Primary Balance	286.5	337.2	-287.0	17.7	285.7	257.7	0.8	79.5
5. Financing (a+b)	994.7	1,137.9	-3.4	14.4	286.0	484.3	708.7	653.6
(a) External (Net)	513.6	454.4	135.6	-11.5	166.5	161.4	347.1	293.1
(b) Domestic (Net)	481.1	683.5	-40.7	42.1	119.5	323.0	361.6	360.5
Non-Bank	439.4	132.2	87.5	-69.9	242.5	92.1	196.9	40.1
Bank	41.7	551.3	-92.8	1,220.8	-123.0	230.8	164.7	320.4

Source: Ministry of Finance

increased the repricing risk for the government.

In this context, the government should now recalibrate its policy mix and devise a workable short- and medium-term strategy with well-defined timelines. Though progress has been observed in select reform areas over the past two years, the area where the most rigorous reforms are still needed is the narrow revenue base. In the short term, the government should be focusing on removing or rationalizing concessions to plug the existing tax gap. Then in the medium-to-long term, it should devise ways to improve the documentation of the economy. In this regard, pushing further on the showing of CNIC on high-end sales would help. Moreover, the federal and provincial governments should also devise a collective workable strategy to mobilize revenues from the agriculture and services sectors.

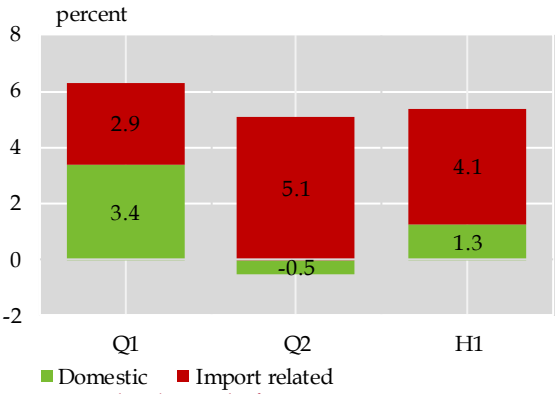
4.2 Federal Revenues

Following the pick-up in economic activity, overall revenues grew by 3.4 percent in H1-FY21, against the 40.2 percent growth observed during the same period last year. This growth entirely came from tax revenues, which more than offset the decline in non-tax revenues (NTRs) due to lower profits of the SBP and the Pakistan

Growth Contribution in Federal Taxes - FY21 **Figure: 4.4**

Source: Ministry of Finance

Growth Contribution in Indirect Taxes - FY21 **Figure: 4.5**



Source: Federal Board of Revenue

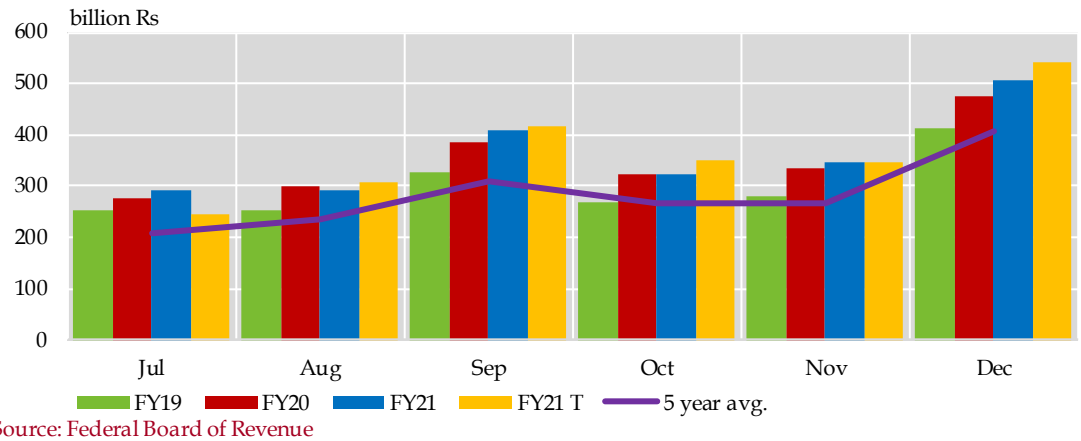
Telecommunication Authority (PTA). However, it is important to note that the decline in NTRs was concentrated mainly in the first quarter, as these posted a YoY increase in Q2-FY21 on the back of a balance surplus profit of the last fiscal year.

On the other hand, the growth in tax collections was spread evenly across the first half of FY21, though the composition of taxes underwent significant changes across the two quarters. Specifically, in Q1-FY21, most of the growth in overall taxes came from indirect collections, whereas in Q2-FY21, the growth was dominated by direct taxes. Also, within indirect taxes, the contribution from import-related collections increased significantly from Q1 to Q2 (**Figure 4.4 & 4.5**).

FBR Collections

The FBR tax collection showed a broad-based increase in H1-FY21 and almost achieved its target for the period (**Figure 4.6**). Moreover, a strong YoY growth in the FBR tax collection is expected in the last

Monthly FBR Tax Collection **Figure: 4.6**



Source: Federal Board of Revenue

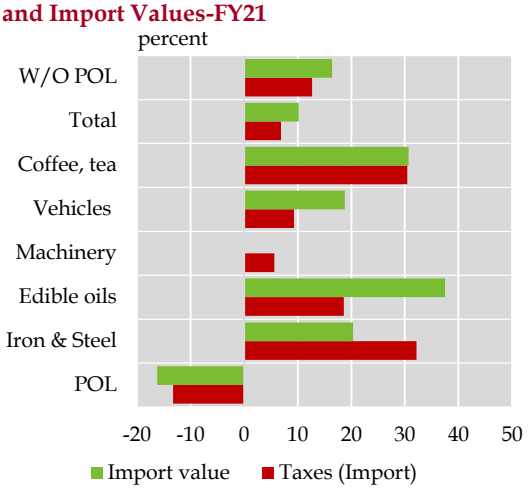
four months of FY21 due to the low base effect from last year.[4]

A broad-based increase in indirect taxes during H1-FY21

Collections through indirect taxes, which had grown by 16.7 percent in H1-FY20 on account of a number of measures announced in the budget, gained further momentum in H1-FY21. These collections posted a YoY increase of 5.4 percent during the period, despite the concessions given to a number of industries (including construction) for the import of raw materials. Both import-related and domestic taxes contributed equally to this growth. This performance can be attributed to the recovery of the domestic economy, higher prices of sugar and electricity, and higher demand for raw materials in the construction industry (especially iron and steel).

Import-related taxes, having a share of around 60 percent in indirect taxes, posted a YoY growth of 6.9 percent in the first half of FY21.[5] This growth was recorded despite the decline in global crude oil prices and the exemption from additional customs duty on more than 1,600 tariff lines (mainly raw material items, including chemical, leather, textile and fertilizer). However, their impact was more than offset by higher collections from iron and steel, food items and vehicles (**Figure 4.7**).

Growth in Import Related Taxes and Import Values-FY21 **Figure 4.7**



Source: Federal Board of Revenue

In case of iron and steel, growth in the construction industry (as evident from higher local cement dispatches) has propelled their imports. While the demand for finished steel products also remained strong, the growth in import of scrap was more pronounced, which reflects vibrancy in the domestic steel industry. As a result, higher collections were recorded from both sales tax and custom duty at the import stage. In case of vehicles also, the growth in the import of both CBUs and CKDs remained strong. The growth in CBUs was more pronounced (127 percent YoY), as new entrants penetrated the market initially through foreign-assembled units. It is important to note here that CBUs attract a higher customs duty compared to the one applicable on CKDs (though green-field investors get concessions at an early stage).[6]

[4] The FBR collected Rs 2,570 billion against the target of Rs 2,550 billion in Jul-Jan FY21. The tax revenues grew by 6.4 percent YoY during the period. The collection was Rs 2,416 billion during the same period last year.

[5] The Rupee value of imports grew by 10.2 percent in H1-FY21, against 0.1 percent growth last year.

[6] The Automotive Development Policy 2016-21 has provided incentives for new entrants, including: concessional rate of custom duty of 10 percent on non-localized parts and 25 percent on localized parts for

The impetus in collections from food imports was mainly price-led. Collections grew particularly strongly from edible oil and ghee, where bullish international prices significantly increased the import values. Similarly, international prices of tea and coffee also remained higher than last year, which pushed up their import values and helped increase collections this year.

Increase in both energy and non-energy related items increased the domestic tax collection

With the recovery in economic activity, the domestic tax collection grew (in gross terms) by 14.7 percent YoY during H1-FY21. Both energy and non-energy related taxes contributed to this growth (**Table 4.2**).

Sales Tax Domestic Collection during H1 **Table 4.2**

billion Rupees; growth in percent

	FY20	FY21	Growth
Energy-related	**201.1**	**238.0**	**18.4**
Discos	56.2	79.1	40.8
Oil refinery	83.3	71.1	-14.7
Oil exploration	47.3	44.3	-6.5
OMCs	11.0	40.7	270.7
LPG/LNG	3.3	2.9	-12.3
Non-Energy	**356.2**	**401.2**	**12.6**
of which			
Cement	46.8	54.3	16.0
Sugar	16.5	29.7	79.9
Textile	20.0	29.5	47.8
Motor cars	5.4	12.9	138.9
Iron and steel	4.2	5.0	18.9
Cigarettes	43.4	52.6	21.2
Total	**557.2**	**639.2**	**14.7**

Source: Federal Board of Revenue

Within non-energy items, cigarettes contributed the most. This is due to the intensified crackdown against smuggled cigarettes, which made these products more expensive in the market and led to an increase in the consumption of local brands. In addition, higher cigarette prices over last year also contributed to the increase in collections. A similar price-driven growth was observed in the case of sugar.[7] In contrast, the increase in collections from the textile sector was attributed primarily to the vibrancy in activity, especially export-related.[8] It must be recalled here that the zero-rating regime for the sector was withdrawn last year, which led to a 47.8 percent growth in sales tax collection during H1-FY21 on YoY basis. The activity-led pick up in indirect taxes collection was also observed in cement and steel industries.

Among energy items, the collection from Discos remained the major source of the YoY increase in collections. This was attributed to the rise in power generation from last year, as well as the increase in power tariffs during the period. Moreover, the increased sales of petroleum products also led to higher collections (up by 10.2 percent).

Improvement in direct taxes due to higher WHT and Collection on Demand

Direct taxes grew 5.6 percent in H1-FY21, compared to an increase of 17.4 percent during the same period last year (**Table 4.3**). The growth came from better

five years for the manufacturing of cars and LCVs; and duty-free import of plant and machinery for setting up the assembly and/or manufacturing facility (one-time basis).

[7] A 25.8 percent YoY increase was observed in sugar prices during H1-FY21.

[8] As per PBS data, textile exports grew by 7.8 percent in H1-FY21, compared to 3.9 percent in the same period last year.

collections under withholding taxes and collections-on-demand, as the growth in voluntary payments remained lower than last year.

Direct Taxes - H1 **Table 4.3**

billion Rupees, growth in percent

	FY20	FY21	Growth
Collection on demand	**19.7**	**38.5**	**95.3**
Voluntary payments	**248.2**	**256.7**	**3.4**
Withholding taxes	**544.8**	**569.3**	**4.5**
Imports	105.8	90.8	-14.2
Salaries	57.5	69.4	20.6
Dividends	30.4	30.1	-1.2
Bank interest and securities	56.7	64.8	14.3
Contracts	112.8	115.7	2.6
Export	19.9	20.2	1.6
Cash withdrawals	8.6	7.2	-16.4
Electric bills	24.9	25.9	4.1
Telephone	27.0	30.8	13.8
Other withholding taxes	100.9	114.4	13.4
Total	**784.9**	**829.2**	**5.6**

Source: Federal Board of Revenue

The rise in withholding taxes was attributed to higher collections from the telecom and banking sectors. The usage of telecom services rose significantly after the Covid-19 outbreak (for virtual meetings and online educational activities, etc.), which translated to higher earnings of telecom firms. Consequently, the collections from WHT on telephone usage increased. Meanwhile, the rise in savings deposits in H1-FY21 over last year led to an increase in collections from bank interest and securities.

Collections-on-demand, on the other hand, more than doubled during H1-FY21 on YoY basis. While the level of these collections is still very low compared to other revenue sources as well as their potential, this improvement reflects the impact of a number of administrative steps taken by the FBR to expand the revenue base. For instance, the Board has expedited the issuance of demand notices to potential taxpayers for the discharge of tax liability.

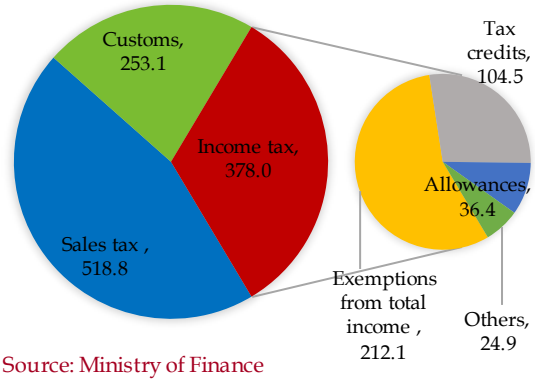
Furthermore, the FBR has also launched *Maloomat Tax-Ray*, under which it collects the information of individuals' assets and withholding deductions from third-party sources (such as banks and Nadra) and shares the same with the individuals. On one hand, the use of third-party data sources helps the FBR to better determine the tax liability of high net-worth individuals (and issue demand notices). On the other hand, it facilitates tax filers in accurately evaluating their assets and withholding claims while filing returns.

It is important to highlight here that the existing income tax structure is characterized by heavy exemptions and concessions to various sectors. It is estimated that the tax expenditures in Pakistan stand at around Rs 1.0 trillion (FY20), distributed almost evenly across sales tax, income tax and customs duties (**Figure 4.8**).[9] The government has committed to transform the existing GST into a more broad-based VAT structure and to eliminate tax credits and deductions for the higher income brackets under the personal income tax. However,

[9] Tax expenditures are special provisions of the tax code, such as exclusions, deductions, deferrals, credits, and tax rates, which benefit specific activities or groups of taxpayers.

meaningful steps are yet to be taken in this regard.

Estimated Tax Expenditure - FY20 (billion Rs) **Figure 4.8**



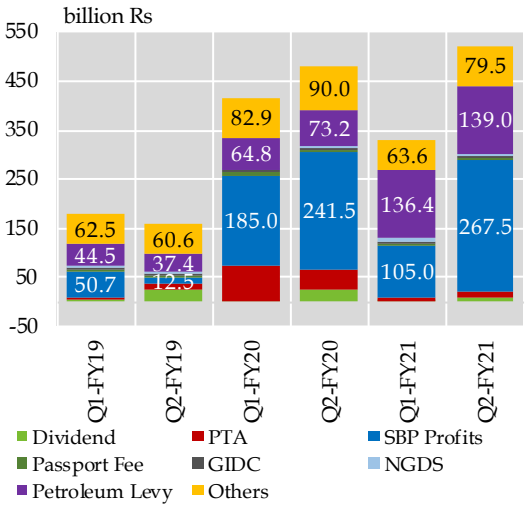
Source: Ministry of Finance

Decline in non-tax revenues due to the absence of one-off flows in H1-FY21

Federal non-tax revenues posted a decline in H1-FY21 on YoY basis. This decline was contributed mainly by lower transfers of SBP and PTA profits to the Ministry of Finance (MoF), which more than offset a YoY increase in collections from petroleum levy and mark-up receipts from public sector enterprises (PSEs) (**Figure 4.9**).

The decline in transfer of the SBP's profits was observed only in the first quarter. This was mainly attributed to lower interest rates and partly to the retirement of some debt owed by the government. Although the SBP's earning profile did not undergo any visible change in the second quarter, the bank was able to transfer higher amount of profits as compared to last year. This was mainly on account of transfer of around Rs 150 billion to the government during the quarter from the balance surplus profit of the previous fiscal year, as some of the profit is retained till the finalization of the audit of financial statements.

Quarterly Non-Tax Revenues **Figure 4.9**



Source: Federal Board of Revenue

Receipts from the PTA also remained lower in H1-FY21 than in H1 -FY20. It may be recalled that last year, cellular companies had paid half of their GSM license renewal fee to the PTA, which had resulted in higher collections under this head (Rs 112.1 billion). The remaining payment tranches are scheduled to be received in a staggered form over the next five years. Hence, the overall transferred receipts were limited to Rs 18.6 billion only in H1-FY21.

In contrast to the above-mentioned NTR sources, collections from petroleum levy almost doubled in H1-FY21 from the same period last year.[10] This reflects the increase in the levy rate on petrol and diesel at the start of the fiscal year, along with higher

[10] The government collected around 60 percent of the full year target for petroleum levy (Rs 450 billion) during H1-FY21.

consumption during the period. Similarly, mark-up receipts from PSEs more than doubled from last year, on account of a 520 basis points increase in the mark-up charged on loans to PSEs and other local bodies.[11]

4.3 Federal Expenditures[12]

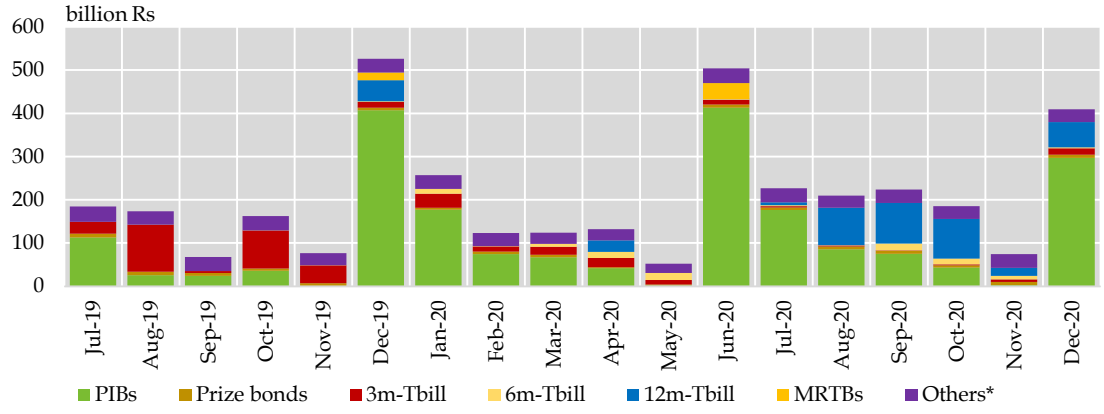
Federal expenditures grew by 5.0 percent during H1-FY21, compared to the 33.6 percent growth observed in H1-FY20 and the 4.7 percent overall increase envisaged for the full-year. Major contribution to this growth came from mark-up spending, as the non-mark-up spending (including development, defence, pensions and running of civil government) declined in both quarters.

Federal Current Expenditures

Within current spending, most of the increase came from mark-up payments, which grew by 15.1 percent during H1-FY21 as compared to the 46.1 percent growth recorded during the same period last year. A large portion of this growth was registered in the first quarter; however, its pace slowed down in the second quarter on YoY basis.

In case of external debt, the interest payments dropped in both quarters of FY21. This was due to: (i) an appreciation of the PKR, which shrunk the volume of foreign debt servicing in Rupee terms; (ii) a drop in foreign interest rates (Libor) in the aftermath of Covid-19, which favorably repriced floating rate debt contracts; and (iii) the relief provided under the Debt Service Suspension Initiative (DSSI), which lowered mark-up payments to multilaterals, including the Paris Club and the ADB. In case of the DSSI, Pakistan is expected to receive potential savings of US$ 3.6 billion (1.3 percent of its GDP) up till June 2021.[13]

Instrument wise Mark-up Payments **Figure 4.10**



Source: State Bank of Pakistan

[11] Circular No. F.8(2)GS-I/2018-1645, dated December 9, 2020 (Finance Division, Budget Wing).
[12] The discussion in this section is based on expenditures excluding statistical discrepancy.
[13] The scheduled payment of both the principal component and interest payments has been suspended for the year under the DSSI. These payments would now be made in a staggered form between FY22 and FY24 (plus one year grace period). Source: World Bank, as of February 19, 2021. worldbank.org/en/topic/debt/brief/covid-19-debt-service-suspension-initiative

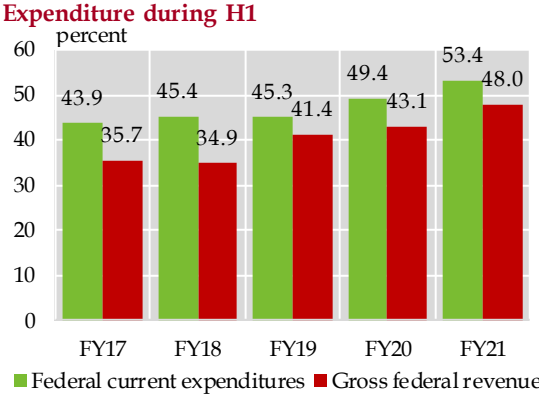
Within the domestic debt servicing, the weakening pace in the second quarter primarily reflects a YoY decline in PIB coupon payments. It is important to recall here that last year, coupon payments in the second quarter had included the impact of the re-profiling exercise, which had converted nearly 93 percent of the SBP's debt stock into PIBs in June 2019.[14] The first coupon payment of these PIBs had fallen due in December 2019, and had pushed up the quarterly payments to Rs 443 billion (nearly 3 times the payments in the preceding quarter). Although the government continued to mobilize PIBs in the subsequent months, they were largely priced at floating rates. This meant that their coupon payments contained the impact of the steep decline in interest rates from March 2020 onwards. Thus, the base effect, coupled with lower interest rates, led to a slowdown in the growth of mark-up payments in Q2-FY21 on YoY basis (**Figure 4.10**).

This slowdown notwithstanding, it is worth highlighting that the level of mark-up payments is still quite high, constituting nearly 53 percent of the federal current expenditures. Importantly also, mark-up payments ate up almost 48 percent of the total federal revenues (**Figure 4.11**), and were nearly six times the volume of the federal development expenditures. These numbers basically reflect the magnitude of the fiscal stress stemming from mark-up payments.

Sizable curtailment in non-markup current expenditures

The non-markup federal expenditures saw a contraction during H1-FY21 on a YoY basis. The decline in three major heads was more prominent: defence, pensions, and running of civil government. It is pertinent to note that despite higher budgetary allocations for FY21, spending under these heads remained lower than last year. Moreover, a reduction in defence expenditures was observed in both the quarters.

Interest Payments as Percent of Federal Revenue and Current Expenditure during H1 **Figure 4.11**



Source: Finance Division

Spending on the running of civil government declined sharply during the second quarter, mainly due to the austerity drive initiated in the beginning of FY21. This included a complete ban on the purchase of all vehicles (except motorcycles) for current expenditures; the creation of new vacancies; and restrictions on other official protocols – such as the entitlement of magazines and newspapers; rationalization of utility consumption; and constrictions on other operational expenditures.[15]

[14] Under the debt re-profiling exercise carried out in June 2019, around 70 percent of the SBP debt was converted into floating-rate PIBs and about 23 percent into fixed-rate PIBs.
[15] Circular No. 7(1) Exp. IV/2016-430, dated August 6, 2020, Expenditure Wing, Finance Division.

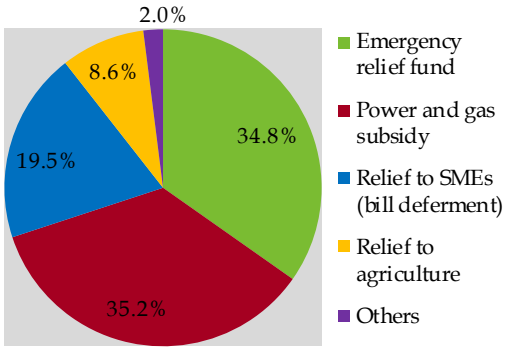
In addition, checks and balances on expenditure management have also been introduced under the Public Finance Management Act of 2019. In this context, the employee-related expenses are monitored and managed by the designated principal accounting officers to ensure that all expenditures are made within the allocated budget for prudent budget and cash management of the fiscal accounts.[16] To meet any additional requirements, ministries and divisions have been allocated technical supplementary grants, primarily from the re-appropriation of funds in the budget. [17]

Within the social protection programs, disbursements under the *Ehsaas Emergency Cash Program* dominated. By end-December 2020, Rs 179.2 billion was disbursed to 14.83 million beneficiaries.[18] Likewise, Rs 1.7 billion was disbursed till October 2020 under the *Kamyab Jawan Youth Entrepreneurship Scheme (KJYES)* to the youth for starting various businesses**.** In addition to these, other social welfare programs have also been initiated, including the *Ehsaas Kafalat* policy for special persons and underprivileged women. As a result, the total spending against the Benazir Income Support Program under *Ehsaas* reached Rs 66.8 billion during H1-FY21, compared to Rs 28.5 billion last year.

Meanwhile, of the Rs 1,240 billion allocated under the Economic Stimulus Package (ESP) announced in the wake of Covid-19, [19] Rs 700 billion were spent in FY20 and the remaining (Rs 540 billion) were re-allocated for FY21. Of this, the government spent only 21.6 percent in H1-FY21, with disbursements concentrated in SME (utility bills' deferment) and agriculture sectors, emergency relief fund, release of pending refunds to exporters, and subsidy to power and gas sectors (**Figure 4.12**).

It is important to highlight here that provisions under the relief for daily-wage workers (Rs 200 billion) remained largely unspent, due to a temporary suspension of the self-registration process for the relief, and the earlier-than-expected resumption of economic activities in the country. [20]

Spending under Economic Stimulus Package's Remaining Tranche - H1-FY21 **Figure 4.12**



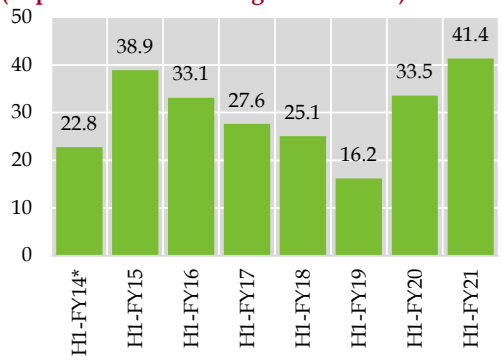
Source: Finance Division

[16] Circular No. F.1(3)-CAO(MoF)/2020/447, Budget Wing, Finance Division.
[17] Mid-year Budget Review for 2020-2021, Finance Division. http://www.finance.gov.pk/budget/mid_year_Budget_review_2020_21.pdf.
[18] finance.gov.pk/economic/economic_update_december_2020.pdf
[19] The term "Economic Stimulus Package" has been named differently in various government documents. At some places, this is referred to as the *Economic Stimulus Package*, whereas in others, it has been referred to as the *Corona Stimulus Package*.
[20] The process of self-registration for the relief (Rs 15,000 per month) of daily-wage workers was temporarily suspended in May 2020.

Federal development spending and net lending

The activity in development spending remained passive during H1-FY21, posting a YoY decline of 14.4 percent. The decline was observed in both quarters, though the magnitude was more pronounced in the second quarter. Within development spending, PSDP expenditures were most affected, as capacity issues in line ministries continued to cause project delays, including hiring, procurements and contracts for civil work. Therefore, while the proportion of budgetary allocations realized during the first half in FY21 was the highest in at least seven years, the actual spending remained lower (**Figure 4.13**). In contrast, nearly 92 percent of the allocations under the foreign-funded PSDP projects was already realized during the first half.

PSDP Releases (Rupee Component) (as percent of Total Budget Allocation) **Figure 4.13**



* the data before H1-FY14 is not available
Source: Planning Commission

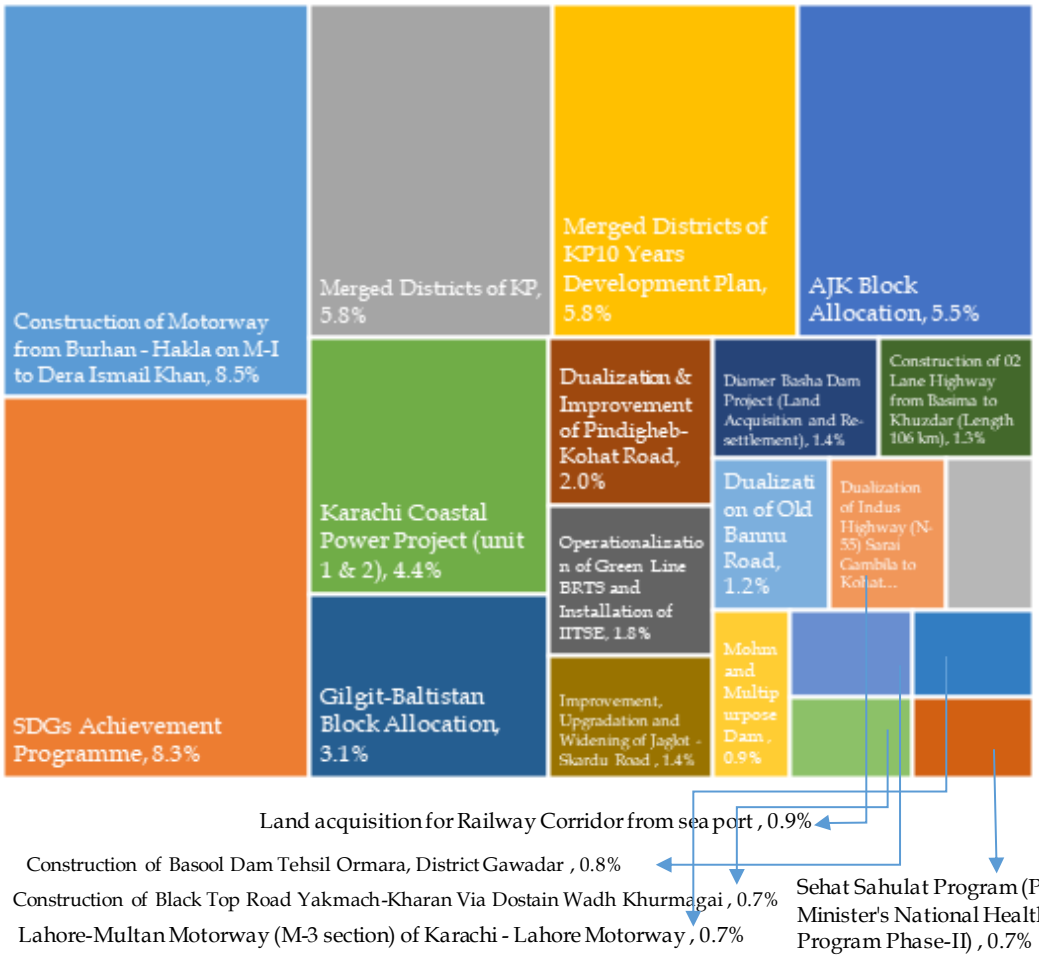
Social and infrastructure development (especially for the under-privileged areas, including FATA, AJK and Gilgit Baltistan) remained the key priorities of the federal PSDP during the review period. The available information suggests that about 55 percent of the total PSDP was released for top 20 projects, including for the regional development in KP, Gilgit Baltistan and AJK. In addition, funds were released for the construction and improvement of roads, mainly in KP and Balochistan (**Figure 4.14**).

The disbursements under the foreign-funded PSDP projects paced up around 92 percent of the foreign budgeted allocation for the year. These were tilted towards power projects, such as the construction of the Japan-funded Guddu-Sibbi Single Transmission Line for the improvement of the power supply system in the southern areas. Also, releases for the US-funded refurbishment of Mangla power station and World bank-funded Dasu hydropower project were notable. Together, these projects constituted around 75 percent of the total foreign PSDP releases during H1-FY21.

Within the non-PSDP development spending, federal development grants to provinces grew sharply in Q2-FY21, reaching Rs 44.9 billion, from only Rs 16.9 billion during the same period last year. Similarly, development spending for grant relief and rehabilitation of IDPs also rose significantly during the first half of FY21.

Similarly, net lending to the PSEs showed a marked increase during H1-FY21, which mainly reflected loans to the Pakistan International Airlines (PIA) and the Pakistan Steel Mills (PSM) for restructuring purposes. It is important to note here that the triage of state-owned enterprises, committed under the IMF program, has been completed, which means that the restructuring/privatization plans for these entities has reached an advanced stage.

Priorities of Federal PSDP - Top 20 projects in terms of releases - H1-FY21 **Figure 4.14**



Source: Planning Commission

It is also important to highlight here that the government has downsized the PSM's labor force before putting it up for sale.

4.4 Provincial Fiscal Operations

During H1-FY21, the provinces posted a combined surplus of Rs 255.1 billion, which was 26.8 percent lower than the same period last year (**Table 4.4**). However, since the budgeted surplus for the year was already on the lower side (to accommodate the needed Covid-related spending), the accumulated surplus during the first half turned out to be in excess of the annual target. This over-performance relative to the target was observed predominantly in the second quarter, when higher federal transfers under the NFC pushed up revenues for all the provinces. Moreover, one-off sales tax adjustments with the federal government improved the

Provincial Fiscal Operations **Table 4.4**

billion Rupees; growth in percent

					Growth			
	H1-FY20	H1-FY21	Q1-FY21	Q2-FY21	H1-FY20	H1-FY21	Q1-FY21	Q2-FY21
A. Total revenue	1,683.4	1,658.3	658.9	999.4	14.4	-1.5	-16.7	12.0
Provincial share in fed. revenue	1,325.8	1,280.1	504.0	776.1	10.5	-3.5	-17.7	8.8
Provincial own revenue	274.3	293.1	131.8	161.3	26.4	6.8	-2.7	16.1
Taxes	214.4	245.9	111.8	134.1	14.2	14.7	6.9	22.0
Non-taxes	59.9	47.2	20.0	27.2	104.8	-21.2	-35.3	-6.1
Fed loans and transfers	83.2	85.2	23.1	62.1	50.0	2.3	-46.4	54.8
B. Total expenditure	1,335.0	1,403.2	614.5	788.7	11.4	5.1	2.1	7.6
Current	1,140.4	1,281.0	565.9	715.1	7.9	12.3	9.2	15.0
Development	219.4	227.7	89.8	137.8	30.8	3.8	27.2	-7.3
Statistical discrepancy	-24.8	-105.5	-41.2	-64.2				
Overall balance (A-B)	348.4	255.1	44.4	210.7	27.5	-26.8	-76.5	32.1
Financing	-348.4	-255.1	-44.4	-210.7				

*Negative sign in financing means surplus.

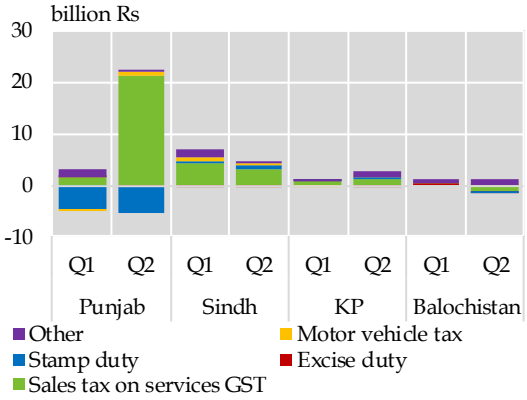
Source: Ministry of Finance

provincial governments' (Punjab and KP) own collections during the quarter. Although expenditure growth also accelerated during Q2-FY21 compared to the preceding quarter (especially current expenditures), it was only able to partially offset the revenue impact. As a result, all the provinces recorded surpluses in Q2-FY21, including Sindh and KP (which had posted deficits in the preceding quarter).

Provincial Revenues

The provincial revenue mobilization recorded a slight decline during the first half of FY21 due to lower transfers from the federal government under the NFC, mainly in the first quarter. As mentioned earlier, revenues rebounded strongly in the second quarter, growing by 12 percent YoY. This improvement was evident in both the higher federal transfers as well as the increase in the provinces' own collections. Federal loans and transfers exclusively for development purposes also increased during this period, after recording a negative YoY growth in the first quarter. However, non-tax revenues recorded a YoY decline in both the quarters, primarily as KP and Punjab received lower profits from hydroelectricity during the period. In overall terms, the share of provincial tax collections increased to 14.8 percent in total provincial revenues, which is the largest in the first half of any year since the rollout of the 18th Amendment.

Absolute Change in Provincial Tax Revenues - H1-FY21 **Figure 4.15**



Source: Ministry of Finance

Apart from Balochistan, all other provincial revenue authorities recorded an increase in the collection of sales tax on services

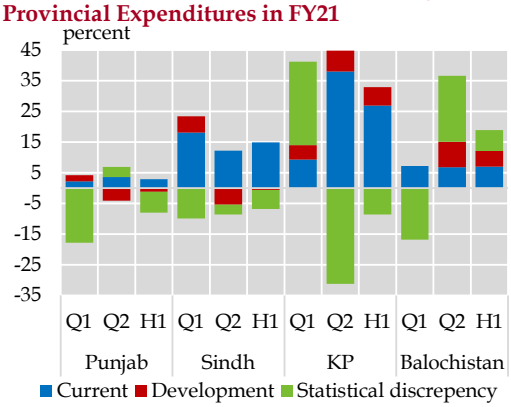
during H1. For Sindh, the growth stemmed from higher activity in ports and shipping services amid a rise in import activity, as well as recoveries from pending payments under franchise and insurance services. In Punjab also, a significant increase in sales tax collection was observed in Q2-FY21 (**Figure 4.15**).

According to the provincial authorities, this improvement was primarily due to the incorporation of cross-input tax adjustment (from 2012-13 to 2018-19) of Rs 16.6 billion between the provincial revenue authority and the FBR. A similar adjustment (though of lesser magnitude, of Rs 1.4 billion) contributed to the YoY increase in KP's tax collection. Excluding these adjustments, the growth in tax revenues of these provinces was relatively modest.

Provincial Expenditures

During H1-FY21, the total provincial expenditures recorded a growth of 5.1 percent on YoY basis. This growth mainly came from an increase in the current expenditures, and partly from a slight increase in development expenditures. Province-wise breakdown of expenditures shows that KP, Sindh and Balochistan contributed to the growth, whereas Punjab recorded a decline in spending. The bulk of the consolidated spending growth was observed in the second quarter, when current expenditures' growth accelerated to 15.0 percent from 9.2 percent in Q1. Meanwhile, development spending dropped 7.3 percent YoY in the second quarter.

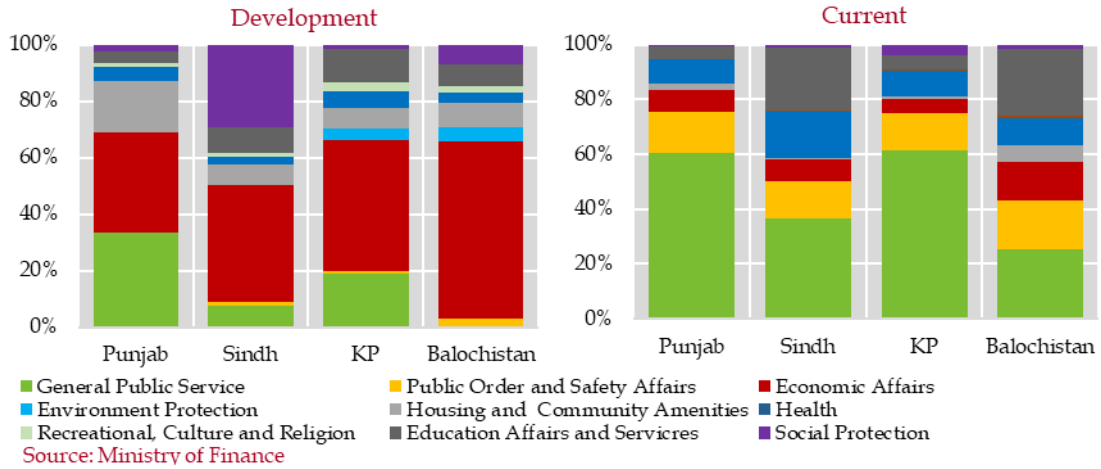
Contribution in Growth of Provincial Expenditures in FY21 **Figure 4.16**



Source: Ministry of Finance

Current expenditures of all the provinces increased in H1-FY21, in line with the growth trend witnessed over the past few years (**Figure 4.16**). However,

Composition of Provincial Expenditures- H1-FY21 **Figure 4.17**



Source: Ministry of Finance

development expenditures increased on YoY basis in only KP and Balochistan. In case of Punjab, spending related to housing and community, general public service and economic affairs was visible during H1-FY21.

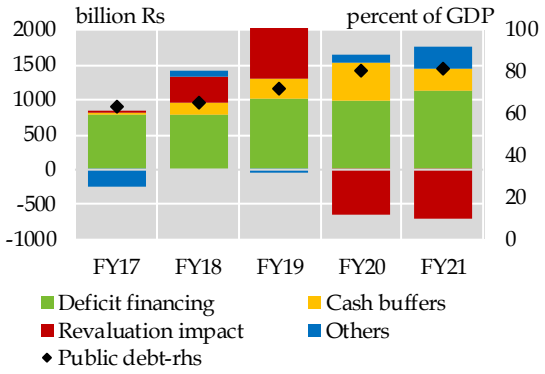
KP's development spending came primarily from economic affairs, which included construction, transport, food, and agriculture (**Figure 4.17**). KP was apparently able to increase its development spending on the back of higher development loans and grants from the federal government during the quarter. Meanwhile, Balochistan also reported an increase in overall development expenditures during H1, despite the slight decline in these expenditures in Q1-FY21.

4.5 Public Debt

The outstanding stock of public debt increased by Rs 1.1 trillion during H1-FY21 and reached 82.2 percent of GDP by end-December 2020, representing an increase of 1.4 percentage points on an annualized basis. Compared to end-June 2020, when the public debt to GDP ratio had touched 87.2 percent, the end-December number shows a drop of 5.0 percentage points.[21]

The pace of public debt accumulation observed a slight deceleration compared to the growth observed during the same period last year.[22] This deceleration mainly represented: (i) lower mobilization of deposits by the government during H1-FY21 over last year; and (ii) the revaluation gains due to the appreciation of the PKR against the US dollar, which helped contain the pace of external debt accumulation (**Figure 4.18**).[23] The deficit financing, on the other hand, remained higher than last year, as reflected in the nominal increase in budget deficit.

Sources of Change in Public Debt - H1 **Figure 4.18**



Source: State Bank of Pakistan

Almost the entire increase in public debt emanated from domestic sources, as the stock of government external debt (including debt from the IMF) increased by only Rs 29.9 billion during H1-FY21. In fact, the stock of public external debt declined in the second quarter, as the PKR appreciated by 3.7 percent against the US Dollar, thereby lowering the public external debt stock in Rupee terms. In Q1-FY21 also, the Rupee had appreciated against the dollar, but the magnitude of the

[21] As mentioned before, the end-December 2020 ratio is based on the targeted GDP for the year.
[22] Public debt recorded an increase of 2.9 percent compared to a rise of 3.1 percent in the same period last year. In absolute terms, public debt increased by Rs 1.1 trillion in H1-FY21, as compared to a rise of Rs 1.0 trillion in the same period last year.
[23] Public debt as per FRDLA definition posted a higher growth of 2.3 percent in H1-FY21, compared to 1.5 percent last year.

revaluation gains was not strong enough to offset the impact of fresh borrowings. Furthermore, it is important to note that apart from net external inflows, revaluation losses due to the depreciation of the US dollar against other currencies (especially the SDR) also contributed towards this increase. The increase in domestic debt, on the other hand, remained almost the same across the two quarters.

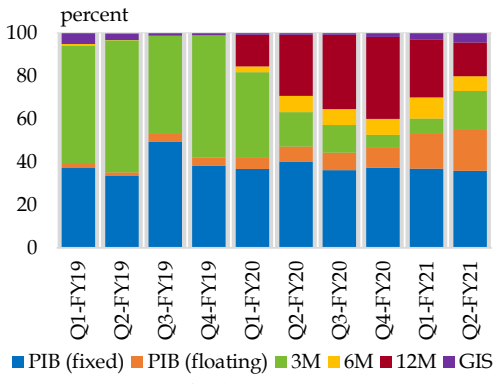
From the institutional perspective, the government adhered to its commitment of zero fresh borrowing from the central bank and relied on scheduled banks for domestic financing needs. National Saving Schemes (NSS) contributed only Rs 4.8 billion during the period under review compared to 269.9 billion in H1-FY20. As for the external debt and liabilities, nearly 83 percent of the increase (in dollar terms) represented Pakistan's increased engagement with multilateral and bilateral sources. The government also borrowed through commercial sources during the period. These borrowings were long-term in nature, but concentrated primarily in Q2; in Q1, the outstanding stock of commercial borrowings had declined, as the government had retired its short-term obligations.

The overall maturity profile of the public debt improved, as the entire increase during H1-FY21 came from long-term instruments. At end-December 2020, the share of long-term instruments in the outstanding central government debt stood at 85.7 percent, as compared to 83.1 percent at end-December 2019. This improvement reflects the impact of the measures taken by the government to make long-term instruments attractive in a low interest rate environment. Specifically, the government introduced floating rate PIBs with new tenors and also rolled out a new coupon structure (allowing quarterly coupon payments and fortnightly coupon resetting). This was done not only to diversify the outstanding stock of the government securities, but also to improve the average time to maturity. From the demand side also, market participants seemed keen to invest in these instruments due to the embedded coupon flexibility (see **Chapter 3** for details).

Domestic Debt

The ownership structure of domestic debt indicated that the financing was done almost entirely through the commercial banks. The rise in domestic debt through non-banks was quite minimal (16 percent, against 37 percent last year), as institutions were barred from investing in instruments offered by the NSS. As highlighted earlier, the government avoided deficit monetization throughout the period, and instead retired Rs 0.3 trillion to the SBP. Hence, the SBP's share in the outstanding debt stock declined by 6.1 percentage points between December 2019 and December 2020.

Instrument-wise Share in Domestic Debt **Figure 4.19**



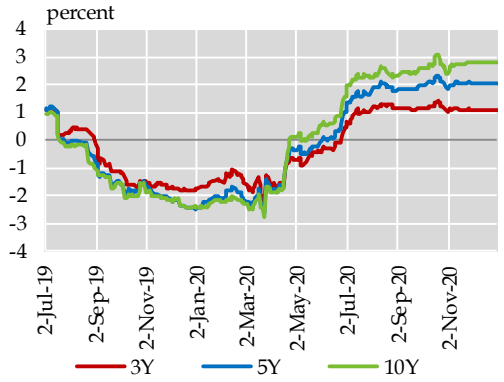
Source: State Bank of Pakistan

As mentioned earlier, the government was able to lengthen the maturity profile of domestic debt and also diversify it across various instruments (including PFL and Ijara Sukuk instruments), as indicated in **Figure 4.19**.[24] Quarterly analysis of government securities shows that banks' preference for short-term instruments had started to increase from the start of Q1-FY21; this was also reflected in the increasing term premium of the long-term bonds (**Figure 4.20**). Subsequently, as the expectations of a bottoming out in interest rates gained traction in Q2-FY21, the demand for 3m T-bills increased further, while the demand for 12m T-bills and fixed-rate PIBs declined (**Chapter 3**).

With the introduction of the 5-year Ijara Sukuk (both fixed and variable-rate options), the government mobilized Rs 363.2 billion during the period under review. This instrument not only helped diversify the domestic debt portfolio, but also improved the maturity profile and provided an investment avenue to Islamic banks.

As mentioned earlier, debt mobilization through non-bank sources was quite limited in both the quarters of H1-FY21. In particular, non-banks' participation in T-bills and PIBs remained lower than last year. Moreover, the weak activity in NSS instruments - an increase of only Rs 4.8 billion in H1-FY21 compared to Rs 269.9 billion in H1-FY20 - stemmed primarily from the imposition of a ban on institutional investments and a decline in profit rates on these instruments (**Figure 4.21**). Although supply-side issues also

Term Premium with respect to 3-Month T-bills **Figure 4.20**

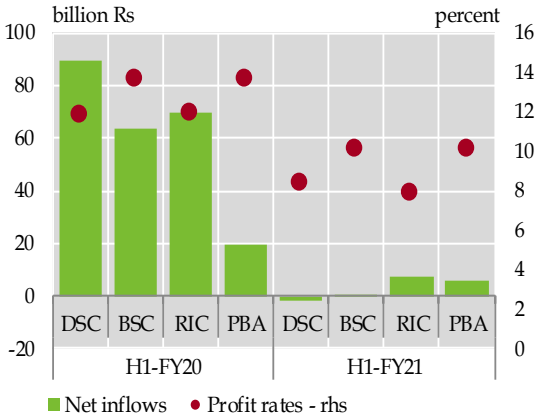


Source: MUFAP

prevailed in the first quarter when CDNS outlets were closed due to lockdowns, the investment continued to remain weak in the second quarter, when all the outlets were operational.

Fund mobilization through prize bonds also recorded a net outflow of Rs 13.8 billion during H1-FY20, as the government discontinued the sale of Rs 25,000

NSS Net Inflows and Profit Rates **Figure 4.21**



Source: Central Directorate of National Savings

[24] Floating rate PIBs (PFL) were initially introduced in May 2018 with a maturity of 10 years. Subsequently in June 2020, 3-year and 5-year PFLs were also launched.

denomination national prize bond. The holders were provided three options in this regard: (i) convert to premium prize bond; (ii) replace with Special Savings Certificates (SSC)/Defence Savings Certificate (DSC); and (iii) encash at face value. It appears that most of the holders opted for the encashment of these bonds, as the rise in sales of the premium prize bonds and the SSC/DSC was marginal.

Notwithstanding this improvement in the profile, challenges have emerged with respect to debt management. First, as mentioned before, markup payments have become a major strain on the fiscal accounts. Effectively, nearly 23 percent of mark-up payments were financed by the accumulated primary surplus during H1-FY21, with the rest being financed by additional debt accumulation.

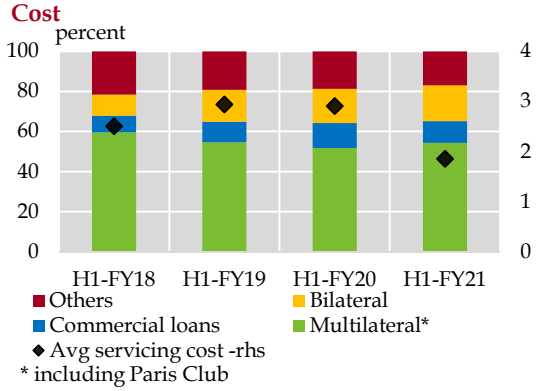
Second, although the floating rate instruments have allowed the government to extend the maturity profile of public debt, their increasing share in the public debt stock has increased the repricing risk for the government. This is because the returns on PFL are repriced in line with any change in the benchmark interest rates. With the introduction of more frequent coupon resetting (fortnightly), this repricing risk has heightened further. Also, the quarterly coupon payments (introduced in October 2020) would increase the liquidity risk for the government.

Public External Debt & Liabilities

In absolute terms, public external debt and liabilities (PEDL) increased by US$ 2.7 billion in H1-FY21, compared to a rise of US$ 3.7 billion in H1-FY20. Improvement in the current account balance kept the financing requirements lower compared to the previous year. It is important to note that revaluation losses due to the depreciation of the US Dollar against other international currencies alone added US$ 1.9 billion, which is equivalent to 70 percent of the total increase in the outstanding stock of public external debt and liabilities (in dollar terms) during the period. Currency-wise revaluation impact indicates that one-half of the revaluation losses emerged due to the depreciation of the US Dollar against the Special Drawing Rights. Excluding the revaluation impact, the increase in PEDL was relatively low (US$ 0.8 billion).

Figure 4.22

Category-wise Share in External Debt and Avg. Servicing Cost



Source: State Bank of Pakistan

Here, it is important to mention that in gross terms, Pakistan had received external inflows of US$ 5.7 billion (46 percent of annual estimates) compared to US$ 5.9 billion during the same period last year.[25] However, a much smaller increase was observed in the outstanding stock of external debt and liabilities (US$ 0.8 billion,

[25] Source: Economic Affairs Division, Monthly Bulletin Foreign Economic Assistance, December 2020.

after adjusting the impact of revaluation losses). This implies that most of the disbursements during H1-FY21 were used for financing the repayment of maturing debt and liabilities (including sovereign deposits). Multilateral donors, such as the ADB, IBRD, IDA, IDB and AIIB, contributed these inflows for various ongoing projects and budgetary support.

The composition of PEDL also changed from last year. Four developments merit a mention in this regard. First, the entire increase in external debt and liabilities was sourced through long-term loans during H1-FY21, in contrast to H1-FY20, when almost 40 percent of external debt accumulation was attributed to short-term loans. Second, the share of multilateral loans increased further during H1-FY21, and these were mobilized at a lower servicing cost (**Figure 4.22**).[26] Third, the share of commercial borrowings declined compared to last year; more importantly, short-term commercial loans were repaid during the period under review, which improved the maturity profile. And last, one-third of the rise in external debt during H1-FY20 was attributed to foreign investment in government securities; this source of funding was not available in H1-FY21.

External debt sustainability indicators posted improvement over last year

In line with the deceleration in PEDL accumulation, all the solvency and liquidity indicators of external debt sustainability recorded an improvement at end-December 2020 compared to end-December 2019 (**Table 4.5**). Total external debt and liabilities (TEDL) and public external debt in terms of GDP reduced by 0.6 and 0.8 percentage points, respectively. As highlighted earlier, the improvement in the current account balance kept the financing needs lower compared to last year. Similarly, the ratios of total reserves to TEDL and SBP reserves to TEDL improved further by end-December 2020. This primarily reflects both an increase in reserves and a lower growth in TEDL.

Indicators of External Debt Sustainability **Table 4.5**

percent

	Dec-16	Dec-17	Dec-18	Dec-19	Dec-20
Solvency indicators					
Total external debt and liabilities/GDP	24.9	28.5	36.3	41.1	40.5
Public external debt/GDP	20.2	22.5	28.7	32.5	31.7
Total reserves/total external debt & liabilities	30.6	22.6	13.9	16.2	17.7
SBP reserves/total external debt & liabilities	24.1	15.8	7.3	10.2	11.6
External debt servicing/FX earnings*	9.2	10.6	13.3	18.6	12.7
External debt servicing/export earnings*	21.6	24.3	31.1	42.3	33.7
Liquidity indicators					
Short-term public external debt/PEDL	1.9	1.9	1.3	3.2	1.0
Short-term external public debt/total reserves	5.1	6.6	7.5	15.7	4.5
Short-term public external debt/SBP reserves	6.4	9.4	14.4	24.8	6.8

*External debt servicing excludes the liabilities component

Source: SBP staff calculations

[26] The average servicing cost has been estimated by taking the actual interest payments in the current half as percent of the average of the total outstanding stock of external debt in the current and previous half.

Likewise, liquidity indicators also recorded an improvement, and the share of short-term debt decreased. Last year, foreign investment in government securities had ticked up, which had increased the share of short-term debt in the overall external debt. However, with the decline in short-term external debt, the maturity profile of external debt had lengthened during H1-FY21.

Lastly, debt relief provided under the DSSI, along with improvements in FX earnings, also improved the debt servicing indicators. External debt servicing to FX earnings ratio reduced by 5.9 percentage points. This ratio implies that, effectively, only 12 percent of FX earnings were required to pay off the maturing obligations during the period under review. If seen in the context of export proceeds, external debt servicing was almost equivalent to one-third of exports. However, to ensure external debt sustainability, there is a need to shore up the level of country's foreign exchange reserves and earnings to smoothly pay off the debt obligations.

5 External Sector

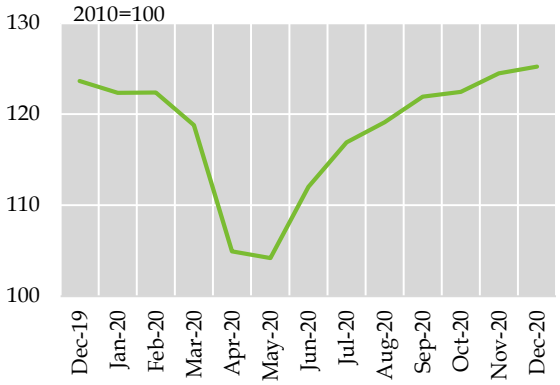
Pakistan's external account position has strengthened, as the current account turned into a surplus in the first half of FY21. Record-high remittances and reductions in the services and primary income deficits were the driving factors and helped offset a widening in the merchandize trade deficit. Export receipts declined by 4.8 percent YoY, despite a sizable increase in export volumes of major products. Meanwhile, import pressures also emerged, as domestic industrial activity recovered after the reopening of the economy, and also because the country had to make sizable one-off purchases of agricultural commodities from abroad – especially of wheat and sugar – to address supply-side challenges and stabilize domestic prices. Higher international prices of most of these commodities accentuated the import payments. However, the sizable reduction in global oil prices on YoY basis provided major support in curtailing energy import payments and offsetting the upward pressures from imports of non-energy products. Owing to these dynamics, the overall current account remained in surplus during the period. Furthermore, with multilateral and bilateral external financing available, the SBP's FX reserves increased by US$ 1.3 billion to US$ 13.4 billion, while its net forward liabilities reduced by US$ 1.2 billion during H1-FY21. The PKR appreciated by 5.1 percent against the US Dollar during the same period.

5.1 Global Economic Developments

During H1-FY21, the global economy showed signs of recovery. Global trade volumes are now above their pre-Covid levels, as the continuation of stimulative fiscal and monetary policies amidst the second wave of Covid-19 supported consumption, stimulated a revival in industrial activity across many export-oriented economies and ensured that the financial markets remained liquid and firms had access to credit (**Figure 5.1**).

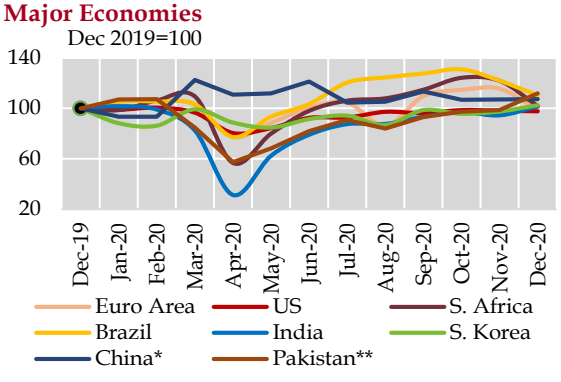
These underlying developments contributed to an overall improvement in the external account positions of many emerging markets (EMs) via the trade and capital flow channels. A sizable improvement in the current account position of EMs was recorded during the period, which contributed to a build-up in the foreign exchange buffers in these economies and led

Figure 5.1a Global Trade Volumes have Recovered



Source: CPB World Trade Monitor (Netherlands)

Figure 5.1b Trends in Industrial Production in Major Economies

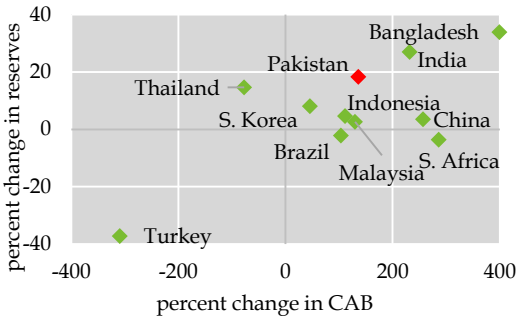


*value added in 1990 prices **LSM index

Sources: Haver Analytics; PBS & SBP calculations

to an appreciation of their currencies against the US Dollar **(Figure 5.2)**.

Change in EMs' FX Reserves & CABs in H1-FY21* **Figure 5.2**

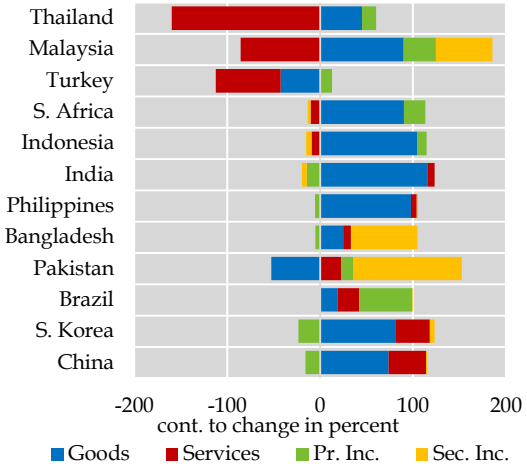


*YoY change in CAB; Dec 2020 over Dec 2019 change in FX reserves

Source: Haver Analytics & State Bank of Pakistan

Here, it is important to note the sources of these current account improvements. For most EMs, the global air travel restrictions generally had a positive impact by significantly lowering their services imports, as indicated in **Figure 5.3** (excluding those that rely heavily on tourism, like Turkey and Thailand). Furthermore, the travel restrictions likely played a major role in diverting a significant chunk of workers' remittances that used to arrive into these countries via informal methods towards the official banking channels.

Contribution to YoY Change in CAB in Jul-Dec FY21 **Figure 5.3**



*Positive values show +ive contribution to change in CAB & vice versa

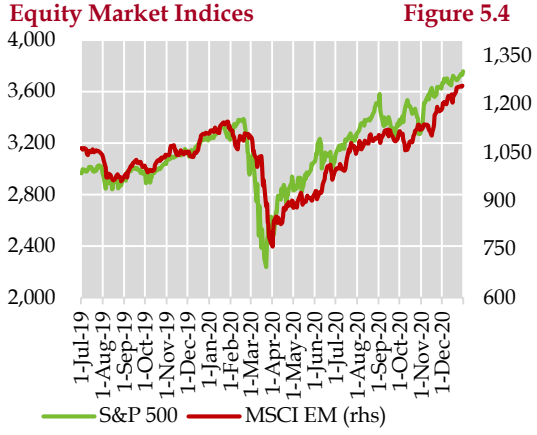
Source: IMF/Haver Analytics

Meanwhile, the global financial markets remained fairly liquid on the back of sizable monetary support from central banks across the advanced and developing economies. The global equity markets recovered from their March 2020 lows and investors' risk appetite appeared to recover by June 2020 onwards, as the economies began to emerge from the lockdowns and rapid progress was noted in the development and eventually the rollout of the vaccines (**Figure 5.4**). The US Dollar Index also weakened after the initial spike during early days of the Covid-19 outbreak, whereas low interest rates in the advanced economies encouraged investors to search for yields in the emerging economies.

5.2 Pakistan's External Account

At the aggregate level, the global trends related to the improvement in the current

Equity Market Indices **Figure 5.4**



Source: Bloomberg

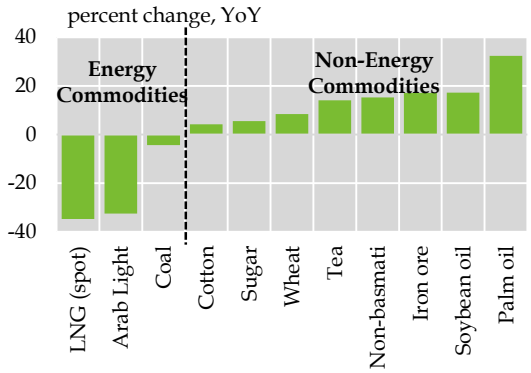
account and reserves positions were also visible in Pakistan's external account during H1-FY21. From a deficit last year, the current account turned into a surplus during the first six months of the ongoing fiscal year; in fact, surpluses were recorded in five out of the six months in the period.

Workers' remittances were mainly responsible for this improvement in the current account, as inflows reached a record high. Further support came from the services and primary income accounts, where the Covid-related air travel restrictions, the G-20's Debt Service Suspension Initiative (DSSI), and the low global interest rates, all played supportive roles.

The net FX earnings from these sources were quite important, as they offset a widening in the merchandize trade payments gap during the six-month period. Import pressures have been visible from the start of the fiscal year, partially reflecting the impact of facilitative domestic policies, which contributed to a sizable recovery in industrial activity and subsequently the industry's demand for imported raw materials. The supply-side shortages in key agricultural commodities further contributed to the import pressures (**Section 5.4**). International prices of most non-energy commodities imported by Pakistan were higher in H1-FY21. However, the overall import payments remained stable, due to sizable reductions in global prices of major energy commodities (on YoY basis), which significantly compressed energy import payments and offset the increase in non-energy import payments during the period (**Figure 5.5**).

Among the agricultural commodities that Pakistan imported was cotton, whose demand by the export-oriented textile industry had risen amid a steep decline in local cotton production. The local textile industry was revving up to fulfill orders from major buyers that could not be met by competitors. However, this surge in export volumes of high value-added textile products, as well as of cement and other products, did not translate into a proportional increase in export receipts.

Growth in Key Global Commodity Prices in H1-FY21 **Figure 5.5**



Sources: World Bank and Bloomberg

On the external financing side, the official external borrowing was lower on both gross and net basis. With the current account in surplus and given the availability of external financing, the SBP's liquid reserves rose by US$ 1.3 billion during H1-FY21 to US$ 13.4 billion, and the PKR appreciated 5.1 percent against the US Dollar during the period.

Current Account

The current account turned into a surplus of US$ 1.2 billion in H1-FY21 from a deficit of US$ 3.4 billion in the same period last year. Surpluses were recorded in the first five months of the period (**Table 5.1**). The Covid-related air travel restrictions likely had a fairly positive impact on the current account,

Pakistan's Balance of Payments **Table 5.1**
million US Dollars

	Q2-FY20	Q2-FY21	Absolute Change	H1-FY20	H1-FY21	Absolute Change
Current account balance	**-1,728**	**382**	**2,110**	**-3,447**	**1,247**	**4,694**
Merchandize trade balance	**-5,625**	**-6,103**	**-478**	**-10,906**	**-11,386**	**-480**
Exports	6,414	6,461	47	12,408	11,815	-593
Imports	12,039	12,564	525	23,314	23,201	-113
o/w Energy imports	2,449	2,206	-242	5,365	4,283	-1,082
Non-energy imports	9,591	10,358	767	17,949	18,918	969
Services balance	**-892**	**-411**	**481**	**-2,070**	**-989**	**1,126**
Primary income balance	**-1,694**	**-1,184**	**510**	**-3,063**	**-2,673**	**390**
o/w interest payments	882	644	-238	1,727	1,290	-437
Workers' remittances	**5,919**	**7,060**	**1,141**	**11,371**	**14,203**	**2,832**
Financial account balance	**-4,834**	**-1,163**	**-3,671**	**-7,145**	**-309**	**-6,836**
Direct investment inflow	827	422	-405	1,373	880	-493
Portfolio investment inflow	126	-290	-416	470	-435	-905
Build-up in fin. assets abroad	316	467	343	187	1,573	1,386
FX loans inflow (net)	**4,199**	**1,480**	**-2,719**	**5,336**	**1,500**	**-3,836**
o/w General government	3,261	1,620	-1,641	4,359	3,042	-1,317
SBP	-501	69	570	-498	-931	-433
Banks	146	21	-125	-291	-621	-330
SBP's liquid reserves (end-period)	**11,336**	**13,415**	**1,262***	**11,336**	**13,415**	**1,283***
SBP's forw. liabilities (end-period)	-4,212	-4,610	1,164*	-4,212	-4,610	1,164*
PKR app(+)/dep(-) in percent*	**1.0**	**3.7**	**-**	**3.3**	**5.1**	**-**

*Change in reserves, forward liabilities and PKR ex. rate during the period (Oct-Dec for Q2, Jul-Dec for H1)
Note: Negative sign with financial account balance means net FX inflow into Pakistan and vice versa. Negative sign for change in financial account balance means lower net FX inflow into Pakistan on YoY basis.
Source: State Bank of Pakistan

as they may have contributed to channelizing remittances to formal channels and curtailing the services trade deficit.

Further support came from the G-20's DSSI and the reduction in global interest rate benchmarks, which helped reduce interest payments on external debt. On the trade front, export receipts underwent a trend reversal and began to rise from Q2 onwards, whereas low international oil prices (on YoY basis) helped contain the energy import payments and partially offset the higher non-energy import payments.

Workers' remittances

Workers' remittances grew by a sizable 24.9 percent YoY and reached a record high of US$ 14.2 billion in H1-FY21. Inflows rose from all the major corridors, but especially from the advanced economies, as shown in **Table 5.2**.

As highlighted in the SBP's First Quarterly Report of FY21, the cross-border air travel restrictions after the Covid outbreak may have helped channelize inflows towards the formal channels. During Q2-FY21 as well, global air travel was far below the comparable 2019 levels, and therefore emigrants are likely to have continued to utilize the banking channels to support their families back home. Within Pakistan, policy measures undertaken by the government and the SBP to encourage inflows through formal channels, along with the orderly foreign

Corridor-wise Workers' Remittances during Jul-Dec **Table 5.2**
million US Dollars

	FY20	FY21	Absolute Change
USA	816.8	1,204.5	387.7
UK	1,237.4	1,877.1	639.7
GCC	7,467.4	8,528.6	1,061.1
KSA	3,174.2	3,955.2	780.9
UAE	2,776.6	2,956.1	179.4
Other GCC	1,516.6	1,617.3	100.8
Europe*	896.3	1,269.9	373.6
Others	954.2	1,323.0	368.8
Total	**11,372.2**	**14,203.1**	**2,830.9**

*comprising 10 European countries
Source: State Bank of Pakistan

exchange market conditions, also contributed to the growth in remittances.

Furthermore, continued policy support in the host destinations (especially the advanced economies) via unemployment benefits, rent and loan deferrals, and direct cash handouts, likely increased the ability of migrants to remit higher amounts back home. Also, the efforts by global money transfer operators (MTOs) and governments to incentivize migrants to adopt digital channels to remit funds have likely also played a role in pushing up inflows received via the banking system.

In fact, the major global MTOs, such as Western Union and MoneyGram, have up-scaled their digital services to facilitate emigrants to send cross-border remittances, after their physical outlets of these MTOs remained closed amid the lockdowns. As a result of these digitization efforts, the share of digital transactions in the overall customer-to-customer (C2C) transactions of these MTOs has risen sharply (**Figure 5.6**). Furthermore, Western Union has reported an increase in the per-transaction amounts, which supports the anecdotal evidence that emigrants are sending higher amounts back home to their families amid the challenging Covid-related economic environment (**Figure 5.6**).[1]

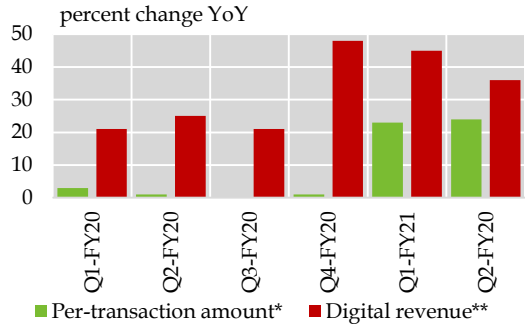
In Pakistan also, banks are being incentivized to introduce digital products to facilitate migrants in sending remittances under the Pakistan Remittance Initiative (PRI).[2] Data shows that transaction volumes and amounts of international remittance transactions in Pakistan via the branchless banking mode (m-wallets) have grown quite strongly since the Covid-19 outbreak.[3]

Services account

The services account deficit contracted by 54.4 percent YoY to almost US$ 1.0 billion in H1-FY21. Most of this improvement was due to a sizable 24.2 percent contraction in imports, though exports also registered a nominal decline of 2.9 percent.

[1] Comparable data with such an extensive breakdown of per transaction revenues and digital revenues is not readily available for MoneyGram, another large money transfer operator.
[2] The PRI launched a scheme to channelize remittances via m-wallets in 2017 by awarding cell phone airtime for every US dollar (or equivalent) received into m-wallets; in January 2019, the benefit was raised to Rs 2 for every US dollar received. For details, see Chapter 5 in the SBP's State of the Economy Report for Q1-FY21.
[3] While quite nominal in terms of overall remittances, remittances sent to Pakistan via m-wallets have risen from US$ 5.5 million in H1-FY19 to US$ 29.9 million in H1-FY21. Furthermore, m-wallets are just one digital medium for cross-border transactions, alongside online ACH bank transfers and funds transfers via MTOs' own websites and mobile apps.

Growth in Western Union's Digital Transactions & Revenues **Figure 5.6**



*for cross-border transactions **including from website & mobile application (own & third party)

Source: Western Union earnings release statements

Breakdown of Services Balance in Jul-Dec* **Table 5.3**

million US Dollars

	FY20	FY21	Change**
Transport	-1,313	-955	358
o/w Air Transport	-291	47	338
Freight	-961	-912	49
Travel	-497	-167	333
ICT Services (net)	487	681	194
Exports	684	959	275
Imports	197	278	81
Others	-747	-503	244
Services Balance (net)	**-2,070**	**-944**	**1,126**

*Negative balance means deficit and a positive sign means surplus.

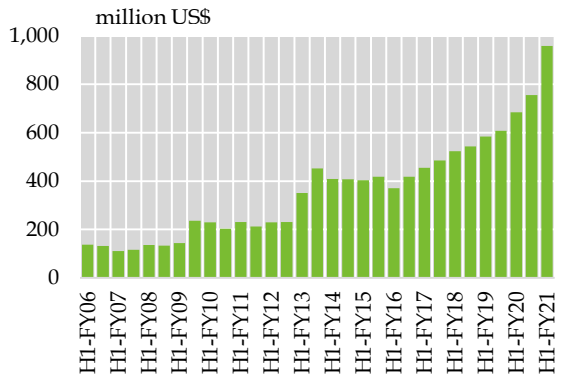
**Positive sign shows YoY improvement & vice versa

Source: State Bank of Pakistan

The contraction in imports was concentrated in areas that were directly impacted by the Covid-related air travel restrictions. The single-largest contribution to the improvement in the overall services account came from the significant reduction in the purchase of air tickets of foreign airlines by Pakistani residents, which is recorded as an import of air transport services (**Table 5.3**). Related to this, the second-largest source of improvement was the 28.1 percent reduction in the import of travel services. This category includes purchase of hard foreign exchange by Pakistani residents from banks and exchange companies for traveling purposes. In line with the reduction in international travel, the usage of credit cards for foreign transactions – which is also recorded as an import of travel services – also dropped and contributed to the reduction in services imports.

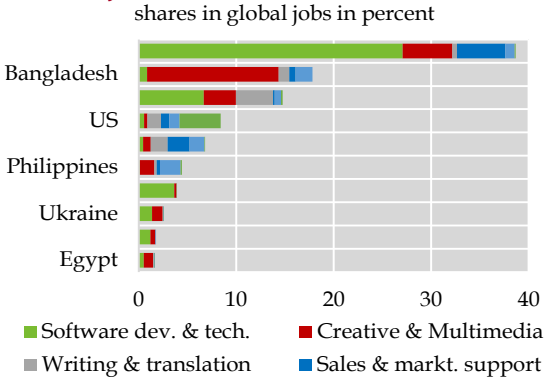
On the export side, Pakistan's ICT firms were able to tap into the surge in global demand for technological services after the Covid outbreak. The ICT services exports surged 40.2 percent YoY and reached an all-time

Pakistan's Exports of ICT Services **Figure 5.7a**



Source: State Bank of Pakistan

Top 10 Home Countries for ICT-related Jobs **Figure 5.7b**



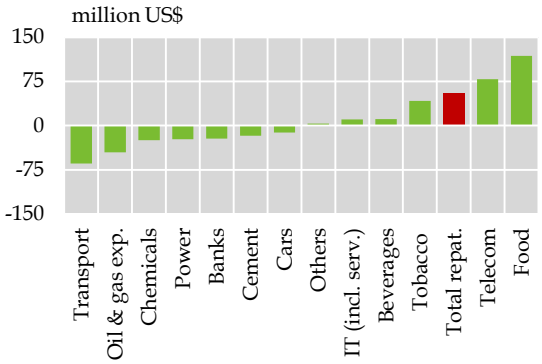
Source: Oxford Internet Institute *As of Feb 2021

high of nearly US$ 1.0 billion in H1-FY21 (**Figure 5.7a**). Within ICT services, the growth mostly originated from software- and hardware-related services. It is worth noting that Pakistani workers, including freelancers, are already well-integrated into the global gig economy; in fact, at the global level, Pakistan is host to the third-largest number of freelancers working on the most popular web platforms for contractual jobs (**Figure 5.7b**).[4] This allowed the country to capture the increase in global demand for ICT services during the period.[5]

Primary income

The primary income deficit declined 12.7 percent YoY to US$ 2.7 billion in H1-FY21, with the entire drop recorded in the second quarter. Interest payments on external debt, as well as profit and dividend repatriations by energy firms, had been dropping consistently, but were offset by higher repatriations by non-energy firms in Q1. However, in Q2, profit repatriations by non-energy firms also dropped, adding onto the already lower repatriations by energy firms. A few main factors were driving these developments in the primary income account, and are discussed below.

Change in Sector-wise Profit Repatriation in Jul-Dec FY21 **Figure 5.8**



Source: State Bank of Pakistan

Low oil prices: The sharp fall in the global oil prices – which began in March 2020 – had shook up the global energy sector and led to bankruptcies and consolidation, as revenues suffered and fresh investments were put on hold.[6] In Pakistan also, fresh FDI into the oil and gas sector declined from last year's levels (**Section 5.3**), whereas lower profitability subdued the sector's profit

[4] Source: Otto Kässi, Vili Lehdonvirta, Online labour index: Measuring the online gig economy for policy and research, Technological Forecasting and Social Change, Volume 137, 2018. The open dataset tracks all the projects or tasks posted on the five major English-language online freelancing platforms (upwork.com, Peopleperhour.com, Freelancer.com, Guru.com and Mturk.com). For more details, see Special Section 2 in the SBP's State of the Economy Report for Q1-FY19.

[5] That said, while Pakistan's ranking in freelance services is encouraging, the country's attractiveness as a business process outsourcing (BPO) destination has declined steeply over the past three years (source: AT Kearney Global Services Location Index 2019). There is a need to promote the BPO services, given that their exports fetch more forex earnings than freelancing. Furthermore, firms providing BPO services also tend to attract FDI.

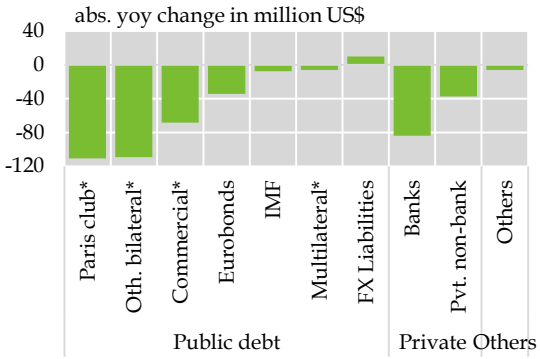
[6] According to a legal firm that tracks energy sector-related bankruptcy filings in the North America region, 46 oil and gas firms filed for Chapter 11 bankruptcy during 2020 (till December 18), up from 42 in 2019. More importantly, many of the firms filing for bankruptcy in 2020 were large firms: the cumulative amount of debt involved was estimated at US$ 53.1 billion – more than double the outstanding debt of firms that had filed for bankruptcy in 2019 (US$ 25.8 billion). Source: Oil Patch Bankruptcy Monitor, Haynes & Boone LLP.

repatriations (**Figure 5.8**).[7] The lower repatriations by this sector partially offset the higher repatriations by firms in other sectors, such as food and telecom.

Post-outbreak evolution in consumer demand: With work from home and distant learning becoming the norm after the Covid-19 outbreak, there has been a sizable increase in the usage of telecom services, particularly data services.[8] The resultant increase in the sector's earnings have led to higher repatriations as well. Similarly, in the case of fast-moving consumer goods (FMCGs), sales of food items, paper products, and cleaning supplies in general have risen, and contributed to higher corporate earnings. As the telecom and most FMCG firms in the country are dominated by multinational companies, these sectors have recorded relatively higher repatriations.

Debt relief under the DSSI and reduction in global interest rates: The overall interest payments dropped by 25.3 percent to US$ 1.3 billion in H1-FY21 YoY. Being the largest beneficiary (in nominal terms) under the G-20's DSSI, Pakistan is eligible for a deferment of both interest and principal repayments on bilateral official debt on repayments falling due between May 2020 and June 2021.[9] At the same time, the sizable drop in the global interest rate benchmarks also lowered the interest payments during the six-month period. Source-wise breakdown shows that Pakistan's interest payments to Paris Club creditors fell the most during H1-FY21, followed by payments to other bilateral and commercial creditors (**Figure 5.9**).

Change in Interest Payments in H1-FY21 **Figure 5.9**



*incl. PSEs, & both short- and long-term debt serv.
Source: State Bank of Pakistan

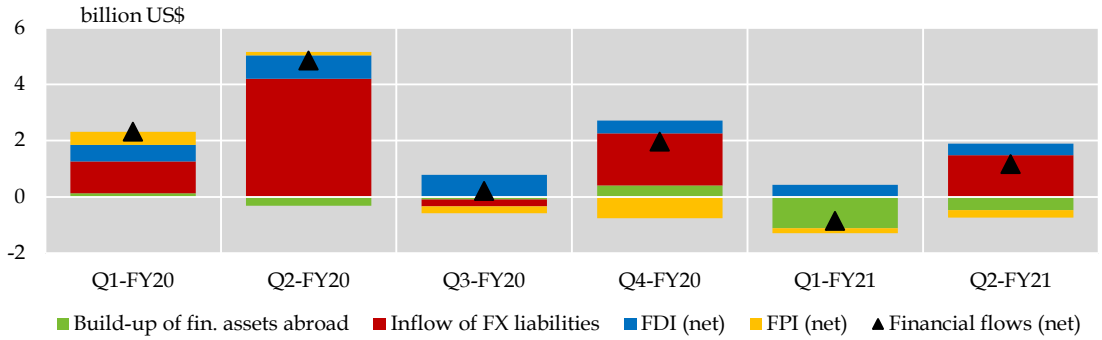
Financial Account[10]

The financial account recorded a marginal inflow of US$ 309 million on net basis during H1-FY-21, against much higher inflows of US$ 7.1 billion realized in same period last

[7] The profit after tax of major exploration and production companies in Pakistan, such as POL Pakistan Ltd. and OGDCL, dropped by 22.4 percent and 20.5 percent YoY respectively during H1-FY21 (source: company financial statements).
[8] In full-year FY20 (latest period for which information is available), data usage in Pakistan had grown 77 percent YoY to 4,498 petabytes. The regulator has attributed this surge in usage at least partially to the rising trend of remote working and learning after the Covid outbreak (source: PTA Annual Report FY20).
[9] According to the October 2020-dated joint IMF-WBG staff note, titled "Implementation and Extension of the Debt Service Suspension Initiative", the bilateral official creditors had committed to "suspend payments on all principal and interest coming due between May 1 and December 31, 2020." The scope of the initiative was later extended to cover debt payments for eligible countries till June 2021 (source: https://www.worldbank.org/en/topic/debt/brief/covid-19-debt-service-suspension-initiative).
[10] As per the IMF's Balance of Payments Manual 6 convention, forex inflows into the reporting country (Pakistan in this case) are denoted by a negative sign, and forex outflows from the reporting country is denoted with a positive sign.

Breakdown of Financial Account Flows to Pakistan*

Figure 5.10



*Signs are reversed from BPM 6 convention. Positive values here indicate FX inflow and negative values show FX outflow from Pakistan

Source: State Bank of Pakistan

year. The breakdown indicates that there was a net FX outflow in the first quarter, which was completely offset by a net inflow in the second quarter of the year (**Figure 5.10**).

In the first quarter, a large chunk of the outflow basically reflected a build-up in FX assets abroad of commercial banks.[11] The asset build-up partially stemmed from the accumulation of net current account receipts abroad, following the heavy inflow of foreign exchange via remittances, an increase in trade credits, and subdued import payments.[12]

This trend also continued in the second quarter, albeit at a moderate pace. The accumulation in bank assets abroad halved from the Q1 level, mainly due to a reduction in the magnitude of the current account surplus. At the same time, the government received higher loan inflows as compared to the first quarter, which contributed to higher overall financial flows in Q2.

Foreign direct investment

Global FDI recorded a sharp drop of around 42 percent in 2020; to put this in perspective, this drop was quite higher than the dip recorded in worldwide FDI during the global financial crisis. The decline was concentrated in the advanced economies, whereas the developing countries were, on aggregate, less affected. Greenfield investments were impacted, mainly due to the uncertainty about the global trajectory of Covid-19 cases; the risk of lockdowns; the scale and efficacy of the governments' Covid-related support; and the rollout of the vaccination programs. Moreover, the multinational corporations (MNCs) also reduced their new equity investments, whereas parent firms withdrew

[11] As per the IMF's Balance of Payments Manual 6, a build-up in financial assets in a non-resident country is considered a financial outflow from the reporting country.

[12] During Q1-FY21, merchandize import payments had declined by 5.7 percent YoY, whereas services import payments had dropped by 28.2 percent. Meanwhile, trade credits mainly reflect the outstanding export bills (OEBs) of exporters, and is the payment amount that the exporter is expecting after shipping their goods.

intra-company loans from their affiliates to strengthen their own balance sheets. [13]

The net FDI into Pakistan fell by 35.9 percent during H1-FY21 YoY (**Table 5.4**), with net inflows dropping across most sectors. While gross investment inflows were slightly lower than last year, the main drop in net FDI was due to a sharp increase in gross outflows during the period. The higher outflows mainly reflected the repayment of intercompany loans by firms in the telecom, electronics and power sectors during the period.

Sector-wise Net FDI inflow in H1 **Table 5.4**
million US$

	FY20	FY21	Change
Food	13.2	8.7	-4.5
Textiles	26.5	7.1	-19.5
Chemicals	-7.4	9.2	16.6
Oil & Gas Explorations	141.5	127.6	-18.5
Pharmaceuticals	25.2	10.9	-14.0
Electrical Machinery	117.8	60.2	-57.6
Electronics	-13.9	-6.2	7.7
Transport Equipment	48.3	14.3	-34.0
Power	262.2	497.1	234.9
Communications	432.1	-41.5	-473.5
Financial Business	162.1	127.4	-34.7
Others	162.8	124.6	-38.2
Total	**1,372.1**	**879.7**	**-492.5**

Source: State Bank of Pakistan

In terms of fresh investments into Pakistan, China dominated the profile, with investments continuing to flow into CPEC-related projects in the power sector. In gross terms, investment from China rose by 46 percent YoY, and its share in Pakistan's gross FDI rose to 44.2 percent, up from 26.9 percent in the same period last year. However, on net basis, FDI from China actually declined by 1.5 percent, as FDI outflows to the country also accelerated from last year's levels.[14]

Here, it is important to note that it is still the Phase-I projects under CPEC that are deriving most of the FDI from China. In the second phase of CPEC, the investment focus is supposed to shift towards industrial development, agriculture mechanization, tourism and social development. However, these sectors are yet to see any significant foreign investment flows. Also, while global FDI had dropped in 2020, there were still some major developing economies that managed to attract higher foreign investment. FDI to developing Asian economies declined only 4 percent in 2020, with East Asian countries attracting around one-third of the global FDI in 2020.

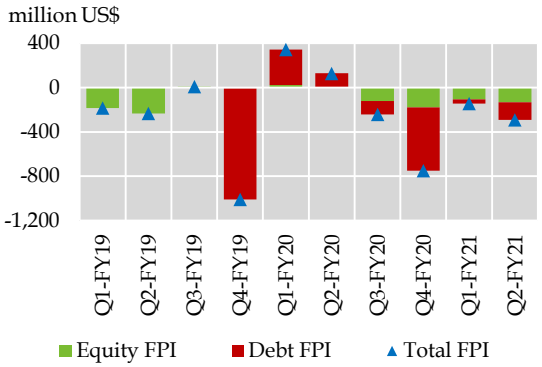
While this indicates the need for further progress on the structural reform front in Pakistan, it also shows that Pakistani firms need to engage more actively in the global value chain, so as to land partnerships with major global companies.[15]

[13] Source: Investment Trend Monitor, Issue 38, January 2021, UNCTAD.
[14] In H1-FY21, gross FDI outflows from Pakistan to China rose to US$ 302.9 million, from US$ 78.6 million in the same period last year. The outflow this year was concentrated in one major coal-fired project in Thar.
[15] In this regard, the SBP has recently (February 2021) taken some major steps to ease foreign exchange regulations, with a view to facilitate Pakistani services firms and exporters in attracting foreign investment. Source: (https://www.sbp.org.pk/press/2021/Pr-10-Feb-21.pdf).

Foreign portfolio investment

As discussed earlier, the global financial markets recovered on the back of sizable support from the governments and the central banks. The emerging markets further benefited from the low interest rates in the advanced economies, which encouraged investors to search for higher yields in EMs. However, not all EMs benefitted equally from this phenomenon.

Foreign Portfolio Investment in Pakistan **Figure 5.11**

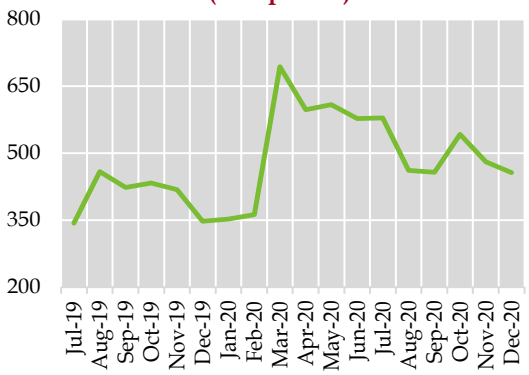


*Source: State Bank of Pakistan

In Pakistan's case, foreign portfolio investment recorded a net outflow of US$ 435 million during H1-FY21; outflows were recorded from both debt and equity securities (**Figure 5.11**). It may be recalled that last year during the Jul-Dec period, Pakistan had received sizable portfolio investment in local currency debt securities (to the tune of around US$ 452 million); however, there was an outflow of US$ 193 million from debt securities this year. Similar to debt securities, equity securities also witnessed an outflow of US$ 242 million in H1-FY21; this compares with a marginal net inflow of US$ 18 million in the same period last year.

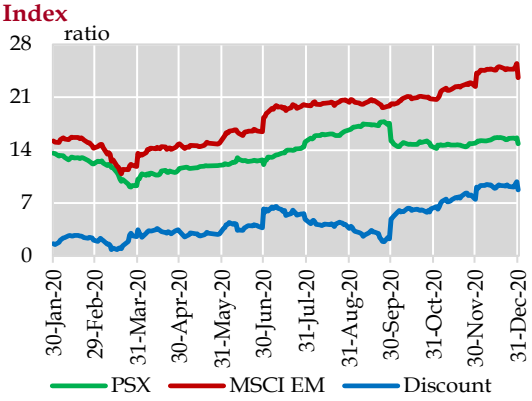
The trend of net FPI outflows from Pakistan's equity market likely reflects the flight to safety and possibly also the elevated level of the country's risk premium. While the credit default swap rates for the country's sovereign debt have dropped by more than 150 basis points from the March 2020 level, they are still higher as compared to the pre-Covid level at end-December 2019 (**Figure 5.12a**). However, it is worth noting that the KSE-100 index's price-to-earnings (p/e) discount to the MSCI Emerging Markets Index has been widening since September 2020, indicating that Pakistani equities are becoming more attractive for foreign investors in relative terms (**Figure 5.12b**).

5-Years Credit Default Swaps Points of Pakistan (end-period) **Figure 5.12a**



Source: Bloomberg

PSX P/E Discount to MSCI EM Index **Figure 5.12b**

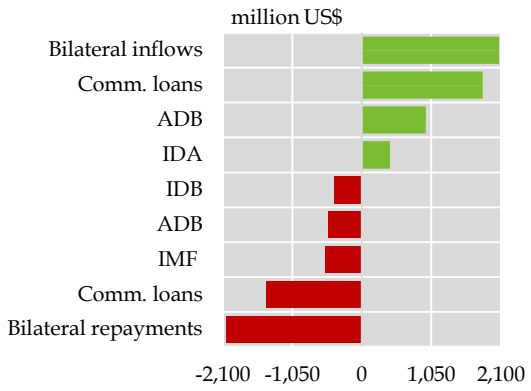


Net incurrence of liabilities

The net inflow of external loans and liabilities into Pakistan dropped to US$ 1.5 billion in H1-FY21, which was less than one-third of last year's level. The lower net inflows mainly reflected the following: (i) return of US$ 2 billion of bilateral deposits by the central bank; (ii) retirements of FX liabilities by commercial banks; and (iii) lower gross borrowing by the government and the private sector.

Multilateral and commercial lending dominated the official borrowing profile, especially in the second quarter of FY21. At the same time, bilateral deposits and swap lines also helped the central bank manage its liability reduction without pressuring the official reserves (**Figure 5.13**). It is also worth highlighting that the maturity profile of the government's external debt has lengthened, as net short-term borrowings were lower than last year (for details, see **Chapter 4**). This change in the maturity structure, along with low global interest rates, bode well in terms of the country's external debt servicing perspective.

Change in Official FX Liabilities in H1-FY21 **Figure 5.13**

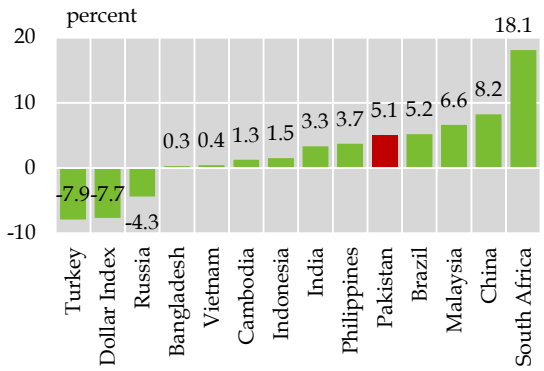


Sources: State Bank of Pakistan and EAD

5.3 Exchange Rate and Reserves

After a brief period of sharp volatility in the immediate aftermath of the Covid-19 outbreak, the currencies of many EMs have been strengthening against the US Dollar. Generally improving current account balances, a revival in capital flows (to some major EMs), and EM central banks' efforts to increase their external buffers in the wake of the initial Covid shock, all were mainly responsible for the appreciation in EM exchange rates (**Figure 5.14**).

Change in EM Currencies against USD during H1-FY21 **Figure 5.14**



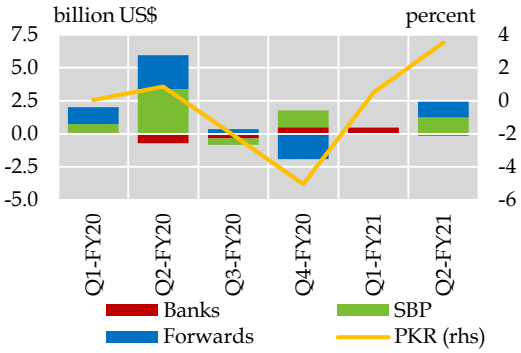
Source: Bloomberg

In Pakistan's case, the improvement in the current account, and the availability of external financing, both played a role in pushing up the country's overall FX reserves by 10.6 percent in H1-FY21, and a 5.1 percent appreciation in the Pak Rupee. Reserves held by the State Bank as well as commercial banks rose over the six-month period, though some notable differences were observed between the first and second quarters.

In the first quarter, commercial banks' reserves had risen by 7.1 percent, at least partially in response to a build-up in the

outstanding export bills.[16] At the same time, the SBP's reserves had remained stable, as the available external financing was sufficient for the official debt repayments. In this scenario, the Rupee had appreciated by 1.4 percent against the US Dollar (**Figure 5.15**).

Change in FX Reserves, SBP's Forward Liabilities & Ex. Rate **Figure 5.15**



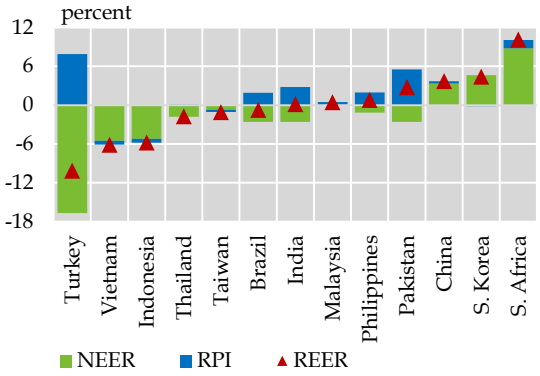
Source: State Bank of Pakistan

In the second quarter, there was a trend reversal, as the central banks' reserves rose by 10.4 percent, whereas reserves held by commercial banks declined by 1.2 percent. While the interbank market remained liquid as the cumulative current account remained in surplus, the net official FX loan inflows were much higher than in Q1 (**Section 5.3**). These inflows, along with efforts to increase official buffers, pushed up the central bank's FX reserves.

For commercial banks, the reduction in the magnitude of the current account surplus and the emergence of some import payment pressures led to a marginal drop in their reserves in Q2. In line with these developments, the Pak Rupee appreciated by 3.7 percent in the second quarter, mainly reflecting the trend in the official reserves.

While Pakistan's nominal exchange rate had appreciated against the USD, in broader terms, the country's NEER actually depreciated during the period (**Figure 5.16**).[17] This indicates that the PKR had weakened against a trade-weighted basket of other currencies in nominal terms. However, the increase in price levels in Pakistan relative to its trading partners led to an increase in the relative price index (RPI). The rise in RPI completely offset the NEER depreciation in Pakistan's case and led to a cumulative 2.8

Breakdown of Change in REER of EMs during H1-FY21 **Figure 5.16**



Sources: Haver Analytics & SBP calculations

[16] In March via EPD Letter Circular No. 7 of 2020, exporters were allowed to hold back export receipts that were due to arrive by end-June 2020, for an additional 90 days; this was applicable where the delays were related to Covid. This was on top of the 180 days for which exporters were already allowed to keep their proceeds abroad.

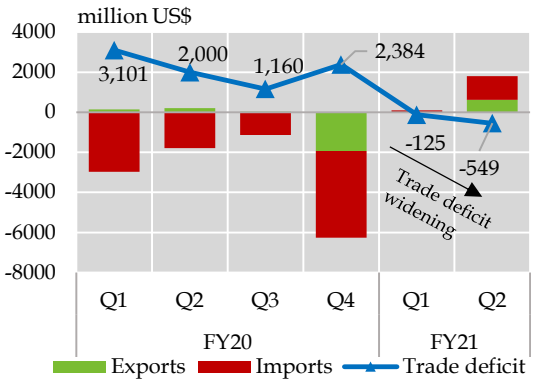
[17] The IMF defines NEER as "a measure of the value of a currency against a weighted average of several foreign currencies. An increase in NEER indicates an appreciation of the local currency against the weighted basket of currencies of its trading partners". Source: https://datahelp.imf.org/knowledgebase/articles/537469-what-is-nominal-effective-exchange-rate-neer

percent appreciation in the country's REER during the period. Here, it is worth noting that Pakistan was not alone in experiencing a REER appreciation, as REERs of some other major EMs, like China and South Africa, also rose during the period.

5.4 Trade Account

The trade deficit widened by 5.8 percent and reached US$ 12.3 billion in H1-FY21, from US$ 11.7 billion in the same period last year. The widening in the trade deficit, which accelerated in the second quarter, was mainly due to rising imports, which had overshadowed the increase in exports, especially in the second quarter (**Figure 5.17**).

Breakdown of Change in Trade Deficit **Figure 5.17**



Source: Pakistan Bureau of Statistics

Within imports, lower energy imports – due to lower international oil prices – were more than offset by higher imports of industrial raw materials, power generation machinery, food products, cotton, and mobile phones. On the other hand, exports rose, mainly on the back of high-value added textile products, which increased significantly in the second quarter and reached their highest level ever in H1-FY21.

Exports

The exports increased by 5.1 percent to US$ 12.1 billion in H1-FY21 – the highest level in any half since H2-FY11. After staying almost unchanged in the first quarter, exports rose in the second quarter by 10.4 percent YoY to US$ 6.6 billion, depicting a V-shaped recovery **(Figure 5.18)**. The growth in exports became broad-based and more pronounced as the year progressed (**Table 5.5**).

The post-outbreak accommodative policies propped up industrial activity and contributed to the rise in export volumes of many major items. These policies included: (i) gas and power subsidies through the industrial support package; [18] (ii) extensions in the validity of erstwhile zero-rating certificates;[19] (iii) a cumulative Rs 190 billion

[18] Main features of the Policy: a) Base electricity tariff of Rs 12.96/KWh to be charged from November 1, 2020 to October 31, 2023 for incremental consumption in off-peak hours over consumption in corresponding period March 2019 to February 2020; b) Rate of Rs 12.96/KWh reduced to Rs 8/KWh on incremental consumption basis for off peak hours from November 1, 2020 to June 30, 2021; c) Abolishment of Time of Use Tariff Scheme from November 1, 2020 to April 30, 2021, meaning same tariff (Rs 12.96/KWh on incremental consumption basis) during off-peak and peak hours.

[19] While the government had withdrawn the zero-rated sales tax scheme for top five exporter industries of the country at the start of FY20, it continued to provide them subsidized power and gas utilities. The zero-rating certificates, however, were going to expire on March 31, 2020. But, amidst the pandemic, the government decided to extend their expiry dates piecemeal-wise till November 30, 2020. Nonetheless, while the gas tariff was fixed at US$ 6.5/MMBtu throughout, power tariff was revised upwards from 7.5 cents/KWh to 9.0 cents/KWh effective September 1, 2020.

Pakistan's Major Exports **Table 5.5**

million US Dollars

Groups/Items	Q1FY21	Abs. Change (YoY)	Q2FY21	Abs. Change (YoY)	H1FY20	H1FY21	Abs. Change (YoY)
Textile group	3,470	98	3,973	439	6,905	7,442	537
Non-textile group	2,002	-136	2,666	185	4,619	4,668	48
Textile	**3,470**	**98**	**3,973**	**439**	**6,905**	**7,442**	**537**
LVA textiles	628	-180	709	-57	1,573	1,336	-236
Apparel	1,562	116	1,778	224	2,999	3,340	340
Home textiles	856	74	984	188	1,577	1,840	262
Other textiles	173	25	207	32	323	379	56
Food	**807**	**-178**	**1,224**	**10**	**2,200**	**2,030**	**-169**
Rice (a+b)	360	-110	603	41	1,033	963	-70
a) Basmati	121	-76	108	-77	381	228	-153
b) Non-basmati	239	-35	496	118	652	735	83
Fish & prep.	78	-1	117	-29	225	195	-30
Fruits & vegetables	135	-13	204	7	345	339	-6
Meat & prep.	75	5	86	1	156	161	6
Petroleum	**46**	**-16**	**46**	**-59**	**168**	**93**	**-75**
Petroleum crude	15	-22	29	-44	110	44	-67
Petroleum prod.	8	-2	10	-5	24	18	-6
Other Manu.	**782**	**-22**	912	**97**	**1,620**	**1,695**	**75**
Raw leather	31	-21	41	-11	104	72	-32
Leather manu.	146	14	147	3	275	292	18
Medical instru.	105	-2	109	8	207	213	6
Chemicals & pharma	224	-18	327	95	475	551	76
Cement & products	72	6	71	-8	145	143	-2
Total Exports	**5,472**	**-38**	**6,638**	**624**	**11,524**	**12,110**	**586**

Source: Pakistan Bureau of Statistics

enhancement in the limits of refinancing for banks under the Exports Finance Scheme (EFS) and the Long Term Financing Facility (LTFF); (iv) loans deferment and restructuring; (v) payroll support under the Rozgar Scheme; and (vi) the Temporary Economic Refinance Facility (TERF).[20] Additionally, sales tax refunds rose significantly in the first half.[21]

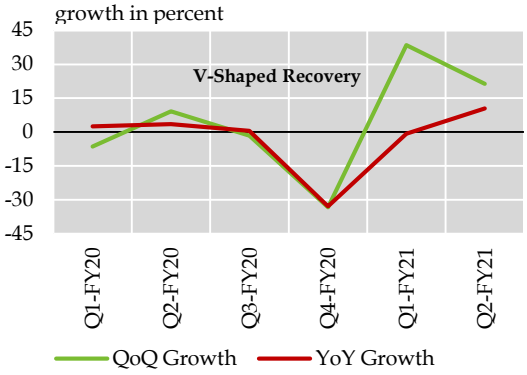
On the demand side, Pakistan was able to maintain or increase its share in the destination markets due to unmet demand from competitors. This was particularly true for textile items, especially high value-added textiles, which were primarily responsible for the gradual improvement in the overall export performance.[22]

[20] For details on some of these schemes, see **Chapter 3: Monetary Policy and Inflation**.

[21] Sales tax refunds increased by almost 339 percent from Rs 17 billion last year to Rs 76 billion in Jul-Nov FY21. (Source: FBR)

[22] Aggregate textile exports grew by 7.8 percent and reached US$ 7.4 billion in H1-FY21, thereby crossing the US$ 7.0 billion mark for the second time ever—the other time being the second half of FY11.

Recovery in Pakistan's Exports from the Pandemic **Figure 5.18**



Source: Pakistan Bureau of Statistics

Meanwhile, the non-textile exports, after declining in the first quarter, also picked up momentum in the second quarter, mainly on the back of higher exports of rice, fruits, medical and surgical instruments, chemicals and pharmaceuticals. However, due to the drag from the first quarter, non-textile exports stood nearly unchanged at US$ 4.7 billion on half-yearly basis.

It is important to note here that in an effort to safeguard, promote and increase the export share of Pakistan's unique products in the international market, the government is currently working on enlisting and registering Geographical Indications (GI) tags for such products under a recently introduced law. **Box 5.1** sheds some light on the implications of GI tags for the country's exports.

Box 5.1: Implications of Geographical Indications Tagging for Exports of Pakistan

Appropriate product differentiation and certification can help a country's exports fetch relatively higher unit prices in the global market. In this context, this Box briefly discusses the recent developments in the area of Geographical Indications (GI) tagging, which can potentially have a beneficial impact on Pakistan's exports by creating a distinct market identity of some export items, thereby allowing exporters to get higher unit prices and contribute to the country's foreign exchange earnings.

Geographical Indications are defined by Article 22 of the Agreement on Trade-Related Aspects of Intellectual Property Rights (WTO) as: "indications which identify a good as originating in the territory of a Member [of the WTO], or a region or locality in that territory, where a given quality, reputation or other characteristic of the good is essentially attributable to its geographical origin".[23]

There are a number of goods, both natural and manufactured, in Pakistan that carry unique characteristics because they are exclusively borne out of a particular locality, climate, set of traditions and/or a group of people. These include, but are not limited to, Basmati rice, Khewra pink salt, Swat peaches, Sindhri mangoes, Qasuri *haldi/methi*, Peshawari *chappal*, Multan blue pottery, truck art, and Sindhi *ajrak* (**Table 5.1.1**). However, lacking awareness, resources, and business management and product marketing skills, the producers and/or exporters of these products generally neglect to build a brand, or register for appropriate rights to protect their products in the international market from counterfeiting and other infringements.

[23] Source: (https://www.wto.org/english/docs_e/legal_e/27-trips_04b_e.htm#3)

GI tags are generally used by the governments to prevent manipulation of domestic products by the foreigners. The process is as follows. First, the government sanctions these tags to the products in light of national legislation on protection of intellectual property. Afterwards, they apply for protection in other countries. Pakistan introduced its own comprehensive GI law in March 2020; until then, the country lacked legal grounds to protect its products, both within and beyond its borders.

Table 5.1.1: List of Some Prospective GI Indications

Basmati Rice	Hunza/Ziarat Apples
Bahawalpur Chunri	Multan Blue Pottery
Bhakkar Karna Oil	Multan Chounsa (Mango)
Chitrali Embroidery	Namal Trout
Gujranwala Colored Pottery	Sailkot Sports/Surgical Goods
Hala ki Ajrak	Qasuri Methi and Haldi
Hunza Apricot	Sahiwal Cattle
Kamalia Khadar	Peshawari Chappal
Kashmir Pashmina	Sindhi Topi/Ajrak
Khattak Dance	Sindhri Mango
Khewra Pink Salt	Swat Peaches
Kilash Dress	Truck Art

Source: Section 52(2) of GI Act (2020)

Once established, the national GI tags can be extended internationally through four channels: a) by providing direct protection in the concerned jurisdiction; b) by concluding agreements with other states or commercial partners; c) through the Lisbon Agreement for the Protection of Appellations of Origin and their International Registration; and d) via the Madrid System for the International Registration of Marks.[24] The World Intellectual Property Organization (WIPO) administers the last two channels. Currently, the number of countries, unions or regions that are party to these are 34 and 86, respectively. According to Bramley et al. (2009), the economic rationale behind GI protections, both local and international, is based on following three key factors.[25]

a) Information asymmetries and the role of reputation: Through GIs, the place of origin can be used as a quality signal, thereby removing information asymmetries between producers and consumers. To improve signaling, the resources of the region (such as production techniques, varieties, landscape, environment and culture) can be mentioned in the origin-labelled product packaging as quality attributes, thereby bringing reputation and increasing the value of the product over time.

b) Improved market access: The value added from these resources creates differentiation based on the product's "qualities" and consequently leads to the institutionalized formation of niche markets. The producers can not only protect and enhance their market share, but can also convert economic rent into premium. For instance, the French origin-labeled cheese earns, on average, two Euros per kilogram more than the French non-origin-labeled cheese. Similarly, the market price of the French poulet de Bresse is four times that of the regular French chicken. And the producers of milk used for the origin-labelled Comté cheese are paid 10 percent above the regular milk prices, while producers of Italian Toscano olive oil fetch a 20 percent premium ever since obtaining registration under the geographical indication in 1998.

c) Rural development potential: In the developing country context, the GIs provide a potential tool for rural producers to enter a niche market, fetch premium prices, and facilitate improved living conditions through higher earnings. A case study, quoted by the WIPO, is that of Cameroon's Oku white honey. Using protective GI, the producers were able to add value to their Oku honey products, which would then be sold in niche markets, both local and foreign, to consumers willing to pay higher prices; this

[24] Source: wipo.int/edocs/pubdocs/en/geographical/952/wipo_pub_952.pdf#page=8
[25] Bramley, C., Estelle, B., and Johann K., "The Economics of Geographical Indications: Towards a Conceptual Framework for Geographical Indication Research in Developing Countries", The Economics of Intellectual Property (2009), World Intellectual Property Organization.

slightly improved the producers' livelihoods over time. In 2014, one liter of processed Oku honey commanded a price of US$ 7.5; before the GI tag, it used to fetch US$ 2.8 per liter.[26]

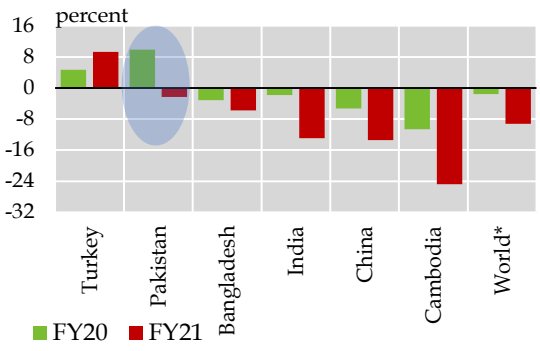
In case of Pakistan, a recent case in GI Tagging is that of the basmati rice. This aromatic rice variety is considered one of the world's most premium, and is produced and exported by only two countries - Pakistan and India. The quality of basmati rice is reflected in its much higher unit values vis-à-vis non-basmati rice varieties. Since September 2020, however, the two countries are engaged in a legal process that is playing out in the European Union, over the usage of the "basmati" label.[27]

The recent measures taken by Pakistan to put in place the needed legal and regulatory framework for GI tagging are a step in the right direction. That said, Pakistan also needs to expedite the domestic registration of other exportable and GI-worthy products. In October 2020, the government announced a 'non-exhaustive indicative list of prospective geographical indications' that included 79 assorted items at the time (**Table 5.1.1**). These products have the potential to increase the country's export earnings, mainly by fetching premium prices, and from increased market access and endorsements by international companies and brands. Furthermore, higher sales of these products would also contribute towards rural development and employment.

High-value added textiles cross half a billion dollar mark for the first time

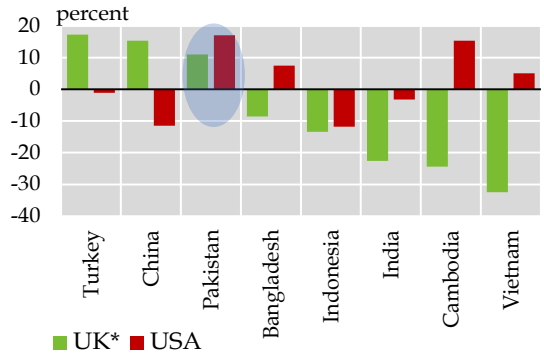
The high-value added items—apparel and home textiles – rose 13.2 percent to US$ 5.2 billion in H1-FY21 YoY. In case of apparel, exporters received higher orders, including some that were diverted from regional competitors where relatively stricter Covid-related mobility restrictions were in place. In fact, despite a drop in demand for these products in the advanced economies

Growth in YoY Quantum Apparel Imports of the EU27 in H1 **Figure 5.19**



*Jul-Nov
Source: Eurostat

Growth in YoY Quantum Apparel Imports of the USA and UK in H1 **Figure 5.20**

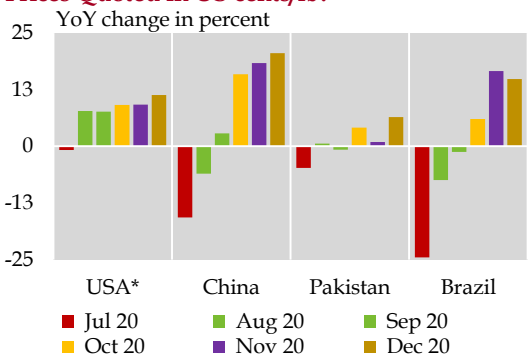


*Jul-Oct
Sources: OTEXA and Eurostat

[26] Source: wipo.int/ipadvantage/en/details.jsp?id=5554
[27] It is worth noting that the EU is a major importer of aromatic rice, and any decision by the bloc on GI tagging for basmati rice will likely have wide-ranging implications for both major South Asian rice exporters.

(the US, EU-27 and the UK) amid lockdowns, their imports from Pakistan either increased during the period or were relatively stable as compared to competitor countries (**Figures 5.19** and **5.20**).[28,29]

Trend in International Cotton Prices Quoted in US cents/lb. **Figure 5.21**



*New York front month/futures
Source: Emerging Textiles

The Pakistan government's facilitative policies, as indicated earlier, contributed towards improving the liquidity position of the textile exporters and allowed them to enhance their capacity utilization. These policies likely led to a net retirement of working capitals loans by the textile sector, as opposed to a net loan uptake during the same period last year.[30] There was also a significant uptick in the fixed investment loans by the textile industry, as some firms pursued capacity expansions amidst the dynamic demand.[31]

Furthermore, Pakistan has been one of the beneficiaries of China's declining share in the US' apparel market due to the US-China trade tensions, which was further compounded by the pandemic in the first half of CY-20.[32] In addition, China, the world's largest textile and apparel producer and exporter, has been shifting its focus over the last few years on maintaining or improving its share in the global textiles market rather than in apparel, thereby rooting itself deeper into the global textile value chain. This has created some space for its Asian competitors, including Pakistan, to increase their shares in the global apparel market.

In case of home textiles (bedwear and towels), exports increased by 16.6 percent

[28] It should be noted here that following the end of post-Brexit "transition period" on Dec 31, 2020, Eurostat does not publish data for the UK on its website anymore. The latest available data for the UK's apparel imports is till Oct-2020.
[29] Even though Pakistan's overall apparel shipments to the EU-27 declined slightly, it should be noted that this decline was led by woven clothes, and not knitwear, whose shipments were nearly the same as last year. This also goes on to show that Pakistan managed to receive some deflected orders for knitwear clothes from the European buyers as well.
[30] There was net retirement of working capital loans (including trade finance) of Rs 13.7 billion by the textile industry in the first five months of H1-FY21, against a net uptake of Rs 73 billion loans during the same period last year.
[31] The textile industry undertook fixed investment loans of Rs 21.4 billion during Jul-Nov FY21. This was almost double from last year's loan uptake of Rs 11.2 billion.
[32] Based on a survey of executives from leading US fashion importers, retailers, brands, and wholesalers, a US fashion industry report highlighted that: Covid-19 and the trade war are pushing US fashion companies to reduce their "China exposure" further. Moreover, "China plus Vietnam plus Many" is the most popular clothing and apparel sourcing model among the respondents. Source: USFIA (2020), *2020 Fashion Industry Benchmarking Study*, Washington, DC: United States Fashion Industry Association.

YoY to US$ 1.8 billion in H1-FY21. The rise came on the back of higher unit values, which, in turn, could be partly attributed to exporters passing on the impact of elevating domestic and imported cotton prices to end-consumers abroad (**Figure 5.21**).[33,34] It should be noted that the EU-27, which imports around two-fifths of its total home textiles from Pakistan, witnessed an increase in the average unit values for its overall imports of these products from the world.[35] Pakistan's share in the largest single market increased from 36.8 percent to 39 percent during the Jul-Dec periods of FY20 and FY21, according to Eurostat data. This shows that the country was able to increase its market share there at even slightly higher unit values.

Moreover, due to higher demand for personal protective equipment (PPE) from foreign buyers, the exports of other textile made-ups (excluding towels and bedwear) reached their highest-ever level of US$ 379 million in the first half of FY21.
At the lower end of the value chain, the country's major cotton-based goods (fiber, fabrics, and yarn) registered their lowest first half exports in dollar terms since at least H1-FY06. Cumulative exports of these products declined 15 percent to US$ 1.3 billion in H1-FY21, mainly due to lower exports of cotton yarn. On the supply side, a major factor was the shortfall in domestic cotton production (FY21), not to mention the primary textiles market feeding to the demand from exporters of finished textile products. On the demand side, possible reasons included the availability of sufficient stocks with the major importing countries, or their upstream value-added products faced lower demand from the world in the face of the second wave of Covid-19.[36]

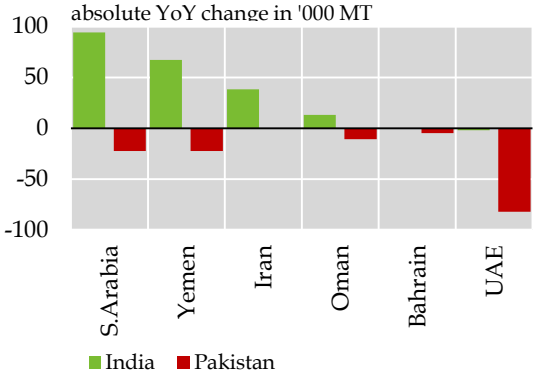
Tough competition and relatively higher unit prices see rice exports decline

Rice exports declined by 6.7 percent to US$ 963 million in H1-FY21 YoY. These exports, after declining consecutively in the first four months of FY21, recovered considerably in November and December 2020; however, the increase in these two months was not sufficient to offset the initial declines.

Basmati rice exports declined by 40 percent to US$ 228 million. Shipments fell drastically to the major markets in the Middle East, where India was able to ship 23 percent more basmati rice during H1-FY21 on YoY basis (**Figure 5.22**).[37] Anecdotal evidence suggests that Indian exporters, unlike their Pakistani counterparts, managed to make further inroads into their biggest market, Iran.[38]

[33] As a consequence of poor cotton crop output, domestic cotton prices rose by 5.6 percent from Rs 8,577 per maund to Rs 9,058 during first halves of FY20 and FY21. (Data source: Emerging Textiles). It should be noted that PKR depreciation (YoY) did blunt this impact slightly, but not completely.
[34] Faced with domestic shortage, Pakistan's raw cotton (uncarded) imports from both the US and Brazil increased 5.3 times on a cumulative basis from a year ago to US$ 264 million during H1-FY21 (source: PBS).
[35] In USD/100 kg terms, unit values of EU's home textile imports from the world rose 1.1 percent during Jul-Dec FY21 (source: Eurostat).
[36] For instance, Pakistan's quantum exports of cotton yarn to both China and Bangladesh decreased nearly 17 percent to 0.14 million tons in H1-FY21, from 0.17 million tons a year earlier (Source: PBS).
[37] Source: Ministry of Commerce and Industry (India).
[38] India and Iran already have a barter-like system in place.

Quantum Basmati Rice Exports to the Middle East in H1-FY21 **Figure 5.22**

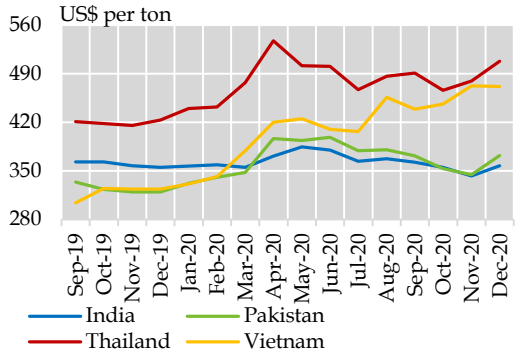


Sources: PBS and Ministry of Commerce (India)

They have also been stocking up basmati rice at distribution points in Iran and selling it from there, at lower prices than Pakistan, and even on credit. [39] As a result, Pakistan's shipments to the UAE dropped precipitously in the Jul-Dec period, as most of the Pakistani rice was previously being transshipped to Iran via the Dubai port.

Shipments of non-basmati rice declined in the first four months of FY21, as India offered the most competitive prices vis-à-vis some of the major rice exporters, owing to its ample stocks and repeated bumper crops **(Figure 5.23)**.[40] Nonetheless, with the arrival of new crop and price gap with India narrowing, Pakistan's exports did pick up in November and December 2020. That said, due to higher domestic prices amid tight supplies before the arrival of the new crop, the price impact was much stronger than the overall quantum impact in the Jul-Dec period. Consequently, in value terms, non-basmati rice exports rose

International Price Comparison of Non-Basmati Rice Variety* **Figure 5.23**



* 25% broken

Source: Food and Agriculture Organization

12.7 percent to US$ 735 million on a YoY basis during the period under review.

Cement exports volume reach highest level since FY15

Shipments of cement and cement products reached their highest level in H1-FY21 since FY15, mainly due to considerably higher clinker exports to China and Sri Lanka.[41] China has been using infrastructure investment as a primary tool to revive its economy after the Covid-19 outbreak.[42] Meanwhile, Sri Lanka began an AIIB-sponsored infrastructure project in early November 2020, which likely increased its

[39] Average unit value of Indian basmati rice exports declined from US$ 1,054 per ton to US$ 866 per ton during Jul-Nov periods of FY20 and FY21. Meanwhile, the unit price of Pakistan's basmati exports increased from US$ 889 per ton in H1-FY20 to US$ 989 per ton in H1-FY21 (source: Ministry of Commerce and Industry, India, and Pakistan Bureau of Statistics).

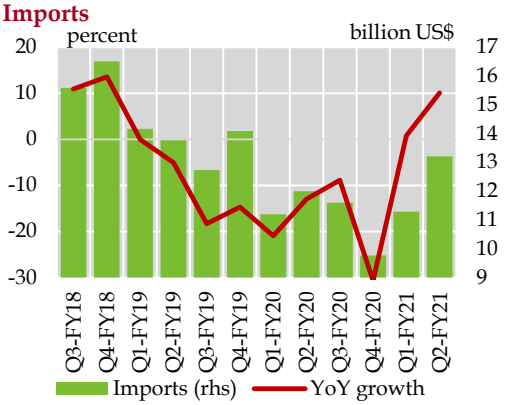
[40] USDA 2020. *Grain World Trade Report December 2020*. Washington, DC: United States Department of Agriculture.

[41] Cumulative volume of clinker exports to China and Sri Lanka rose 6.3 times to 0.7 million tons in H1-FY21 on YoY basis (source: PBS).

[42] China's cement production increased by 7.3 percent in H2-CY20 YoY (source: Haver Analytics).

demand for construction material.[43] Nevertheless, in value terms, cement and product exports cumulatively registered a slight decline of 1.6 percent to US$ 143 million, owing to lower unit values on YoY basis.

Quarterly Trend of Pakistan's Imports **Figure 5.24**



Source: Pakistan Bureau of Statistics

Imports

In H1-FY21, Pakistan's imports increased in consecutive quarters for the first time since Q4-FY18. Imports grew by 0.8 percent and 9.8 percent respectively in Q1 and Q2 of FY21 (**Figure 5.24**).[44]

While the revival in economic activity, which gained traction in the second quarter, contributed strongly to the broad-based quantum increase, the import of agri-products especially contributed to the trend

Pakistan's Major Imports during H1 **Table 5.6**

million US$

Groups/Items	FY20	FY21	Abs. change	Quant. effect	Price effect
Energy	**6,142**	**4,771**	**-1,371**	**1446**	**-2817**
POL prods.	2,591	2,169	-422	1,233	-1,655
Crude oil	1,771	1,323	-448	296	-744
LNG	1,627	1052	-575	-25.9	-549
Chemical	**3,822**	**4,045**	**223**	-	-
Fertilizer	433	325	-108	-105	-2
Plastic mat.	948	1,119	171	341	-170
Other chem.	1,848	1,974	125	-	-
Transport	**837**	**1,133**	**296**	-	-
Cars	261	465	204	-	-
CBUs	32	95	62	-	-
CKDs	229	370	144	-	-
Truck & buses	129	179	51	-	-
Aircraft & ships	211	257	46	-	-
Metals	**2,073**	**2,291**	**218**	-	-
Steel scrap	806	949	143	242	-99
Iron & steel	763	859	95	215	-120
Food	**2,567**	**3,905**	**1,339**	-	-
Tea	229	286	57	78	-21
Palm oil	842	1,112	269	63	206
Wheat	0	661	661		
Sugar	2	127	125	134	-9
Textile	**980**	**1,665**	**686**	-	-
Raw cotton	87	532	445	495	-50
Syn. yarn	273	320	48	164	-116
Machinery	**4,433**	**4,241**	**-192**	-	-
Power gen.	650	821	170	-	-
Electrical	1,192	640	-552	-	-
Construction	81	54	-27	-	-
Cell phones	616	939	323	-	-
Other mach.	1,185	1,083	-101	-	-
All other items	**1,921**	**1,796**	**-125**	-	-
Total imports	**23,195**	**24,454**	**1,259**	-	-

Source: Pakistan Bureau of Statistics

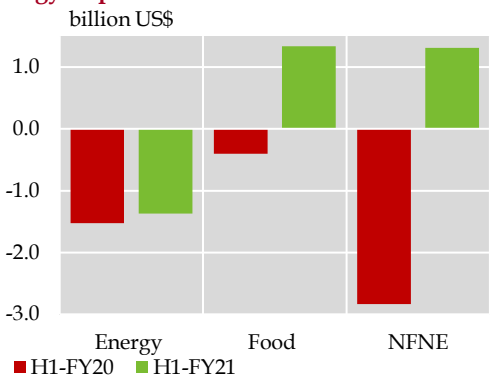
[43] Source: (https://www.china.org.cn/world/Off_the_Wire/2020-11/04/content_76876333.htm)

[44] Aggregate imports in H1-FY21 increased by a significant 5.4 percent YoY, compared to the 17.0 percent and 20.3 percent YoY declines witnessed in H1-FY20 and H2-FY20, respectively.

reversal in imports in H1-FY21 (**Table 5.6**).[45,46]

Specifically, the country had to import sizable quantities of wheat, sugar and cotton to address the domestic demand-supply gap and to stabilize their domestic prices. On the other hand, benign global energy prices – which remained 26.3 percent lower from H1-FY20, as per the World Bank's Energy Price index – reined in Pakistan's energy value imports despite a sharp increase in their quantum imports (**Figure 5.25**).

Changes in Energy and Non-Energy Imports **Figure 5.25**

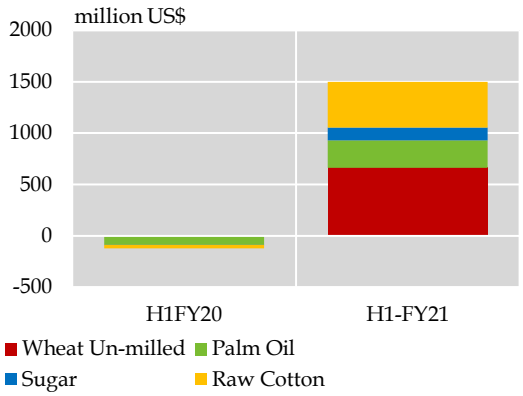


Source: Pakistan Bureau of Statistics

Agri-products – wheat, sugar, palm oil, and cotton – largely contributed to the expansion in the trade deficit

In H1-FY21, the import of food products increased by a remarkable 52.2 percent to US$ 3.9 billion from US$ 2.6 billion in H1-FY20; higher import quantums were the dominant factor behind the increase in imports. In case of palm oil, however, higher international prices were the major reason behind the rise in import values (**Table 5.6**).

Impact of Agri-Product imports **Figure 5.26**



Source: Pakistan Bureau of Statistics

Together, the increase in imports of key agricultural products –wheat, sugar, palm oil and cotton – elevated Pakistan's imports by US$ 1.5 billion. In terms of impact, this upsurge is more than the US$ 1.3 billion YoY rise in Pakistan's overall imports in H1-FY21 (**Figure 5.26**). Pakistan imported US$ 661 million of wheat and US$ 127 million of sugar during H1-FY21. In contrast, in H1-FY20, Pakistan had exported US$ 11.4 million of wheat and US$ 70.7 million of sugar.[47]

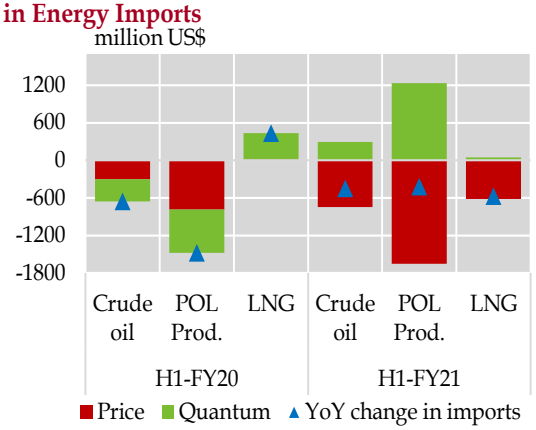
[45] Import values of agri-products such as, sugar, wheat, cotton and palm oil were 131 percent higher in H1-FY21 compared to its first half average values of last five years.
[46] According to the FBR, Pakistan Customs cracked down on the illegal imports of a number of commodities. This may have contributed to an increase in the imports via legal channels (https://www.fbr.gov.pk/fbr-achieves-highest-monthly-growth-in-december-during-juldec-2020/152791).
[47] In H1-FY19, Pakistan had exported US$ 97.2 million (461.3 thousand metric tons) of wheat and US$ 74.9 million (252.4 thousand metric tons) of sugar, respectively.

Below-target crop output resulting from bad weather and pest and locust attacks last year mostly led to the import of cotton and sugar this year. On the other hand, some disruption in the supply chain necessitated higher import of wheat. While the growth in wheat production was 2.5 percent in FY20, the below-target procurement of the commodity triggered uncertainty in the wholesale and retail markets. This led to a shortage of the commodity and a hike in its price.[48] To stabilize domestic prices and build strategic reserves, the government reverted to the import of wheat in H1-FY21. The situation was not very different for sugar, where the decline in domestic production due to the lower output of the sugarcane crop in FY20 may have led to tight supplies of the commodity. The government resorted to sugar imports to control the unwarranted increase in sugar prices in H1-FY21.

The increase in imports of palm oil in H1-FY21 was mostly price-driven. Global palm oil prices increased 33.3 percent in the first half of FY21, with contribution from both demand- and supply-side factors. On the supply side, palm oil production in Malaysia declined by 100,000 metric tons during MY2020-21.[49] On the demand side, India reduced its basic customs duty on the import of crude palm oil from 37.5 percent to 27.5 percent in November 2020 to control the anticipated inflationary pressures in the country.[50] Moreover, Indonesia increased the palm oil export levy by US$ 5 per ton in June 2020.[51]

Also, cotton production in Pakistan was 6.9 percent lower in FY20 due to exceptionally heavy monsoon rains and pest attacks. The situation remained similar in FY21, and there was a notable decline of around 10 percent in the crop's area. Estimates suggest that cotton production may decline by a further 24.0 percent in FY21 from last year.[52] As Pakistan's textile exports are increasing, the shortfall in the domestic cotton is being met via increased imports. Therefore, raw cotton imports increased by US$ 445 million in H1-FY21; with quantum imports increasing to 282,000 metric tons from a mere 50,000 metric tons in H1-FY20.

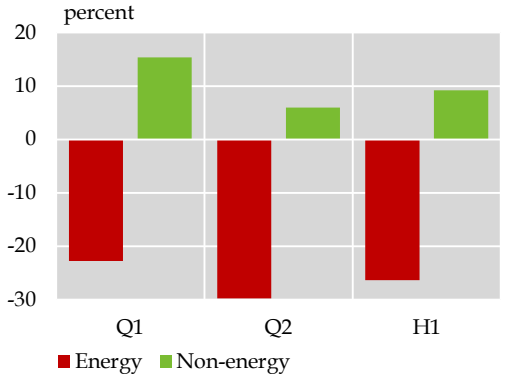
Contribution of Unit Price & Quantum Effects to YoY Change in Energy Imports **Figure 5.27**



Source: Pakistan Bureau of Statistics

[48] For details, see the SBP's First Quarterly Report FY21 on the State of Pakistan's Economy.
[49] Source: USDA Report # MY2020-0014, dated December 17, 2020.
[50] India is the largest importer of edible oil and imports around 15 million tons annually from different countries, including Indonesia and Malaysia.
[51] The Indonesian government is promoting the use of biodiesel as an energy source to reduce its dependency on imported diesel. To support this objective, the government in Indonesia imposed Crude Palm Oil (CPO) levy.
[52] Source: USDA Report # PK2020-0014, dated December 2, 2020.

YoY growth in Global Commodity Prices in FY21 **Figure 5.28**



Source: The World Bank

Lower oil prices kept the energy imports in check

Energy imports declined by a sharp 22.3 percent YoY to US$ 4.8 billion in H1-FY21, after dropping 19.9 percent in the same period last year (**Figure 5.27**). While quantum imports increased by 23.5 percent in H1-FY21, an almost 37.1 percent decline in unit prices more than offset the impact of the quantum increase.

Uncertainty related to the spreading pandemic and its impact on the major economies kept the international energy prices at a lower level as compared to last year (**Figure 5.28**). On the other hand, the revival in economic activity in Pakistan – as evidenced by an 8.2 percent YoY increase in the LSM index in H1-FY21 - increased the demand for energy products.

As the domestic production of crude oil and gas declined by 6.6 percent and 3.5 percent YoY in H1-FY21, respectively, the country's dependence on the imported fuel increased in H1-FY21 not only for power generation but also for other economic activities, such as usual transport services (**Table 5.7**).

Fuel-wise Power Generation during Jul-Dec* **Table 5.7**

GWh

	FY20		FY21	
	Value	**Abs. Change YoY**	**Value**	**Abs. Change YoY**
Furnace oil	2,491	-3,153	2,891	400
LNG**	13,853	167	14,754	902
Hydro	22,412	3,474	23,702	1,290
Coal	12,704	4,751	12,702	-1
Natural gas	7,970	-3,211	7,027	-943
Nuclear	4,672	-802	4,330	-343
Others	3,025	81	2,641	-384
Total	**66,467**	**1,308**	**68,047**	**1,580**

*Excluding K-Electric

Source: NEPRA

In H1-FY21, power generation increased by 2.4 percent, with a significant increase in generation from furnace oil (FO) and hydro sources **(Table 5.7)**.[53] While better water availability due to rains increased the hydropower generation, gas supply-related disruptions in the country's southern region necessitated power generation on furnace oil (FO). The government lifted the ban on FO-based power generation that it had imposed earlier in January 2019, resulting in increased imports of the commodity.[54] Moreover, cold weather in the north amid tight domestic gas

[53] Furnace oil imports increased by 531,000 metric tons – almost 1,400 percent higher than the 38,000 tons imported in H1-FY20.

[54] For details, see **Chapter 5** in the SBP's First Quarterly Report on the State of Pakistan's Economy.

production increased the LNG imports in the second quarter of FY21.

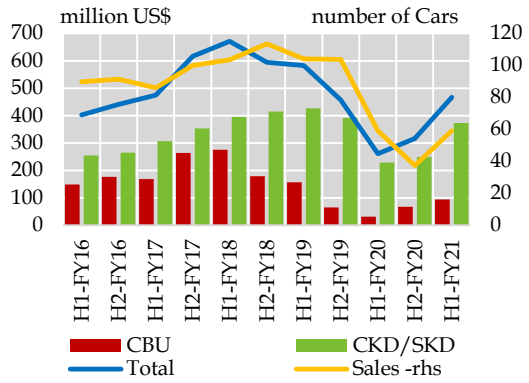
Additionally, with the reviving economic activity, transportation also gained momentum. Increased shipments due to exports and imports, uptick in construction activity,[55] and surge in sales of heavy and light vehicles, all contributed to a significant rise in the demand for transport fuels.[56] As the marginal gain in POL production of local refineries was insufficient to cover the rising fuel demand of the transport sector, the imports of transport fuels become inevitable.[57]

Reversal in car imports

In H1-FY21, transport group imports increased by US$ 296 million, with US$ 204 million contribution coming from car imports. Car imports – comprising both completely build units (CBU) and completely knocked down (CKD)/semi knocked down (SKD) kits– rose to US$ 465 million in H1-FY21, up from US$ 261 million in H1-FY20.

Macroeconomic stabilization measures adopted in 2018 had tapered the import of cars since H2-FY18. With CBU imports declining more prominently, the share of CKD/SKD imports increased to 88 percent in H1-FY20 in Pakistan's total car imports; suggesting some progress towards value addition in the auto sector (**Figure 5.29**). In H1-FY21, however, the import of both CBUs and CKD/SKD reversed, and witnessed an increase; with CKD's share in in total car imports falling to 80 percent.

Car Imports and Sales in Pakistan **Figure 5.29**



Source: Pakistan Bureau of Statistics

Though the pick-up in economic activity may be the key driver, the introduction of some new variants in the local market may have supported the import growth of both category. New car manufacturers in Pakistan are also allowed to import 100 units at concessionary duties under the Auto Policy 2016-21.

Importantly, reviving activity in the construction and automobile sectors led to an increase in iron steel and steel scrap imports, with quantum rise significantly offsetting the lower unit prices.

Imports of power generating machinery and cell phones (both from machinery group) witnessed a significant rise in H1-FY21. The import of power generation machinery

[55] Cement production increased by 3.9 million tons in H1-FY21 on YoY basis.
[56] Sales of cars and 2- and 3-wheeler vehicles increased by 13.4 percent and 18.9 percent YoY in H1-FY21, respectively (source: PAMA).
[57] Refineries' output of POL products increased by 5.0 percent in H1-FY21. Specifically, the production of petrol and diesel increased by 16.1 percent and 7.2 percent YoY respectively in the period.

increased due to the ongoing work on CPEC-related power projects, while cell phone imports rose due to multiple factors. Though the reduction in taxes may have contributed to the increased demand, work from home arrangements and the adoption of distance learning methods by educational institutions have also likely played a major role in pushing up the import demand for cell phones.[58]

[58] For more details, see the SBP's First Quarterly Report on the State of Pakistan's Economy.

Special Section: LNG Sector in Pakistan – Attaining Sustainability through Deregulation and Structural Reforms[1]

Pakistan is a relatively new player in global LNG market, but has quickly become a major importer. Depleting indigenous gas reserves and a transition towards cleaner and cheaper power generation have been the major factors driving the country towards adding LNG to its energy mix. Over the past few years, the government has established the basic LNG infrastructure, which has helped bridge the gas supply-demand shortfall, and lately there has been some progress towards private sector participation in LNG import. However, multiple operational and structural bottlenecks in the current framework are causing import delays, price distortions, as well as lags and inefficiencies in the distribution of LNG. This section sheds light on some of the international best practices that the government may learn from, and emphasizes the need to introduce reforms to maximize the potential returns from deregulating the LNG market.

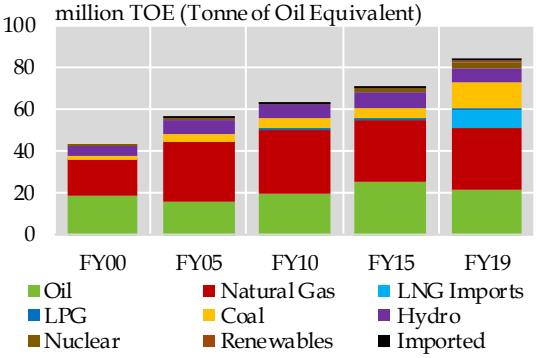
S1.1 Introduction

The objective of this section is to: (i) briefly explain the evolution of global LNG trade; (ii) describe the existing structure of Pakistan's LNG sector; (iii) highlight the structural, contractual and pricing elements that cause delays at the import, transmission, and distribution stages and result in regulatory inefficiencies; (iv) provide an overview of the ongoing deregulation, onboarding of private sector participants, and capacity expansions underway in the domestic LNG sector; (v) evaluate the fundamental concerns associated with natural gas pricing and governance in distribution companies; and (vi) discuss the possible redressal measures to help the overall gas sector operate on a sustainable basis.

S1.2 Background

Natural gas is one of the most important sources fulfilling Pakistan's energy requirements (**Figure S1.1**), primarily because of the country's natural endowment of the fuel, and its inherent cost advantage over oil. Contributing nearly 35 percent of the country's primary energy supplies, local natural gas production currently stands at 29.3 million tons of equivalent (TOE) – placing Pakistan among the top-25 natural gas producing countries.[2] In terms of final energy consumption, the share of natural gas has remained above 30 percent over the past

Primary Energy Supplies by Source in Pakistan **Figure S1.1**



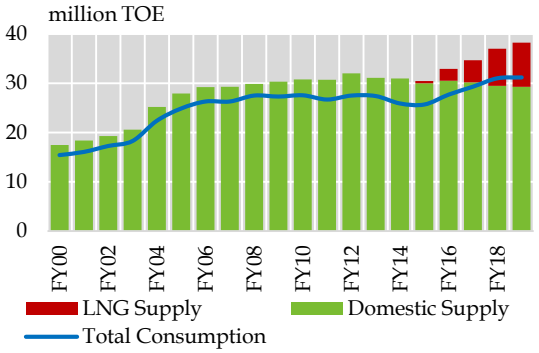
Source: Pakistan Energy Yearbook, HDIP (various editions)

[1] This chapter draws heavily from discussions with, and the data shared by, officials from the Ministry of Energy (Petroleum Division), Sui Northern Gas Pipelines Limited, Oil and Gas Regulatory Authority, Pakistan, Hydrocarbon Development Institute of Pakistan, Pakistan LNG Limited, and Engro Elengy.
[2] BP (2019). Statistical Review of World Energy 2019. London: British Petroleum.

two decades. Thermal power producers, households and general industries are major users of natural gas, while the fertilizer sector also uses it as a principal feedstock and fuel source.

However, despite a large and growing consumer base, indigenous gas supplies have stagnated since 2008. While security concerns in gas-rich areas led to fewer mining and exploration projects,[3] consistently low well-head prices also adversely affected their commercial viability. In the meantime, gross underpricing of natural gas for the household sector resulted in excessive consumption and wastage of the fuel. These dynamics led to a burgeoning natural gas deficit in the country, which ultimately pushed the government to develop a medium-to-long-term gas import strategy. As a result, Pakistan signed two major pipeline trade agreements – the Turkmenistan-Afghanistan-Pakistan-India (TAPI) Gas Pipeline and the Iran-Pakistan (I-P) Gas Pipeline– in 2010. But these projects have been facing delays due to financing constraints and geo-political conditions in the region. To plug the gas deficit in the short term, Pakistan started importing natural gas (in liquefied form – LNG) in sizable quantities from FY15, and has since then quickly become a major buyer in the international market. At present, nearly 23 percent of the country's natural gas consumption is being met through imported

Natural Gas Supply and Consumption in Pakistan **Figure S1.2**



Source: Pakistan Energy Yearbook, HDIP (various editions)

LNG (**Figure S1.2**). The import of LNG has also helped reduce overall electricity generation cost in the country by around Rs 234 billion during FY17-20.[4]

Going forward, the natural gas shortfall in the country is projected to increase substantially, stoking the demand for further LNG imports. Although variable renewable energy (VRE) sources – such as solar and wind – provide a better alternative to achieve the least-cost energy mix and attain broader energy security over the medium-to-long-term, a number of commercial and technical constraints hamper the short-term viability of these projects. Strong political commitment, massive investment in technical capacity and planning tools, support from global development partners, and most importantly, flexibility on the part of existing

[3] "… the proven gas reserves and annual average gas production are already on a decline in Pakistan, and the oil & gas sector has failed to attract sufficient foreign investments. The energy experts identify difficult security situation, and policy delays as major obstacles to foreign investment in this sector." SBP (2015). State of Pakistan's Economy Annual Report 2014-15. Karachi: State Bank of Pakistan.

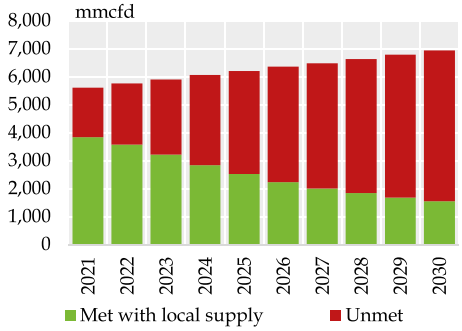
[4] During FY17-20, 72,755 GWh of electricity was generated in the country (excluding K-Electric) from LNG, at a total cost of Rs 666.3 billion. If the same quantity of electricity was generated using residual furnace oil (RFO), the total cost would have been Rs 900 billion. Data source: NEPRA (2020). *State of Industry Report 2020*. Islamabad: National Electric Power Regulatory Authority.

energy operators and investors, is required for a large-scale switch to VREs.[5] The other low-cost alternative is coal, which has gained traction lately, especially under the coal-powered projects set up under CPEC. However, burning coal to meet domestic energy requirements is not a sustainable solution, given its heavy contribution to the greenhouse gas emissions. Leading IFIs have also lately advised against developing additional coal resources in Pakistan, except for the plants already committed.[6]

Keeping these limitations in mind, it appears that the magnitude of future LNG requirements (if natural gas exploration levels and the pricing policy remain unchanged) would remain high over the short- to-medium-term. Estimates by the Ministry of Energy and OGRA suggest that Pakistan's indigenous supplies would only fulfill 22.3 percent of the estimated demand by 2030. If the long-delayed I-P and TAPI gas pipeline projects do not become operational, the average annual net gas shortfall during 2021-2030 is projected to be 2,593 mmcfd (**Figure S1.3**).[7] To put this deficit in context, it is 2.7 times the volume of LNG the country imported in 2020. Thus, it has become crucial to develop an efficient LNG market, characterized by a robust regulatory and operational infrastructure, to help run the domestic gas sector on a sustainable basis and strengthen Pakistan's energy security.

Within this context, this section intends to evaluate the existing regulatory and operational infrastructure of the LNG market (including imports and domestic sales) in the country, and discuss what is required to operate this sector efficiently and in a cost-effective manner. Since the global LNG trade is relatively new compared to oil, and is still evolving, the section initially takes stock of developments in the major markets and closely tracks the recent policy transitions in terms of nature of contracts, pricing benchmarks, and the role of governments. Similar transitions are either underway or being contemplated in Pakistan's LNG market as well.

Estimated Gas Demand in Pakistan **Figure S1.3**



Source: OGRA

Following that, the section provides a detailed account of major stakeholders in domestic LNG market, and identifies specific procedural bottlenecks causing delays at the import, transmission, and distribution stages. These challenges not only lead to recurring supply shortages, but also result in cost escalation, which ultimately feeds into

[5] World Bank (2020). *Variable Renewable Energy Integration and Planning Study*. Pakistan Sustainable Energy Series. Washington, DC: World Bank

[6] World Bank (2020).

[7] If TAPI and IP become operational, then the overall unmet demand would average 1,166 mmcfd during the same period. For unit descriptions and conversion factors used throughout the special section, please refer to **Annexure-I**.

consumer tariffs or accumulation of arrears. There is also a perception among various stakeholders in the country about the cost of imported LNG, and there are frequent debates over the quality and duration of the long-term sovereign LNG contracts and the timeliness and benefits of spot procurements. These dynamics make a strong case for greater involvement of domestic private sector in LNG import and local sales, which is expected to introduce efficient practices in LNG supply chain, as experienced by other countries in the region.

While the government has recently allowed the private sector to import LNG, and has also issued licenses to interested parties, the remaining duration of the long-term sovereign contracts implies that the private sector would be operating in parallel with the public sector for some time. But it is important to understand that private participation alone will not solve the sector's broad operational and financial problems. Specifically, without addressing the fundamental issues associated with natural gas pricing, governance in distribution companies, and uncertainties at the end of the gas supply-chain, the domestic LNG market and the overall gas sector would continue to operate sub-optimally.

In particular, while addressing bottlenecks in the existing import, regasification, and pipeline infrastructure is necessary, it is equally important to expand the LNG user-base in the country; this is especially to reduce the per unit terminal capacity charges, which the private sector would also be paying for. However, this expansion appears challenging, given the prevailing mindset of cheap/subsidized access to natural gas, which has seen users (especially industries) vying for a greater share in the indigenous natural gas pie instead of shifting to LNG. Subsidy rationalization is also important in the context of managing fiscal and quasi-fiscal costs of the government, especially when imported LNG is provided to already heavily subsidized sectors, such as households and fertilizer. The situation could become more challenging for the gas distribution companies when their high-revenue sectors (such as transport and power) start shifting their gas demand to the private sector. In this context, political consensus and strong provincial coordination is needed to get a policy buy-in for the rationalization of subsidies.

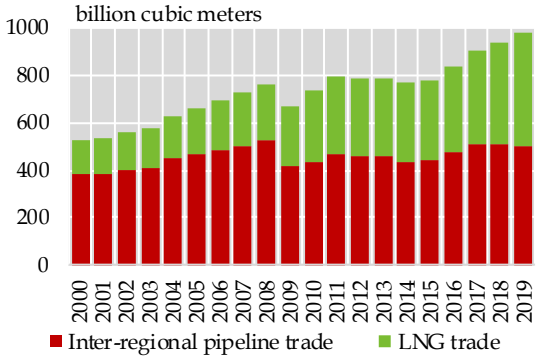
Finally, cross-sector linkages need to be carefully evaluated. In particular, the robustness of demand projections that ultimately feed into timely procurement decisions, crucially hinges on the adoption of more structured and regulatory-compliant practices in the power sector, which is consuming 60 percent of total LNG.

S1.3 Why is LNG Gaining Traction Worldwide

Natural gas was historically traded via networks of extensively laid inter- and intra-country pipelines, as its low density made it costlier to store and trade via shipping channels as compared to oil.

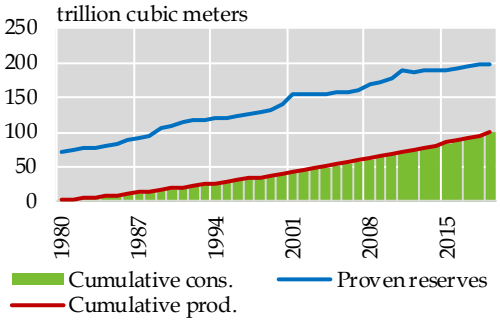
Over time, however, the industry saw rapid advancements in purification, liquefication and regasification technologies. These not only made it cost-effective to transport gas in liquefied form via specialized vessels, but also increased the commodity's trade potential by reducing the need for highly capital-intensive long-distance pipelines. As a result, this mode of transportation became increasingly popular.

Annual Trend in Natural Gas Trade **Figure S1.4**



Source: British Petroleum Statistical Review of World Energy June 2020

Global Natural Gas Proven Reserves, Cumulative Production and Consumption **Figure S1.5**



Source: British Petroleum Statistical Review of World Energy June 2020

During the last two decades (2000-2019), the volume of the global LNG trade more than trebled, with overall share of LNG in natural gas trade increasing from 27.6 percent to over 49 percent during the same period (**Figure S1.4**).

From the demand side as well, LNG has been gaining traction as a reliable source of energy, due to a number of reasons:

- First, technological advancements in power generation, particularly the advent of low-cost combined cycle generation turbine (CCGT) plants, have made it easier for oil-importing developing countries such as India, China and Turkey to switch to gas-fired power generation and take advantage of the cost flexibility.[8] This has resulted in a continuous rise in the global production and consumption of natural gas (**Figure S1.5**). Given the expected surge in Chinese and Indian economies over the medium-to-long-term, traders and energy experts are expecting a similar surge in LNG imports to cater to the growing energy needs of their industrial, residential and power sector users.

- Second, rising environmental concerns have been creating demand for cleaner fuel-sources such as LNG, since natural gas is free from sulfur, minimizes CO_2 emissions, and is more efficient in generating electricity compared to other fossil fuels.

- Third, the LNG value chain offers custom-made and small-scale solutions to cater to customers' needs; these include small liquefaction and regasification plants and bunkering solutions etc. (**Box S1.1**).

[8] CCGT power plants use both gas and steam turbines to produce electricity which is more efficient compared to traditional simple cycle plants. These power units are available in smaller sizes and involve short planning lead time.

Box S1.1: Understanding the LNG Value Chain

In contrast to the pipeline trade of natural gas, LNG trade requires substantial investments at multiple stages of value addition. The first stage in converting natural gas to LNG is the exploration of natural gas from underneath the earth's surface. Countries with an exportable surplus of natural gas reserves export the commodity; exploration contributes approximately 11 percent to the overall cost of LNG. The next step is liquefaction, which involves the removal of various extraneous elements and ensures consistent composition and combustion characteristics of the natural gas.[9] The liquefaction process requires huge investments and adds 42 percent to the overall LNG cost. Once natural gas is converted to liquid form (i.e., LNG), it is transported to the importing countries via specialized trucks and ships; for long distances, shipping is the preferred option. The overall transportation/shipping approximately adds 20 percent to the LNG cost borne by the importer. In the next stage of the value chain, the marine terminals at the importing destinations receive the LNG, store it, and later convert it back into gaseous form. In some countries, ships and barges – such as Floating Storage Units (FSUs), Floating Regasification Units (FRUs), and Floating Storage and Regasification Units (FSRUs) – perform these different functions. These floating facilities provide a rapid and low capital cost solution to the LNG importing countries, and approximately sum to 27 percent of the overall LNG landed price. In the last stage, the LNG in gaseous form is transported to the final customers through the countries' own transmission and distribution networks.

Reference:
GIIGNL (2019). *The LNG Process Chain*. LNG Information Paper#2, October 2019 update. France: International Group of Liquefied Natural Gas Importers

As a result, the number of players in the global LNG supply chain rose manifold since the turn of the century. On the export front, new players such as Qatar, Australia, and recently the US, emerged and eventually surpassed traditional exporters such as Indonesia, Malaysia and Russia. Meanwhile on the imports front, China, India, and Pakistan generated sizable LNG demand in the international market. In response to mounting needs, the global LNG infrastructure underwent significant capacity expansions. From exploration to liquefaction, and shipping to regasification and distribution, all activities have seen a noticeable surge in investments.

For instance, the discovery of sizable shale gas reserves in the US had a market-altering impact on the global LNG trade, as the country transitioned from a net-importer to a net-exporter within the span of just a few years by investing heavily in export infrastructure. In the face of growing competition, Qatar has also recently planned to increase its LNG production-handling capacity by 64 percent by 2024, to make use of its recently discovered gas reserves. Similar expansion plans have also been announced by other natural gas producing countries, including Canada, Mozambique and other West African countries.[10]

Likewise, importing countries have been investing heavily to increase their LNG regasification, storage and pipeline

[9] In this process, refrigeration technology is used to cool, condense and liquefy the natural gas so it can be converted to liquid form at a temperature of approximately -162°C. At standard temperature of 15.6°C, LNG occupies around 600 times lesser volume than natural gas, which makes LNG trade a feasible and economically viable option even for remote and distant locations.
[10] Source: International Energy Agency.

capacities. For example, India, Bangladesh, China, and Brazil, activated new LNG regasification terminals in 2019. Meanwhile, new players are also embracing LNG imports; Philippines, El Salvador, Ghana, Cyprus, Croatia and Vietnam are in the process of setting up their first receiving terminals.

Recent Policy Transitions

An increasing shift to market-based LNG business

Initially, the governments or designated state regulatory bodies in both the exporting and importing countries were solely responsible for drafting the LNG trade agreements, and for building and maintaining the distribution and transmission infrastructure. In order to mitigate commercial risks, the contracts were drafted on a long-term basis, with fixed prices, pre-committed volumes based on a take-or-pay basis[11], and government guarantees. In such a model, exporters bore risks on the pricing front by locking in rates that, depending upon international dynamics, may end up being consistently lower than the prevailing spot prices. On the other hand, the buyers/importers accepted the risk on the volume front and, thus, had to ensure the development and operationalization of necessary infrastructure, and generation of enough demand to cater to the provisions made under the take-or-pay obligations. The importers under long-term contracts also assumed the risk of lower spot prices than the rates locked-in under their agreements.

With regards to regasification, transmission and distribution, the government of the importing country would often sign contracts with international oil companies (IOCs) and multilateral agencies to set up regasification units (both onshore or offshore), which were run by public sector enterprises.

However, after the installation and operationalization of the basic terminal and pipeline infrastructure by the governments of the LNG importing countries, there has been a growing trend toward deregulation and liberalization of the downstream LNG business in the wake of growing LNG demand. Japan and South Korea are major examples in this regard (**Box S1.2**). Their experience reveals that greater private sector involvement leads to better price discovery, based on the underlying market dynamics.[12] Furthermore, it results in greater operational efficiency, as private players strive to grow in the absence of government-backed guarantees and notified or supported prices.[13]

Multiple Pricing Options Have Emerged

In the relatively new LNG markets, the traders experience challenges with price discovery and unavailability of appropriate benchmarks. Furthermore, as mentioned above, most international contracts were state-executed, with governments treating important articles regarding pricing

[11] In the take-or-pay clause, the buyer is obliged to pay for a specific minimum annual quantity of gas at the contract price, irrespective of the volume of gas it actually receives.
[12] Source: IEA (2019), *LNG Market Trends and Their Implications*, IEA, Paris.
[13] Colombo, S., El Harrak, M., & Sartori, N. (2016). *The Future of Natural Gas: Markets and Geopolitics*. Hof van Twente: European Energy Review.

arrangements, ascribed volumes, and terms of pay-or-take provisions as highly confidential. Such complexities made the overall LNG pricing structure obscure and complex.[14]

For instance, in Asia, due to the absence of a regional liquid trade market in the beginning, LNG prices were predominantly linked to crude oil under government-to-government agreements. However, as the market matured and the participation of private players increased, multiple alternative pricing options emerged (**Table S1.1**). For example, traders have started to use Gas-on-Gas prices, especially in big importing countries such as Japan and South Korea; China and India have also been increasingly transitioning towards market-based prices. This change materialized after the initiation of short and spot LNG trade between Asian and Atlantic economies, specifically after 2005.

Box S1.2: Liberalization in the Gas Market – The Case of Japan

In Asia, the three largest LNG importers - Japan, Korea and China - have all implemented multiple reforms in their domestic gas markets to deregulate retailing, increase competition and lower the cost of LNG.

Japan, for instance, had started the deregulation process in 1995, and had fully liberalized its retail market by 2017. Being the largest importer of natural gas and LNG, Japan meets around a quarter of its energy demand through LNG imports from Australia, USA, Qatar and Russia. The main consumers of natural gas in Japan are power supply companies and city gas, which distribute the fuel among industrial, commercial, and household sectors. Before the reform process in 1995, high fixed costs and economies of scale were the main reasons for the monopolistic nature of the retail gas market, with the government supporting the structure through tariff regulations and supply and safety obligations.

However, due to the growing demand from large-scale industrial users, the government introduced the first round of reforms in 1995, followed by subsequent rounds in 1999, 2004, 2007 and 2017. Under the reform process, the government had allowed non-traditional gas companies to sell gas in any area. Under the Gas Business Act 2015, the Japanese government abolished the regional monopoly in the retail market and allowed registered companies to enter the retail market. It also lifted the tariff regulations that were previously imposed on the retail companies. In addition, the government introduced a licensing system, where the companies were required to have licenses for gas manufacturing, pipeline service and gas retail business.

Furthermore, to encourage third parties' access to LNG terminals, the terminal owners are prohibited to reject third-party use, and are required to report and publish their annual utilization plans. Besides, the government also introduced the legal unbundling of the pipelines' service business and allowed new entrants to use the pipeline networks. This act necessitated the legal separation of the pipeline service business from the major gas companies by 2022, with the overall objective to promote retail competition in the pipeline network, as well as the import and terminal networks.

[14] Source: Ason, A. (2019). *Price Reviews and Arbitrations in Asian LNG Markets*. OIES Paper NG 144. Oxford: The Oxford Institute for Energy Studies.

Reference:

IEA (2019). *LNG Market Trends and their Implications: Structures, Drivers and Development of Major Asian Importers*. France: International Energy Agency.

This is because such pricing had already been popular in the North American and European markets, including in Russia. In North America, for instance, the Gas on Gas (GOG) prices represented 100 percent volume of the natural gas market (this mainly represented pipeline gas contracts), whereas in other regions, like the former Soviet Union, a large number of natural gas contracts are based on the Regulation cost of services (RCS) and the Regulation below cost (RBC) models (**Figure S1.6**).[15] As the Asian market developed, region-specific benchmarks also started gaining traction. These include the Japan-Korea Marker (also called the Asian spot index), and the newly-launched West India Marker (WIM).

The emergence of LNG portfolio players and spot market

In the LNG market, sellers seek long-term contracts to safeguard the interest of their investments, while buyers prefer short-term

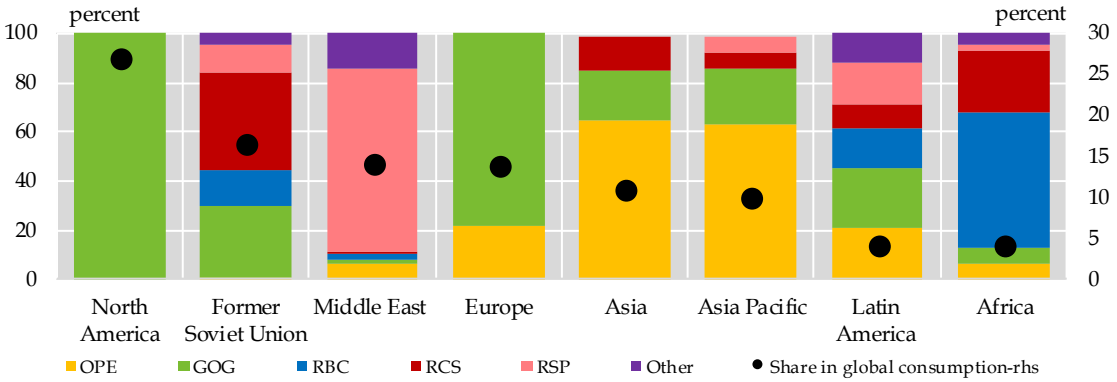
Types of Wholesale Natural Gas Pricing Formation Mechanisms **Table S1.1**

Mechanism	Description	Followed by
Oil price escalation (OPE)	The price is linked, usually through a base price and an escalation clause, with competing fuels, typically crude oil, gas oil and/or fuel oil. In some cases, coal or electricity prices can also be used.	China; Japan; S. Korea
Gas-on-gas competition (GOG)	The price is determined by the interplay of supply and demand – gas-on-gas competition – and is traded over a variety of different periods (daily, monthly, annually or other periods). Trading takes place at physical hubs (e.g., Henry Hub) or notional hubs (e.g., the National Balancing Point in the UK).	Russia; Europe; Colombia
Bilateral monopoly (BIM)	The price is determined by bilateral discussions and the agreements are reached between a large seller and a large buyer, with the price being fixed for a period of time – typically one year. There may be a written contract in place, but often the arrangement is at the government or state-owned company level.	Qatar; UAE; Iraq
Netback from final product	The price received by the gas supplier is a function of the price received by the buyer for the final product the buyer produces. This may occur where the gas is used as a feedstock in chemical plants, and is the major variable cost in producing the product.	Trinidad & Tobago
Regulation: cost of service (RCS)	The price is determined, or approved, formally by a regulatory authority, or possibly a ministry, but the level is set to cover the "cost of service", including the recovery of investment and a reasonable rate of return.	China; Bangladesh; Malaysia
Regulation: social and political (RSP)	The price is set, on an irregular basis, likely by a ministry, on a political/social basis, in response to the need to cover increasing costs, or possibly as a revenue raising exercise – a hybrid between RCS and RBC.	Iran; Saudi Arabia; Oman
Regulation: below cost (RBC)	The price is knowingly set below the average cost of producing and transporting the gas, often as a form of state subsidy to the population.	Egypt; Algeria; Former Soviet Countries

Source: IGU (2020). Wholesale Price Survey 2020. Barcelona: International Gas Union.

[15] Hub-based price indices include the US' Henry Hub and the UK's National Balancing Point (NBP).

Composition of Price Structure in LNG Market **Figure S1.6**

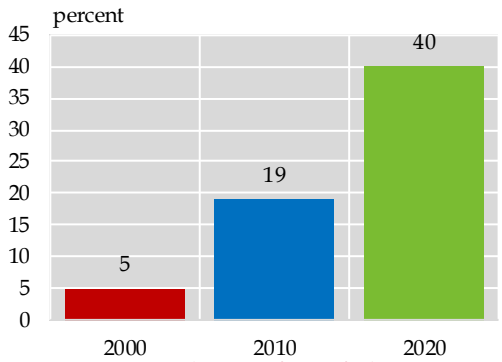


Source: IGU (2020). *Wholesale Price Survey 2020.* Barcelona: International Gas Union

contracts to diversify supplies and avoid -volume commitments. Because of this, the role of portfolio players has become increasingly important in recent years. These players hold a portfolio of LNG supply, shipping, storage and regasification assets in different regions, and are therefore able to offer more flexible buying and selling options to exporters and importers. Portfolio players have become increasingly involved in the short-term and spot sales, and handle large volumes of "flexible gas supplies" (i.e. non-contracted and free to be supplied anywhere) purchased primarily from the US and Australia.[16]

In the spot market, the excess and uncommitted LNG volumes are sold in other than contracted markets on the basis of single transaction sales. This trend gained significant momentum in the 2010s with a sudden rise in demand from East Asia following the shutdown of nuclear power plants in Japan and lower demand in the European region.[17] As a result, the share of spot and short-term trade in global LNG trade has increased rapidly between 2000 and 2020 (**Figure S1.7**)

Share of Short-term and Spot Purchases in Total LNG trade **Figure S1.7**



Source: International group of Liquified Gas Importers (GIIGNL)

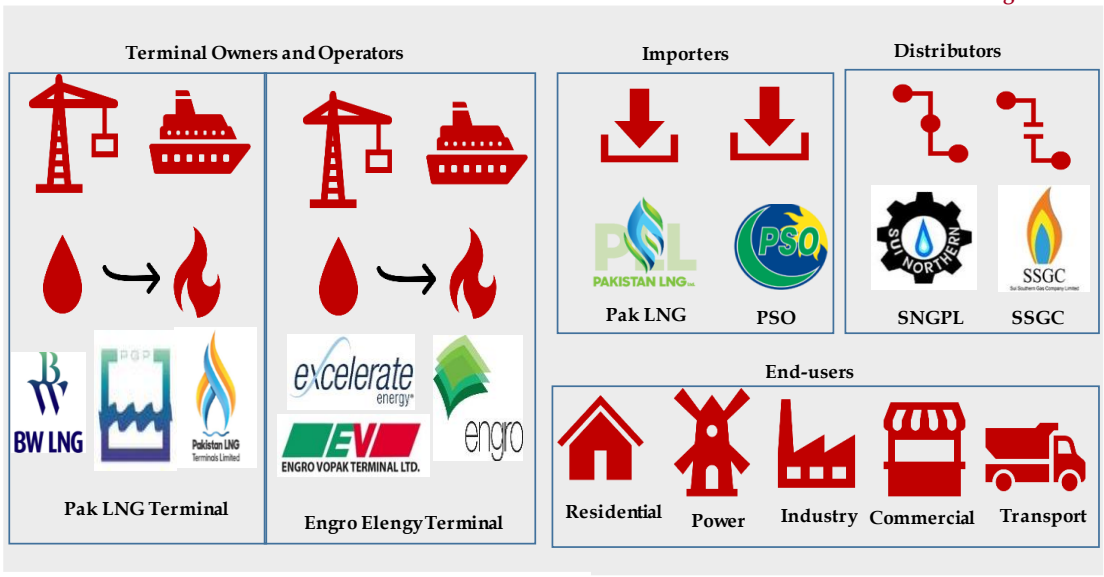
S1.4 The current state of LNG market in Pakistan

Physical infrastructure

As in most other countries transitioning towards LNG, the associated trading and distribution infrastructure is still at a

[16] Source: GIIGNL (2020)
[17] Source: IEA (2020), 'LNG Market Trends and Their Implications'

LNG Sector in Pakistan – Major Players **Figure S1.8**



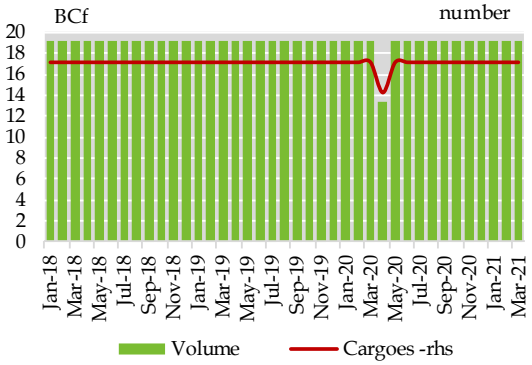
Source: Company reports and official websites

developing stage in Pakistan. The country started imports only in 2015 to bridge the rising demand-supply gap. Encouragingly, in a short span of five years, the sector has established strong footings and a basic supply chain structure.

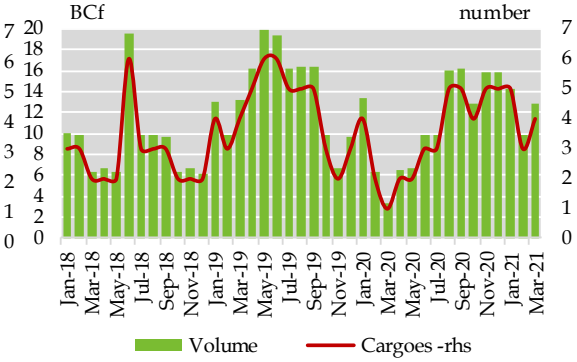
The current LNG value chain comprises two Floating Storage and Regasification Units (FSRUs) with different import-handling facilities at Port Qasim Karachi. The first terminal – Engro Elengy Terminal (Private) Limited (EETL) – commenced operations in 2015, and currently provides handling and regasification facilities to Pakistan State Oil, which has the mandate to import the contracted supplies under the long-term agreements. The second terminal, – Pakistan LNG Terminals Limited (PLTL) – was built in 2017 by Pakistan GasPort Consortium (PGPC), and currently provides handling and regasification facilities to another state-owned importer, Pakistan LNG Limited (PLL). The existing pipeline network of the two public Sui gas companies is utilized to transport and distribute imported LNG from the terminals to other parts of the country (**Figure S1.8**).

At present, the two FSRUs have a government-contracted capacity – on a take-or-pay basis – of around 600 mmcfd each. The installed regasification capacity of the two units stands at 690 mmcfd and 750 mmcfd, respectively. As shown in **Figure S1.9**, on average, 6 LNG cargoes are coming every month at Engro Elengy, with quantities amounting to 19 million mmbtu, roughly at par with the contracted capacity of the

Monthly Imports by PSO **Figure S1.9a**



Monthly Imports by PLL **Figure S1.9b**



Source: OGRA, Pak LNG, and Engro

terminal.[18] In the case of PLL, however, the average capacity utilization since its operationalization has averaged 65 percent, with 3-4 cargoes berthing every month.

Presently, Pakistan has been importing LNG under a government-to-government LNG agreement (15-year contract with Qatar on take-or-pay basis) as well as four agreements with private suppliers in Italy and Qatar (also term contracts on take-or-pay basis). During the last 3 years, more than 87 percent of the imported LNG in Pakistan came under these term agreements. The remaining 13 percent comprised spot purchases, to cater to demand in excess of the term contracts. Under the existing arrangement, the EETL terminal receives all the contracted volumes imported by PSO, whereas the PLL receives both long-term and spot cargoes.

Regulatory and operational framework

The upstream and downstream natural gas sector, including the import of LNG, is being regulated by a comprehensive legal framework, which comprises policies, rules and regulations that are enforced by different ministries and regulatory bodies. The government has authorized OGRA to manage LNG allocation, pricing, and other associated matters.[19] OGRA issues licenses to design, construct and operate the LNG terminals and the pipeline infrastructure, and also computes and notifies the weighted average cost of imported LNG for domestic users.

The operators of LNG terminals are also required to secure NOCs from relevant authorities, including the Ministry of Energy (Petroleum Ministry), Port Qasim Authority, Ministry of Maritime Affairs, Defense Ministry, Ministry of Industries and Production, Civil Aviation Authority, Sindh Environmental Protection Agency, Naval Headquarters/Maritime Security, Sindh

[18] With a utilization rate of 98 percent, the terminal was the fastest in the world to achieve 250 ship-to-ship LNG transfers. Source: company press release [https://www.engro.com/press-releases/u-s-ambassador-commends-engro-elengy-on-worlds-fastest-250-ship-to-ship-transfers/]

[19] Source: OGRA

Govt. District Administration and the City District Government, Karachi.

The Ministry of Energy (Petroleum Division) is solely responsible for issuing sector-specific policies, such as the LNG Policy (2011), Third Party Access Rules (TPA),[20] and the Natural Gas Allocation and Management Policy. In addition, the ministry reviews and executes the gas price agreements between the producers and the government-nominated buyers; and it also ensures the safety of natural gas pipelines, in coordination with the law enforcement agencies.[21]

Currently, the government is the sole player in the LNG-importing business. This is in line with the global practice of heavy state presence during the initial stages of the LNG market development, to build the basic infrastructure, implement policies governing the fuel-mix, and generate local demand from industries, power and transport sectors. The LNG procurement process typically starts with the estimation of LNG demand, which originates from end-consumers like the power sector (including captive power plants), general industries, transport, and households. In particular, the Sui companies are mainly responsible for forecasting future demand of gas by different consumer segments. The Sui companies present their projections to the Petroleum Division, which weighs the projected demand against the contracted supplies from long-term arrangements, and then submits a formal request to PLL to procure additional volumes from the spot market, if needed. PLL then floats the tender in the international market, and procures the required quantities.

S1.5 Challenges arising out of Present Operational and Administrative Structure

The domestic natural gas market has consistently been prone to various challenges, such as supply shortages during winter seasons, difficulties in timely delivery of adequate quantities to the power, industrial and residential sectors, and the financial constraints faced by the distribution companies while ensuring implementation of OGRA-notified sector-wise gas tariffs. With substantial government involvement across the LNG supply chain and a distorted subsidy structure, price discovery in the natural gas sector becomes harder. Besides, a common perception that seems to prevail is that the prevailing price of LNG in Pakistan is on the higher side, and that this has more to do with the take-or-pay nature of the contracts (regards to both the capacity charges of the terminals and the fuel's import cost), than with the trends and levels of global prices. Furthermore, governance issues, procurement timings, global bargaining position, and financial considerations of the distribution companies, are also believed to contribute to the escalation in the LNG import cost.

While there might be merit in some of these arguments, our analysis suggests that these kinds of problems (especially contractual issues and procurement timings) are not unique to Pakistan. As mentioned before, the global LNG market does not have a long history; it is still evolving and is in the

[20] Under TPAs, third party importers and marketers of LNG are allowed to utilize any excess gas capacity available with the Sui gas distribution pipeline companies (SNGPL and SSGC) on a short-term basis.
[21] Ministry of Energy (Petroleum Division)

process of embracing changes on policy and procedural grounds. Pakistan's LNG market would experience a similar transition (e.g., changes in term-spot balance, nature of additional import/ terminal contracts, and modifications in public procurement rules) in due course. Furthermore, as will be discussed later in this section, the current operational and procedural challenges have more to do with heavy (rather, exclusive) involvement of the public sector in the business. These issues are expected to be addressed to a large extent with the private sector's participation in the LNG import and marketing business going forward.

The following points present the major challenges that arise out of the existing operational and administrative structure of LNG imports in Pakistan.

The uncertain demand from the power sector

Demand projection is a critical element in the LNG procurement business, as the spot purchase decisions are based on the import requirements communicated by the end-users to the importers. In case of Pakistan, this issue gets complicated due to a narrow user base and uncertainties associated with the power sector's consumption - as the sector takes up more than half of the imported LNG. Specifically, LNG-based power plants in the country are known to be highly efficient and are ranked above the oil-based plants in the merit order. However, recurring transmission bottlenecks compromise the merit order, and these power plants are sometimes forced to operate below capacity. This uncertainty related to the level of their capacity utilization makes it challenging for these plants to accurately assess and subsequently communicate their actual monthly fuel requirements to the Sui companies.

Procedural delays

Once the import request is placed by the Petroleum Division, PLL initiates the process of placing the tender. As a public owned entity, PLL has to fulfill all the requirements under the Public Procurement Regulatory Authority (PPRA) regulations. Though the guidelines ensure transparency in the public procurement process, the length and duration of the required procedures delay shipment arrivals. In light of the PPRA rules, the overall import procedure takes up, on average, more than 60 days, with a 30-day mandatory period between advertisement and bid submission and a 10-day period between bid announcement and award of tender (**Box S1.3**).

Apart from creating a timing mismatch from when the commodity is needed and when it is actually supplied, this lead time may also be unfavorable from the pricing perspective, as the PLL effectively locks in the import price 40 days in advance. Since the spot LNG market exhibits more volatility as compared to other fuels, prices can move substantially in either direction by the time the LNG vessel arrives. This uncertainty may then be implicitly factored in the form of higher rates quoted by the exporting companies that submit the spot bids to PLL.

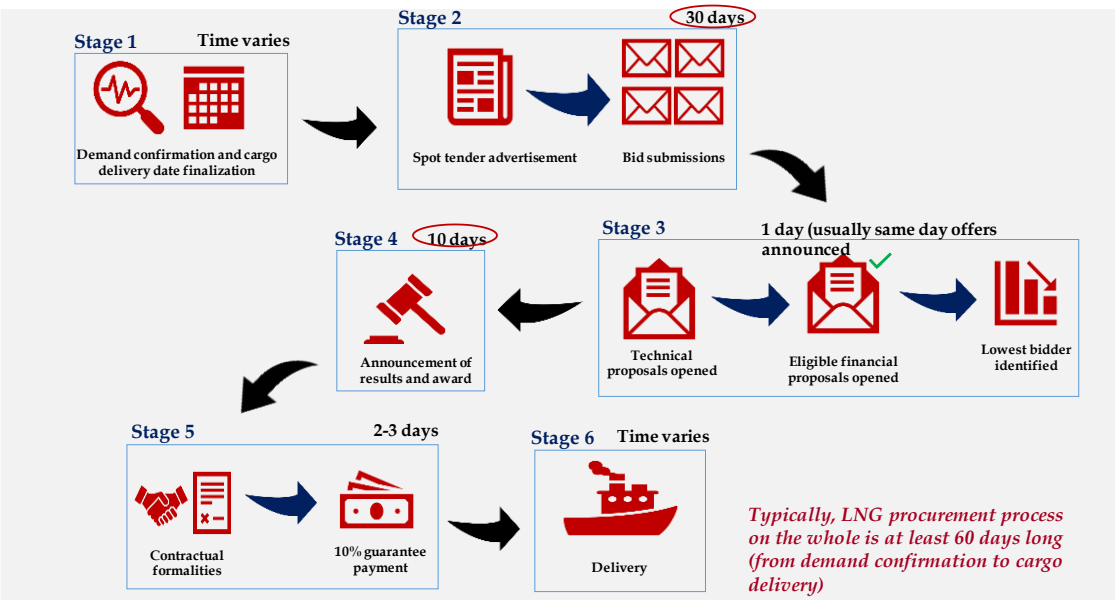
Box S1.3: LNG Procurement Process in Pakistan - A Brief Description with Timelines

Stage 1: After taking into account LNG demand and constraints (terminal, pipeline, port-related etc.), delivery dates of the LNG cargoes are locked.

Stage 2: Based on the locked delivery dates/windows, a tender is advertised. The tendering/procurement process is in accordance with the Public Procurement Regulatory Authority (PPRA) Rules. Once the delivery dates are locked and a tender is advertised, any change in demand will necessitate restarting the procurement process. If the procurement process is not restarted, the required amendments may lead to either a shortage of gas and/or penalties on account of delay in cargo discharging. According to PPRA Rules, there must be at least 30 days between the advertisement and the bid submission dates (**Figure S1.3.1**).

Stage 3: Bids received are opened the same day (first technical and then financial, based on the single-stage two envelope procedure), and the offers are announced (and the lowest bidder identified) after the technical evaluation of the bids.

LNG Procurement Process in Pakistan - A Brief Description with Timelines **Figure S1.3.1**



Stage 4: As per PPRA Rules, at least 10 days must be provided between the announcement of offers and the award of the tender.

Stage 5: Contractual formalities are completed and successful bidder furnishes a performance guarantee. According to PPRA rules, the amount shall not exceed 10 percent of the contract amount.

Stage 6: The LNG cargo is delivered on the locked delivery date/window. Weather, operational and technical reasons may lead to amending the schedule, based on mutual consent as per the provisions of the contract.

From the policy and operational perspective, it will be prudent to provide sufficient time between Stages 5 and 6. This time will allow the LNG vessel to reach Pakistan. For perspective, an LNG cargo takes around 3 days from Qatar and around 35 days from the US to reach Pakistan. Considering the mandatory

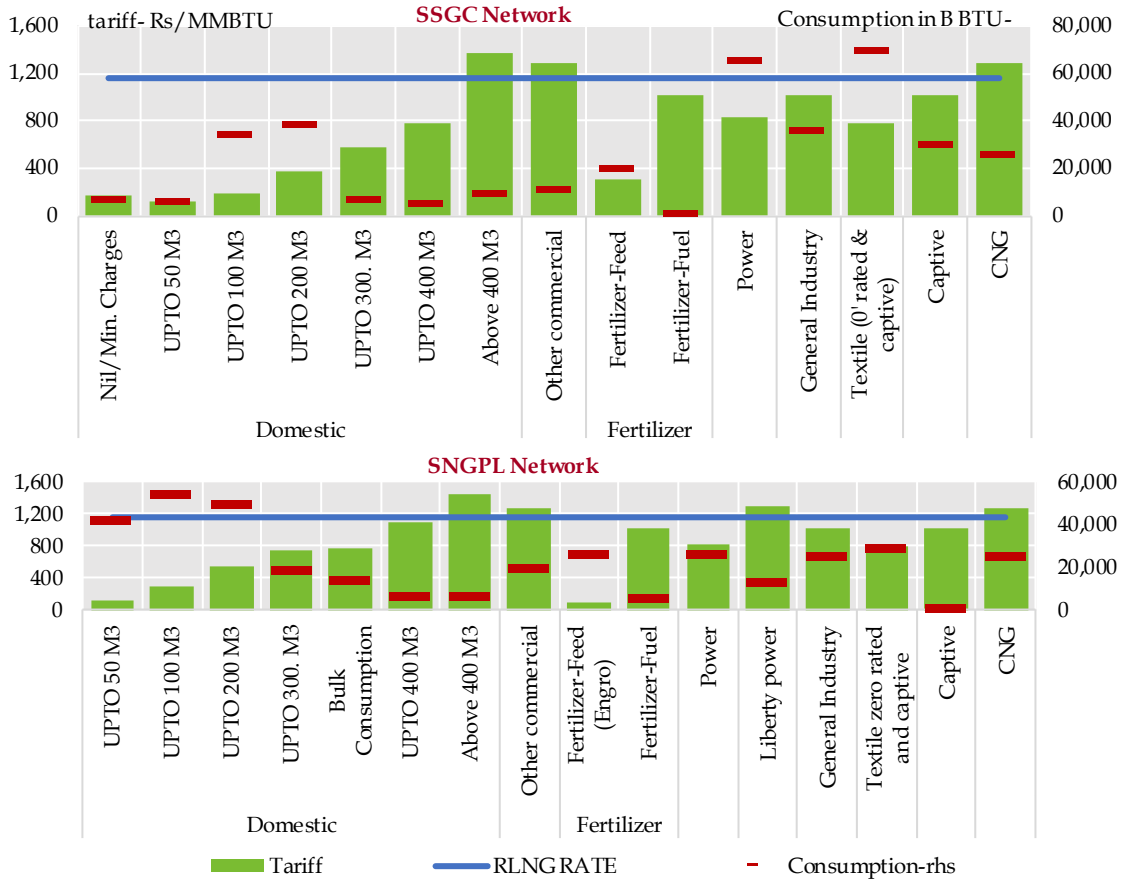
PPRA timelines requirement and the time required for the LNG vessel's voyage, the LNG procurement typically takes at least 60 days (from demand confirmation to cargo delivery).

Reference:
PPRA Rules, Public Procurement Regulatory Authority; input from procurement agencies.

Gas pricing structure and excess capacities

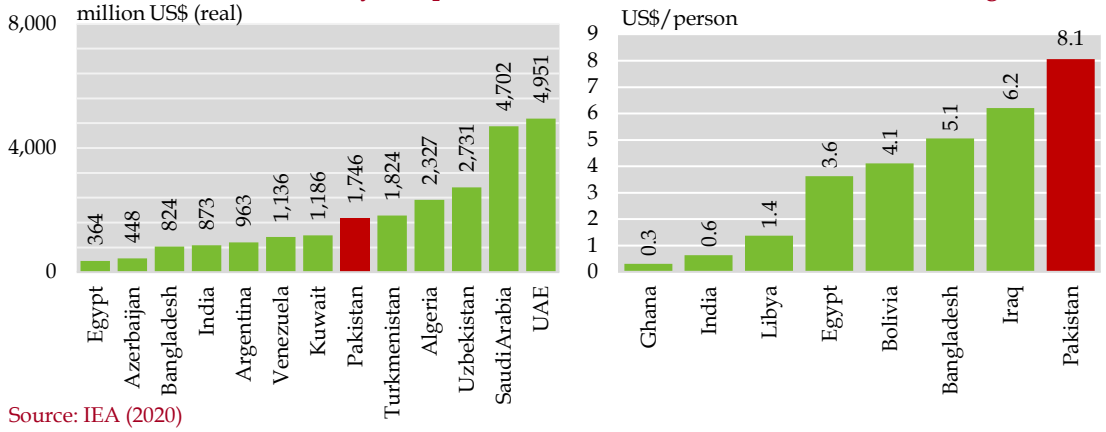
Presently, the pricing of natural gas in the country is premised on the provision of cross-subsidies: the household sector (also termed as domestic or residential sector) and fertilizer sector (for feedstock) are subsidized heavily, at the cost of commercial and transport sectors (**Figure S1.10**). According to the International Energy Agency, Pakistan featured in the top 10 countries providing the most subsidies to the natural gas sector in 2019, with the level close to the one observed in the gas-exporting countries. The amount of the subsidy was around US$ 1,750 million in real terms, or US$ 8.1 per person in Pakistan. For reference, the gas subsidies in India and Bangladesh were US$ 873 million (US$ 0.6 per person) and US$ 824 million (US$ 5.1 per person), respectively (**Figure S1.11**).

Gas Tariffs and Consumption of Natural Gas in Different Sectors **Figure S1.10**



Source: OGRA, Tariff Petitions for SSGC (16th Oct 2019), SNGPL (15th Oct 2019)

Gas subsidies - A Cross-country Comparison **Figure S1.11**



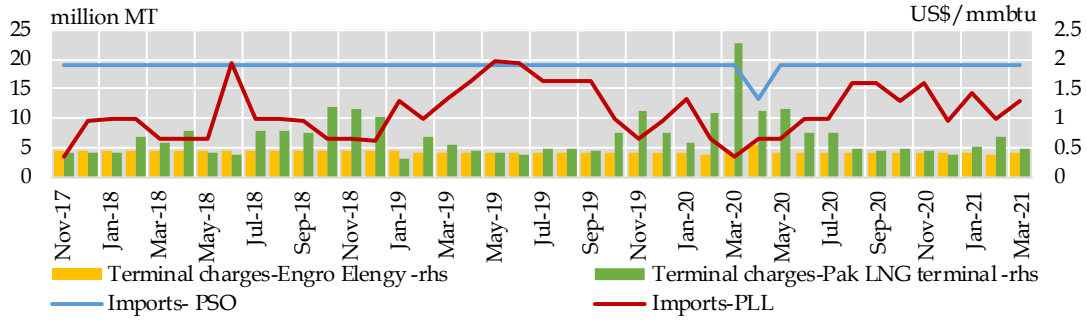
Source: IEA (2020)

Meanwhile, the LNG price is notified by OGRA on a weighted average basis, after taking into account various factors - such as the import volumes, delivered ex-ship (DES) price,[22] importer margins, terminal charges, retainage and T&D loss adjustments, cost of supplies to pipeline companies, and the margins of the distributors (see **Annexure-II** for details). The end result is that the imported LNG becomes significantly more expensive than the indigenous natural gas, especially for households, fertilizers (for feedstock) and general industries. The share of these sectors in total gas consumption is around 70 percent, which basically implies that the bulk of gas users would resist shifting to LNG at the prevailing prices. The demand will only be generated in these sectors when indigenous natural gas is not available. In the absence of demand from these sectors, it becomes difficult to utilize the terminal capacities of the FSRUs completely. This, in turn, leads to higher terminal charges per unit of gas sold (**Figure S1.12**), and the price-demand spiral ultimately feeds into even higher LNG prices and further suppression of demand.[23]

[22] The delivered ex-ship price (DES) is calculated by applying the agreed-upon Brent slope under the term or spot contracts on the average of the crude spot prices of the last three months. The resulting US$/mmbtu prices of each cargo would then be used to to a weighted average DES price for the two importers, PSO and PLL (based on quantity of imported LNG).

[23] "Under the LNG import tolling commercial structure, the user or users of the LNG import terminal are different entities than the owner of the LNG import terminal. The LNG terminal company need not buy LNG or sell natural gas, but rather provides regasification services (without taking title to the natural gas or LNG) under one or more long-term terminal use agreements. The LNG terminal company revenues are derived from tariff payments paid to the LNG terminal company by the terminal users. The payments typically take the form of a two-part tariff: (1) fixed monthly payments cover the LNG terminal company's debt service, return of and on equity, and fixed operation and maintenance costs, and (2) variable regasification service payments are designed to cover the terminal company's variable operation, maintenance and other costs, such as the terminal's power costs". Reference: DOE (2017). *Understanding Natural Gas and LNG Options*. Washington, DC: US Department of Energy.

Individual Terminal Tolling Charges **Figure S1.12**



Note: Under the tolling structure, the import terminal owner provides and charges a fee for services such as offloading, storage, and regasification from the importers (in this case, PSO and PLL). These tariffs depend on the level of terminal capacity utilization, with the rates increasing if there is any unutilized capacity.
Source: OGRA

Arrear accumulation with the distribution companies

The slab-wise pricing is resulting in substantial accumulation of arrears with the Sui companies. This is because sectors with access to subsidized rates, particularly the lower slabs of the residential sector and the feedstock slab of the fertilizer sector, are consuming substantially more gas than the ones paying above-average rates. With the cross-subsidy mechanism not working as intended, substantial arrears for the two gas distributing companies are being generated, and these are resulting in a rapidly growing circular debt in the gas sector.

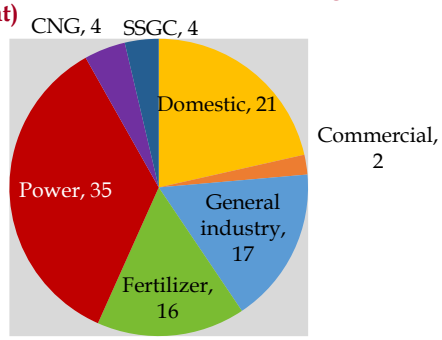
The result is visible if we compare the sector-wise gas consumption with the sector-wise revenues of the Sui companies. For example, while the fertilizer feedstock sector consumes 16 percent of natural gas, it contributes just 3 percent to the revenues of the distribution companies. Likewise, the household sector consumes 21 percent of the natural gas, but contributes only 11 percent to the gas companies' revenues (**Figure S1.13**).

S1.6 The ongoing onboarding of private sector and capacity expansions

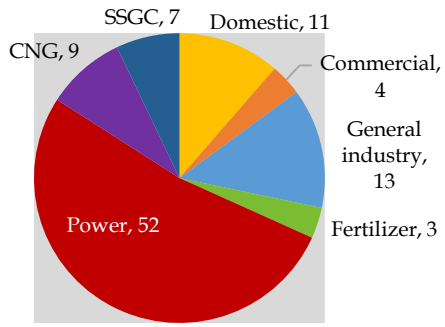
The analysis presented in the previous section reveals that heavy public sector involvement in all the stages of the supply chain – from assessing demand to imports and pricing – is one of the major reasons for the import delays, price distortions and distribution lags in the domestic LNG market. In order to avoid these problems in the future, Pakistan should learn from other LNG-importing countries in the region, and allow as well as incentivize increased involvement of private sector in the LNG supply chain. This would be in line with the experience of both the more mature LNG markets, such as Japan and South Korea, and some emerging ones, like India. Higher private sector involvement in these countries helped accelerate the adoption of the cheaper fuel across the economy, and smoothen supply chain dynamics by streamlining procurement processes and enabling market-based price discovery.

Encouragingly, in Pakistan, the government has recently started allowing private sector importers to utilize the excess capacities of

Share in Natural Gas Consumption (percent) **Figure S1.13a**



Share in Revenue (percent) **Figure S1.13b**



Note: 'These are consolidated figures for both SNGPL and SSGC. The "SSGC' slice in both the charts represents the amount of LNG withheld by SSGC.
Source: Pakistan Energy Yearbook 2019; HDIP; Financial Statements of SNGPL and SSGC; OGRA

the existing terminals. The willing players can enter the market in the following way:

- First, they would need a license for sale of natural gas/LNG from OGRA. At present, Trafigura Pakistan, Energas, and Tabeer Energy have been granted licenses.
- After that, the private sector players can approach the terminals via a Third Party Access (TPA) arrangement, which would allow them to participate in an auction to secure access to the unutilized capacity.

However, the process of auctioning the unused capacities is complex due to a couple of reasons. First, given that demand fluctuations are common and that the forecast system is not up to par, the private players would remain uncertain of having access to terminal capacity commensurate with the amount booked under short- to medium-term orders by the end-users. Second, as there are no finalized procedures to oversee the auctioning process (the TPA regulations are in draft form and function as a guiding document), the whole procedure involves all the supply chain players getting into a new FSRU-pipeline usage agreement/ understanding each time the government authorizes auctioning of the excess capacities. Note that this adds to the already lengthy procurement process of around 60 days of securing spot purchase deliveries.

Given these operational limitations with the existing terminals, and realizing that the expected demand would remain unmet even after the private sector fully utilizes the excess capacity, the government has started expanding the existing terminals. In addition, the construction of three new terminals (one on-shore and two FSRUs) has also received regulatory approvals. According to OGRA's estimates, the country needs the terminal send-out capacity to increase by around 150 percent by FY30, to handle the additional demand of 1,998 mmcfd of LNG; the planned capacity expansions are expected to plug this balance.

Specifically, Excelerate Energy and Engro Elengy have signed a Heads of Agreement (HOA), under which Excelerate will exchange its existing FSRU Exquisite with a new-build FSRU. This would increase the send-out capacity by around 150 mmcfd, and the excess capacity would be available to the

private sector via TPA arrangements.[24] Meanwhile, the firm is also working to construct a separate on-shore LNG terminal, PakOnshore LNG, with a projected send-out capacity of 1,200 mmcfd.[25] The PLL is also expanding its capacity by around 150 mmcfd to accommodate orders from K-Electric going forward. Furthermore, the two private companies, Energas and Tabeer, have been granted licenses by OGRA to set up their own terminals. The two FSRUs would have a combined send-out capacity of 1,550 mmcfd. All these expansions are expected to increase the country's total send-out capacity by 2,900 mmcfd within the next three to four years.

The eventual increase in capacities, especially onshore, means that terminal operators would also be able to store the imported LNG. Storage of gas is vital to: (i) balance the sectoral demand fluctuations due to seasonality; (ii) ensure that the country has supplies available in case of a major disruption in the international supply chain or a sudden increase in regional/global gas prices; and (iii) take advantage of lower prices to lock in supplies for future use. However, given that LNG storage is costly, there would be a need to make more accurate demand forecasts and improve communication and coordination between the government authorities, importers and terminal operators, to ensure timely deliveries of the required amounts of LNG. Furthermore, terminal send-out capacity of expanded and new terminals would need to be backed up by a commensurate increase in the distribution pipeline network to ensure their business viability.

In particular, the limited pipeline capacity means that there is a lot of uncertainty in terms of their ability to meet the committed future demand. Because of this, planned expansions in terminal capacities would not become operational unless there is sufficient capacity available in the pipeline network (and vice versa).

At present, while the two Sui gas distribution companies have been investing to enhance the pipeline network keeping in view the future demand, the existing pipeline network is still insufficient to cater to the additional demand. In particular, these companies can transport around 1,800 mmcfd of natural gas across the country, with a great amount of monthly volatility during the year. During FY20, for example, around 798 mmcfd of LNG was sold on average via the pipeline network, with the amount reaching as high as 1,270 mmcfd during July and as low as 502 mmcfd during February.

Even in periods with low distribution, it becomes challenging for the Sui companies to accommodate the demand from users/importers with whom they have not signed any Gas Transportation Agreement (GTA). This is because, under the OGRA Third Party Access Rules 2018, any unutilized or excess pipeline capacity is offered to private parties on a three-month forward and first-come-first-serve basis, after approval from all the relevant stakeholders. In this regard, uncertainties in the demand from the private sector and the possibility of any unplanned surge in send-out from the public sector, may discourage both the Sui companies and the private sector from

[24] Source: Company press release (https://www.engro.com/press-releases/excelerate-energy-and-engro-elengy-terminal-agree-to-expand-pakistan-lng-import-terminal/)
[25] Source: Company press release (https://www.engro.com/press-releases/pakistan-onshore-lng-invite-expressions-of-interest-to-setup-pakistans-first-onshore-lng-terminal/)

booking the capacity usage three months in advance.

To this end, substantial investments are required to: (i) increase the distribution capacity to supply more gas to users already connected to the gas pipeline network, while expanding the pipeline network to reach off-grid users; and (ii) in the interim period, utilize alternative ways to supply excess LNG to the end-users.

With regards to the first option, the Pakistan-Russia joint project on the Pakistan Stream Gas Pipeline is under consideration. The 1,100 km pipeline would have the capacity to transport around 1,600 mmcfd of LNG. For the second option, two private sector companies - LNG Easy Pakistan and Daewoo Gas - have recently been granted provisional licenses by OGRA to establish virtual pipelines to distribute LNG via cryogenic bowsers.[26] LNG Easy Pakistan is planning to use berth at the Karachi Port Terminal (KPT), and Daewoo Gas at the Gwadar Port, for an "integrated LNG project structure," as per the LNG Policy 2011 to import, transport, market and distribute LNG to mainly off-grid customers at the start.[27] During the short term, such a process would help bridge the demand-supply mismatch, as virtual pipelines offer the opportunity to import LNG without the need of an LNG terminal; the berthing vessels can offload at the bowsers/tankers present at the berthing/loading ports. The downside is that it is relatively expensive to distribute LNG via virtual pipelines.

In the medium term, the virtual pipeline system can be made part of an extended network serving the transport sector. For example, in India, a network of LNG fueling stations are being installed along the 5,846 km golden quadrilateral highway network, to help enable the heavy vehicles' switch from diesel to the cheaper fuel.[28] Along similar lines, in Pakistan, the Economic Coordination Committee (ECC) recently allowed OGRA to issue CNG licenses to LNG-based fueling stations with the provision that the stations would neither receive nor later claim an indigenous natural gas supply connection.[29]

S1.7 What would it take to maximize returns from the ongoing deregulation and run the overall gas sector on a sustainable basis?

In order to maximize returns from private sector involvement and ensure sustainability of the overall natural gas sector, it is important to first adopt a holistic approach to resolve the deep-rooted structural and operational challenges. Underpricing of the fuel is a major challenge, and unless the subsidy structure is rationalized and ultimately done away with, the financial viability of the natural gas sector would be difficult. As observed in the previous sections, the global LNG market has been evolving rapidly, with new economies becoming a part of the value chain and the

[26] These are specialized tankers which are used to transport (via road) cryogenic liquids, which are usually liquefied gases being kept at very low temperatures as their boiling points are below -90.0 degrees Celsius (the boiling point of LNG, for example, is -162.0 degrees Celsius).
[27] Source: OGRA (https://www.ogra.org.pk/download/5330).
[28] Source: https://www.exxonmobillng.com/en/About-us/Trending-topics/Indian-virtual-pipeline-initiative/
[29] Ministry of Finance Press Release No. 376. https://www.finance.gov.pk/press_releases.html

nature of purchase agreements and pricing dynamics changing over time. Pakistan is one of the countries that has made a late entry to this market. As such, it has the advantage of first analyzing and learning from the ongoing transformations across more mature markets – such as greater private sector involvement, emergence of flexible term contracts, and increasing share of spot purchases – and accordingly framing its medium- to long-term policy direction.

In this light, the regulatory and structural challenges would need to be addressed to smoothen the supply chain subtleties and satisfy the unmet demand. Furthermore, given the duration of the existing term contracts and the concurrent growing interest of new players to set up terminals and distribution networks, the existing government-controlled import operations would continue to run in parallel with the upcoming private sector involvement in the domestic LNG market. For such a hybrid market to function effectively, however, reorganizations would be required, along the lines of international best practices, to maximize returns from the ongoing developments. In particular, reforms in the following areas could potentially make the domestic LNG operations smoother and more efficient:

1) Introducing some form of price pooling mechanism to ensure that sufficient demand is generated and the public distribution network remains financially viable once private players enter the market

As noted above, the pricing of natural gas in the country is based on the provision of cross-subsidies: the household and fertilizer (feedstock) sectors are subsidized heavily, at the cost of commercial and transport sectors. After the entry of private sector terminal operators and importers in Pakistan, who would be free to sell the imported fuel at competitive rates (with no government intervention), it is likely that the high-priced transport and industrial sectors, and other commercial units, may eventually move out of the public piped gas network – especially as new pipeline capacities come online and the virtual LNG distribution expands.

In this case, the two public utilities will be left with heavily subsidized and low-revenue sectors, since they will be bound to sell both the LNG as well as natural gas at prices negotiated or fixed by the government. These gas utilities will also be bound by the LNG import prices negotiated by the federal government on a long-term basis under the term contracts. In contrast, the private companies could procure spot cargoes at the timing of their choice and as per suitability.

In this regard, a shift towards price-pooling would go a long way towards addressing this challenge. To a large extent, the uniform rate applicable on all the end-users would reduce the incentive to switch suppliers. Furthermore, the potential revenue gains from switching household consumers to the weighted average LNG price, as opposed to the current slab-wise structure, would be significant. As of FY21, Pakistan's indigenous supply of natural gas is unable to meet 29 percent of the total demand for gas by all sectors. This supply gap is estimated to increase to 78 percent by FY30. Assuming that this entire increase in unmet demand is met by imported LNG, then at current rates, the average foregone revenue in case of slab pricing for household consumers would be 55.6 percent of the realized revenue in FY30.

Price pooling may also help generate additional LNG demand in the country. This

is important because in the short- to medium-term, where the take-or-pay contract agreements would stay in place for imports as well as terminal operations, additional demand generation can be one way to make prices favorable. It is important that this prospective LNG demand be generated from buyers who currently pay higher gas tariffs (almost at par to LNG rates), such as residential consumers using above 10.64 M ft^3, transport and general industries, ice factories, commercial sector, and captive power plants.

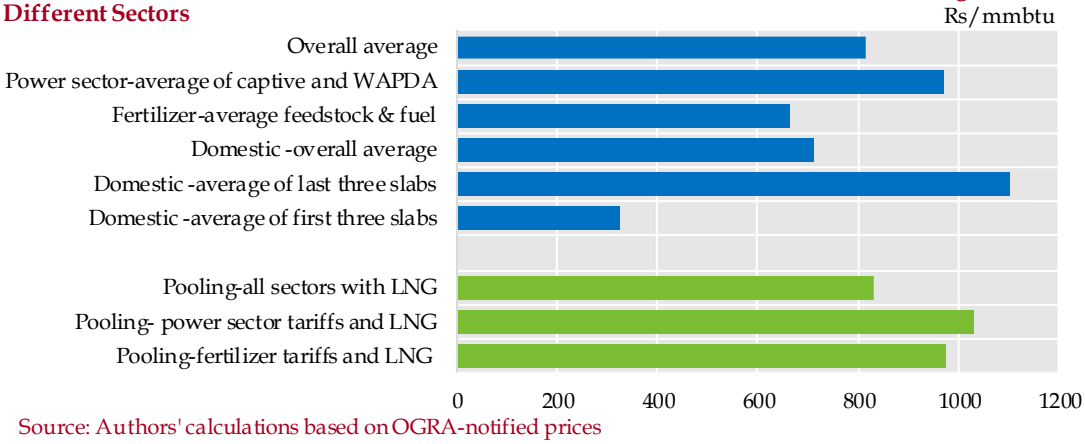
This pooling mechanism has gained traction lately in the countries that are utilizing parallel gas supplies from indigenous sources and imports. For example, India introduced price pooling between natural gas and LNG for one of its largest gas consumers i.e., urea plants, in May 2015 to provide a level-playing field to all fertilizer companies and ensure better management of demand-supply gaps.[30] In Pakistan, the adoption of a similar pricing mechanism may ensure smoother availability of gas to more productive sectors. **Figure S1.14** illustrates the average natural gas tariff for different sectors. The red bars show current averages, whereas the yellow bars suggest the average tariffs, if the LNG tariff rates are pooled with the prevailing rates in different sectors.

2) Supply reliability would also be helpful in generation of additional demand

While price-pooling would help generate additional demand, provisions under the distribution agreements and in the sectoral allocation and management policies add a further layer of uncertainty to gas supplies.

During winter seasons, there is a heightened overall demand for natural gas. In these months, household and commercial gas consumers get prioritized access to both the indigenously sourced and the more expensive imported gas, according to the Natural Gas Allocation and Management Policy 2005. Furthermore, the consumer LNG contracts with gas distribution companies clearly postulate the right of distributing companies in terms of curtailing

Current Average Sectoral Gas Triffs and Comparison With Pooled Prices among Different Sectors **Figure S1.14**



Source: Authors' calculations based on OGRA-notified prices

[30] Source: Ministry of Petroleum and Natural Gas, Government of India.

or discontinuing the deliveries of LNG to industrial and commercial consumers.[31]

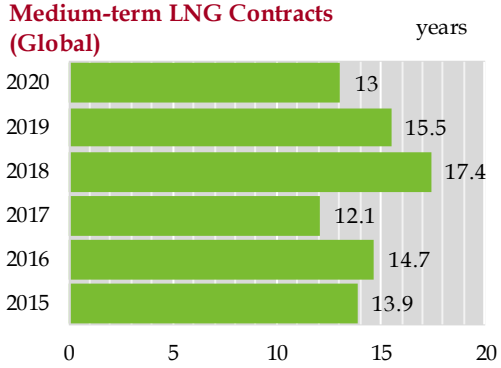
In such a scenario, other sectors, such as general industry and power, remain hesitant to increase their reliance on LNG and prefer to meet their energy needs through the indigenous natural gas (because of cheaper cost) or alternative fuels (to avoid supply uncertainties). Therefore, the government needs to review the allocation and management mechanism of natural gas supplies to incentivize sectors to switch to LNG, which would help utilize the excess terminal capacities and lower the end-user gas prices.

3) There is a need to discover the optimal balance between spot and term purchases

Over the long term, sustainable demand can only be generated when end-consumers are certain of receiving smooth supplies at competitive rates. To a certain extent, private sector participation in LNG trade would fill the additional demand-supply gap while ensuring market efficiency. However, the authorities would have to appropriately weigh the pros and cons before deciding on importing the fuel via long-term contracts or short-term spot purchases.

There exists a trade-off between flexibility and stability when it comes to term and spot imports, with the applicable slope of the former staying relatively unchanged for the duration of the contract and that of the latter varying according to the overall global supply and demand dynamics.

Volume Weighted Average Duration of Long- and Medium-term LNG Contracts (Global) **Figure S1.15**



Source: International Group of LNG Importers

As stated earlier, most of the LNG importing countries arrange their initial supplies through long-term contracts on G2G basis. These contracts assure volume security, which is a primary consideration in building up the capital-intensive LNG infrastructure in the importing countries.

While the average duration of term contracts has still not changed considerably between 2015 and 2020 (**Figure S1.15**), excess supply in global LNG market in recent years has offered buyers relatively favorable conditions for both new contracts and

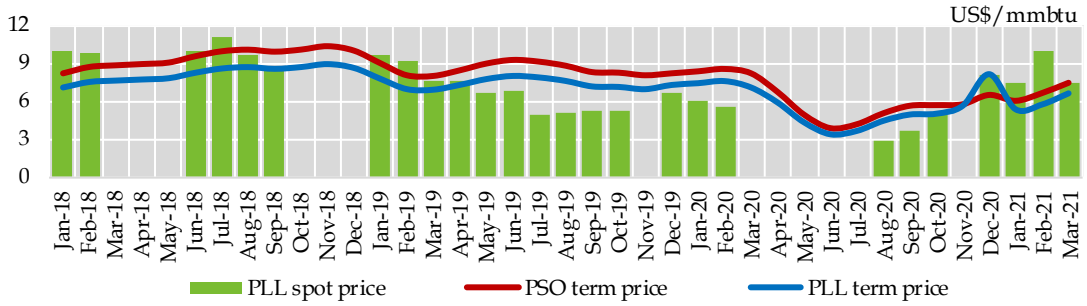
[31] In the LNG-based contracts between the distribution companies and industrial and commercial units, one of the clauses is as follows: "… the distribution company shall have the right to curtail and /or discontinue deliveries of LNG to the consumer whenever and to the extent necessary in its sole judgement for the service to other customers it may require. The company shall be the sole judge with regard to such conditions and curtailment of deliveries" (Source: OGRA).

renegotiation of existing ones.[32] In comparison to the falling trend in international spot prices and the lower slopes contracted in the newer agreements, the older contracts appear to be expensive in terms of flexibility and pricing. From 2015 onwards, the newer global contracts began exhibiting more flexibility in terms of pricing mechanism, with increasing adoption of hub-based pricing instead of oil-linked pricing, and inclusion of more flexible price review clauses.[33]

For instance, India's state-owned Petronet had successfully negotiated with Qatar's exporting company RasGas over non-lifting of LNG during 2015, and got a waiver of a take-or-pay payment. The deal also reduced the contract price by nearly half, with the flexibility to lift the 2015 take-or-pay quantity over the remaining term of the 25-year contract; the company also renegotiated the contract price with ExxonMobil.[34] Similarly, in 2019, Japan's utility company Osaka Gas initiated arbitration over its contract with ExxonMobil over the LNG pricing issue.

However, as mentioned before, the volume of spot trade has also substantially increased globally during the last few years, with its share in overall trade rising to 35 percent, from 5.0 percent in 2000.

Import Price of LNG in Pakistan **Figure S1.16**



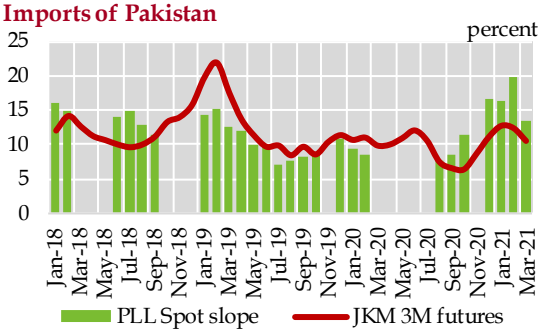
PLL spot price: Price of LNG imports purchased by PLL on spot basis.
PLL term price: Price of LNG imports purchased by PLL in term basis.
PSO term price: Price of LNG imports purchased by PSO on term basis.
Months where bars are absent are the ones in which no PLL spot imports were observed.
Source: Authors' calculations using data from PLL; Engro; OGRA; World Bank; and Bloomberg

[32] "In particular, the LNG supply glut has enabled buyers to seek greater concessions and flexibility in LNG contracting, which has resulted in a trend towards shorter term and more flexible contracts, with new pricing options". The Lantau Group (2019). *Phase Two: Liquefied Natural Gas (LNG) Demand Projection, Procurement Strategy and Risk Management - Executive Summary Report*. Washington, DC: World Bank. Similarly, KPMG, a consultancy, noted that: "The abundant supply picture has changed the negotiating dynamic in the LNG market; buyers will have the upper hand in both new contracts and contractual renegotiations due to both excess supply and locational optionality". KPMG (2016). *Gas, LNG, and Contract Optimization Proposition*. Toronto: KPMG.

[33] Source: Ason, A. (2019). *Price Reviews and Arbitrations in Asian LNG Markets*. OIES Paper NG 144. Oxford: The Oxford Institute for Energy Studies.

[34] India is currently the fourth biggest LNG importer, and is expected to witness the biggest rise in energy demand across the world over the next 20 years (Reference: IEA (2021). *India Energy Outlook 2021*. World Energy Outlook Special Report. Paris: International Energy Agency). This may increase its contract negotiating power, on top of the factors already mentioned in footnote 26.

Applicable Brent Slope on LNG Imports of Pakistan **Figure S1.17**



Note: Brent slope for the Japan Korea Marker prices is derived by dividing the 3 months future JKM prices for a certain month by the preceding three months' average of crude oil spot prices. Slope data for PLL imports is actual.
Source: Authors' calculations using data from PLL; OGRA; Bloomberg

The recent slump in the global LNG market during the Covid-19 outbreak also validated the need to reassess the price and volume conditions agreed under the long-term contracts. For Pakistan, the government can engage in short term contracts with more flexible conditions until the country is ready to pursue more spot purchases under the private sector's participation.

However, it is also important to note that the volatility in the spot market means that there would be times when spot procurements may end up being costlier than the term procurements. As shown in **Figure S1.16**, although Pakistan's spot procurements were cheaper than term procurements most of the time, there have been instances when spot procurements were costlier. This may be the case during winters, when excess demand almost always results in a substantial rise in global prices. However, better demand forecasting and adequate storage capacity can help alleviate these concerns and allow for better spot decisions.

Here, it is also important to note that so far, spot rates for LNG imported by Pakistan had been higher than LNG futures in 2018;[35] lower in comparison to most of 2019 and early 2020, and, after a long pandemic-induced break, much higher than the futures prices in the second half of 2020, as the actual price rose due to a demand glut in the East Asian markets (**Figure 1.17**). All in all, this makes a strong case of advertising and finalizing orders earlier than usual during winters in order to lock in rates, which tend to increase as the season progresses.

4) Improvements in demand forecasting and decision-making in both public and private sectors

Given the fact that nearly a third of cargoes at PLL arrived on spot basis during FY20, timely and accurate demand forecasting by public procurement agencies is important because the incoming private players would secure the rights to utilize the auctioned excess capacity of the terminals.

Currently, the demand forecasting capability and practices are not at a satisfactory level, which – in the presence of a lengthy public procurement process – results in tender delays and pricier bids. Also, smooth importing on a regular basis would eventually require more than one-at-a-time auction process, which would further necessitate timely communication and

[35] Future international prices of spot purchases, in terms of slope of Brent, are arrived at by using the three months forward rate of Japan Korea Marker (JKM) for any given month (for example, the JKM futures price for April 2020, as on end-January 2020) and dividing it by the average of spot crude oil prices during the preceding three months (January, February, and March, 2020).

dissemination of demand forecasts along the whole supply chain.

For smoother operations and to ensure that imports are finalized at competitive rates, importers need to notify the terminals around three to four months in advance to secure the needed cargoes. In this regard, the PPRA procurement rules may also be revised to minimize the time between the invitation and opening of bids, and between result announcement and contract finalization. With private importers eventually coming into the market, further improvements would be witnessed on this front, provided that these players would not have to follow PPRA regulations. Although the government has recently exempted PLL from the PPRA rules when securing spot purchases, these exemptions are time-bound, and would also not be sufficient to shorten the import process duration. A more effective solution would be to introduce sector-specific clauses within the PPRA rules for LNG imports. This would provide a legal cover to the importers, help reduce costs, and speed up supplies to the end-consumers on a sustainable basis.

5) A consistent policy on the treatment of UFG losses borne by the Sui companies

According to the Ministry of Energy (Petroleum Division), unaccounted for gas (UFG) "is a phenomenon of gas loss which is contingent upon occurrence of various technical factors when gas flows from fields to end consumers. It is calculated as the difference between metered gas volume injected into the transmission and distribution network (Point of Dispatch/Delivery) and the metered gas delivered to the end consumers (Consumer Meter Station) during a financial year".[36] The rate of UFG of SNGPL stood at around 12 percent (about 52,577 mmcf), while that of SSGCL stood at around 18 percent (70,810 mmcf) in FY19. This compares to the UFG benchmarks of 1.0-2.6 percent in the advanced economies (US, UK, Canada, New Zealand and Germany), and 4.2-5.0 percent in developing economies (Turkey, Russia and Bangladesh).[37] Meanwhile, OGRA has allowed a UFG charge of 6.3 percent for domestic consumers. This means that the unmet amount becomes part of the distribution companies' losses.

The current revenue calculation mechanism disproportionally incentivizes network expansion over pipeline maintenance. This is because new connections increase the utility companies' fixed assets, and the companies are guaranteed a market-based return of 17.43 percent on their net operating fixed assets.[38] As a result, residential connections have risen by an average of 504,722 per annum (6.5 percent YoY average growth) during FY16-19, compared to per annum average additions of 1,753 commercial consumers (2.8 percent) and 111 industrial consumers (1.0 percent) during the same period. Continued addition of new connections, particularly residential, without addressing the high UFG rates and low slab pricing would mean that the inefficiencies in

[36] Ministry of Energy (2020). *Unaccounted for Gas (UFG) Gas Report FY-2020*. Islamabad: Ministry of Energy (Petroleum Division).
[37] KPMG (2017). *Oil & Gas Regulatory Authority Un accounted for Gas – Study*. Final Report July 2017. Karachi: Klynveld Peat Marwick Goerdeler.
[38] OGRA Annual Report 2018-19.

the gas distribution network would keep on rising.

Encouragingly, the federal cabinet recently ratified a three-year plan approved by the ECC to trim the UFG losses of the Sui companies. The reduction plan, which is based on yearly UFG reduction targets, has two components: tracking against 30 key monitoring indicators (KMIs)[39] as advised by OGRA; and UFG reduction plans in law and order affected areas. The overall objective is to reduce the UFG losses of SNGPL and SSGC by 4 percent (18,240 MMCf) and 9.55 percent (40,629 MMCf), respectively, in three years.

In FY20, a number of improvements took place with regards to the UFG reduction policy. For instance, SSGC replaced and tested 1,244 industrial meters against the target of 1,560 meters. Moreover, over 2,758 raids were conducted against the illegal use of gas, resulting in a claim of 390 mmcf of natural gas. Meanwhile, in Karak, the region contributing the most to the UFG losses, the HR strength of SNGPL was increased, and work was expedited to lay the legal gas pipeline network and install gas connections. During FY18-20, a total of 6,466 illegal taps in the distribution and transmission network were removed and 160 FIRs lodged in the Kohat district for gas theft.

S1.8 The Way Forward

Ensuring energy security lies at the core of a country's energy policy. In case of Pakistan, the swift shift towards imported LNG was the right step, keeping in view the falling indigenous gas supplies. At this point, the incoming capacity expansions in terminals and pipeline networks mean that LNG's share in the country's energy mix would continue to increase. Recently, Pakistan has also signed another G2G deal with Qatar to import 200 mmcfd (roughly two cargoes a month) of LNG from 2022 onwards at an applicable Brent slope of 10.2 percent, which would then increase to 400 mmcfd (four cargoes per month) after three years. This contract entails the option of increasing the import volume during high-demand months, for example during winters, and also has a price renegotiation clause of four years.

With LNG imports set to rise substantially over the coming years, it is crucial to devise ways to address the mindset of cheap availability of natural gas in the country. Due to the prevalence of extensive cross subsidies, various segments of the economy, in particular fertilizers and household sectors, have taken the availability of subsidized natural gas for granted. In hindsight, the policy of subsidized natural gas has entailed significant economic cost for the country, with the indigenous reserves deteriorating at a rapid pace as excessive consumption of the fuel was encouraged. Going forward, consumers would have to quickly readjust to the more expensive imported LNG. Here, it is pertinent to mention that natural gas as a heating source is less efficient than electricity, and that the consumption in terms of energy equivalent of running, say, a 35-gallon gas geyser (29,000 BTU/hour) is much higher than that of a 1.5-ton air conditioner (18,000 BTU/hour).[40] However, in Pakistan, the bills consumers face with regards to the former

[39] The KMIs pertain to network segmentation, underground leak survey, industry meters proving, and overhead leakage repairs, etc.
[40] SBP Annual Report for 2012 on the State of Pakistan's Economy.

are substantially lower than those for the latter.

The government has to start passing on the impact of higher LNG prices to the consumers via an appropriate price pooling mechanism; otherwise, it risks the formation of a circular debt situation akin to the one prevailing in the electricity sector. Furthermore, given that the domestic consumption of natural gas is expected to increase sharply going forward, an increase in prices would help cut down extravagant household consumption, which would in turn help reallocate the cheaper fuel to the power and industrial sectors to decrease the cost of energy generation and increase the fuel's usage in value-addition segments. The impact of subsidy rationalization on the low-income quintile can be compensated via targeted cash transfers, which is a more efficient way of providing social protection.

In addition, the relevant authorities also need to develop a long-term strategy that, among other aspects, also focuses on expanding the indigenous reserves base of natural gas. According to the US Energy Information Administration (EIA)'s 2013 Technically Recoverable Shale Oil and Shale Gas Resources report, Pakistan held sizeable shale gas reserves of 105 trillion cubic feet (Tcf). Pakistan's Ministry of Energy (Petroleum Division) also completed a study in 2015 on the evaluation of shale oil and gas resources in the Lower Indus Basin and the Middle Indus Basin with the help of USAID. The results revealed that Pakistan's shale gas geological resources amounted to 95 Tcf recoverable reserves. However, the exploration companies face many challenges in developing these resources because of complex geography, environmental constraints, and low natural gas prices in the country. Thus, the country needs to develop preferential policies (increasing the wellhead prices to begin with) and conduct pilot projects as early as possible, to encourage domestic and foreign oil and gas companies to plan investments.

Beyond gas, the government also needs to take an all-inclusive view of the energy mix in the country, given that renewables, especially solar, have appeared as low-cost and crucial alternatives in the midst of worsening climate change situation. At present, the renewables' share is only 4 percent in Pakistan's installed power generation capacity and 2 percent in power generation. However, the incentive to switch to these sources is significant. According to the World Bank's 2020 Global Photovoltaic Power Potential report, utilizing just 0.071 percent of geographical area of Pakistan for solar photovoltaic (solar PV) power generation would be sufficient to meet the country's current level of electricity demand. This makes the country rank 49th out of 210 economies in terms of average solar power generation potential.[41] Furthermore, bringing the share of renewables to at least 30 percent of the total generation during the next 20 years would also lead to a reduction of US$ 0.002 for every kWh consumed in Pakistan, or around US$ 5 billion (in today's discounted terms).[42]

[41] Energy Sector Management Assistance Program (ESMAP) .2020. *Global Photovoltaic Power Potential by Country*. Washington, D.C: World Bank Group.
[42] Schmitt,Karsten; Reithe,Georg; Hoepp,Julia; Schreider,Achim.2020. *Variable Renewable Energy Integration and Planning Study* (English). Pakistan Sustainable Energy Series Washington, D.C.: World Bank Group.

Annexure-I – Common Abbreviations and Conversion Factors used in LNG Trade

Conversion Factors for Natural Gas Units

Input unit	Output unit	Multiply by
cubic metres (m3) LNG	cubic metres (m3) natural gas	615
cubic metres (m3) natural gas	cubic metres (m3) LNG	0.001626016
cubic metres (m3) LNG	cubic feet (cf) natural gas	21,718.52
cubic feet (cf) natural gas	cubic metres (m3) LNG	0.000046044
Million cubic feet (mmcf)	Million british thermal units (mmbtu)	1,037
million tonnes LNG	billion cubic feet (bcf) natural gas	48.0279467
billion cubic feet (bcf) natural gas	Million british thermal units (MMBtu)	1,000,000
billion cubic feet (bcf) natural gas	million tonnes LNG	0.020821211
million tonnes LNG per year (MTPA)	billion cubic feet natural gas per day (bcf/d)	0.131584156
billion cubic feet natural gas per day (bcf/d)	Million tonnes LNG per year (MTPA)	7.59974192

Common abbreviations and their description

Abbreviations	Description
cf	cubic feet
mcf	thousand cubic feet
mcd	thousand cubic feet per day
mmcf	million cubic feet
mmcfd	million cubic feet per day
bcf	billion cubic feet
bcfd	billion cubic feet per day
tcf	trillion cubic feet
m3	cubic metre
Btu	British thermal units
mmbtu	million British thermal units
MTPA	million tonnes per annum (of LNG)
TOE	Tons of oil equivalent – amount of energy released by burning one tons of crude oil

Source: North American Cooperation on Energy Information; International Energy Agency

Annexure-II – Computation of OGRA Notified LNG Prices

Computation on LNG Weighted Average Pricing for Feb 2021 (quantities in mmbtu; price in US$/mmbtu)

		PSO	PLL
A	**Number of cargoes**	**6**	**3**
B	**Quantity Received**	**19,200,000**	**9,600,000**
C	Retainage 0.6 % of B for PSO and @ 0.778% of B for PLL	115,200	74,692
D	**Quantity Delivered at Terminal (B-C)**	**19,084,800**	**9,525,308**
E	Transmission Loss (0.38% of D for SNGPL; 0.12% for SSGC)	72,522	36,196
F	Distribution Loss: (6.3 percent of D for both SNGPL and SSGC)	1,202,342	600,094
G	**Total loss Including Retainage (D+E+F)**	**1,317,542**	**674,786**
H	Percentage Losses (G/B*100)	6.86	7.03
I	**Quantity available for Sale (B-G)**	**17,882,458**	**8,925,214**
J	**LNG Price (DES) (see notes)**	**6.7773**	**8.5366**
K	PSO/ PLL other imports related costs (see notes)	0.5234	0.6337
L	PSO / PLL margin (2.5% of J)	0.1694	0.2134
M	Terminal Charges (based on quantity imported; see notes)	0.3786	0.6956
N	**LNG Cost (J+K+L+M)**	**7.8487**	**10.0793**
O	Retainage adjustment (0.6% or 0.778% of N, whichever applicable)	0.0471	0.0784
P	T & D volume adjustment (0.38% of N plus 0.63% of N; see notes)	0.5309	0.6830
Q	LSA management fee (SSGC/PLTL) (fixed; see notes)	0.0250	0.0250
R	Cost of supply-SNGPL (fixed; see notes)	0.2621	0.2621
S	Cost of supply -SSGC (fixed; see notes)	0.1012	0.1012
T	**Total LNG price without GST (N+O+P+Q+R+S)**	**8.8153**	**11.2296**
U	Quantity available for Sale (same as in I)	17,882,458	8,925,214
V	**Total cost of LNG (T*U)**	**157,639,975**	**100,226,650**
W	Total LNG cost (PSO & PLL) (sum of two prices in V)	257,866,625	
X	Total quantity available for sale (PSO & PLL) (sum of two volumes in U)	26,807,671	
Y	**Weighted Average Sale Price without GST (X/W)**	**9.6191**	

Notes:

A. The number of monthly cargoes received in respective terminals
B. Total quantity of the imported LNG in MMBtu
C. Guaranteed retainage as per the Operation and Service agreement (OSA) between the terminal owner and terminal operator. These are charged as compensation for fuel for the port facility. Retainage charges are 0.6 percent for PSO imports and 0.778 percent for PLL imports.
D. Quantity delivered net of the volume withheld as retainage.

E. Transmission losses as permitted for the Sui companies by OGRA. Currently, the rate is 0.38 percent for SNGPL and 0.12 percent for SSGC. In the table above, SNGPL's transmission rate has been taken for the LNG price determination
F. Transmission losses as permitted for the Sui companies by OGRA. Currently, the rate is 6.3 percent for SNGPL and SSGC
G. Total volume loss is inclusive of retainage and either transmission or distribution losses, depending upon the stage of supply. In the table above, distribution losses are added as the computation is for LNG price charged to end-consumers
H. Losses as a percent of total imported volume
I. LNG quantity, net of retainage and transmission/distribution losses, which is available for further distribution to the end-users
J. Delivered ex-ship price (DES) is calculated by applying the agreed upon Brent slope under the term or spot contracts on the average of the last three months' crude spot prices. The resulting US$/MMBtu prices of each cargo would then be used to reach to a weighted average DES price for the two importers, PSO and PLL, based on quantity of imported LNG. Under the DES price mechanism, the seller bears all costs and risks associated in bringing the goods to the port of destination. The buyer, then, is responsible for all costs necessary to unload the goods and clear them through customs.
K. Other import-related costs include handling/unloading charges and charges under the Sindh Infrastructure Development Cess (CESS)
L. The margins allowed to the importers on LNG purchases. Presently, the rate is 2.50 percent of the DES price.
M. Terminal charges are based on capacity charges. For PLL, these charges are US$ 245,220 per day and US$ 0.009 per MMBtu, with the average working out @ US$ 0.4177 per MMBtu. For PSO imports (Engro Elengy terminal), the average rate is US$ 0.479 per MMBTu. In addition to this, Port Qasim charges US$ 600,000 per vessel. Note that these charges are with regards to full capacity utilization. Given that PLL's capacity utilization is around 60 percent, the resultant terminal charges rise to around US$ 0.7 per MMBtu
N. This is the total LNG cost, inclusive of the DES price and the aforementioned margins and charges.
O. Retainage costs are carried forward and charged from the end-consumers. Resultantly, total LNG cost is increased by 0.6 percent and 0.778 percent for PSO and PLL, respectively
P. A similar adjustment is made for the transmission and distribution losses. Total LNG cost, calculated in stage N, is increased by 0.38 percent and 6.3 percent, respectively, to accommodate transmission and distribution losses
Q. These are the margins of distribution companies, SNGPL and SSGC, under the LNG Supply Agreement (LSA) with the LNG importers (PSO and PLL). The level is fixed at US$ 0.02621 per MMBtu
R. Cost of supplying LNG gas borne by the SNGPL
S. Cost of supplying LNG gas borne by the SSGC
T. Total LNG cost, inclusive of the DES price, importer margins, terminal charges, retainage and T&D loss adjustments, cost of supplies to the pipeline companies, and the margins of the distributors.
U. LNG quantity, net of retainage and transmission/distribution losses, which is available for further distribution to the end-users. Same as in stage I
V. Total price is calculated by multiplying the total LNG quantity available for sale with each importer by the total LNG cost computed in stage T
W. Summation of the total costs of PSO and PLL available LNG supplies, as computed in V
X. Summation of the total quantity of PSO and PLL available LNG supplies, as computed in U
Y. Final weighted average LNG price for the month computed by dividing total available supplies over total cost.

Source: OGRA

Annexure: 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

ACH	Automated Clearing House
ADB	Asian Development Bank
AEO	Authorized Economic Operators
AFI	Authorized Financial Institutions
AIIB	Asian Infrastructure Investment Bank
AJK	Azad Jammu and Kashmir
APCMA	All Pakistan Cement Manufacturers Association

B

BB	Branchless Banking
bbl	Barrel
BBO	Branchless Banking Operators
BCS	Business Confidence Survey
BIM	Bilateral Monopoly
BISP	Benazir Income Support Program
BP	British Petroleum
BPO	Business Process Outsourcing
BSC	Behbood Savings Certificate

C

CAN	Calcium Ammonium Nitrate
CBU	Completely Built Up
CCGT	Combined Cycle Generation Units
CDNS	Central Directorate of National Savings
CKD	Completely Knocked Down
CNIC	Computerized National Identity Card
CPEC	China Pakistan Economic Cooridor
CPI	Consumer Price Index
CPO	Crude Palm Oil

D

DAP	Diammonium Phosphate
DES	Delivered Ex-ship Price

DSC	Defense Saving Certificate
DSSI	Debt Service Suspension Initiative

E

ECC	Economic Coordination Committee
EETL	Engo Elengy Terminal (Private) Limited
EFS	Export Finance Scheme
EIA	Energy Informaiton Administration Agency
EM	Emerging Market
EPD	Exchange Policy Department
ESMAP	Energy Sector Management Assistance Program

F

FATA	Federally Administered Tribal Areas
FBR	Federal Board of Revenue
FDI	Foreign Direct Investment
FED	Federal Excise Duty
FMCG	Fast Moving Consumer Goods
FO	Furnace Oil
FPI	Foreign Portfolio Investment
FSRU	Floating Storage and Regasification Unit
FX	Foreign Exchange
FY	Fiscal Year

G

GCC	Gulf Cooperation Council
GDP	Gross Domestic Product
GI	Geographic Indicator
GIDC	Gas Infrastructure Development Cess
GIIGNL	The International Group of Liquified Natural Gas Importers
GIS	Government Ijara Sukuk
GIS-FRR	Government Ijara Sukuk - Fixed Rental Rate
GIS-VRR	Government Ijara Sukuk - Variable Rental Rate
GoG	Gas on Gas

GSM	Global System for Mobile
GST	General Sales Tax
GSTS	General Sales Tax on Services
GTA	Gas transportation Agreement

H

H1	First Half
H2	Second Half
HOA	Heads of Agreement
HR	Human Resource

I

IBA	Institute of Business Administration
IBRD	International Bank for Reconstruction and Development
ICT	Information and Communications Technology
IDA	International Development Association
IDB	Islamic Development Bank
IEA	International Energy Agency
IFS	International Financial Statistics
IMF	International Monetary Fund
IP	Iran Pakistan Pipeline

J

JKM	Japan Korea Marker

K

KJYES	Kamyab Jawan Youth Entrepreneurship Scheme
KP	Khyber Pakhtunkhwa
KSA	Kingdom of Saudi Arabia

L

LCVs	Light Commercial Vehicles
LLP	Limited Liability Partnership
LNG	Liquefied Natural Gas
LPG	Liquefied Petroleum Gas
LSM	Large-Scale Manufacturing

LTFF	Long-term Financing Facility
LVA	Low Value Added

M

MMT	Million Metric Ton
MoF	Ministry of Finance
MOIP	Ministry of Industries and Production
MoM	Month on Month
MPC	Monetary Policy Committee
MRTBs	Market Related Treasury Bills
MSCI	Morgan Stanley Capital International
MSP	Minimum Support Price
MTO	Money Transfer Operators
MUFAP	Mutual Funds Association of Pakistan

N

NADRA	National Database and Registration Authority
NBP	National balancing Point
NDA	Net Domestic Assets
NEER	Nominal Effective Exchange Rate
NEPRA	National Electric Power Regulatory Authority
NFA	Net Foreign Assets
NFC	National Finance Commission
NFNE	Non-food Non-energy
NGDS	Natural Gas Development Surcharge
NP	Nitro Phospate
NSS	National Savings Scheme
NTR	Non Tax Revenue

O

OCAC	Oil Companies Advisory Council
OGRA	Oil and Gas Regulatory Authority
OMCs	Oil Marketing Companies
OMO	Open Market Operation

	OPE	Oil price escalation
P		
	PAMA	Pakistan Automotive Manufacturers Association
	PBA	Pensioners' Benefit Account
	PBS	Pakistan Bureau of Statistics
	PEDL	Public External Debt and Liabilities
	PFL	Pakistan Investment Bond - Floating Rate
	PFM	Public Finance Management
	PGPC	Pakistan GasPort Consortium
	PIA	Pakistan International Airline
	PIB	Pakistan Investment Bond
	PKR/Rs	Pakistan Rupee
	PLL	Pakistan LNG Limited
	PLTL	Pakistan LNG Terminals Limited
	POL	Petroleum, Oil and Lubricants
	PPRA	Public Procurement Regulatory Authority
	PRI	Pakistan Remittance Initiative
	PSDP	Public Sector Development Program
	PSE	Public Sector Enterprise
	PSM	Pakistan Steel Mills
	PSO	Pakistan State Oil
	PSX	Pakistan Stock Exchange Limited
	PTA	Pakistan Telecommunication Authority
Q		
	Q1	First Quarter
	Q2	Second Quarter
	Q3	Third Quarter
	Q4	Fourth Quarter
	QoQ	Quarter on Quarter
R		
	RBC	Regulation: below cost

RCS	Regulation cost of services
REER	Real Effective Exchange Rate
RFCC	Refinance Facility for Combating COVID 19
RFO	Residual Furnace Oil
RIC	Regular Income Certificate
ROA	Return on Assets
ROE	Return on Equity
RPI	Relative Price Index
RSP	Regulation: social and political

S

SBP	State Bank of Pakistan
SDGs	Sustainable Development Goals
SDR	Special Drawing Rights
SME	Small Medium Enterprises
SNGPL	Sui Northern Gas Pipelines Limited
SSC	Special Savings Certificate
SSGC	Sui Southern Gas Company
SUPARCO	Pakistan Space and Upper Atmosphere Research Commission

T

TAPI	Turkmenistan Afghanistan Pakistan India Pipeline
T-bills	Treasury bills
TEDL	Total External Debt and Liabilities
TERF	Temporary Economic Refinance Facility
TPA	Third party Access

U

UAE	United Arab Emirates
UFG	Unaccounted for Gas
UNCTAD	United Nations Conference on Trade and Development
US	United States of America
US$	US Dollar
USAID	United States Agency for International Development

	USDA	United States Department of Agriculture
	USFIA	United States Fashion Industry Association
V		
	VAT	Value Added Tax
W		
	WA ONR	Weighted Average Overnight Rate
	WALR	Weighted Average Lending Rate
	WfH	Work-from-Home
	WHT	Withholding Tax
	WIM	West India Marker
	WIPO	World Intellectual Property Organization
	WTO	World Trade Organization
Y		
	YoY	Year on Year