THE STATE OF PAKISTAN'S ECONOMY

Second Quarterly Report
for the year 2018-19 of the
Board of Directors of State Bank of Pakistan

State Bank of Pakistan

Acknowledgment

Analysts:

Chapters:

1. Overview	Waqas Ahmed
2. Real Sector	Waqas Ahmed; Javed Iqbal; Khurram Ashfaq Baluch; Saher Masood; Talha Nadeem
3. Inflation and Monetary Policy	Asma Khalid; Fatima Khaliq; Umer Khan Baloch; Amjad Ali; Umar Mashood; Sabahat
4. Fiscal Policy and Public Debt	Muhammad Mazhar Khan; Muhammad Idrees; Mansoor Saleem; Hira Ghaffar
5. External Sector	Muhammad Omer; Syed Ali Raza Mehdi; Junaid Kamal; Sarmad Ellahi

Special Sections

1. The Importance of Human Capital in the Context of CPEC	Asma Khalid; Ahmad Mobeen
2. Evaluating the Fiscal Burden of State-owned Enterprises in the Power Sector	Asma Khalid; Sabahat

Editing:	Talha Nadeem; Syed Ali Raza Mehdi
Formatting:	Javed Iqbal; Khurram Ashfaq Baluch
Publication Manager:	Waqas Ahmed
Director:	Omar Farooq Saqib

Publication Review Committees:

PRC of the Management	Saeed Ahmed (Chairman); Inayat Hussain; Syed Irfan Ali; Muhammad Ali Malik; Syed Samar Husnain; M. Ali Choudhary; Muhammad Javaid Ismail; M. Farooq Arby; and Omar Farooq Saqib
PRC of the Board	Ardeshir Khursheed Marker (Chairman); Zubyr Soomro; and Azam Faruque

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For feedback and queries: quarterly.report@sbp.org.pk

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1 Overview

1.1 Economic Review

As the economy moved into the second quarter of FY19, the effects of macroeconomic stabilization measures taken since December 2017 have started to unfold. Specifically, monetary policy tightening, exchange rate adjustments, reduction in PSDP spending and regulatory measures have impacted domestic economic activity. This is reflected in a contraction in LSM growth, decline in imports and moderation in the fixed investment component of private sector credit. The underperformance of major *kharif* crops added to this slowdown. Nonetheless, inflation continued to increase mainly due to cost factors and some persistence in underlying demand.

In particular, during Q2-FY19 CPI inflation on YoY basis attained the highest level in 17 consecutive quarters. This trajectory was largely dictated by its core component, non-food non-energy (NFNE), which further gathered momentum as the pass-through of exchange rate depreciation and second round impact of high oil price accentuated its already elevated level. Moreover, persisting high level of fiscal deficit continued to undermine efforts to contain domestic demand.

Table 1.1: Economic Indicators

	FY18	H1-FY18	H1-FY19
	Growth rate (percent)		
LSM[a]	5.0	6.6	-1.5
CPI (period average YoY)[a,1]	3.9	3.8	6.0
Private credit (flow)[b]	14.9	5.7	9.5
Money supply (flow)[b]	9.7	2.3	3.6
Exports[a]	13.7	10.9	1.9
Imports[a]	14.9	18.0	-2.6
FBR tax revenue (billion Rs)[c]	3,844.0	1,722	1,795
Exchange rate (+app/-dep%)[b]	-13.7	-5.0	-12.5
	million US dollars		
SBP's liquid reserves (end-period)[b]	9,789	14,107	7,199
Workers' remittances[b]	19,623	9,745	11,030
FDI in Pakistan[b]	3,092	1,633	1,319
Current account balance[b]	-18,989	-8,353	-7,615
Fiscal balance (% of GDP)[d]	-6.6	-2.2	-2.7

Data sources: [a] Pakistan Bureau of Statistics; [b] State Bank of Pakistan, [c] Federal Board of Revenue; and [d] Ministry of Finance
[1] YoY growth in the average of CPI index for the quarter.

Indeed, the fiscal deficit continued to stay high despite a sharp cut in development spending since the beginning of FY19. While revenue collection declined, current expenditures increased substantially. Rising interest rates and exchange rate depreciation are contributing to the sharp increase in the latter; whereas, a slowdown in economic activity took a toll on the former despite some compensation from higher inflation and

exchange rate adjustments. The resulting financing of the budget deficit fell mostly on borrowing from the central bank, as the government resorted to limited external borrowing.

In the external sector, exchange rate depreciation and other regulatory measures have resulted in some improvement in the current account deficit (CAD) during H1-FY19. While the balance on trade in goods and services stagnated at last year's level, the sharp increase in workers' remittances was key in curtailing CAD which improved by 8.8 percent (YoY)[1]. However, net financial inflows were lower than last year in the wake of absence of sovereign debt issuance, lower short-term borrowing, drop in FDI, and continued outflow of equity investments. Therefore, SBP's FX reserves declined by US$ 2.7 billion during H1-FY19, and the PKR depreciated by 12.5 percent against the US dollar.

Taking stock of the evolving developments in the economy, most importantly the high level of fiscal and current account deficits, it is evident that measures addressing structural issues are needed. In order to improve productivity and increase exports, investment in human capital and technology is required. This strategy is long term but its impact on total factor productivity (TFP) is exponential. It will not only attract FDI in Pakistan but with strategic diplomatic efforts, more skilled labor can be sent abroad. In both cases, much needed foreign inflows would materialize. Likewise, the ongoing focus of both the government and SBP to improve financial inclusion, particularly in the context of supporting SMEs and low cost housing sector, can result in better income distribution and an improvement in effectiveness of monetary policy. Lastly, the government's focus on revenue related measures is timely; however, over-reliance on the withholding mode of income tax regime for shoring up tax revenue needs to be rationalized. Unless such measures to facilitate structural transformation are taken, the Pakistan economy will continue to experience business cycles of shorter durations.

1.2 Executive Summary

Real Sector

Economic activities in H1-FY19 remained constrained. This is evidenced by the decline in the performance of the industrial sector, as explained by contraction in LSM particularly in Q2-FY19, and lower production of major crops in the agriculture sector. The slowdown in both the commodity producing sectors is broad based and it is affecting the services sector as well.

[1] CAD has further improved in January 2019. On cumulative basis, it has narrowed down by 16.8 percent during Jul-Jan FY19.

The industrial sector is facing the brunt of the slowdown in both public and private consumption. LSM contracted by 1.5 percent during H1-FY19 relative to a healthy growth of 6.6 percent in H1-FY18. The slowdown in LSM became more pronounced in Q2-FY19 as it declined by 2.4 percent compared to a growth of 3.7 percent in Q2-FY18. Sharp decline in PSDP spending and uncertainties in the property market are impacting the cement and steel sectors, while lower sugar production amid inability in offloading accumulated stocks has dampened the food sector's growth. The lacklustre performance of the textiles sector indicates some moderation in domestic demand. The automobiles sector's growth remained positive, but much lower than the last year's level during the first half. This trend is mainly attributed to the sharp increase in car prices and borrowing costs along with the decline in rural demand for tractors and motorcycles. However, a partial downside impact cannot be ruled out due to the restriction on non-tax filers to buy a car, that has recently been reversed in the Finance Supplementary (Second Amendment) Act, 2019.

In the agriculture sector, during the first half of FY19 there has been a broad based decline in production of major *kharif* crops mainly due to water shortages. Cotton crop is affected the most as according to official estimates[2] its production has remained short by 25 percent from its target. At the start of the *rabi* season, water shortages and weak fertilizer offtake due to its higher price has led to contraction in area sown under wheat. With additional area available to them, farmers have been inclined to utilize it for cultivation of minor crops, as per the historical trend. Furthermore, predictive indicators such as credit disbursements show that livestock sector's growth is going to remain largely intact.

The performance of the services sector is also witnessing moderation as depicted by limited data available by the first half of FY19. Declining trend in performance of commodity producing sector, together with slowdown in imports, has affected the wholesale segment. Similarly, a declining trend in commercial vehicles sales and POL sales shows that growth in the transport sector has also moderated. Lastly, even though the finance segment witnessed an increase in deposits and bank profitability, some deterioration in asset quality has been observed as NPLs rose on a YoY basis while infection ratio of the sugar sector deteriorated sharply.

Inflation and Monetary Policy

Macroeconomic challenges in the form of rising inflationary pressures, elevated levels of twin deficits and low foreign exchange reserves led the Monetary Policy

[2] Pakistan Cotton Crop Assessment Committee.

Committee (MPC) to further increase the policy rate by 150 basis points in November 2018.

Average headline CPI inflation rose to 6.5 percent during Q2-FY19 – the highest quarterly inflation since Q1-FY15, when global crude oil prices were around US$ 100 per barrel. Whereas, the increase in inflation is more pronounced in its core component (NFNE)[3]. Upward revision in the prices of natural gas by the government has alone contributed around 1.0 percentage point in the recent surge in inflation. In addition, pressure on prices in non-food non-energy component of CPI was further fuelled by pass through of exchange rate depreciation on inflation. Food inflation, on the other hand, continued to stay muted during Q2-FY19, with a notable decline in prices of perishables offsetting the double-digit hikes in prices of cigarettes, meat and chicken.

As for the private sector credit, an additional uptake of Rs 570.4 billion has been observed during H1-FY19, compared to Rs 296.3 billion in the same period last year. This trend is largely due to the rising cost of imported inputs and higher energy prices on account of PKR depreciation and liquidity constraints owing to a higher level of unsold inventories (in POL, steel, autos, fertilizers, electronics and sugar sectors) along with circular debt in the energy sector. While non-manufacturing businesses have curtailed further expansion, few industries, such as power, cement and textile sectors, continued to borrow for capacity additions.

Since SBP financed most of the budgetary borrowings, commercial banks had sufficient liquidity to cater to the private sector's credit needs, sometimes extending incremental loans at sub-Kibor rates during Q2-FY19 as well. This is because most of the government debt is now accumulated in the short-run with large maturities in every auction. The commercial banks were hesitant to completely roll over these maturities close to the upcoming monetary policy decisions in anticipation of further increases in the policy rate. These dynamics made public debt management challenging while posing higher re-pricing risks for the government.

In overall terms, the significant rise in both the budgetary borrowings and private sector credit led to a steep increase in the net domestic assets (NDA) of the banking system during Q2-FY19, which more than offset the decline observed in net foreign assets (NFA) as the external situation of the economy continued to weaken. As a result, reserve money growth reached 3.1 percent during HI-FY19 as compared to 0.3 percent during the same period last year.

[3] Increased by 8.2 percent during Q2-FY19 on YoY basis.

Fiscal Sector

The growth in revenue generation recorded further moderation in the second quarter of FY19. This, along with persistent increase in current expenditures, resulted in a broad-based deterioration of fiscal indicators. For example, the overall fiscal deficit increased to 2.7 percent of GDP, up from 2.2 percent in the same period of last year. Similarly, a sharp growth in current expenditures led to a significant increase in the revenue deficit, which increased to 1.7 percent of GDP in H1-FY19 from 0.5 percent last year. At the same time, the primary deficit increased to 0.4 percent of GDP in H1-FY19 from 0.1 percent last year.

The decline in revenue collection has been driven by a slowdown in tax revenue growth and decline in non-tax revenues. The deceleration in tax revenue is largely due to stagnant growth in direct and sales taxes. While the moderation in economic activity resulted in an overall deceleration in tax growth, exchange rate depreciation partially helped to shore up revenues through import-stage taxes. The non-tax revenue declined significantly during H1-FY19, primarily on account of lower SBP profits due to revaluation of liabilities.

Expenditure growth further decelerated during Q2-FY19, mainly due to a sharp cut in development expenditures. Development spending declined both at federal and provincial level, while current expenditure growth was higher at federal level on account of both higher interest payments and defence related spending. Specifically, the growth in interest payments on domestic debt was a result of re-pricing of domestic debt mainly because of increase in interest rate during Q2-FY19. Meanwhile, external debt servicing was higher largely due to PKR depreciation.

External Sector

The high CAD is mainly a result of a 5.0 percent growth in the merchandize trade deficit, which partially offset the notable improvements in the services account and workers' remittances. Higher international oil prices during most of the period has been the key factor behind rising trade deficit, as they pushed the six-month energy import payments up by 26.7 percent to an all-time high level of US$ 8.0 billion. The higher prices completely offset the impact of a drop in quantum imports of both crude oil and POL products, and also played a dominant role in pushing up the LNG imports during the period.

On an overall basis, energy import payments have completely offset the impact of a decline in non-energy import payments during H1-FY19. A sizable cut in development spending and the general slowdown in economic activity reduced the country's demand for imported construction-related items, like iron and steel, and

construction machinery. Support also came from soft international palm oil prices, and the continued and expected drop in imports of CPEC-related power generation and electrical machinery. Furthermore, regulatory measures and the PKR depreciation contributed to a decline in multiple non-essential consumer imports, such as CBU cars, and dry and fresh fruits.

The export situation is also presenting a challenge, with cumulative receipts stagnating at US$ 11.8 billion during H1-FY19, that is, a growth of 0.1 percent as compared to 11.3 percent during H1-FY18. The economic slowdown in key European markets, such as Germany and France, is a major concern, as these countries are among the top destinations for Pakistan's textile exports. Even though Pakistan's textile exports to the EU rose in quantum terms, the exporters were fetching lower unit prices owing to strong competition from Bangladesh and China. Competition from China also played a role in subduing Pakistan's non-basmati rice exports to major African markets, and offset the healthy quantum-led growth in basmati exports recorded during H1-FY19. Meanwhile, the withdrawal of export subsidies on sugar and wheat (in Q1 and Q2 respectively) contributed to dwindling exports of both commodities.

A part of the merchandize trade deficit has been offset by a 16.8 percent reduction in the services deficit, with lower freight imports and a hefty decline in FX purchases by residents going abroad playing a key role. Workers' remittances posted a healthy growth of 13.2 percent during H1-FY19, with the US, UK and Malaysia figuring prominently. Continued strong growth in these economies, along with rollback of previous restrictions on correspondent banking (in case of UK), led to higher remittances from the two economies.

1.3 Economic Outlook

Real GDP growth during FY19 is likely to moderate significantly, mainly due to slowdown in the growth of the agriculture sector and stabilization measures taken to preserve macroeconomic stability. This is in line with a further contraction in LSM during Q2-FY19. Moreover, given that public development spending, a key driver for private sector industrial

Table 1.2: Key Macroeconomic Targets and Projections

		FY19	
	FY18	**Target**[1]	**SBP Projections**
		percent growth	
Real GDP	5.2	6.2	3.5 - 4.0
CPI (average)	3.9	6.0	6.5 - 7.5
		billion US dollars	
Remittances	19.6	21.2	20.5 - 21.5
Exports (fob)	24.8	27.9	25.5 - 27.0
Imports (fob)	56.0	58.5	54.0 - 56.0
		percent of GDP	
Fiscal deficit	6.6	4.9	6.0 - 7.0
CAD	6.1	4.0	4.5 - 5.5

Data source: [1] Ministry of Finance and Planning Commission

activities, is unlikely to pick up anytime soon, the full year outlook for manufacturing activities remains subdued. Furthermore, private consumption is going to remain lower due to tighter monetary policy and pass through of exchange rate depreciation that has resulted in both higher energy prices and core inflation. In addition, the prospects for the upcoming wheat crop remain subdued in terms of growth. All these aspects are going to constrain the services sector in the coming months as well. Therefore, SBP has revised down its projection for real GDP growth during FY19 by 0.5 percent to 3.5-4.0 percent (**Table 1.2**)

Regarding price pressures, inflation is expected to remain high in H2-FY19. This is due to the second round impact of recent exchange rate depreciations, an upward adjustment in gas and electricity prices and higher budgetary borrowing from SBP. However, the lagged impact of policy rate increases would be instrumental in keeping demand pressures in check. Acknowledging these risks, SBP continues to project average CPI inflation at 6.5-7.5 percent for the full year.

As noted earlier, the primary deficit has increased further while there has been a sharp reduction in development expenditures in order to improve the fiscal position. This situation has become more challenging as the growth in current expenditure inched up to 17.3 percent during the first half as compared to 13.5 percent last year. On the contrary, revenue collection has contracted by 2.4 percent during the same period as compared to the growth of 19.8 percent last year. Since there is limited room to curtail government expenditures in the coming months, it is the growth in revenues that would be instrumental in determining the overall fiscal position for FY19. Incorporating the performance of revenue collection during the second half in the last four years, SBP projects fiscal deficit to further deteriorate by 0.5 percent of GDP, which brings it close to the same level as in FY18.

As for the external sector, while the CAD has improved by USD 1.7 billion during the first seven months of FY19, it is still high at USD 8.4 billion. Some improvement is expected to continue in the remaining months as imports are likely to contract further on account of moderating domestic demand and relatively low international oil price as compared to that at the beginning of FY19.[4] However, merchandize exports are expected to miss the target due to waning demand in certain export destinations. Additionally, this is compounded by the competitive pressures in the international arena and the lack of diversified and higher value

[4] International price of Brent crude was about USD 75 per barrel in July 2018. It dropped to about USD 57 per barrel in December 2018. The World Bank projects the international oil price to remain around USD 67 per barrel on average during 2019 and 2020.

added products that can effectively utilise the export quotas allowed under specific trade agreements.

Meanwhile on the external financing front, the efforts of the government have started to materialize in the shape of bilateral inflows from Saudi Arabia, UAE and China. Some of these inflows have already been realized, while rest are due in H2-FY19. Along with the Saudi deferred oil payment facilities, these inflows have an important role in meeting the external financing gap for FY19; thereby, relieving pressure on the foreign exchange reserves and mitigating volatility in the FX market.

2 Real Sector

2.1 Overview

Available economic indicators suggest that macroeconomic adjustments have started moderating aggregate demand in the country. The slowdown has been driven largely by consumer durables and construction allied industries. Consequently, large scale manufacturing (LSM) has contracted by 1.5 percent during H1-FY19 compared to YoY growth of 6.6 percent in H1-FY18. Furthermore, the contraction is more pronounced in Q2-FY19 (2.4 percent) as compared to Q1-FY19 (0.6 percent).The agriculture sector continued to face issues regarding shortage of water, higher fertilizer prices and decline in output of major *kharif* crops. These developments in the industrial and agriculture sectors are impacting the services sector as well; however, the actual position would be available towards the end of FY19 as relevant data becomes available.

Several factors contributed to the slowdown in LSM during H1-FY19. Last year, (i) CPEC related activities, (ii) higher PSDP expenditure, (iii) private sector construction activities and (iv) consumer spending had strengthened the industrial performance. However, during H1-FY19, a contraction in the former two and slowdown in the latter two resulted in lower output.[1] This was more noticeable in case of construction-allied industries. Demand for housing moderated as the price of building materials and cost of financing increased. Moreover, additional tax measures further constricted the real estate market.

Certain sector-specific issues also contributed to the decline in LSM. Automobile prices witnessed multiple upward revisions during H1-FY19 due to PKR depreciation. As the induced economic slowdown to curtail domestic demand started to take effect, price-sensitive potential buyers refrained from making purchases, especially those of durables. In addition, certain restrictions on income tax non-filers with respect to purchase of cars further dampened the automobile demand. Pharmaceuticals is another industry that suffered due to a considerable lag in regulatory adjustments in prices. This pricing issue was in addition to weakening of the local currency, which added to the distress of an import dependent sector (see **Box 2.2**). Similarly, lower sugarcane production and previous year's inventories dampened the prospects of the sugar industry.

[1] PSDP, an important indicator of construction activities, dipped sharply to Rs 328.2 billion in H1-FY19 from Rs 519.8 billion in H1-FY18.

In the agriculture sector, the production of crops posted a decline during this *kharif* season. More specifically, compared to last year, there has been a reduction of 1.1 million bales for cotton, 13 million tons for sugarcane, and 0.3 million tons for rice respectively. While demand management policies affected manufacturing activities, agriculture was faced with sector specific issues. Scarcity of water remained the main challenge, resulting in decline in area under cultivation of major crops.[2] In addition to water shortages, higher fertilizer and other input prices further complicated the situation during Q2-FY19. As a result, the sowing of wheat (the only major crop of *rabi* season and the largest crop of the year) has been constrained.

The performance of livestock and minor crops will be critical in determining the overall growth in the agriculture sector for FY19. Historical data substantiates better growth in production of minor crops when major crops are in distress. If this holds true, minor crops, including fodder, are expected to perform better. This can be traced to availability of more vacant area for cultivation and the conducive nature of many minor crops to adapt well to water conservation practices. With anticipation of better fodder production, lagged impact of initiatives by the government[3] and good credit off-take during H1-FY19, livestock is expected to maintain its growth momentum during FY19.

Weak performance of commodity-producing sectors also tends to have a negative impact on the services sector. On this note, the performance of segments like wholesale and retail trade may suffer due to decline in production of *kharif* crops, and slowdown in imports. Moreover, flagging economic activity has adverse implications for segments like transport, storage and communication. During H1-FY19, lower demand for commercial vehicles and lower POL sales to the transport sector substantiates this case as well.

2.2 Agriculture

Second estimates of major *kharif* crops reinforce earlier assessment of lower production levels for all the three major *kharif* crops in FY19 compared to FY18; cotton declined by 9.2 percent, rice by 3.9 percent and sugarcane by 15.9 percent

[2] Canal water availability in the country during H1-FY19 remained lower by 2.3 percent compared to last year. The situation worsened during Q2 in particular, with a YoY decline of 6.3 percent.

[3] During FY18, the National Progressive Control of FMD, worth Rs. 726 million, was launched to control the Foot and Mouth Disease and improve animal health. The program is also aimed at strengthening diagnostic capabilities and curbing a major cattle disease in the country. The government and private firms also reached out to markets of China and Russia for future exports of meat and meat products. As regards to poultry, lifting of ban by the UAE on Pakistan's imports in FY18 is another opportunity worth exploiting.

respectively. While rice and sugarcane surpassed the targets set in Annual Plan FY19, the fall from last year's level will weigh heavily on growth of the crop sector in FY19.

Area under cultivation of wheat, the biggest crop of the year, has been estimated to fall by 2.9 percent. Most of this fall in area has been recorded in Sindh, which has the highest average yield among the provinces. The major reason for the slide is due to insufficient water availability as growers had to endure water stress conditions throughout the year.

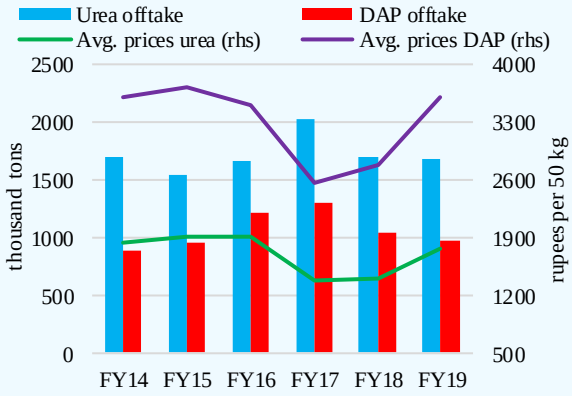
Rabi - Input Situation

After *kharif*, when farmers had to face water shortages, the situation became more acute during the initial months of the *rabi* season. In addition to water scarcity, fertilizer uptake declined and credit uptake decelerated during the wheat sowing months.

Challenges regarding canal water availability persisted in the sowing months of the *rabi* season as irrigation flows stood at 16 million acre feet (MAF) during Q2-FY19, not only 6.3 percent lower than the previous year but also lower than the Q2 average over the last 5 years.

Lower availability of water resulted in shrinkage of area under the wheat crop. Crop yield per hectare may also suffer due to reduction in nutrient offtake by 6.8 percent during the first half (Q2) of the *rabi* season. The decline in fertilizer usage is more pronounced than the reduction

Figure 2.1: Fertilizer Offtake and Average Prices - Q2



Data source: National Fertilizer Development Center

Table 2.1: Agriculture Credit Disbursements (billion Rupees)

	Q1		Q2		H1	
	FY18	FY19	FY18	FY19	FY18	FY19
Farm sector						
A. Production	57.6	82.4	128.7	148.6	186.3	231.0
All crops	38.5	40.1	70.6	70.5	109.1	110.6
Corporate farming	2.6	26.7	37.2	49.2	39.8	75.9
B. Development	3.3	6.0	7.8	11.5	11.1	17.5
Tractor	1.1	1.0	1.5	1.2	2.6	2.2
C. Total farm sector (A+B)	60.9	88.4	136.5	160.1	197.4	248.5
Non-farm sector						
Livestock/dairy						
Working capital	34.6	56.7	66.8	75.9	101.4	132.6
Fixed investment	6.6	4.8	8.7	5.5	15.3	10.3
Poultry						
Working capital	24.3	25.9	29.9	35.6	54.2	61.5
Fixed investment	0.4	0.7	0.5	0.6	0.9	1.2
Other	29.1	35.7	33.6	37.5	62.7	73.2
D. Total non-farm sector	95.0	123.7	139.5	155.1	234.5	278.8
Total agriculture (C+D)	155.9	212.1	276.0	315.2	431.9	527.3

Data source: AC&MFD, State Bank of Pakistan

in area under wheat cultivation. It is mainly explained by an increase of 16.7 percent in fertilizer prices during the corresponding period. Furthermore, the fall in DAP offtake, the essential imported fertilizer used during sowing, was more pronounced as its price increase was due to a combination of increase in international price and PKR depreciation (**Figure 2.1**).[4]

In line with weak crop sector performance, agriculture-credit disbursements decelerated from 39.4 percent during Q2-FY18 to 14.2 percent in Q2-FY19. The breakdown reveals that disbursements for all crops in the quarter were at the same level despite higher input prices. Livestock disbursements, on the other hand, continued to show healthy growth, with major share attributed to working capital disbursements. Higher credit growth in livestock indicates positive interest in this sector even after increase in interest rates (**Table 2.1)**.

Wheat

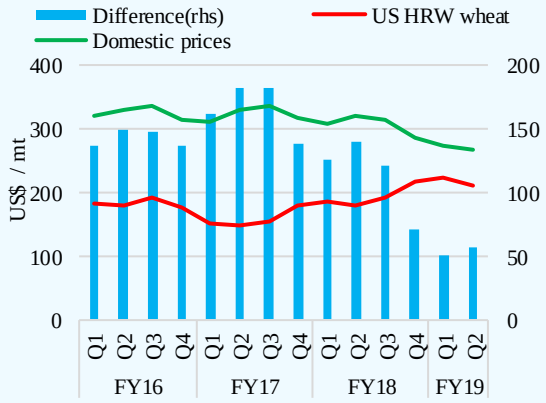
In the presence of significant carry-over stocks, the government had lowered the target for area sown under wheat. Latest estimates show that the sown area is lower than the target. The decline in area under wheat was more pronounced in Sindh where recent water shortages are felt more acutely compared to Punjab. While growers in Punjab can resort to underground water for irrigation, groundwater in Sindh is mostly saline and unsuitable for agricultural use (**Table 2.2**).

Table 2.2: Wheat Crop

	Area (000 hectares)			Production (000 tons)		
	FY18	**FY19T**	**FY19P**	**FY18**	**FY19T**	**3-year avg**
Punjab	6515	6515	6564	19607	19510	19867
Sindh	1170	1150	1046	3582	3800	3776
Balochistan	761	768	687	1383	1362	1383
KP	394	400	286	935	900	913
Pakistan	**8839**	**8833**	**8583**	**25507**	**25572**	**25938**

Data source: Ministry of National Food Security and Research

Figure 2.2: Wheat Domestic and Global Prices



Data source: Pakistan Bureau of Statistics and World Bank

Resultantly, the achievement of targeted wheat production would largely depend on the crop yield. To achieve the harvest of 25.6 million tons, productivity of 2,972 kg per hectare would be required, which entails a growth of 3.2 percent over last

[4] Domestic DAP prices rose by 29.7 percent in Q2-FY19 compared to same period last year.

year. Achieving such yield would be a challenge given delayed sowing of the crop due to late cane crushing and delayed rice harvesting in major *kharif* areas.

Given the existing carryover stocks, realization of the set target will result in another year of wheat accumulation. In the face of depressed international wheat prices, exports, yet again, may not be feasible without government support. The same is also evident from wheat export data, where depletion of stocks is slow as exports were lower in the second quarter. On the other hand, the excess wheat in the domestic market kept prices under check during H1-FY19 (**Figure 2.2**).

Minor crops

Anecdotal evidence suggests that minor crops perform better when production of major crops falls. The below par performance of the major crops in the ongoing year may revitalize the minor crops as reduced area may be substituted for minor crops. Lower prices of many perishable food items in the domestic markets during H1-FY19 lends weight to this hypothesis (**Table 2.3**).[5]

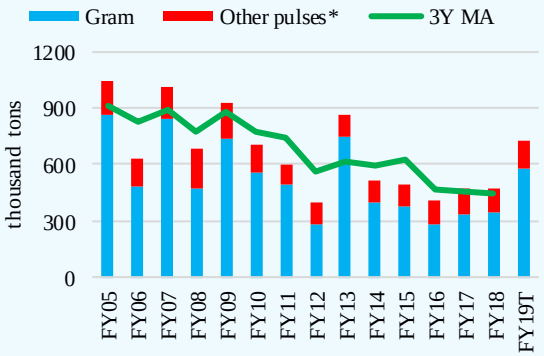
Table 2.3: CPI Prices for Minor Crops and Perishable Food Items (Rupees per kg)

	H1FY18	H1FY19	% Change
Gram	119	121	1.6
Lentil (masoor)	121	106	-12.6
Potatoes	40	31	-23.0
Onions	61	34	-43.5
Tomatoes	74	58	-21.9
Sunflower	45	48	6.9
Chilli	91	87	-4.8
Mash	181	146	-19.0
Moong	121	116	-4.5

Data source: Pakistan Bureau of Statistics

Production of gram, which fell short of its ambitious target in FY18, is expected to improve in FY19 due to the existing circumstances in agriculture. Production of pulses is expected to rise as higher prices and high import quantum reflects rising demand and hence higher profitability.[6] (**Figure 2.3**).

Figure 2.3 Pulses Production

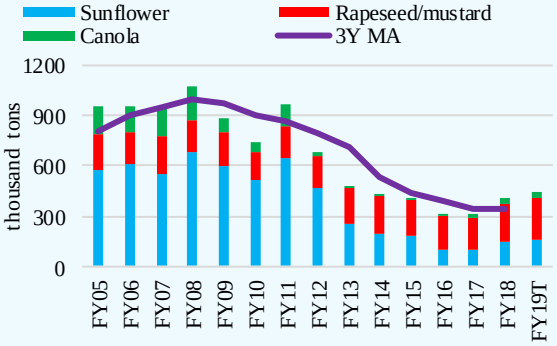


T: Target, *Other pulses: Mash, Mung & Masoor
Data source: Pakistan Bureau of Statistics and MNFSR.

[5] For details, see Chapter 3.
[6] Pulses imports registered a YoY growth of 48.8 percent in H1-FY19, accumulating to 0.51 million tons.

The rising trend in oilseeds (canola, sunflower and rapeseed/mustard) cultivation is expected to continue due to incentives and supportive schemes at the provincial level, especially in Punjab **(Figure 2.4)**.[7] More focus on these policies for oilseeds would also be helpful in relieving some import needs.

Figure 2.4: Oilseeds Production



T: Target
Data source: Pakistan Bureau of Statistics, Pakistan Oilseed Development Board, and MNFSR.

Furthermore, effective and long-term policy measures are needed to incentivize cultivation of pulses and oilseeds and enhance their production. Provision of good quality, high yielding seeds[8] is very important in order to ensure targeted production. Nonetheless, improved agronomic practices are needed to enhance yields of the crops as Pakistan is faced with rising threat of climate change (**Box 2.1**).

Box 2.1: Smarter Agriculture for Adapting to Climate Change

Pakistan is ranked among the top ten most climate vulnerable countries according to the Long Term Climate Risk Index[1]. The agriculture sector is effected by the short-term variability and longer-term climate changes. Rapid population growth will lead to higher caloric demand and at the same time will be accompanied by rapid urbanization. In such situations, adaptation to climate change is needed and for agriculture it means focusing on farm management practices, proper fertilizer usage and adoption of heat/drought resistant varieties. Climate Smart Agriculture is an approach used worldwide focusing on enhancing agriculture productivity and incomes while simultaneously building resilience to climate vulnerability and changes.

Manifestations of climate change: Climate change has led to long term reduction in rainfall in semi-arid regions of the country. In November 2018, the Pakistan Meteorological Department issued a drought warning for Sindh and Balochistan due to below normal rainfall. This was the second warning of the year. Irrigation water flows for Oct-Jan FY19 have been 20 percent lower than the 5-year average. Shortages and erratic nature of water has already been stressed upon in previous SBP reports. Mean temperature of the country has increased by 0.5 degree Celsius in previous 30 years. By 2060, Pakistan's mean temperature is expected to rise by 1.4 degree Celsius to 3.7 degree Celsius, higher than the world average[2]. The manifestations of climate changes and

[7] In 2017-18 *rabi* season, canola and oilseed area under crop enhanced, particularly in Punjab as cash incentives per acre were promised to farmers before the season.
[8] Gram seed requirement for *rabi* 2018-19 was 39,892 metric tons while the total availability stood at 324 metric tons, hence meeting only 0.81 percent of the total needs.

variability are currently witnessed in the erratic nature of rains, higher temperature and reduced water availability.

Economic Risks: The FAO's International Model for Policy Analysis of Agriculture Commodities and Trade (IMPACT) calculates the percentage difference between climate change occurring scenario with and without climate change over the period 2020-2050 on trade, yields, cultivated area and livestock in Pakistan[3]. The crops at risk are wheat, maize, sugarcane and gram with the most negative impact, where yields of all crop are expected to decline. The 2050 wheat projected area is expected to decline by 2.5 percent lower under climate change as compared to no climate change. Furthermore, through crop models predictions it is concluded that yields will reduce due to high temperature in arid, semi-arid and humid zones.[4] The temperature changes have already effected wheat-sowing season, resulting in crop sowing delays.[5]

Climate smart agriculture practices and impediments: To tackle climate change threats and enhance yields, climate smart agriculture requires adoption of a wide array of techniques for all crops, from water saving and pest management to adoption of heat/drought resistant varieties of seed. Several practices such as alternative wet and drying (AWD) of paddies helps save up to three irrigations as compared to continuous flooding, no-till rice and wheat systems are in practice where wheat is sown without tilling the land after rice.

The FAO study for Pakistan highlights the main impediments to accepting the Climate Smart Agriculture practices which need to be addressed:

- Adoption of several climate smart and yield increasing practices is low due to lack of knowledge and awareness. Extension services by the agriculture departments are still weak as many of the farmers are unaware of modern agro-chemical, crop seed varieties and adequate fertilizer use. Only 27 percent of total households surveyed in Punjab in 2014 had interacted previously with an extension agent.[6]

- Lack of financing tools and credit disbursements for smart technology such as drip irrigation and high yielding seeds is low, resulting in disappointing uptake of several techniques and adequate quality seeds even when available.

- Absence of heat and drought tolerant varieties of seed for most of the crops such as cotton, rice, maize etc. The timely sowing of such varieties could reduce yield loss by 90 percent.[7] At present, research funding only forms 0.2 percent of the agricultural GDP[8], hence lack of research focus in seed varieties is a significant impediment.

References:

[1] Source: https://germanwatch.org/en/16046.

[2] Climate Risks and Food Security Analysis: A Special Report for Pakistan (Islamabad, December 2018). WFP

[3] CIAT; World Bank. 2017.Climate-Smart Agriculture in Pakistan. Washington, D.C. 28 p

[4] Sultana, H. Ali, N. I. Mohsin, and A.M. Khan. 2009. Vulnerability and adaptability of wheat production in different climatic zones of Pakistan under climate change scenarios. Climatic Change, 94:123–142

[5 & 6] CIAT; FAO. 2018. Climate-Smart Agriculture in Punjab, Pakistan. Rome, 36 p

[7] Tesfaye et al. 2017. Climate change impacts and potential benefits of heat-tolerant maize in South Asia.

[8] Pakistan: Agricultural R&D indicators factsheet. 2015. http://ebrary.ifpri.org/

2.3 Large Scale Manufacturing (LSM)

Manufacturing activities continued to decline further, as evident from a contraction of 1.5 percent during H1-FY19, compared to 6.6 percent growth in H1-FY18. Fall in PSDP spending and sector-specific issues had a major impact on the industrial sector. Public development spending plays a significant role in supporting private investment; thus, the measures aimed at narrowing fiscal deficit weighed heavily on the industrial sector, especially construction-allied activities (**Table 2.4**).

Table 2.4: YoY Growth in LSM
percent

	wt.	H1		Q1		Q2	
		FY18	FY19	FY18	FY19	FY18	FY19
LSM	70.3	6.6	-1.5	9.8	-0.6	3.7	-2.4
Textile	20.9	0.7	-0.2	1.0	-0.2	0.5	-0.1
Cotton yarn	13	0.1	0	0.1	0.0	0.1	0.0
Cotton cloth	7.2	0	0.1	0.0	0.1	0.1	0.2
Jute goods	0.3	62.7	-8	98.1	-8.1	39.9	-8.0
Food	12.4	-0.4	-3.9	10.9	1.5	-8.1	-8.4
Sugar	3.5	-37.3	-37.2	NA	NA	-37.3	-37.2
Cigarettes	2.1	69.8	6.8	92.0	4.4	52.3	9.1
Vegetable ghee	1.1	8.2	0.7	11.5	2.6	5.3	-1.1
Cooking oil	2.2	5	-1.2	3.5	4.7	6.5	-6.5
Soft drinks	0.9	-2.6	-0.8	2.6	-5.7	-11.2	8.7
POL	5.5	8.1	-4.9	13.6	-5.4	2.8	-4.4
Steel	5.4	37.1	-7.6	47.0	-2.9	28.1	-12.4
Non-metallic minerals	5.4	10.2	-1.2	12.3	0.1	8.5	-2.4
Cement	5.3	10.3	-1.6	12.4	0.1	8.5	-3.1
Automobile	4.6	21.8	-3.6	29.1	-1.1	15.1	-6.2
Jeeps and cars	2.8	27	2.3	31.4	4.7	22.8	-0.2
Fertiliser	4.4	-9.8	6.5	-5.8	-4.8	-14.0	19.2
Pharmaceutical	3.6	5.1	-10	1.9	-4.8	8.1	-14.4
Paper	2.3	10.1	-2.1	9.6	3.9	10.5	-7.6
Electronics	2	92.9	29.4	76.7	16.5	101.0	40.1
Chemicals	1.7	1.5	-3.2	6.0	-7.5	-3.0	1.5
Caustic soda	0.4	16.6	5.3	18.1	17.2	15.2	-5.3
Leather products	0.9	-2	-2	-0.3	0.5	-3.6	-4.3

Data source: Pakistan Bureau of Statistics

The increase in interest rates has resulted in higher financial costs. Meanwhile, the loss of value of the local currency was a major setback for the import-reliant industrial sector, resulting in price hike for most of the locally manufactured industrial goods, notably autos. From the consumers' perspective, higher borrowing costs helped moderate the earlier level of high domestic consumption.

Cement

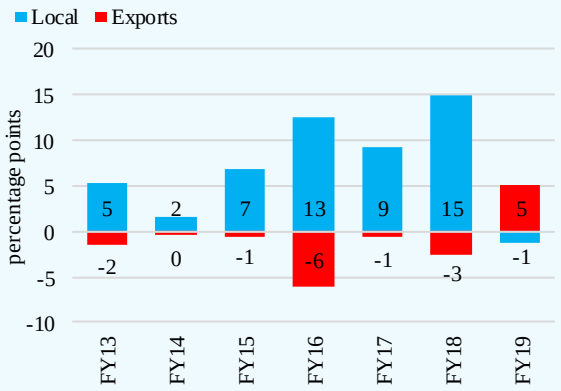
In line with other construction allied industries, cement production declined by 1.6 percent in H1-FY19, compared to an expansion of 10.3 percent during same period last year.

On the other hand, All Pakistan Cement Manufacturers Association (APCMA) data for H1-FY19 shows a growth of 3.9 percent in cement sales largely driven by exports of clinker.[9] Bifurcation of sales data suggests that exports led to growth in overall cement sales. As domestic circumstances were not favorable for the

[9] This also includes last years' inventory.

cement sector during H1-FY19, producers ventured into new export markets for their product, with encouraging results. Depreciation of the local currency also aided the recovery in exports by making cement exports more feasible (**Figure 2.5**).

Figure 2.5: Cement Sales Growth Contribution - H1



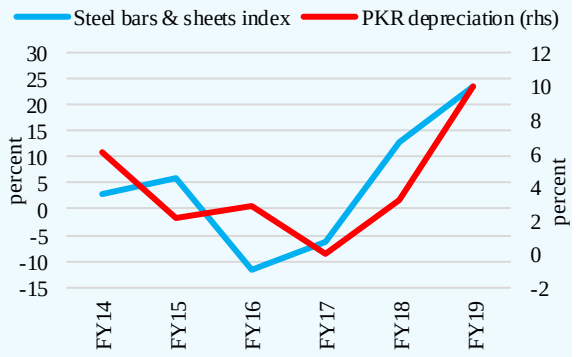
Data source: All Pakistan Cement Manufacturers Association

Steel

The production of steel shrank by 7.6 percent during H1-FY19 compared to impressive growth of 37.1 percent recorded during same period last year. Similar to other construction related industries, the performance can be traced back to aforementioned macroeconomic factors.

One additional factor that weighed on the steel industry during H1-FY19 was international price dynamics. The global economy is currently gripped by the US-China trade tensions, which had led to volatility in the global steel market.[10] Naturally, uncertainty in steel prices in international market has adverse implications for domestic steel industry.

Figure 2.6: Steel Price and Rupee Depreciation - H1



Data source: Pakistan Bureau of Statistics and State Bank of Pakistan

It is evident from import data that the price of imported scrap products, which the local industry utilizes for its production processes, increased by 8.9 percent during H1-FY19. In contrast, price of imported finished products rose marginally by 1.0 percent. In this scenario, it was hard for the local industry to compete with imported products that became relatively cheaper. The issue became severe as the prices of energy (a

[10] This seems to be temporary phenomenon as possible resolution of emerging trade war between the two nations will settle the market.

major input) surged as well. In this backdrop, the quantum of scrap products fell sharply compared to finished items (**Figure 2.6**).

Due to factors mentioned above, the WPI index for steel bars and sheets showed rapid growth of 23.4 percent in H1-FY19 compared to 12.9 percent last year. This has further dampened the private sector's demand for domestic steel. Meanwhile, the gross margins of the industry are also narrowing. After a favorable 2017, increased competition from abroad coupled with domestic economic slowdown, especially in the construction allied activities, is not a good omen.

Automobile

The contraction of 3.6 percent in H1-FY19 in the automobile production can be traced back to a multitude of factors. First, the increase in prices of vehicles due to currency depreciation, especially JPY-PKR, that in turn increased the cost of production. The automobile assemblers passed on the impact of depreciation to the customer. For instance, car prices jumped up 18.4 percent during CY18, compared to a marginal growth of 4.8 percent seen last year.

Table 2.5: Increase in Typical Car Financing

	H1-FY18	H1-FY19
Price of car (December)[1]	1,500,000	1,776,000
Down payment[2]	300,000	355,200
Finance amount	1,200,000	1,420,800
Interest rate (kibor+4)	10.3	14.4
Interest payment/month	10,280	17,076
Impact due to higher financial cost		6,796
Principal payment /month[3]	20,000	23,680
Impact due to car price escalation		3,680
Total impact/month		**10,476**

Assumptions:
[1] Price of a typical car. Price increase of 18.4 percent in 2018
[2] Down payment is 20 percent of vehicle price
[3] Payback period of 5 years
Data source: Author's calculations

Second, an increase in financing cost amid policy rate hikes also had a significant impact on vehicle demand. Car finance dipped by Rs 9 billion to Rs 11.7 billion during H1-FY19, showing a YoY decline of 43.5 percent. **Table 2.5** calculates the impact of price hike and interest rates for a typical customer. The financing cost per month for an average customer increased by Rs 10,476 per month, which proved to be high for the borderline consumers.

Third, the uncertainty regarding filer vs non-filer issue has unsettled the market. In the absence of hard data, there is no direct way to isolate the impact of ban on non-filers on car demand from price and interest rate hikes. However, there are some indicative developments. The market has witnessed a significant reduction in booking and delivery time lag. Moreover, rate premiums (*own money*) for immediate delivery in the grey market decreased considerably in line with

reduction in wait times. These two factors reveal, albeit indirectly, the effect of restricting non-filers from buying cars.[11]

The rural centric tractors and motorbikes segments showed decline in production by 20.4 and 2.8 percent during H1-FY19, compared to remarkable growth of 52.9 and 18.8 percent a year earlier (**Table 2.6**). The fall in these categories reflects the state of rural economy, which has been hurt by lower *kharif* production this year. Similar to cars and jeeps, increase in price also contained demand. While the bus segment recouped some of earlier losses in production level from the previous year, production of trucks and light commercial vehicles (LCVs) declined significantly.

Table 2.6: Automobile Sector Production during H1 (units)

					Growth (percent)	
	FY16	FY17	FY18	FY19	FY18	FY19
All Cars	72,847	79,803	96,284	103,883	20.7	7.9
Cars <800 cc	19,102	18,270	23,489	22,298	28.6	-5.1
Cars between 800-1000 cc	12,354	17,002	25,654	29,108	50.9	13.5
Cars >1000cc	41,391	44,531	47,141	52,477	5.9	11.3
Sports Utility Vehicles	454	221	7,034	3,926	3082.8	-44.2
Light Commercial Vehicles	41,090	22,967	26,404	22,198	15.0	-15.9
Trucks	2,326	3,806	4,514	3,751	18.6	-16.9
Buses	499	669	409	515	-38.9	25.9
Tractors	13,064	21,336	32,614	25,969	52.9	-20.4
Motorbikes	657,283	792,094	940,985	914,860	18.8	-2.8

Data source: PAMA

Electronics

The production of the electronics industry increased sharply by 29.4 percent in H1-FY19 in addition to growth of 92.9 percent during the same period last year. In the past two years, electric motors have remained the driving force behind this growth momentum.

Production of this sub-segment rose by 44.3 percent on top of 303.3 percent increase witnessed last year. A possible explanatory factor of surge in electric motor production could be its usage as input for a wide range of finished products, especially washing machines, refrigerators and air conditioners. With seasonal demand for these goods likely to rise at the start of the summer season,

[11] The government relaxed some restrictions on non-filers as this report went into print, while jacking up the levies. This measure is expected to revive the demand for automobile in H2-FY19, especially in the aftermath of government seriousness in implementing the vehicle import policy in letter and spirit.

manufacturers had been building up inventories of these motors. Improvement in electricity supplies also contributed to the performance of the subsector.

Fertilizer

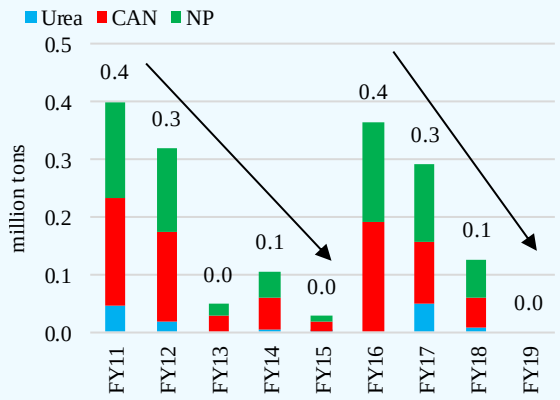
The restart of manufacturing activities at the smaller urea units remained the highlight of Q2-FY19. This helped the fertilizer sector to record a growth of 6.5 percent in H1-FY19, despite a lackluster Q1-FY19. This performance is opposite to 9.8 percent contraction last year, when smaller urea processing plants had ceased production.

Two out of the three small plants that were non-operational last year resumed production. The restart of processing activities was due to provision of subsidized RLNG. Hence, urea production of smaller units ballooned by 245.1 percent to 0.2 million tons. On the other hand, production activities at Pakarab Fertilizers came to a complete halt despite government incentives (**Figure 2.7**). It is pertinent to mention here that this plant not only produces urea but also significant quantities of other fertilizers. These commodities would now have to be imported to close the shortfall in the market.[12] Meanwhile, production of large-scale urea producers grew by 3.4 percent in H1-FY19 compared to 1.8 percent in the same period last year, contributing towards overall growth.

Food

The contraction of 3.9 percent in the food sector is majorly explained by the developments in the sugar subsector. During the last few years, sugar industry went through a phase of impressive growth on the back of high sugarcane production in the country. However, in FY19 the progress of the industry stalled in line with a reduction in the sugarcane crop production. Still, Pakistan is likely to produce around 6.5 million tons of sugar in FY19.[13] Beyond the current annual

Figure 2.7: Pakarab Fertilizers Production Trend - H1



Data source: National Fertilizer Development Center

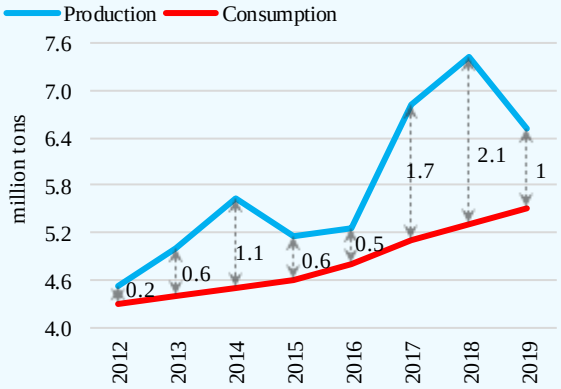
[12] Pakarab fertilizer plant, in addition to urea, produces sizeable quantities of CAN and NP products. Its operations on RLNG-CNG mix still remains infeasible under the government's announced formula of 60-40 percent respectively.

[13] Data source: USDA

consumption level, the country will add 1.0 million tons to the inventory. In the wake of depressed international price of sugar, the government would have to provide subsidies to make export of unsold stocks viable for the industry (**Figure 2.8**)

The country had unsold sugar stocks of 3 million tons before the start of the current crushing season. With government exercising some control over pricing of sugarcane, it somewhat restricted the ability of millers to procure all their raw material at lower prices. This has kept the domestic production cost higher in FY19 as well. The millers' inability to seek markets for exporting their excess stocks coupled with costly production makes the sugar glut situation unsustainable.

Figure 2.8: Sugar Surplus



Data source: United States Department of Agriculture

Meanwhile, the price setting mechanism remained a thorny issue between millers, farmers and provincial governments, and continued to hurt the parties involved in the current crushing season as well. The government of Punjab and Sindh fixed price of sugarcane at Rs 180 and Rs 182 per 40 kg, whereas the millers were vying for lower prices at par with international sugar prices. The advent of the much delayed crushing season along with unresolved issues mentioned above, the health of the sugar industry is not promising.[14]

Moreover, there is a need for product substitution from sugar to ethanol that can be blended with gasoline to boost octane ratings and reduce emissions. In that way, it has the potential to reduce the country's dependence on imported fossil fuels.

Textile

The performance of the textile sector remained subdued, as its production came down by 0.2 percent in H1-FY19. Last year, supported by relaxation of duties on exports, the textile sector had managed modest growth of 0.7 percent.

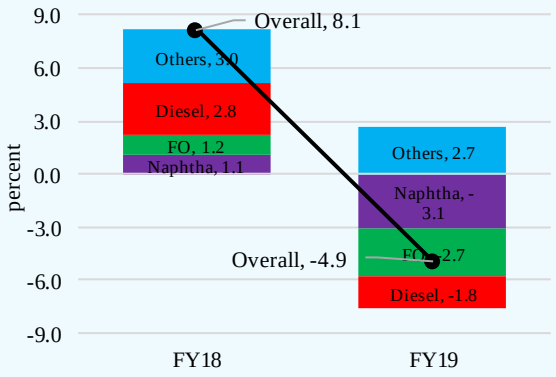
[14] See Box 2.3: Sugarcane - the Cost of Indicative Pricing in First Quarterly Report for FY19.

The export-oriented industry is facing challenges in the form of stiff competition from exporters like Cambodia and Bangladesh. Consequently, the increase in quantum for value added items like knitwear and readymade garments comes at lower export prices diluting the overall impact. The task to export more is challenging in the wake of significant shortfall in domestic cotton production. It has increased the cost of production, since global average price of cotton during H1-FY19 increased by 10.7 percent compared to H1-FY18.

POL

Apart from the slowdown in economic activity, the changing dynamics of domestic energy generation had adverse implications for the petroleum industry. As a result, the POL industry witnessed a contraction of 4.9 percent in H1-FY19. Broad-based contraction is evident from the fact that except for motor spirits, production of all the major products observed contraction (**Figure 2.9**).

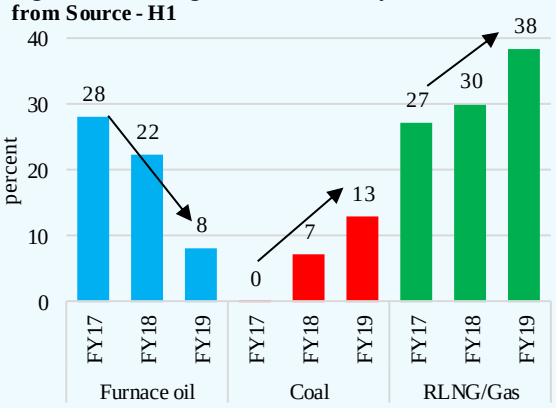
Figure 2.9: POL Product-wise Growth - H1



Data source: Pakistan Bureau of Statistics and SBP

The inclusion of new fuels, RLNG and coal, in the energy supply mix has altered the balance of the POL group. Whereas the overall contraction of POL industry is visible from domestic production, the significant increase in RLNG imports is filling in for other petroleum products, especially furnace oil. This is in line with government's last year initiative to shift away from costly furnace oil and towards cheaper gas for electricity production. As a result of decline in electricity

Figure 2.10: Average Share of Electricity Generation from Source - H1



Data source: National Electric Power Regulatory Authority

production from furnace oil based plants to the tune of 60.0 percent, production of furnace oil contracted by 2.7 percent. Meanwhile, imports of alternative fossil fuel rose sharply in H1-FY19. The decline of 14 percent in use of furnace oil for electricity generation has been fully compensated by the higher production from imported gas and coal (**Figure 2.10**).

Pharmaceuticals

A broad-based decline of 10.0 percent in pharmaceutical production was witnessed during H1-FY19 compared to 5.1 percent growth during the same period last year. Industry sources blame the sub-optimal drug pricing policy for this dismal performance, wherein producers have to face long delays for approval under the Drugs Act of 1976 (**Box 2.2**). The act necessitates the approval of federal cabinet for product registration, pricing, repricing and packaging.

In fact, the pharmaceutical industry is dependent on imported raw materials (about 95 percent), and amid frequent episodes of currency depreciation, the cost of their product has increased. The escalated costs made production of some products unfeasible at prevailing prices, and thus badly hit their production. Usually, the pricing approval process is lengthy; keeping in view the worrisome situation of availability of medicines, the regulator allowed some price adjustment.

Box 2.2: Drug Pricing Policy and the Pharmaceutical Sector

Drug Regulatory Authority of Pakistan (DRAP) is the implementing body of the Drugs Act of 1976, which was promulgated to ensure availability of medicines at affordable prices. DRAP exerts control over all the aspects of drugs market. While the current policy regime has kept prices mostly at par with inflation in the medium term, the pricing policy is the cause of disagreement between the private sector and the regulator.

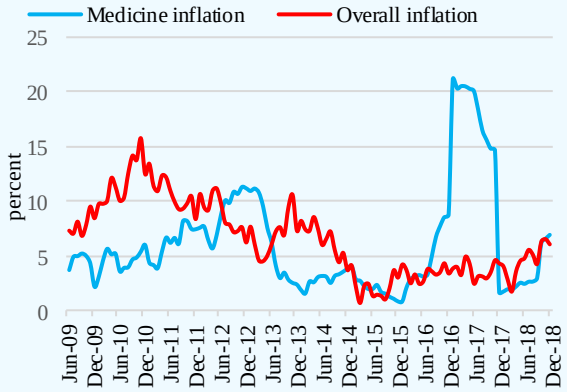
Extensive delay in adjustment of prices has made investors, both foreign and domestic, wary of investing in pharmaceutical sector.[15] The government fixes the maximum price of medicines based on the respective cost of production of each drug. A generic case involves a lengthy regulatory procedure (typically taking 1-2 years) to determine the prices of medicines. The process requires the eventual approval from the federal cabinet.

The industry has extensive exposure to exchange rate risk. Depreciation of the PKR has a direct impact on this industry. Its profitability gets squeezed, as producers are not allowed a timely and commensurable increase in the prices of their products. The dependence on imported materials is a critical factor in limiting the growth potential of the industry under lagged adjustment of prices.

[15] Johnson & Johnson, Bristol Myers Squibb and MSD have reportedly ceased their activities in Pakistan because of regulatory bottlenecks.

Retrospective analysis of prices reveals interesting insights to the patterns of price adjustments, i.e. prolonged periods of low medicinal inflation, followed by periods of significant adjustments. These price corrections have been more frequent in recent times (see **Figure 2.2.1**).

Figure 2.2.1: Medicinal Inflation vs Overall Inflation



Data source: Pakistan Bureau of Statistics

In this regard, DRAP issued a new drug pricing policy in 2018. To overcome the lag issues, domestic price of medicines were linked with *average price of the same dosage form and strength of the same brand in India and Bangladesh*.[16] Moreover, the policy also allowed annual price increments equal to *70 percent of the annual inflation rate with a cap of 7 percent*.

Whilst the latest policy has a more relaxed tone compared to the previous one, it still has some issues. First, it should be noted that compared to Pakistan, India has very different cost dynamics, as it is one of the largest producers and exporters of generic drugs and its raw material.[17] On the other hand, Pakistan's pharma industry is heavily reliant on raw material imports and its industry is inward looking.[18]

Second, the latest drug pricing policy does not say anything about the adjustment of prices under foreign currency movements. The policy becomes ineffective in mitigating the external risk, given the origin of imported raw material is mostly different from India and Bangladesh.

In addition to slow regulatory framework, another critical factor is the lack of government support for the industry, especially in R&D [19] required for obtaining international certification from the US Food and Drug Administration (FDA). This certification is a prerequisite for exporting medicines to developed countries where profit margins are higher. On the contrary, India has state of the art research labs. It gains significant advantages by fast-tracking its FDA approvals as soon as patents expire. As a result, India's pharmaceutical industry has not only attained economies of scale but helps in earning foreign exchange as well.

2.4 Services

Beyond its dominant contribution to Pakistan's GDP (60 percent), the services sector has also narrowed the gap with the agriculture sector in terms of providing employment, underscoring its growing importance for economic growth (**Figure**

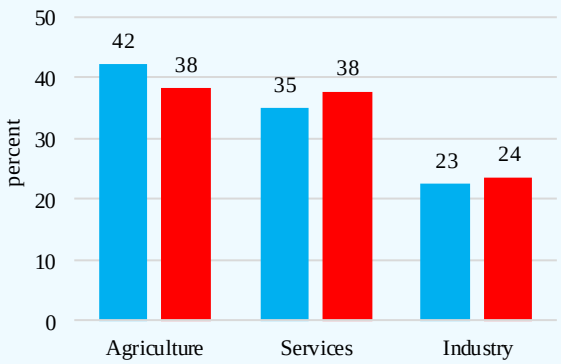
[16] Drug Pricing Policy 2018
[17] Source: http://www.worldstopexports.com/drugs-medicine-exports-country/
[18] Pakistan imported US$ 1.1 billion worth of pharmaceutical products.
[19] The government charges pharmaceutical firms a certain percentage of their profits in the name of R&D.

2.11). That said, proxy indicators continued to hint toward a moderation in service sector activities during H1-FY19 (**Table 2.7**).

With regard to the *wholesale and retail trade* segment, the decline in LSM continued during the second quarter, together with a slowdown in imports. In terms of credit, bank lending to wholesalers was higher during H1-FY19 compared to last year.[20] However, the borrowing activity of retail traders was relatively low during the first half compared to H1-FY18, reflecting a slowdown in retail activities.[21]

Moreover, for both wholesale and retail trade enterprises, borrowing was of a short term nature, with importers' credit needs in particular rising in response to a weaker PKR. By contrast, long-term borrowing by wholesale and retail traders for fixed investment purpose was lower during H1-FY19 compared to last year, which might carry implications for allied services for the full year.

Figure 2.11: Employment by Sector



Data source: Pakistan Labor Force Survey 2017-18

Table 2.7: Services Sector Indicators (H1)

	FY18	FY19
Wholesale and Retail Trade (34.4%)		
LSM (H1; YoY growth)	6.6	-1.5
Imports (billion US$)	28.7	28.0
Sub-sector credit offtake- flow (Rs bln)	43.9	54.5
Agriculture credit (disbursements, Rs bln)	431.9	527.3
Transport, Storage and Communication (20.0%)		
Commercial vehicle sales (units)	28,955	24,559
POL sales to transport sector- million MT	7.9	7.2
Subsector credit offtake - flow (Rs bln)	17.4	5.9
Cellular teledensity (%)	72.7	73.9
Broadband users (million)	50.5	63.8
Finance and Insurance (3.6%)		
Assets (Rs bln)*	18,341.5	19,682.1
Deposits (Rs bln)*	13,011.8	14,254.2
Profit after tax (Rs bln)	67.9	73.0
Net NPLs (Rs bln)*	75.6	110.1
General Government Services (14.2%)		
Expenses on general government and defense** (Rs bln)	1,526.7	1,809.5

Note: Values in brackets indicate sectoral shares within the services sector, as of FY18. The remainder consists of housing services (10.0 percent) & other private services (17.8 percent).
* Stocks, as of end-December 2017 and 2018 respectively
**Only Federal Government
Data source: SBP, PBS, OCAC, PAMA, PTA and MoF

[20] Specifically, firms engaged in wholesale and commission trade borrowed Rs 41.1 billion in H1-FY19, compared to Rs 29.6 billion in H1-FY18.
[21] Retail trade businesses borrowed Rs 13.4 billion during H1-FY19 from commercial banks, compared to Rs 14.3 billion during H1-FY18.

As for *transport, storage and communication*, the slowdown in commercial vehicle sales and POL sales to the transport sector, evident in the previous quarter, was extended. In fact, even credit offtake to this segment slowed down during Q2-FY19. This was primarily due to a decline in borrowing by the telecom sector; specifically, the net retirement of long-term, fixed investment loans.[22]

Meanwhile, the *finance and insurance* segment witnessed an uptick in bank profitability during H1-FY19 compared to last year. At the same time, there was also some deterioration in asset quality, as net NPLs had risen to Rs 110.1 billion by end-December 2018, compared to Rs 75.6 billion a year earlier; however, the deterioration was limited to only a couple of sectors. On the whole, the total infection ratio (i.e. NPLs as a proportion of advances) continued on the declining trend which has been observed for several years now. The notable exceptions were the sugar and agribusiness sectors, whose sectoral infection ratios worsened by December 2018 compared to a year earlier.[23] Also, while the infection ratio for the 'shoes and leather garments' sector was lower than last year, it still remained on the higher side.[24]

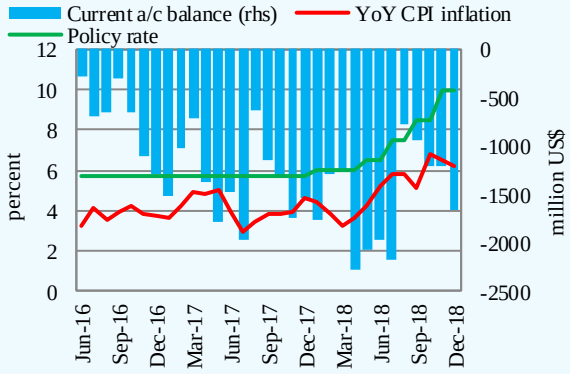
[22] In terms of bank credit to the telecom sector, there was a net retirement of Rs 5.8 billion in H1-FY19, compared to borrowing of Rs 8.7 billion in H1-FY18.
[23] The sectoral infection ratios for sugar and agribusiness sectors rose from 5.9 percent and 6.6 percent as of December 2017, to 17.2 percent and 8.3 percent as of end-December 2018 respectively. For a detailed discussion on the rise in sugar sector NPLs, refer to SBP's First Quarterly Report for FY19 (Chapter 3: Monetary Policy and Inflation).
[24] The infection ratio for the shoes and leather garments sector was 16.8 percent as of December 2018, compared to 18.7 percent in December 2017.

3 Inflation and Monetary Policy

3.1 Overview

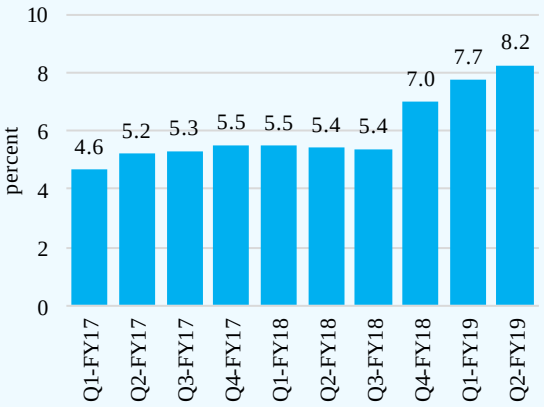
Challenges to macroeconomic stability persisted throughout the first half of FY19 in the form of rising inflationary pressures, elevated levels of twin deficits and low foreign exchange reserves (**Figure 3.1**). Importantly, pressures on core inflation, as measured by NFNE component of CPI, deepened further in Q2-FY19 (**Figure 3.2**). In addition to persisting underlying demand, this also reflected growing dispersion of cost push pressures stemming from exchange rate depreciation and higher fuel prices across a large number of goods and services.

Figure 3.1: Trend in Key Policy Indicators



Data source: State Bank of Pakistan and Pakistan Bureau of Statistics

Figure 3.2: YoY change in NFNE Inflation



Data source: Pakistan Bureau of Statistics

Price adjustments in transport services, cars, pharmaceuticals, clothing and footwear were particularly strong during the second quarter due to a high prevalence of imported components in these sectors. On aggregate, core inflation contributed 4.2 percentage points to the overall increase of 6.5 percent in headline inflation in Q2-FY19. Also, a steep upward revision in natural gas tariffs during the quarter, as well as a rise in motor fuel prices (particularly CNG) further pushed up the headline inflation. Moreover, since natural gas caters to 37 percent of the industrial sector's fuel needs, the spill-over impact of its price hike was likely to be strong. These upside risks offset the

positive impact of a softening in global crude oil prices from October 2018 onwards. Thus, by the time the Monetary Policy Committee (MPC) met in the month of November 2018, SBP's inflation projection for full-year FY19 remained unchanged within the range of 6.5 – 7.5 percent, higher than the target of 6 percent.

Considering these developments, the MPC decided to further increase the policy rate by 150 bps to 10.0 percent. In addition to revising the policy rate, the committee also suggested some strategic initiatives to overcome the recurring balance of payments problems over the medium term. The committee also emphasized the need of a supportive role of fiscal policy in generating conditions suitable for sustainable growth.

The latter has become increasingly important so far in FY19, as the developments on the fiscal front have posed challenges for the conduct and effectiveness of monetary management. Specifically, despite a cut in the PSDP spending, the overall fiscal deficit remained high in Q2-FY19.[1] Not only did this partly dilute the impact of monetary tightening on domestic demand, but also complicated liquidity management by keeping budgetary borrowings from banking system at an elevated level. As a result, although SBP intervened more heavily in the interbank market via OMOs (in both directions) during Q2-FY19, banks' recourse to the SBP's discount window was also more frequent compared to Q2-FY18 (**Table 3.1**).

Table 3.1: Liquidity Management Indicators

		No. of OMOs	No. of discounting	Ceiling facility (billion Rs)	Floor facility (billion Rs)	Avg outstanding OMO (billion Rs)	Avg deviation of O/N rates from PR(bps)
Oct	2017	7	4	67.0	13.5	1,428.0	6
	2018	11	7	265.3	82.5	-418.3	-17
Nov	2017	9	3	45.9	-	1,511.2	0
	2018	20	3	54.6	-	-1,008.5	-5
Dec	2017	8	5	150.4	38.5	1,651.6	14
	2018	10	8	280.8	-	629.9	25

Data source: State Bank of Pakistan

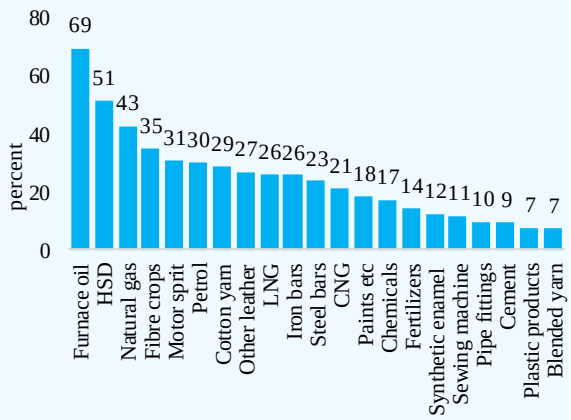
These developments also had implications for the conditions in the credit market as well as the transmission of changes in the policy rate to the lending rates. Specifically, during the first two months of the quarter, the government's entire financing burden was borne by the SBP, as banks were not willing to roll over their maturing investments at prevailing interest rates. In these two months, the

[1] PSDP declined by 37.5 percent in Q2-FY19 as compared to the same period last year.

government retired Rs 1.3 trillion to banks. As a result, excess liquidity persisted in the interbank market, the extent of which can also be gauged from average monthly outstanding OMO position turning into net absorptions after a period of 53 months in October 2018. In the month of December, however, banks actively participated in T-bill auctions (following the 30th November policy rate hike), and the government was able to retire its SBP debt. This month also witnessed a sharp surge in bank deposits (up Rs 378.5 billion), which supported interbank liquidity. Therefore, throughout the quarter, banks remained eager to scale up their lending to the private sector.

However, the overall credit demand conditions in the private sector were not conducive, especially for fixed investment loans. Fewer businesses took a long-term view of the economy and undertook fresh capex activity during the quarter; moreover, the scheduled retirements of previously taken loans (especially in non-manufacturing sectors) were also falling due. With regards to working capital loans, while nominal loan requirements were quite large due to prevailing cost push pressures in the economy (**Figure 3.3**), the demand came from fewer borrowers (a 25.6 percent YoY drop was seen in number of loan applications during Q2-FY19).[2]

Figure 3.3: Inflation in Key Inputs (WPI and CPI) during H1



Data source: Pakistan Bureau of Statistics

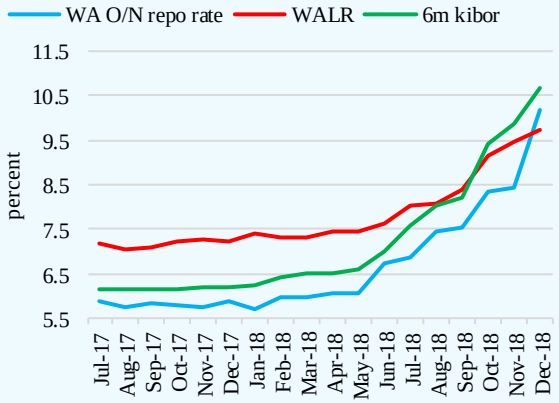
For instance, the demand for working capital loans remained strong particularly from export-oriented industries of textiles and basmati rice. Input purchases in these two sectors were quite upbeat, as an improved demand prevailed for their products in advanced economies. The impact of these purchases on bank borrowings was pronounced due to a steep rise in raw material prices (e.g., cotton and imported chemicals) amid currency depreciation, as well as cash flow constraints faced by these firms due to pending refunds claims.

[2] Nominal requirements per application more than doubled compared to the same period last year.

Thus, with falling number of loan applications, a stiff competition persisted among banks to secure blue-chip on their books. This gave businesses more negotiating powers on price settlement, which limited banks' ability to pass on the impact of overnight rates to the retail lending rates (**Figure 3.4)**. As a result, the overall offtake in private credit more than doubled compared to the same quarter last year (**Figure 3.5**).

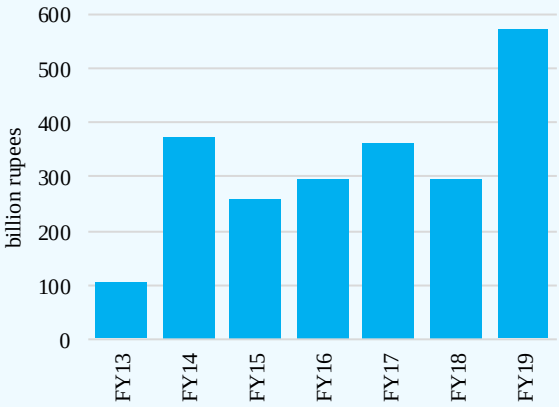
With government borrowings already growing at a rapid pace, the large volume of private credit off-take led to a steep rise in net domestic assets of the banking system during Q2-FY19 (**Table 3.2**). This increase was large enough to offset the contraction in net foreign assets of the banking system, and resulted in a higher monetary expansion during the quarter.

Figure 3.4: Trend in Key Money Market Rates



Data source: State Bank of Pakistan

Figure 3.5: Half Yearly Flows of Credit to Private Sector



Data source: State Bank of Pakistan

Table 3.2: Monetary Aggregates

billion Rupees	FY18 Q1	FY18 Q2	FY18 H1	FY19 Q1	FY19 Q2	FY19 H1
Net budgetary borrowing	369.9	-56.7	313.2	84.6	566.0	650.6
From SBP	201.2	-203.9	-2.7	1518.3	-261.2	1257.1
From scheduled banks	168.7	147.2	315.9	-1433.7	827.3	-606.5
Credit to private sector	-37.4	333.7	296.3	127.9	442.5	570.4
Credit to PSEs	5.1	60.9	66.0	60.7	84.4	145.1
Other items (net)	-130.6	-21.9	-152.5	-91.8	66.5	-25.3
Net domestic assets	170.2	340.6	510.8	171.0	1,087.5	1,258.4
Net foreign assets	-258.6	84.2	-174.4	-148.5	-532.6	-681.2
Money supply (M2)	-88.4	424.8	336.4	22.4	554.8	577.3
Reserve money	-134.7	151.5	16.8	-31.0	198.5	167.5

Data source: State Bank of Pakistan

3.2 Government borrowings

Net budgetary borrowings from the banking system more than doubled in H1-FY19 compared to the same period last year, and reached a multi-year high of Rs 650.6 billion. Bulk of this amount was taken during Q2-FY19, when a sharp fall in external financing together with an increase in the fiscal deficit raised the government's funding requirements from domestic sources. Within the banking system, a noticeable change during the second quarter was a shift in the composition of budgetary borrowings in the month of December 2018. While the government had borrowed heavily from SBP in Q1-FY19 and retired Rs 1.4 trillion to scheduled banks, it scaled up its borrowings by Rs 827.3 billion from commercial banks and retired part of its debt to SBP during Q2-FY19. This shift came on the back of banks' renewed interest in the T-bill auctions post November 2018 policy rate hike (along with prior interest rate adjustments), which induced them to actively participate in the T-bill auction held in December 2018.

As a result, during Q2-FY19, net-of-maturity acceptances of T-bills increased to Rs 1.0 trillion (**Table 3.3**). However, banks continued their cautious bidding behavior as they kept on placing a majority of bids in the 3-month T-bills in anticipation of further increase in interest rates. By end December 2018, nearly all the banks' investments in 6-month and 12-month papers had matured and almost the entire Rs 5.4 trillion T-bill portfolio comprised 3-month papers.

Table 3.3: Auction Profile of Government Securities (face value)
billion rupees

	T-Bills			PIB -fixed rate			PIB -floating rate		
	Target	Offered*	Accepted	Target	Offered*	Accepted	Target	Offered*	Accepted
In gross terms									
Q1-FY18	3,900.0	4,511.2	4,406.3	300.0	104.1	55.6	-	-	-
Q2-FY18	3,600.0	4,586.5	3,601.2	200.0	54.3	0.0			
Q1-FY19	5,450.0	5,119.0	4,687.0	150.0	64.1	20.6	150.0	151.5	108.3
Q2-FY19	4,600.0	5,779.7	5,431.4	150.0	45.3	22.5	150.0	93.4	0.0
Net of maturity									
Q1-FY18	218.5	829.7	724.8	-296.6	-492.5	-541.0	-	-	-
Q2-FY18	-5.0	981.5	-3.8	200.0	54.3	0.0			
Q1-FY19	-210.6	-541.6	-973.6	-311.1	-397.1	-440.6	150.0	151.5	108.3
Q2-FY19	198.5	1,378.2	1,030.0	150.0	45.3	22.5	150.0	93.4	0.0

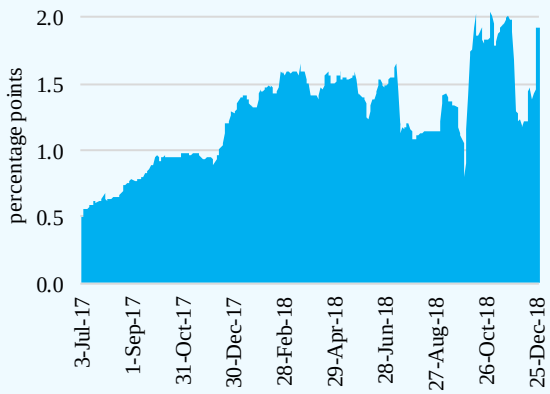
* Offered amount excludes non-competitive bids

Data source: State Bank of Pakistan

Moreover, it has become quite apparent since the beginning of this tightening cycle that banks' participation in auction of 3-month papers lessens as well after the very first auction following the monetary policy decisions. This strategy has helped banks minimize their exposure to the interest rate risk in the rising interest rate scenario. Since SBP had been regularly conducting OMOs to absorb excess liquidity, banks increasingly used this window as an alternative investment avenue to temporarily park their funds coming from maturities of government papers, until the policy rates were further adjusted.

Likewise, the demand for longer tenor instruments, fixed rate PIBs, also remained muted. The total offers stood at Rs 45.3 billion during Q2-FY19 compared to a target of Rs 150.0 billion. However, a notable development was a sharp increase in cut-off rates by the government on the very last auction of the second quarter. Cutoff yields for 3-year, 5-year and 10-year PIBs were increased by 4.75 percent, 4.22 percent, and 4.45 percent respectively. Importantly, banks' bidding pattern in this auction clearly indicated that despite a 425 bps increase in policy rates between January and November 2018, medium term expectations regarding inflation and interest rates were quite entrenched. In the secondary market also, the spread between 3-month and 3-year paper remained at an elevated level throughout the quarter (**Figure 3.6**).

Figure 3.6: PKRV Yield Spread (3Y - 3m)



Data source: State Bank of Pakistan

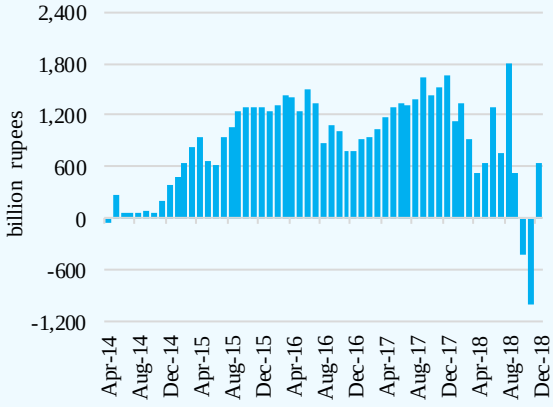
Meanwhile, floating rate PIBs attracted higher amount of offers compared to fixed rate in all tenors combined; however, majority of the offers were placed at higher margins than the previously accepted cut-off. Since the margin remains constant throughout the life of this instrument, the government scrapped the only floating rate PIB auction held during the quarter in order to avoid the additional borrowing cost.

3.3 Liquidity management

In order to have a better picture of liquidity developments during Q2-FY19, the two contrasting periods, the first two months and December, need to be discussed independently.

During October and November 2018, the government's retirements to scheduled banks swelled to Rs 1.3 trillion,

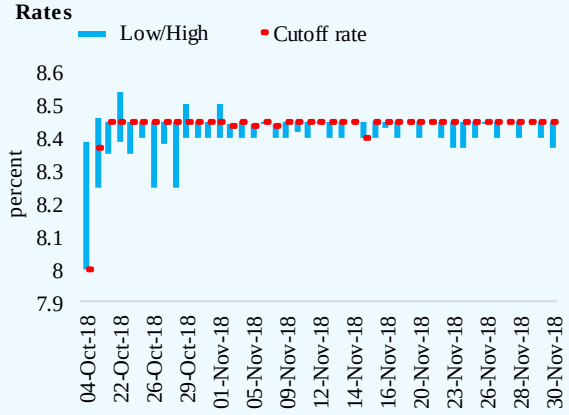
Figure 3.7: Trend in Monthly Average of OMOs



Data source: State Bank of Pakistan

which more than offset the liquidity pressures emanating from higher credit offtake from the private sector and public sector enterprises combined. The resultant surplus liquidity was absorbed by the SBP through calibrated interventions. As a result, the average outstanding OMOs during the review period remained negative Rs 708.6 billion (net absorptions) compared to Rs 1,468.9 billion (net injections) during the same period last year **(Figure 3.7**). Here it is important to note that in six OMOs during these two months, SBP accepted fewer bids than offered as banks were eyeing higher cutoffs (**Figure 3.8**). Thus, with excess liquidity staying in the interbank market on these occasions, overnight rates remained suppressed. Consequently, weighted average overnight rates remained on average 11 basis points below the policy rate in October and November, compared to a deviation of 3 basis points above the policy rate in the same months of 2017.

Figure 3.8: Banks' Bidding Pattern in OMOs and Cutoff Rates



Data source: State Bank of Pakistan

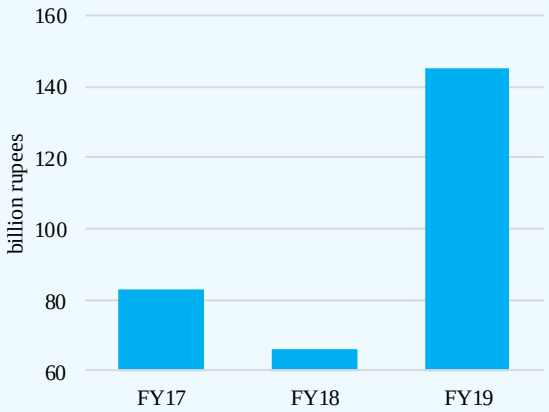
However, as mentioned earlier, in the month of December scheduled banks' interest in the government securities was revived after the policy rate hike on 30th November 2018. Liquidity pressures stemming from their voluminous participation in the T-bill auctions were further deepened by a sharp increase in private sector credit. While some of these pressures were compensated by increased deposits mobilization, SBP had to step up the OMO injections to keep the overnight rates close to the policy rate. On average, the outstanding stock of OMOs jumped to Rs 629.9 billion (net injection) during the month. Still, the overnight rates remained at an elevated level of 25 basis points on average above the policy rate.

3.4 Credit to PSEs and Commodity Financing

Credit availed by the public sector enterprises (PSEs) was almost two times higher in H1-FY19 compared to last year (**Figure 3.9**). Energy-related entities accounted for nearly 95 percent of this credit flow. Among the major PSE borrowers, Power Holding Private Limited availed Rs 50.2 billion credit for the settlement of power sector payables. PSO, on the other hand, availed financing to

manage its liquidity constraints arising from circular debt, particularly due to pending receivables from different energy related enterprises.

Figure 3.9: Half Yearly Flows of Credit to PSEs



Data source: State Bank of Pakistan

Partially because of excess liquidity issues, scheduled banks' exposure to the energy sector has registered striking increase since FY17. Scheduled banks have been comfortable disbursing loans to this sector, as energy sector loans are generally considered to have low credit risk since most of these are government guaranteed (**Box 3.1**).

Loans for commodity operations recorded net contraction during H1-FY19, which was higher than the retirement in the same period last year (**Table 3.4**). This contraction entirely stemmed from wheat loans, as financing for other commodities saw a modest rise during the period under review. Offloading of wheat stock, specifically in international market, enabled the procurement agencies to make significant loan retirements.[3]

Table 3.4: Commodity Financing

billion Rupees	H1-FY17	H1-FY18	H1-FY19
Wheat	-77.8	-11.2	-91.8
Cotton	-1.9	0.0	0.0
Rice	0.0	0.1	0.0
Sugar	3.5	-2.1	2.1
Urea	-6.6	-1.5	4.2
Total	-82.8	-14.6	-85.4

Data source: State Bank of Pakistan

Box 3.1: Implication of Energy Sector Loans for Banking System Stability

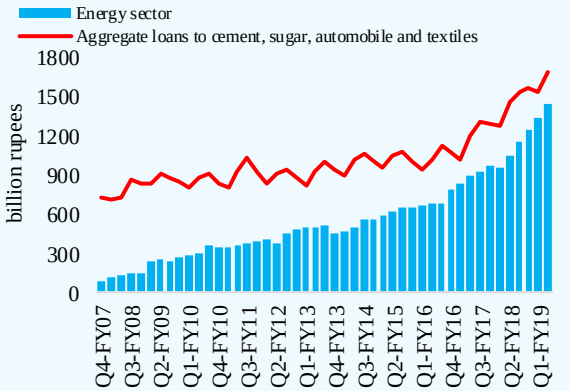
During the last decade, domestic banks' exposure to the energy sector has steadily increased.[4] Advances to the energy sector, which accounted for only 4.8 percent of total advances of the banking system at end-December 2007, jumped to around 17 percent by end-December 2018.

[3] During H1-FY19, 461.3 thousand MT wheat was exported, as compared to only 173 MT in H1-FY18. The bulk of the exports was made in Q1-FY19, whereas a very small quantity was exported in Q2-FY19. The federal government limited freight subsidy to Passco only whereas the provincial procurement agencies were required to get subsidies from their respective provincial governments.

[4] The energy sector comprises of an integrated chain of different entities, including oil & gas exploratory firms, refineries, oil marketing companies, power generation and distribution, and gas distribution companies.

Importantly, the outstanding loans of the energy sector have surpassed banks' combined exposure to major manufacturing concerns, such as textile, chemical, automobile and cement (**Figure 3.1.1**). This section will evaluate the implications of the large exposure to energy sector on the stability of the banking system using the standard CAEL framework, which includes capital adequacy, asset quality, earnings and liquidity.

Figure 3.1.1: Comparison of Bank's Exposure to Energy Sector viz-a-viz Other Major Sectors



Data source: State Bank of Pakistan

The increased borrowing reflects both expansions as well as cash flow constraints

As things stand, the sector owed around Rs 1.4 trillion to banks at end-December 2018, up from just Rs 129.6 billion at end-December 2007 (**Table 3.1.1**). More than half of this amount is owed to public sector entities like PHPL, Wapda, SSGC, SNGPL and PSO, etc. Since the country has experienced a noticeable increase in generation, distribution and transmission capacities in both power and gas sectors, the hike in energy loans is understandable (**Table 3.1.2**).

Table 3.1.1: Dependence of Energy Sector on Banking System

In billion Rs

	2008	2012	2017	2018
Circular debt estimates*	195.8	400.7	750	1,196
Receivables of Discos*	105.8	385.6	729.9	824.4
Banks' exposure in overall energy sector** (end June)	142.4	483.1	971.1	1,245.8

Data source: *Senate Report; **State Bank of Pakistan

Table 3.1.2: Performance Indicators of Energy Sector

	Unit	2008	2012	2017	2018
Electricity Gen Capacity*	GW	19.4	22.8	29.9	30.7
Transmission Capacity*	000 km	13.2	14.3	17.3	18.1
Gas distribution lines**	000 km	71.9	102.4	123.5	132.1

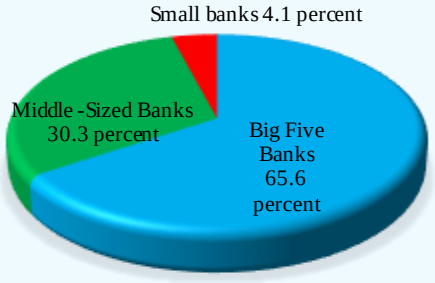
Data source:*For 2018, Senate Report, NTDC and KEL, for 2008, and 2012 Energy Year Book and NEPRA; **For 2008, 2012 and 2017 Energy Year Book, for 2018 Economic Survey.

Moreover, the government has been encouraging PSEs to generate their own funds to finance their capital expenditures, instead of relying on PSDP allocations. But since these energy-related PSEs have remained cash strapped due to recurring cash flow problems, most of them had been tapping bank funding to meet their expansion outlays. Not just that, even for working capital requirements, energy-related PSEs had been borrowing from banks.

Energy loans are widely dispersed across banks

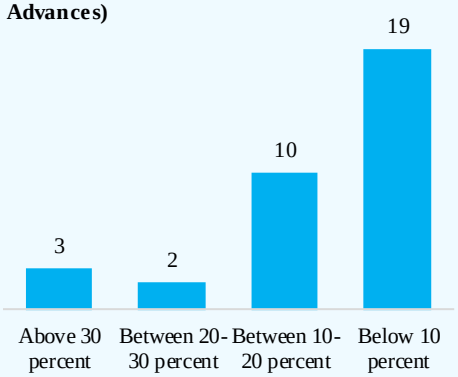
Bank-wise analysis suggests that almost all the scheduled banks are involved in lending to the energy sector, irrespective of their size as well as ownership (**Figure 3.1.2**). However, the level of exposure varies; for instance, in case of four largest banks, the share of energy in total advances ranged between 23 percent and 32 percent by end-December 2018. But in case of other medium size banks, the exposure varies. In overall terms, energy loans constitute more than 10 percent of advances in nearly half of the commercial banks.

Figure 3.1.2a: Bank -Wise* Share in Power Sector Loans



* Banks classification by total asset; large > Rs 1.1 trillion, middle-sized < Rs 1.1 trillion but > Rs 0.35, small < Rs 0.35 trillion.
Data source: State Bank of Pakistan

Figure 3.1.2b: Frequency Distribution of Banks (Power Sector Advances as Percent of Total Advances)



Limited risk in sight from stability perspective

From capital adequacy perspective, lending to energy sector is actually in commercial banks' interest. Since the counterparty to most energy loans are public sector enterprises, credit risk is negligible, and in most cases, these loans are backed by explicit government guarantees (**Table 3.1.3**). In fact, in case of major borrowers such as PHPL and WAPDA, the current guarantee cover actually exceeds the outstanding amount of loans. Effectively, when banks lend against government guarantees, they generate an asset as risk-free as T-bills or PIBs on their book; this means that they assign zero risk weight for the calculation of capital charge. Therefore, despite significant exposure to this sector, the banking system continues to maintain a capital ratio that is sufficiently above the minimum regulatory requirement.

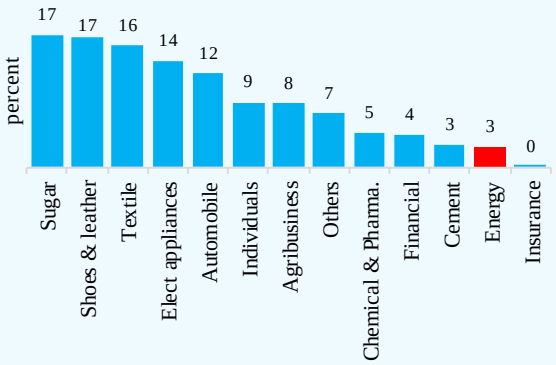
Table 3.1.3: Loans to Major Parties within Energy
billion Rupees

	Outstanding loans	Govt. guarantee
PHPL	516.5	582.9
PSO	144.3	0.0
Wapda	88.4	214.2
SNGPL & SSGC	96.2	48.6
NTDC	21.2	28.6
Genco III	19.2	24.7
Sub-total	**885.8**	**898.9**

Source: SBP and Debt Office, MoF

From an asset quality standpoint, two aspects are important to note: First, the energy sector has the lowest infection ratio (non-performing loans as percent of total loans) among all the non-financial sectors (**Figure 3.1.3**). Only 2.7 percent of banks' energy loan portfolio is classified (in gross terms), which is below the overall ratio of 8.0 percent by end-December 2018. Second, while most of the PSE loans in the energy sector are backed

Figure 3.1.3: NPLs to Advances Ratio of Different Business Segments (As on 31st Dec 2018)

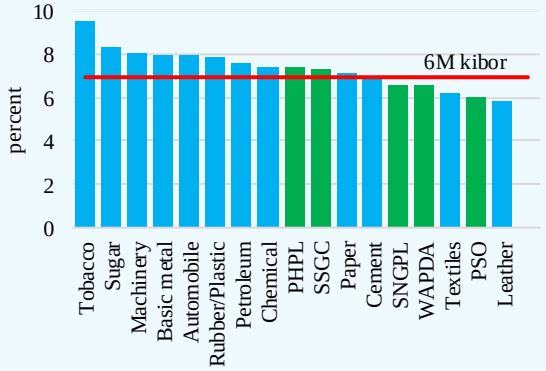


Data source: State Bank of Pakistan

by government guarantees, there has not been a single incidence of a guarantee being called. Here it is also worth noting that the power sector regulator, Nepra, has allowed the federal government to impose the financing cost surcharge of 43 paisa per unit in consumer tariffs (estimating to the collection of Rs 30-32 billion), to ensure smooth debt servicing to commercial banks.

In terms of earnings also, banks are at an advantageous position while lending to the energy sector. This is because despite the guarantee cover, majority of the energy sector loans entail market rate of return. For instance, all the lending facilities availed by PHPL during FY18 were contracted at 6m Kibor plus 200 bps, whereas those in FY19, were contracted at 3m Kibor plus 200 bps (**Figure 3.1.4**). Similarly, the financing of Wapda's Neelum Jhelum hydro project was settled at 6m kibor plus 113 bps. These rates are actually higher than the mark-up that banks are collecting from their prime customers in the private sector.

Figure 3.1.4: Comparison of Outstanding Lending Rates in Major Manufacturing Sectors and SOEs (end-June 2018)



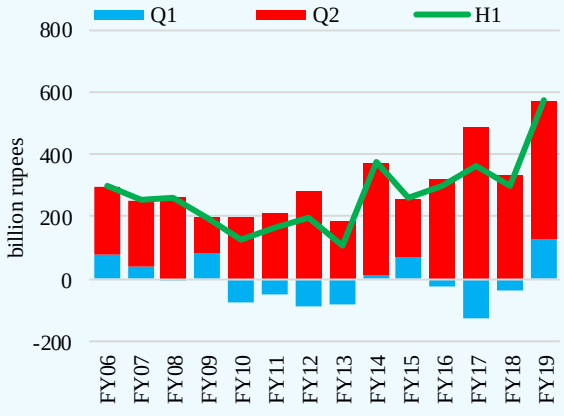
Data source: State Bank of Pakistan

The only concern for the banking system could be the implications for liquidity. Nearly 15 percent of the net-of-SLR deposits are stuck in energy-related funds. On average, banks' exposure to the energy sector has been rising by Rs 98.2 billion every quarter since December 2017. Though banks are complying with required liquidity ratios, the persistent increase in their exposure to the energy sector may trigger supply-side pressures in the credit market. In this context, it is important to note that the government has recently issued Sukuks worth Rs 200 billion to ease liquidity pressures in the energy sector.

3.5 Credit to Private Sector

Credit to the private sector rose by Rs 570.4 billion in H1-FY19, compared to a Rs 296.3 billion rise in the same period last year (**Figure 3.10**).

Figure 3.10: Trend in Flows of Credit to Private Sector



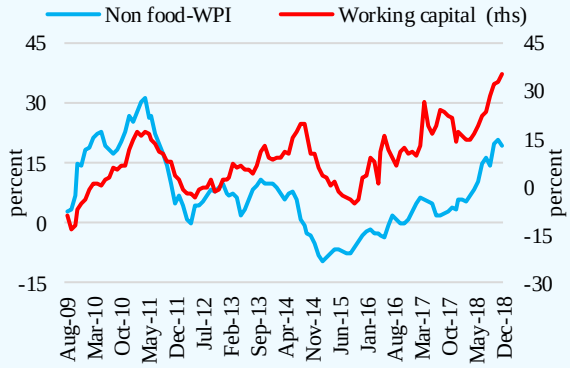
Data source: State Bank of Pakistan

This trend was driven primarily by: (i) increased export-related activity in textiles and basmati rice; (ii) a sharp rise in raw material prices, as the impact of higher fuel prices and exchange rate depreciation played out (**Figure 3.11**); and (iii) liquidity constraints stemming from lower

sales/inventory build-up and pending refund claims. The impact of the last one was also reflected in significant withdrawals in deposits in these sectors.

On the other hand, the momentum of overall fixed investment loans weakened during Q2-FY19. Net retirements by construction and transport, storage and communication sectors largely offset the impact of fresh activity in textiles, cement and power sectors.

Figure 3.11: YoY Trend in Non Food WPI and Manufacturing Working Capital Loans



Data source: Pakistan Bureau of Statistics and State Bank of Pakistan

Working Capital

Working capital rose by Rs 469.7 billion in H1-FY19, compared to Rs 167.5 billion in the same period last year, and explained the bulk (92.7 percent) of variation in loans to private businesses (**Table 3.5**).

Table 3.5: Loans to Private Sector Businesses in H1 (flow in billion Rupees)

	Total Loans		Working Capital*		Fixed Investment	
	FY18	FY19	FY18	FY19	FY18	FY19
Private sector businesses	**241.3**	**506.7**	**167.5**	**469.7**	**73.8**	**37.0**
Manufacturing	139.9	384.5	77.5	348.4	62.3	36.1
Textiles	127.2	202.5	85.4	187.4	41.8	15.1
Rice Processing	38.8	45.8	38.0	42.7	0.8	3.1
Refined petroleum	2.9	33.0	7.1	36.6	-4.3	-3.5
Cement	15.6	27.2	9.1	7.5	6.4	19.7
Edible oil and ghee	18.6	25.3	16.1	28.9	2.5	-3.6
Motor vehicles	1.7	21.5	1.5	19.7	0.1	1.8
Fertilizer	-41.3	17.0	-35.9	22.1	-5.4	-5.1
Iron & Steel	6.3	13.0	9.6	12.3	-3.2	0.7
Sugar	-68.1	-59.6	-72.5	-62.5	4.3	2.9
Electricity, gas and water supply	8.2	47.8	30.4	32.0	-22.2	15.8
Prod, trans and dist. of electricity	-1.5	49.0	26.4	31.3	-27.9	17.7
Prod, trans and dist. of gas	9.7	-1.2	3.9	0.7	5.7	-1.8
Commerce and Trade	45.0	56.7	38.7	54.0	6.3	2.7
Real estate & related	14.0	19.5	10.1	11.0	3.9	8.6
Transport, storage and communication	17.4	5.9	4.4	19.5	13.0	-13.6
Mining and Quarrying	3.1	5.8	0.7	2.5	2.4	3.3
Agriculture	12.2	1.0	3.9	7.1	8.3	-6.1
Construction	2.4	-6.3	0.2	6.4	2.2	-12.7
Ship breaking etc.	5.1	-13.8	5.9	-14.7	-0.8	1.0

Source: State Bank of Pakistan, *includes trade financing

Manufacturing concerns were prominent as textiles, rice processing, refined petroleum, edible oil and ghee, fertilizer and motor vehicles manufacturers, all increased their short-term borrowings during H1-FY19. Sugar sector remained an exception, as it retired its short-term loans, which was consistent with the fall in its production amid lower domestic and international prices and carryover stocks from the previous year.

Export-related activity went up

From sectoral perspective, textiles' working capital loans contributed more than half to the overall increase in manufacturing loans in Q2-FY19, as firms scaled up their raw material purchases amid strong domestic demand as well as rising exports to the EU. In particular, the volume of value added exports grew by double digits in H1-FY19 (**Chapter 5**). However, activity alone does not explain such a large increase in working capital requirements (52.7 percent YoY in Q2-FY19). Moreover, the subsidized export refinance scheme constituted only 17.0 percent of working capital loans of the sector in H1-FY19, compared to 30.2 percent last year.

Other factors, such as an increase in raw material prices as well as higher energy costs, explain the increased borrowing requirements of the firms. For instance, cotton prices in the domestic market were 34.7 percent higher during H1-FY19 compared to the same period last year. Similarly, prices of other imported inputs like chemicals, bleaching agents and garment accessories went up due to exchange rate depreciation. Importantly, the sector also faced liquidity constraints during the period due to stuck up refunds with FBR (to the tune of Rs 44 billion). Firms tried to compensate for these constraints by drawing down their deposits: the sector withdrew Rs 33.6 billion of deposits during H1-FY19, whereas last year its deposits had risen by Rs 8.1 billion.

Similarly, increase in borrowing by rice processing units can also be explained by growing penetration of basmati varieties in the EU. This was the second consecutive year when rice processors have increasingly borrowed during H1-FY19 to finance their working capital.

Increasing raw material prices and liquidity constraints faced by automobile sector

Funding requirements of car assemblers increased primarily due to higher cost of components and accessories. This reflected the impact of exchange rate depreciation, imposition of regulatory duties as well as cash margin requirements on the import of completely- and semi-knocked down units. Typically, car assemblers finance their operations using deposits from customers' pre-payments as well as internal cash flows. However, due to more-than-expected fall in their

sales, stemming from the ban on non-filers from purchasing/registering cars, a significant inventory was built up that constrained the assemblers' cash flows. As a result, their reliance on bank borrowings increased sharply.[5]

Higher crude prices raised need for inventory financing

Global crude prices recorded a significant increase of 45.5 percent in Q1-FY19, compared to 12.3 percent in Q1-FY18. Though prices started falling from October 2018 onward, the impact of increased prices in Q1-FY19 was more pronounced for private businesses in storage and marketing of oil and raised inventory financing requirements during H1-FY19. Besides, these companies are also expanding their network across the country, which also contributed to increased borrowings.

In associated businesses such as refineries, the higher global crude prices and exchange rate depreciation increased working capital requirements of these firms. Furthermore, gross refining margins were also squeezed during the quarter, as firms were unable to pass on the full impact of higher crude prices on their products' prices (as per firms' financial statements). Most refineries also faced cash flow constraints due to rising inventories of furnace oil following the government's decision to shift thermal power generation from furnace oil to RLNG. In case of thermal power producers, higher fuel cost along with inter-company settlements raised borrowing requirements. These entities increasingly borrowed for short-term fund management during H1-FY19, compared to the same period last year.

In case of fertilizer, revival in production along with rising input costs raised short-term borrowing to Rs 22.1 billion in H1-FY19, compared to net retirements of Rs 35.9 billion last year.[6] Big urea producers remained the main borrowers. Besides production activity, the impact of 50.4 percent increase in feedstock prices in Q2-FY19 also played a role in raising manufacturers' short-term borrowing need.[7]

Fixed investment loans lose momentum

With the moderation in the overall economy, demand for fixed investment loans suffered, as these rose only Rs 37.0 billion in H1-FY19, compared to Rs 73.8

[5] Local assemblers produced 9,456 more cars than they could sell during H1-FY19, compared to the gap of 4,355 and 4,321 for the same period of FY17 and FY18, respectively. While a positive supply-demand gap already existed in earlier years, it more than doubled in H1-FY19, hinting towards inventory buildup and the ensuing liquidity constraints (Data source: PAMA).
[6] Fertilizer production rose by 6.5 percent in H1-FY19, against a decline of 9.8 percent in H1-FY18.
[7] Effective from September 27, 2018 the government raised feedstock rate for many fertilizer units to 185 per MMBTU from 123 per MMBTU (Source: OGRA).

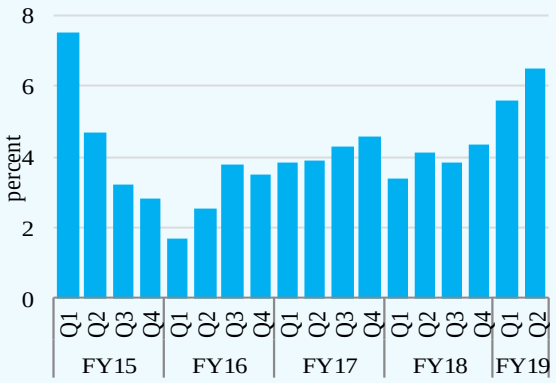
billion last year. Though manufacturing concerns in textile, cement and power generation cumulatively borrowed Rs 52.5 billion in H1-FY19, non-manufacturing sectors such as transport, storage & communication, construction and agriculture diluted the impact by retiring long-term loans during the period. Resultantly, fixed investment loans could grew only Rs 2.2 billion in Q2-FY19, compared to Rs 19.8 billion in Q2-FY18.

Within manufacturing, textile firms continued to borrow for BMR and benefitted from SBP's subsidized refinance schemes such as LTFF, which constituted around 78 percent of the increase in the sector's long term loans during H1-FY19, compared to 39.0 percent in the same period last year. This trend was also consistent with growing import of textile machinery during H1-FY19.[8] Meanwhile, cement industry increased its long-term borrowing by Rs 19.7 billion to finance ongoing capacity expansion projects smoothly. In case of electricity production and distribution, besides borrowing by other private producers such as IPPs and wind projects, K-Electric remained the key player during H1-FY19, as it financed its capital expenditure on transmission network in its jurisdiction.

3.6 Inflation

Average headline CPI inflation increased to 6.5 percent during Q2-FY19, compared to 4.1 percent during Q2-FY18 (**Figure 3.12**). This was the highest quarterly inflation since Q1-FY15, when global crude oil prices hovered around USD 100 per barrel.

Figure 3.12: Quarterly Trend in Average Headline CPI Inflation



Data source: Pakistan Bureau of Statistics

Inflation during Q2-FY19 remained broad based

It is important to note that inflation was quite dispersed across items within the CPI basket (**Figure 3.13**). For instance, 64.4 percent of the items recorded inflation in the range of 5 percent or more during Q2-FY19, whereas the share was 30.2 percent during Q2-FY18. This represents the prevalence of some underlying

[8] In rupee terms, textile machinery imports rose by 7.6 percent in H1-FY19, compared to the 12.8 percent increase in the same period last year (Data source: Pakistan Bureau of Statistics).

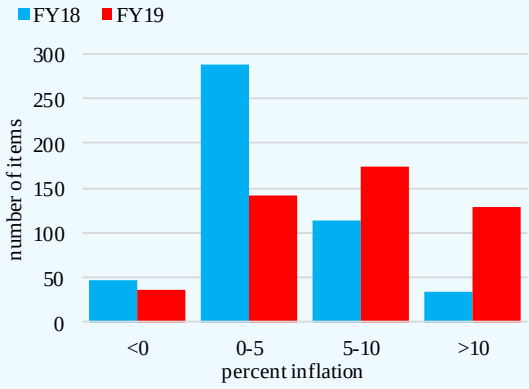
demand in the economy, as well as continued pass-through of exchange rate depreciation and higher fuel prices.

Energy inflation emerged as the dominant factor during Q2-FY19

Energy inflation remained noticeably high due to double-digit surge in prices of natural gas, kerosene, petrol, diesel, CNG and LPG (**Figure 3.14**). Most prominent was the revision in natural gas tariffs and CNG prices in the second quarter.

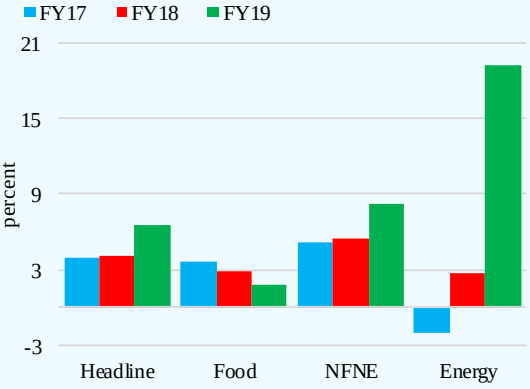
Oil and Gas Regulatory Authority revised the retail prices of natural gas for various consumers after keeping them unchanged for about 2 years (**Figure 3.15**). With effect from 27th September 2018, the hike was primarily recorded in high-level slabs, that is, for users of more than 400 m^3 per month. The tariff for this slab increased from Rs 600 to Rs 1,460 per MMBTU/month. Due to this adjustment, high inflation (85.3 percent) was seen in gas prices during Q2-FY19. Singlehandedly, gas contributed about 1 percentage point in inflation during the quarter (**Table 3.6**), and accounted for about 15 percent share in headline CPI inflation of 6.5 percent during Q2-FY19.

Figure 3.13: Distribution of CPI Items during Q2



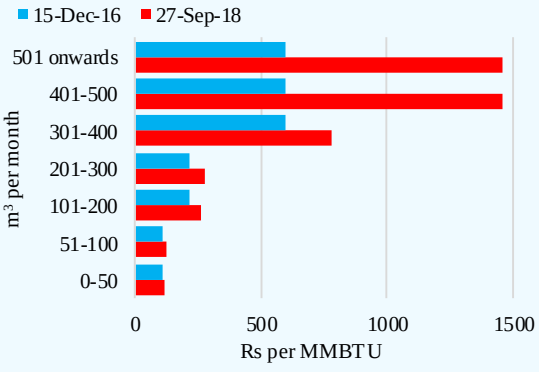
Data source: Pakistan Bureau of Statistics

Figure 3.14: CPI Inflation during Q2



Data source: Pakistan Bureau of Statistics

Figure 3.15: Slabs of Natural Gas Prices for Domestic Consumers



Data source: Oil and Gas Regulatory Authority

Table 3.6: Top and Bottom 10 Items Contributing to CPI Indices during Q2-FY19

Sub-indices	Weight	Contribution		Sub-indices	Weight	Contribution	
		Q1	Q2			Q1	Q2
Top 10	**52.5**	**3.9**	**5.5**	**Bottom 10**	**8.8**	**-0.2**	**-1.4**
House Rent	21.8	1.5	1.3	Onion	0.5	-0.2	-0.6
Gas	1.6	0.0	1.0	Tomatoes	0.4	0.1	-0.3
Clothing and Footwear	7.6	0.3	0.6	Fresh Vegetable	1.7	0.1	-0.3
Motor Fuel	3.0	0.5	0.6	Potatoes	0.5	-0.1	-0.2
Education	3.9	0.6	0.5	Pulse Mash	0.2	-0.1	0.0
Transport Services	2.7	0.3	0.4	Egg	0.5	0.0	0.0
Meat	2.4	0.3	0.4	Gram Whole	0.2	0.0	0.0
Milk Fresh	6.7	0.3	0.3	Pulse masoor	0.3	0.0	0.0
Chicken	1.4	-0.1	0.3	Besan	0.2	0.0	0.0
Cigarette	1.4	0.0	0.2	Electricity	4.4	0.0	0.0

Data source: Pakistan Bureau of Statistics

Food inflation remained moderate

Food inflation continued to remain benign during Q2-FY19. While prices of meat, chicken, and cigarettes posted double-digit inflation during the quarter, a sharp decline in prices of perishables (such as onions, tomatoes, potatoes and fresh vegetables) and pulses more than offset their impact (**Table 3.6)**.

Prices of meat typically increase in a stable manner; however, these have recorded sharp variations in recent months. Prices of beef, mutton, chicken and fish rose at a higher rate during Q2-FY19 as compared to the same periods of previous years. This can be explained by the increase in transport cost during Q2-FY19.

Core inflation continued with the upward trajectory

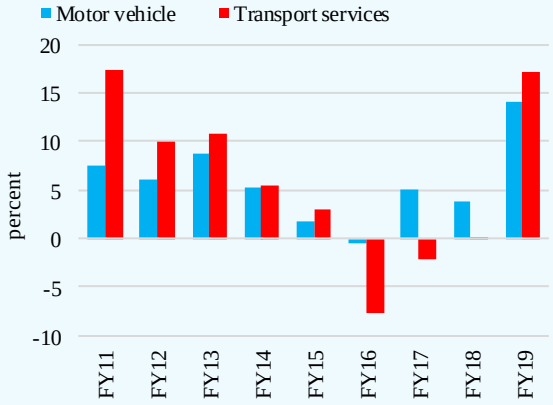
The core measure of inflation (non-food non-energy) rose considerably from 5.4 percent in Q2-FY18 to 8.2 percent during Q2-FY19. Importantly, YoY inflation has shown a rising trend for each month since March 2018. On the face of it, the consistently rising inflation in NFNE represents underlying demand pressures; however, delving deeper into its components reveals that cost-push pressures played a substantial role. The second-round impact of exchange rate depreciation determined the change in prices of various consumer goods, particularly goods manufactured with imported inputs. At the same time, higher fuel prices raised the production and distribution cost of goods and services.

Developments in clothing and footwear market shed some light on this aspect. The cost of production for textile industry has increased due to sharp rise in cotton prices as well as higher PKR cost of imported machinery, chemicals and other inputs amid exchange rate depreciation. Similarly, prices of footwear which were

almost stable during H1-FY18, rose by 7.6 percent during H1-FY19 due to higher import cost and operating expenses. Resultantly, of the total 59 items in clothing and footwear subgroup, an overwhelming majority of 47 items showed higher inflation during Q2-FY19 compared to only 20 items in Q2-FY18. Taken together, inflation in clothing and footwear doubled to 7.3 percent during FY19 compared to the same period last year.

Inflation in transport services during Q2-FY19 reached close to the unprecedented level observed during Q2-FY11 (**Figure 3.16**). The government passed on the impact of higher international oil prices and exchange rate depreciation to domestic fuel prices, which fed into rising transport fares. Similarly, in the automobile industry, PKR depreciation scaled up prices of imported CKD/SKDs, auto parts and accessories. Domestic car assemblers passed on this impact to their customers, and as a result, car prices (recorded in CPI) increased by 14.1 percent during Q2-FY19.

Figure 3.16: Inflation in Transport Sector during Q2

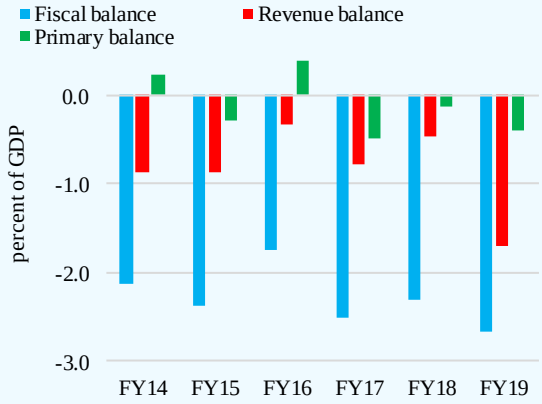


Data source: Pakistan Bureau of Statistics

4 Fiscal Policy and Public Debt

4.1 Overview

Figure 4.1: Fiscal Balance Indicators during H1



Data source: Ministry of Finance and SBP calculations

Fiscal indicators further deteriorated in the second quarter of the current fiscal year. The deceleration in revenue growth that started in Q1-FY19 intensified in the second quarter. The rigidities in interest payments persisted, which together with a sharp increase in defense expenditures resulted in a steeper growth in the revenue deficit. Moreover, the primary deficit owing to shortfall in revenue growth and higher growth in non-interest current expenditures, also recorded an increase.[1] Thus, fiscal deficit increased to 2.7 percent of GDP in H1-FY19 compared to 2.2 percent in H1-FY18 **(Figure 4.1)**. The financing burden fell on both the domestic and external sources, with major reliance on central bank borrowing in case of former and bilateral sources in case of latter.

The revenue collection during H1-FY19 remained lower than recorded in H1-FY18. Within that, while tax revenue growth decelerated, the non-tax revenue actually declined significantly during H1-FY19 **(Table 4.1)**. The slowdown in tax revenue was broad-based and driven by stagnant sales tax and direct tax revenues, along with deceleration in custom duties. Further, lower PSDP releases and reduced sales tax rates on POL products restrained the direct and sales tax collections respectively. Although moderation in aggregate demand led to an overall slowdown in tax collection, the exchange rate depreciation and increase in regulatory duties partially helped to improve Rupee collection in import-related taxes.

[1] The revenue balance is total revenue less current expenditures, while the primary balance is the fiscal balance excluding interest payments.

Table 4.1: Summary of Fiscal Operations
billion rupees

	Flows		Growth (%)	
	H1-FY18	**H1-FY19**	**H1-FY18**	**H1-FY19**
A. Total revenue	2,384.7	2,327.1	19.8	-2.4
Tax revenue	2,026.9	2,082.5	16.4	2.7
Non-tax revenue	357.8	244.6	43.4	-31.6
B. Total expenditure	3,181.0	3,357.0	14.0	5.5
Current	2,545.2	2,984.4	13.5	17.3
Interest payments	*751.4*	876.7	16.1	16.7
Defence	*393.4*	479.6	17.0	21.9
Development	574.8	361.1	15.6	-37.2
Net lending	2.0	8.3	131.4	311.8
Statistical discrepancy	59.0	3.2	3.1	-94.5
Fiscal balance (A-B)	-796.3	-1,029.9		
Financing	796.3	1,029.9		
External sources	384.1	218.0		
Domestic sources	412.2	811.9		
Banks	331.8	577.6		
Non-bank	80.4	234.4		
percent of GDP				
Total Revenue	6.9	6.1		
Tax revenue	5.9	5.4		
Non tax revenue	1.0	0.6		
Total Expenditure	9.2	8.7		
Current	7.4	7.8		
Development	1.7	0.9		

Data source: Ministry of Finance

Non-tax revenue collection recorded a significant drop during H1-FY19. The lower level was mainly due to reduced SBP profits. The decline was mainly on account of revaluation losses on SBP liabilities.

The expenditure growth also recorded significant deceleration primarily due to sharp cut in development spending during H1-FY19. The current expenditures, on the other hand, recorded a higher growth both at federal and provincial level. The growth in federal current spending was on account of higher interest payments and defense expenditures. Particularly, interest payments on external debt went up due to PKR depreciation and increase in LIBOR.[2] Moreover, recent monetary tightening (350 basis points increase in SBP policy rate during H1-FY19) resulted in higher interest payments on domestic debt.

[2] LIBOR, on average, increased by around 1 percentage point on different tenors during H1-FY19 over the same period last year.

In this backdrop, the higher financing needs were met through both domestic and external sources with relatively higher reliance on the former. The external financing was availed through borrowing from bilateral sources, and domestic financing came from SBP and non-bank sources. Resultantly, the accumulation in external and domestic debt recorded significant increase. While the increase in domestic debt was driven by higher financing needs, the external debt, in Rupee terms, grew mainly on account of exchange rate depreciation.

4.2 Revenue

Total revenues fell by 2.4 percent during H1-FY19, against 19.8 percent increase recorded in H1-FY18. The decline mainly stemmed from lower non-tax revenue collection **(Table 4.1)**. The non-tax revenue of both federal and provincial governments recorded a decline. In case of tax revenue, the growth was driven by FBR taxes, whereas provincial tax collection declined.

FBR taxes

FBR tax collection grew by 4.3 percent during H1-FY19 compared to 16.9 percent growth during the same period last year **(Table 4.2)**. The slowdown in FBR taxes was broad-based, contributed by deceleration in both direct and indirect taxes.

Table 4.2: FBR Tax Collection

billion rupees

		Collection		% growth	
	Target FY19	**H1-FY18**	**H1-FY19**	**H1-FY18**	**H1-FY19**
Direct taxes	1727	663.5	668.4	12.2	0.7
Indirect taxes	2671	1058.1	1126.4	20.1	6.5
Customs duty	735	281.5	336.0	29.1	19.4
Sales tax	1670	686.5	688.0	18.9	0.2
FED	266	90.1	102.3	5.5	13.6
Total taxes	**4398**	**1721.6**	**1794.8**	**16.9**	**4.3**

Data source: Federal Board of Revenue

The collection during H1-FY19 stood at 40.8 percent of the annual target, lower than average collection of 42.2 percent observed during first half of last five years. This requires 23.3 percent growth in H2-FY19 in revenue collection, in order to meet the full-year target. Given the average growth of 15 percent in H2 seen during the last five years, this seems to be a challenging prospect.

The break-up shows that direct taxes remained almost unchanged from last year's level, while indirect taxes recorded 6.5 percent growth during H1-FY19. The increase came entirely through higher collection from excise and custom duties, while collection from sales tax was almost the same as last year. Higher custom and excise collection emanated from imposition of regulatory duty and increase in

excise duty rates, particularly on cigarettes. Whereas, a slowdown in the domestic economy led to modest growth in both sales and direct taxes.

Direct taxes

Direct taxes grew by 0.7 percent during H1-FY19, compared to 12.2 percent growth recorded in H1-FY18 **(Table 4.3)**. The sharp fall in direct taxes' growth was mainly on account of slowdown of economic activities in the country.

While the growth of withholding tax from imports decelerated to 9.0 percent in H1-FY19 against 13.2 percent last year, collection from other major components observed decline during H1-FY19. Particularly, the reduction came from contracts, telephone and salaries. While less PSDP releases had an impact on income from contracts, lower collection from telephones was on account of suspension of taxes on mobile top-up by the Supreme Court. In case of salaries, the collection in H1-FY19 was lower than last year, despite some improvement in collection observed during Q2-FY19 compared to Q1-FY19.

Table 4.3: Major Revenue Spinners of Direct Taxes

billion rupees; growth in percent

	H1-FY18	H1-FY19	Growth
Collection on demand	**40.1**	**32.7**	**-18.5**
Voluntary payment	**174.2**	**192.8**	**10.7**
Withholding taxes	**491.5**	**449.4**	**-8.6**
Imports	104.8	114.2	9.0
Salaries	57.8	32.8	-43.3
Dividends	30.8	25.4	-17.5
Bank interest & securities	22.3	25.9	16.1
Contracts	127	106.5	-16.1
Exports	13.4	15.5	15.7
Cash withdrawal	16.1	17.8	10.5
Electricity bills	16.6	19.2	15.7
Telephone	25.1	3.7	-85.3
Miscellaneous	2.9	0.8	-72.4
Gross income tax	708.8	675.7	-4.7
Net direct tax	663.5	668.4	0.7

Data source: Federal Board of Revenue

Table 4.4: Major Revenue Spinners of Sales Tax

billion rupees; growth in percent

	H1-FY18	H1-FY19	Growth
Mineral Fuel, oil, and their products	128.4	103.7	-19.2
Vehicles	32.8	35.3	7.6
Nuclear reactor, boiler and machinery	29.7	34.5	16.2
Iron and Steel	32.3	34.3	6.2
Electric machinery and equipment	24.4	25.9	6.1
Oil refinery	77.2	71.5	-7.4
Electrical Energy	31.3	32.4	3.5
Oil Exploration	30.3	31.0	2.3
Oil Marketing Companies	24.0	16.2	-32.5
Others	276.2	303.4	9.8
Total	**686.5**	**688.0**	**0.2**

Data source: Federal Board of Revenue

Indirect taxes

The indirect tax collection grew by only 6.5 percent during H1-FY19, compared to a 20.1 percent growth last year. This slowdown was an outcome of slower growth in sales tax collection. Having around 60 percent share in indirect taxes, sales tax recorded only 0.2 percent growth in collection against 18.9 percent in the same

period last year **(Table 4.4)**. Besides slowdown in economic activities, this can be traced to lower tax rates on various petroleum products and overall decline in imports of petroleum products, particularly during Q2-FY19.[3]

The custom duty collection grew by 19.4 percent in H1-FY19 compared to 29.1 percent growth in H1-FY18 **(Table 4.5)**. The significant growth in collection came from increase in regulatory duty on non-essential consumer items. Though there was a slowdown in growth of import quantum, the PKR depreciation mainly helped maintain growth in value terms.

Table 4.5: Major Revenue Spinners of Excise and Custom Duty
billion rupees; growth in percent

	H1-FY18	H1-FY19	Growth
Custom Duty			
Vehicles	48.9	48.4	-1.0
Mineral Fuel, oil, and their products	30.3	41.5	37.0
Iron and Steel	19.8	25	26.3
Nuclear reactor, boiler and machinery	16.8	20.5	22.0
Electric Machinery and Equipment	14.5	19	31.0
Other	151.2	181.6	20.1
Total	**281.5**	**336**	**19.4**
FED			
Cigarettes & Tobacco	24.5	32.2	31.4
Cement	23.6	27.8	17.8
Total services	20	19.6	-2.0
Beverages & Concentrates	9.7	10.3	6.2
Others	12.3	12.4	0.8
Total	**90.1**	**102.3**	**13.5**

Data source: Federal Board of Revenue

The FED collection rose by 13.5 percent during H1-FY19 against 5.5 percent increase in the same period of last year. This higher growth was attributed to higher collection from cigarettes and cement. While surge in FED from cigarettes was due to higher tax rate on different brands, collection from cement was due to increased sales activity.[4]

Non-tax revenue

Non-tax revenues declined by 31.6 percent during H1-FY19 compared to a growth of 43.4 percent in same period last year **(Table 4.6)**. The major reduction came from transfer of lower SBP profit during H1-FY19. Importantly, SBP profit during H1-FY19 was almost half the level seen last year, largely on account of revaluation losses on SBP liabilities. On the contrary, revenues from royalties,

[3] The government has reduced sales tax rates on various petroleum products during H1-FY19. Moreover, the import growth of petroleum group declined to 3.6 percent in H1-FY19 from 29.0 percent in same period last year.

[4] Effective from 18th September 2019, the government revised FED on different cigarette brands through SRO # 1150(I) /2018. Moreover, the cement sales grew by 3.9 percent during H1-FY19 (Source: APCMA).

dividends, PTA profit, windfall levy and discount retained on crude oil increased during the period.

Table 4.6: Non-tax Revenues
billion rupees

	Actual	
	H1-FY18	**H1-FY19**
Mark-up (PSEs & others)	13.9	5.8
Dividends	19.2	30.2
SBP profits	125.2	63.2
Defense	6.1	6.3
Profits from post office/PTA	8.6	15.9
Royalties on gas & oil	26.6	41.9
Passport & other fees	7.5	9.3
Discount retained on crude oil	4.1	6.5
Windfall levy against crude oil	0.8	4.5
Petroleum levy on LPG	0.3	1.8
Other	145.8	59.3
Total	**357.8**	**244.6**

Data source: Ministry of Finance

4.3 Expenditure

The fiscal spending rose by 7.4 percent during H1-FY19, compared to 14.3 percent growth in the corresponding period last year. Despite higher growth in current spending, significant cut in development spending led to overall deceleration in expenditure growth. While development spending fell both at federal and provincial levels, the acceleration in current expenditure was mainly driven by higher growth in federal current expenditures **(Table 4.7)**.

Table 4.7: Fiscal Spending
billion rupees; growth in percent

				Growth	
	H1-FY17	**H1-FY18**	**H1-FY19**	**H1-FY18**	**H1-FY19**
Current expenditures	**2,241.6**	**2,545.20**	**2,984.40**	**13.5**	**17.3**
Federal	1,473.5	1,656.00	1,936.20	12.4	16.9
Interest payments	647.4	751.4	876.7	16.1	16.7
Defense	336.3	393.4	479.6	17	21.9
Public order and safety	51.4	59.5	68.8	15.8	15.6
Others	438.4	451.6	511.1	3	13.2
Provincial	768.1	889.3	1,048.20	15.8	17.9
Development expenditures	**497.4**	**574.8**	**361.1**	**15.6**	**-37.2**
PSDP	445.7	519.8	328.2	16.6	-36.9
Federal*	198.3	203	160.5	2.4	-20.9
Provincial	247.4	316.8	167.7	28.1	-47.1
Others (incl. BISP)	51.7	55	32.9	6.4	-40.2
Net lending	**-6.4**	**2**	**8.3**	**131.1**	**311.8**
Total Expenditure**	**2,732.6**	**3,122.0**	**3,353.8**	**14.3**	**7.4**

*Excluding grants to provinces

**Excluding statistical discrepancy

Data source: Ministry of Finance

The federal current expenditures grew by 16.9 percent in H1-FY19 compared to 12.4 percent increase in H1-FY18. This increase was largely due to higher interest payments and defense spending. The interest payments grew on both domestic

and external debt. Particularly, the interest payments on external loans more than doubled during H1-FY19. Both rise in LIBOR and PKR depreciation added to the debt servicing of external debt.

The overall development spending declined by 37.2 percent during H1-FY19 compared to a growth of 15.6 percent in the same period last year. In case of the federal government, both PSDP and other development spending declined during the period. A significant portion of the federal PSDP was related to infrastructure and power sector development.

4.4 Provincial Fiscal Operations

The provincial surplus reached Rs 273.2 billion during H1-FY19, almost 96 percent of the overall target set for FY19.[5] The major contribution came from Punjab and Sindh, followed by Balochistan. However, the surplus of Khyber

Table 4.8: Provincial Fiscal Operations
billion rupees

	Punjab	Sindh	KP	Balochistan	Total	Growth
H1-FY19						
A. Total Revenue	707.5	398.4	231.8	134.1	1471.8	4.9
Provincial share in federal revenue	583.3	297.1	195.9	123.0	1199.3	9.6
Provincial own revenue (I+II)	110.3	87.3	13.7	5.7	217.0	-9.9
I. Taxes	92.5	83.0	8.7	3.6	187.8	6.4
II. Non-tax revenue	17.8	4.3	5.0	2.2	29.3	-54.6
Fed loans and transfers	13.9	14.0	22.2	5.3	55.5	-18.6
B. Total expenditure	579.5	354.0	195.0	95.8	1224.3	0.9
Current	504.8	307.9	154.0	90.0	1056.6	17.9
Development	74.7	46.2	41.1	5.8	167.7	-47.1
Gap (A-B)	128.0	44.4	36.8	38.3	247.5	30.4
Financing* (overall balance)	**-119.0**	**-98.3**	**-12.7**	**-43.3**	**-273.2**	**34.0**
H1-FY18						
A. Total Revenue	677.3	379.3	223.7	122.5	1402.9	31.8
Provincial share in federal revenue	533.2	276.5	176.8	107.3	1093.8	26.1
Provincial own revenue (I+II)	113.1	80.7	36.0	11.1	240.9	33.0
I. Taxes	91.8	72.2	8.4	4.0	176.4	21.1
II. Non-tax revenue	21.3	8.5	27.6	7.1	64.5	82.3
Fed loans and transfers	31.0	22.1	10.9	4.1	68.1	327.5
B. Total expenditure	636.7	319.5	176.4	80.4	1213.1	18.7
Current	422.3	263.3	135.2	75.5	896.3	15.7
Development	214.4	56.2	41.2	4.9	316.8	28.0
Gap (A-B)	40.7	59.8	47.3	42.1	189.8	350.1
Financing* (overall balance)	**-69.5**	**-60.7**	**-21.0**	**-52.7**	-203.9	125.2

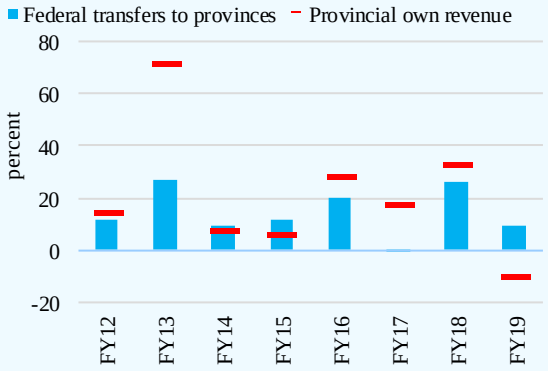
Negative sign in financing means surplus.
Data source: Ministry of Finance and SBP calculations

[5] The targeted provincial surplus is Rs 285.6 billion in the FY19 budget.

Pakhtunkhwa almost halved during H1-FY19 as compared to the previous corresponding period **(Table 4.8)**.

The provincial revenue grew by 4.9 percent during H1-FY19 as compared to 31.8 percent achieved in the corresponding period of last year. Having been dependent mostly on federal transfers, the decline in federal revenues affected the overall provincial revenue position during the first half. In addition, the *provincial own revenue* collection also declined by 9.9 percent **(Figure 4.2)**.

Figure 4.2: Growth Trends in the Main Sources of Provincial Revenue Generation during H1



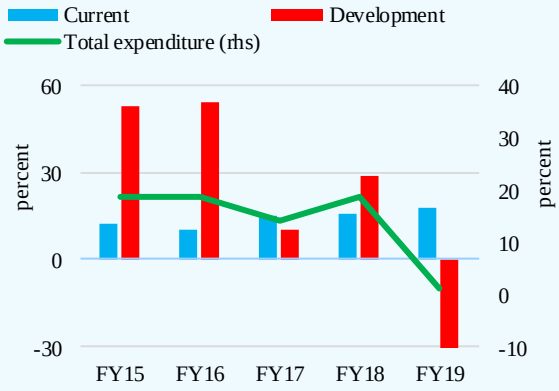
Data source: Ministry of Finance and SBP calculations

However, the provincial own tax revenue grew by 6.4 percent, compared to the growth of 21.1 percent last year. Major contributors were stamp duties, followed by excise duties and motor vehicle tax; however, General Sales

Tax on Services (GSTS) declined during the period. The decline in provincial own revenue mainly came from a reduction in non-tax revenue, which observed a sharp decline of 54.6 percent, compared to 82.3 percent growth last year. Apart from reduction in other sources, profits from hydroelectricity, the major source of provincial non-tax revenue, contracted to Rs 0.8 billion as compared to an addition of Rs 18.2 billion observed in the last corresponding period.

On the other hand, provincial expenditures grew by a meagre 0.9 percent during H1-FY19, as compared to 18.7 percent growth in the same period last year. Although provincial current expenditures recorded some growth, the development spending recorded a steeper

Figure 4.3: Provincial Spending Trends during H1



Data source: Ministry of Finance and SBP calculations

decline of 47.1 percent, which explains the overall lower growth in expenditure **(Figure 4.3)**.

4.5 Public debt

The country's gross public debt grew by 10.0 percent during H1-FY19, reaching Rs 27.5 trillion by end-December 2018. Both domestic and external debt, in Rupee terms, recorded significant increase as their flows almost doubled in H1-FY19 **(Table 4.9)**. However, it is important to note that the increase in external debt was mainly due to the impact of exchange rate depreciation on its outstanding stock (especially in Q2, PKR depreciated by 10.5 percent) despite much lower additional debt accumulation during H1-FY19. Due to higher financing needs and lower external financing, the domestic debt recorded a substantial increase of around Rs 1.1 trillion in H1-FY19.

Table 4.9: Pakistan's Public Debt Profile
billion rupees

	End period stocks		Flows			
			H1		FY19	
	Jun-18	Dec-18	FY18	FY19	Q1	Q2
Gross public debt	24,952.9	27,455.9	1,412.1	2,503.0	830.6	1,672.5
Government domestic debt	16,416.3	17,535.7	588.2	1,119.4	503.6	615.9
Government external debt	7,795.8	9,101.1	773.8	1,305.3	327.1	978.3
Debt from the IMF	740.8	819.0	50.1	78.2	-0.1	78.3
Total debt of the government*	23,024.0	25,238.2	1,243.9	2,214.3	693.7	1,520.5

*Gross public debt minus government deposits with the banking system.
Data source: State Bank of Pakistan

Domestic Debt

The deficit financing put major pressure on the domestic sources. Consequently, the domestic debt rose by Rs 1,119.5 billion during the first half of FY19, about twice the increase recorded in the previous corresponding period **(Table 4.10)**. Moreover, the government domestic debt was mostly short-term debt, with more reliance on the central bank borrowing during H1-FY19.

Table 4.10:Absolute Change in Government Domestic Debt
billion rupees

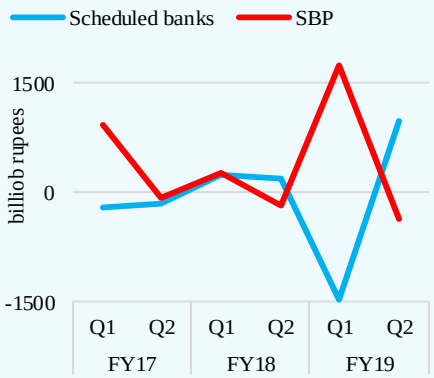
	H1		FY19	
	FY18	FY19	Q1	Q2
Government domestic debt	**588.2**	**1,119.5**	**503.6**	**615.9**
Permanent debt	-495.4	-277.4	-290.1	12.8
Of which				
PIBs	-541.0	-309.8	-332.3	22.5
Prize bond	45.6	77.6	42.1	35.5
Floating debt	1,038.2	1,398.6	778.7	619.9
Of which				
MTBs	747.7	22.8	-970.8	993.5
MRTBs	83.2	1,375.8	1,749.5	-373.7
Outright basis by SBP	207.3	0.0	0.0	0.0
Unfunded debt	45.1	-2.6	14.8	-17.4
Foreign currency loans	0.2	0.7	0.1	0.6

Data source: State Bank of Pakistan

Central bank borrowing increased

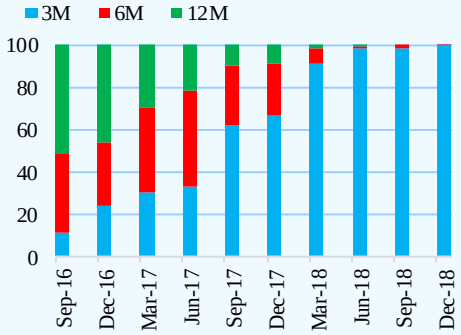
Cumulatively, the government mostly borrowed from SBP and retired its debt to commercial banks. The disaggregated data shows that in Q1, the government borrowed more from SBP, while in Q2, the government borrowed more from scheduled banks and retired some of its borrowing from the central bank **(Figure 4.4)**.

Figure 4.4: Sources of Domestic Debt



Data source: State Bank of Pakistan

Figure 4.5: Composition of Outstanding T-bills (percent)



Data source: State Bank of Pakistan

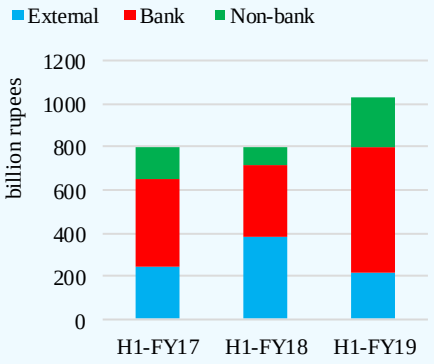
MTBs other than 3-months gathered less or no volume

Banks were more interested in 3-month treasury bills during H1-FY19. Amid monetary tightening observed during the recent past, banks were reluctant to invest in 6 and 12-month instruments. Consequently, the longer tenure treasury bills disappeared almost completely in the outstanding debt **(Figure 4.5)**.

The banks' expectation of a further rise in policy rate discouraged them to invest in long-term debt instruments, largely in order to manage market risk. Out of the total amount of Rs 203.9 billion offered for PIBs, only Rs 43.1 billion was accepted (mostly for 5-year tenor securities).

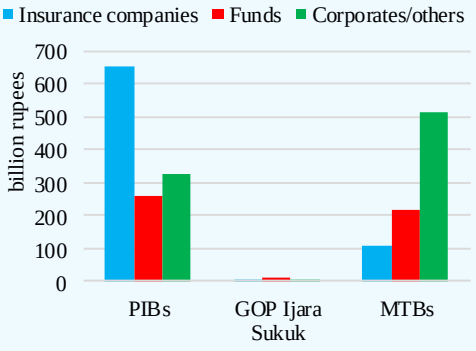
The share of non-bank sources in domestic debt, including mutual funds, insurance companies, corporates and individuals, improved slightly. Most of the debt accumulation from non-bank came from PIBs and MTBs **(Figure 4.6 and 4.7)**. Despite some increase in NSS rates, net inflows declined by Rs 4.6 billion during H1-FY19. The break-up of NSS shows that schemes like SSA and SSC (having features such as no penalty on early encashment and eligibility for institutional investment) recorded retirements, possibly reflecting a shift in investment towards mutual funds, insurance companies, and corporates. However, all other major schemes posted a net increase **(Table 4.11)**.

Figure 4.6: Financing Composition Duirng H1



Data source: Ministry of Finance

Figure 4.7: Domestic Debt Composition of Non-bank Sources



Data source: State Bank of Pakistan (up to Nov, 2018)

Public external debt

The public external debt and liabilities increased by US$ 3.1 billion (4.1 percent) during H1-FY19 compared to an increase of US$ 4.4 billion (6.7 percent) in the corresponding period of last year **(Table 4.12)**. In contrast with H1-FY18, in which loans were raised through issuance of Euro/Sukuk bonds, the loans during the current period came through bilateral

Table 4.11: Net Receipts under NSS Instruments*
billion rupees

	H1-FY18	H1-FY19
Defence Saving Certificates (DSC)	6.1	-1.0
Special Saving Certificates (SSC)	-25.5	-1.8
Regular Income Certificates (RIC)	5.1	17.4
Behbood Saving Certificates (BSC)	21.2	42.1
Special Saving Accounts (SSA)	29.4	-79.3
Saving Accounts (SA)	0.9	1.5
Others	9.1	16.5
Total	**46.4**	**-4.6**

*excludes short-term savings certificates
Data source: Central Directorate of National Savings

Table 4.12: Public External Debt & Liabilities
billion US$

	Stock		Flows			
			H1		FY19	
	Jun-18	Dec-18	FY18	FY19	Q1	Q2
Public external debt & liabilities (i+ii+iii)	75.4	78.5	4.4	3.1	1.0	2.1
Public external debt (i+ii)	70.2	71.5	4.3	1.2	1.1	0.1
i) Govt. debt	64.1	65.6	4.2	1.4	1.2	0.2
Of which;						
Paris club	11.6	11.4	-0.1	-0.3	-0.1	-0.1
Multilateral	28.1	27.7	0.3	-0.4	-0.5	0.1
Other bilateral	8.7	11.3	0.7	2.7	2.2	0.5
Euro/Sukuk bonds	7.3	7.3	2.5	0.0	0.0	0.0
Commercial loans (LT)	6.8	6.8	0.3	0.0	0.0	0.0
ii) IMF	6.1	5.9	0.1	-0.2	-0.1	-0.1
iii) Foreign exchange liabilities	5.1	7.0	0.1	1.9	-0.1	2.0

Data source: State Bank of Pakistan and Economic Affairs Division

sources as mainly stop-gap arrangements.

Regarding the impact of movement of currencies on revaluation of public debt, the external debt recorded some revaluation loss of US$ 134.9 million stemming mainly from appreciation of Japanese Yen against USD in Q2-FY19. However, summing the revaluation gains recorded in Q1-FY19 yields a cumulative revaluation gain of US$ 299.2 million in public debt in H1-FY19.

Debt servicing recorded an increase during H1-FY19. Specifically, debt repayments of US$ 3.7 billion were made in H1-FY19 as compared with US$ 2.9 billion in the same period last year. Relatively higher repayments during the current period were primarily due to higher principal payments, which increased to around US$ 2.7 billion in H1-FY19 against US$ 2.1 billion in the same period of last year. Within principal payments, the short-term credit repayments recorded a significant increase, amounting to around US$ 1.2 billion in H1-FY19 as compared to US$ 0.6 billion in H1-FY18.

Interest payments also recorded an increase of US$ 1.0 billion in H1-FY19, which stood around US$ 234 million higher than H1-FY18. This was mainly driven by the higher payments on Euro/Sukuk bonds, followed by those on multilateral and commercial loans **(Table 4.13)**.

Table 4.13: Public External Debt Servicing
million US$

	H1-FY18	H1-FY19	Change
Principal (P)			
Public debt(a+b)	2,082.1	2,677.6	595.4
a. Government debt	2,082.1	2,552.1	469.9
Paris club	294.7	313.8	19.2
Multilateral	665.1	666.0	0.9
Other bilateral	88.5	162.3	73.8
Commercial loans/credits (LT)	408.0	200.0	(208.0)
Short term	605.9	1,210.0	604.1
b. IMF		125.5	125.5
Interest (I)			
Public debt (a+b)	782.6	1,016.6	234.0
a. Government debt	722.0	945.4	223.5
Paris club	121.3	115.0	(6.3)
Multilateral	166.1	217.5	51.3
Other bilateral	89.6	121.0	31.4
Euro/Sukuk bonds	171.3	251.8	80.5
Commercial loans /credits(LT)	129.4	198.1	68.8
Multilateral (ST)	44.2	31.0	(13.3)
b. IMF	60.7	71.2	10.5
Total (P+I)	2,864.8	3,694.2	829.4

Data source: State Bank of Pakistan

5 External Sector

5.1 Overview

The country's external account continued to present a challenging picture during H1-FY19, as spiking global oil prices and a slowdown in overall exports partially offset the gains from the domestic macro adjustment policies.[1] The sizable rebound in workers' remittances and a noticeable contraction in the services deficit helped reduce the current account gap by 8.8 percent YoY in H1-FY19; nonetheless, the level of the deficit remained at an elevated level (**Table 5.1**).

Table 5.1: Performance of Key External Indicators
(million US$)

	Q2			H1		
	FY18	FY19	*difference*	FY18	FY19	*difference*
Current account balance	-4,592	-3,851	741	-8,353	-7,615	738
Trade balance	-7,444	-7,528	-84	-14,758	-15,500	-742
Exports	6,152	5,956	-196	11,831	11,841	10
Imports	13,596	13,484	-112	26,589	27,341	752
Energy imports	3,385	3,888	503	6,331	8,019	1,688
Services balance	-1,469	-929	540	-2,745	-1,894	851
Primary income balance	-1,525	-1,531	-6	-2,582	-2,642	-60
Secondary income balance	5,846	6,137	291	11,732	12,421	689
Remittances	4,955	5,473	518	9,745	11,030	1,285
Financial account balance	-4,920	-2,883	-2,037	-6,790	-5,523	-1,267
FDI inflows (net)	868	760	-108	1,633	1,319	-314
Portfolio investment (net)	2,446	-234	-2,680	2,320	-419	-2,739
Eurobond/Sukuk	2,500	0	-2,500	2,500	0	-2,500
Private FPI	-54	-234	-180	-129	-419	-290
FX liabilities (net)	2,070	2,421	351	2,887	4,505	1,618
SBP's liquid reserves (end-period)	14,107	7,199	-6,908	14,107	7,199	-6,908

Data source: State Bank of Pakistan

As a result, FX payment pressures persisted in the interbank, and were accentuated by maturities of short-term official debt contracted in the previous year. This led the government to seek BoP support, particularly from bilateral sources. While sizable inflows were realized from the friendly countries, they were insufficient to completely finance the current account deficit. Consequently, SBP's FX reserves

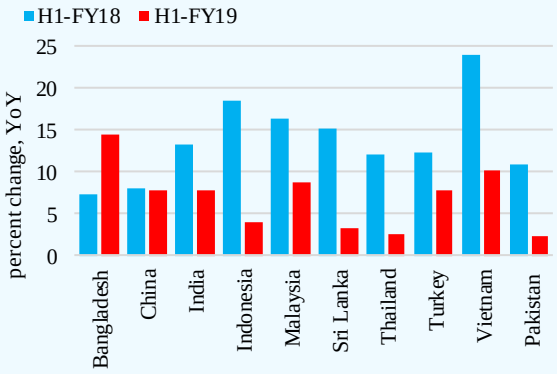
[1] Though international oil prices tapered from October 2018 onwards, they continued to be higher on YoY basis during H1-FY19 as well as most of Q2-FY19. Arab Light crude oil prices were, on average, 32.0 percent higher in H1-FY19 than in H1-FY18, and 16.4 percent higher in Q2-FY19 as compared to Q2-FY18.

declined by US$ 2.7 billion during the period, and the PKR depreciated by 12.5 percent against the US dollar.

The balance of payments challenges have arisen at a time when the global economy itself is facing significant headwinds. The major EU economies, such as Germany and France, are facing a major slowdown in consumer demand, as reflected by subdued retail sales as well as imports (**Section 5.5**).[2] While political developments are responsible for the slump in France, the German economy finds itself buffeted by the uncertainty surrounding the outcome of US-China trade negotiations.[3] This slowdown in EU economies has negative spillover for Pakistan and other emerging market exporters, which have posted subdued export performances this year (**Figure 5.1**).

In addition to lower demand from the EU, Pakistan's export earnings were also dragged by lower unit prices; this was particularly true for exporters of knitwear, readymade garments and basmati rice. On the other hand, non-basmati rice exporters were finding it challenging to maintain their share in African markets owing to strong competition from Chinese exporters. Finally, the withdrawal of subsidies on wheat and sugar led to weak export performances of both commodities.

Figure 5.1: Export Growth of Major Emerging Markets



Data source: Haver Analytics and Pakistan Bureau of Statistics

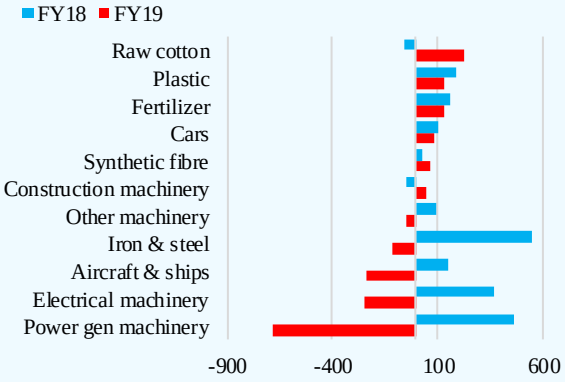
On the import side, the growth in payments tapered in H1-FY19, in response to a significant cut in development expenditures, the completion of early harvest CPEC projects and regulatory measures aimed at curtailing non-essential imports

[2] The EU's overall imports grew by a much lower 4.0 percent YoY during H1-FY19, after rising by 14.9 percent in the same period last year (source: Haver Analytics).

[3] The trade tensions between the US and China, along with the slowdown in the Chinese economy, have affected Germany's exports performance. Specifically, the growth in Germany's exports to China slowed down to 5.1 percent YoY during H1-FY19, from 13.3 percent recorded in H1-FY18. In tandem, exports, on average, contributed negative 0.1 percentage points to real GDP growth in Germany in H1-FY19, against a positive contribution to growth of 0.7 percentage points in H1-FY18 (source: Haver Analytics).

(**Figure 5.2**). The slowdown in construction activity lowered the demand for imported construction machinery as well as iron and steel. Further support came from lower payments for aircraft parts and railway locomotives, and CBU cars.

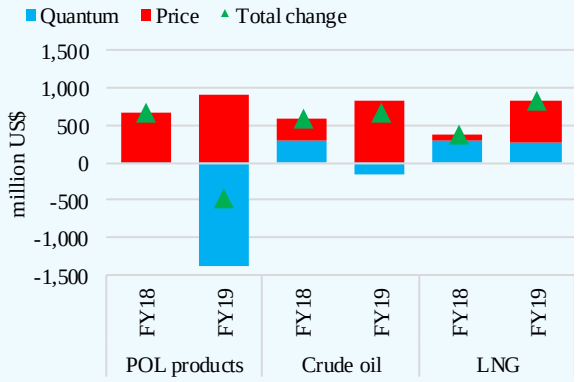
Figure 5.2: Absolute Change in Import Payments (YoY) during H1 (in million US$)



Data source: State Bank of Pakistan

However, FX savings from lower non-energy import payments were completely offset by a 27.1 percent rise in the energy import bill, which reached its highest six-monthly level ever. The elevated international prices played a dominant role here, with quantum imports of both POL products and crude oil declining during the period (**Figure 5.3**).

Figure 5.3: Contribution of Price and Quantums to YoY Change in Energy Imports in H1



Data source: Pakistan Bureau of Statistics

With these underlying dynamics in the trade account, the current account deficit (CAD) could not be curtailed significantly, despite a healthy rise in remittances and a reduction in the services deficit. The elevated CAD necessitated the need to arrange sizable external financing.

However, net financial inflows were lower than last year, as the new government did not pursue sovereign debt issuance or heavy short-term borrowings. Instead, it engaged bilateral sources for BoP support, while simultaneously entering into bailout negotiations with the IMF. The resulting FX inflows from China and Saudi Arabia cumulatively amounted to US$ 4.0 billion during H1-FY19, and allowed the government to retire both the long- and short-term debt payments falling due in the period.

5.2 Current account

In H1-FY19, the current account deficit remained at an elevated level of US$ 7.6 billion, declining by 8.8 percent YoY from the same period of last year. In H1-FY18, the CAD had risen by 76.9 percent.

Even though the merchandize deficit widened by 5.0 percent, it was entirely offset by a 31.0 percent decline in the services deficit; this kept the balance of trade in goods and services in H1-FY19 to its previous year's level. A major reason behind the services deficit decline was a drop in services imports. The lower imports were mainly a result of a strong 38.6 percent drop in FX purchases from exchange companies and banks by individuals for personal travel; this is understandable given the scale of the PKR adjustment over the past 12 months.[4] Further support to the services account came from a 20.9 percent drop in freight charges, in response to lower quantum imports.

Meanwhile, a significant 58.3 percent decline in profit repatriation on foreign investment (to US$ 628.8 million in H1-FY19) also helped alleviate some of the pressure on the current account. Repatriation under direct investment figured more prominently, as these dropped by 67.8 percent during the period. This lower repatriation also helped offset the 31.6 percent rise in interest payments during the period. The higher interest payments reflected both the rise in the stock of external debt, as well as the repricing of existing floating FX debt following a rise in global interest rate benchmarks.[5]

Table 5.2: Overseas Workers' Remittances to Pakistan
(million US$)

	FY18			FY19			**Growth** (in %)
	Q1	**Q2**	**H1**	**Q1**	**Q2**	**H1**	**H1-FY19**
Total	**4,790**	**4,955**	**9,745**	**5,557**	**5,473**	**11,031**	13.2
GCC	2,869	2,951	5,820	3,017	2,954	5,971	2.6
S. Arabia	1,228	1,303	2,531	1,263	1,304	2,568	1.5
UAE	1,078	1,083	2,161	1,227	1,121	2,349	8.7
other GCC	563.3	565	1,129	527	529	1,055	-6.5
Non-GCC	1,921	2,004	3,925	2,540	2,519	5,059	28.9
UK	643	707	1,350	810	837	1,647	22.0
USA	626	655	1,281	863	870	1,733	35.3
Malaysia	257	244	501	395	392	787	57.2
EU	160	155	315	166	147	313	-0.7
Other countries	235	242	478	306	273	579	21.1

Data source: State Bank of Pakistan

[4] These FX purchases by resident Pakistanis are recorded under the import of "other" services under the travel services in the SBP's balance of payments data.
[5] 12-month LIBOR averaged 2.9 percent during H1-FY19, up from 1.8 percent during H1-FY18.

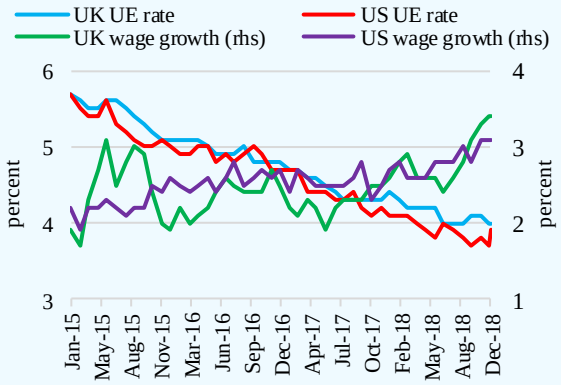
Furthermore, current transfers also increased considerably. Specifically, workers' remittances witnessed a significant increase in the H1-FY19, which more than offset the net outflows from foreign currency accounts during the period.

Workers' Remittances

For the first time, worker's remittances have crossed US$ 11.0 billion mark in the first half of a fiscal year, reaching US$ 11.03 billion in H1-FY19. This inflow was 13.2 percent higher from the same period last year (**Table 5.2)**. Though the growth was broad-based, the strong increase from the US and the UK provided major push to the H1-FY19 inflows.

Particularly, remittances from USA witnessed a sharp increase of 35.3 percent and rose to US$ 1.7 billion in H1-FY19. Economic turnaround in the US and the UK in the recent past resulted in declining unemployment and rising wages, and both factors contributed to a sharp rise in remittances from these countries (**Figure 5.4**).

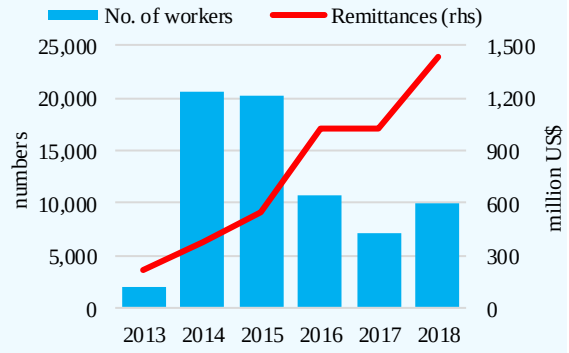
Figure 5.4: Unemployment (UE) Rate and Wage Growth in the US and UK



Data source: Bloomberg

Besides the US and the UK, inflows from Malaysia also supported overall remittances in H1-FY19. Malaysia, in particular, is emerging as one of the major sources of remittances and contributed US$ 787 million in H1-FY19, up 57.2 percent higher from last year. In fact, remittances from Malaysia have been rising persistently since FY13 (**Figure 5.5**).

Figure 5.5: Dynamics of Remittance Inflows from Malaysia



Data source: State Bank of Pakistan, Bureau of Emigration and Overseas Employment

Over the last couple of years, Malaysia has been facing workforce shortage in labor-intensive sectors, such as manufacturing, construction and agriculture. To

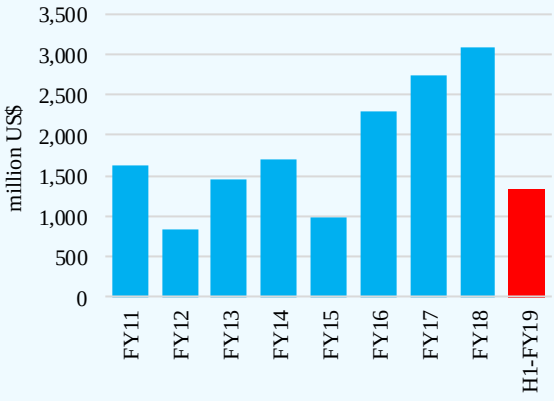
address the problem, Malaysia raised the wages for both local and foreign workers in its minimum wage policy of 2013. The wage level was raised from RM 600/month to RM 900 per month in the Peninsular Malaysia and from RM 579/month to RM 800/month for Sabah, Sarawak and the Federal Territory of Labuan. As a result, Pakistan's labor migration to Malaysia had jumped in 2014-15 and remains at elevated level since then, compared to 2013. This may explain the persistent increase in remittances from Malaysia.

Meanwhile, the inflows from GCC, the major source of Pakistan's remittances, increased by a marginal 2.6 percent in H1-FY19 against a decline of 3.4 percent witnessed in the same period last year.

5.3 Financial account

The net inflows in the financial account declined to US$ 5.5 billion in H1-FY19 from US$ 6.8 billion in H1-FY18, as both foreign direct investment and portfolio investment declined. These were only partially offset by official bilateral inflows from China and KSA. This long-term BoP support may also have helped in lengthening Pakistan's external debt maturity profile, which otherwise had shortened due to the short-term commercial borrowings in the last couple of years.

Figure 5.6: FDI Inflows in Pakistan



Data source: State Bank of Pakistan

Foreign direct investment

FDI is slowing down after growing consistently over the last three years under CPEC (**Figure 5.6**). The inflows declined by 19.2 percent in H1-FY19 over the corresponding period of last year (**Table 5.3**). With early harvest projects nearing completion, CPEC-related power sector investments are now being shifted to the transmission and distribution side.

Though the inflows in financial business and electrical machinery increased also, these were insufficient to offset the decline in inflows in power and construction

as well as higher principal loan repayments by telecom firms to their parent companies abroad.[6]

Table 5.3: Net FDI Inflows to Pakistan

(million US$)	FY18			FY19			Change in FY19	
	Q1	Q2	H1	Q1	Q2	H1	Q2	H1
Total FDI (net)	**765.2**	**867.0**	**1,632.2**	**558.9**	**760.3**	**1,319.2**	**-106.6**	**-313.0**
Financial business	190.1	86.0	276.1	39.8	163.5	203.4	77.5	-72.8
Electrical machinery	0.8	10.2	10.9	5.2	119.5	124.7	109.3	113.8
Power	205.3	406.6	611.9	92.4	109.5	201.9	-297.1	-410.0
Construction	124.8	226.1	350.9	180.3	107.5	287.8	-118.6	-63.1
Oil & gas explorations	52.8	53.9	106.7	74.1	60.6	134.7	6.7	28.0
Telecommunications	62.8	-78.0	-15.3	-54.2	-80.9	-135.1	-2.9	-119.9
Others	128.7	162.2	290.9	221.2	280.7	501.9	118.5	211.0

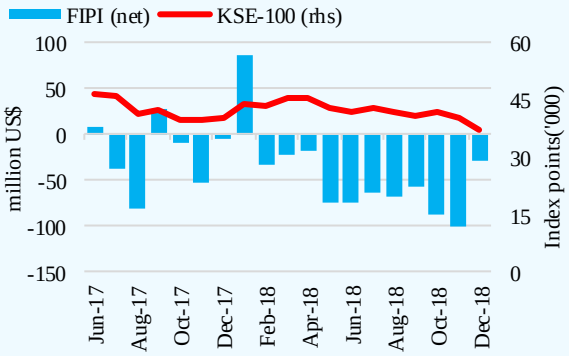
Data source: State Bank of Pakistan

By source, China continued to dominate direct investments with 57.6 percent share in net FDI inflows during H1-FY19. Apart from power and construction, electrical machinery and financial business sectors also attracted Chinese investment. Following China, direct investment from UK also increased to US$ 116.0 million in H1-FY19, mainly in food and financial business.

Foreign portfolio investment

The foreign portfolio investment witnessed an outflow of US$ 419.3 million in H1-FY19 against an inflow of US$ 2.3 billion in the same period of last year, when the government had mobilized US$ 2.5 billion by issuing Eurobonds and Sukuk.

Figure 5.7: Foreign Investment in Pakistan's Equities and PSX Performance



Data source: National Clearing Company of Pakistan Limited and Pakistan Stock Exchange

In the equity market, Pakistan witnessed net foreign selling of US$ 403.5 million in H1-FY19. Comparatively, in H1-FY18, the net foreign selling was only US$ 155.7 million (**Figure 5.7**).

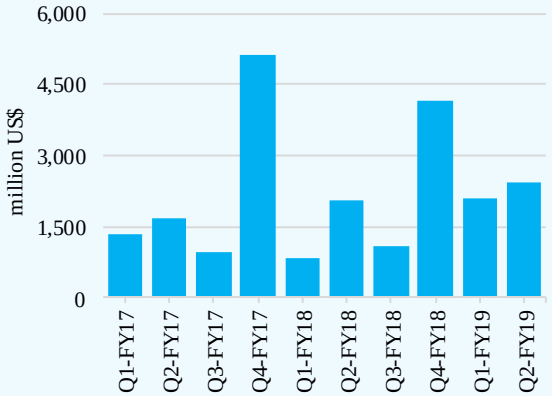
[6] These principal loan repayments to parent companies are recorded as outflows under FDI in the balance of payments data.

Importantly, MSCI has dropped UBL and Lucky Cement from the MSCI Global Standard Index in its semi-annual review. This caused a significant decline in the weights of Pakistani stocks in the MSCI EM index. A portfolio capital outflow in these stocks was, therefore, expected. [7]

Besides the external factor, domestic macroeconomic developments such as declining foreign exchange reserves, rising inflationary pressures and uncertain exchange rate policy may have also dented the investors' confidence.

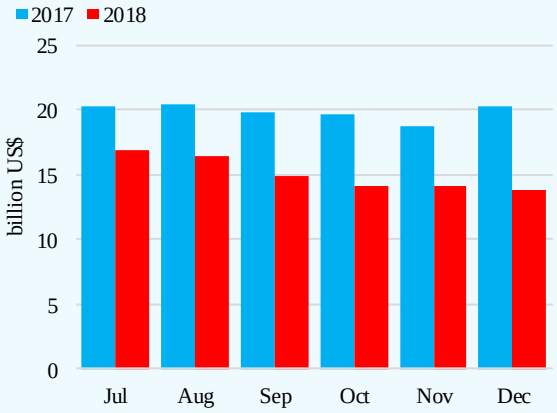
Net incurrence of liabilities: In H1-FY19, the net inflow of FX liabilities amounted to US$ 4.5 billion, mainly via US$ 2.0 billion deposits received from each of Saudi Arabia and China (**Figure 5.8**). In net terms, disbursement of government loans remained lower (US$ 1.6 billion in H1-FY19 compared to US$ 1.7 billion realized in H1-FY18). The government took this opportunity to lengthen the maturity profile by retiring some of the short-term FX debt. These retirements amounted to US$ 1.2 billion in H1-FY19, as compared to US$ 607.0 million in the same period of last year.

Figure 5.8: Net Flow of FX Liabilities



Data source: State Bank of Pakistan

Figure 5.9: Pakistan's Liquid FX Reserves (Jul-Dec)



Data source: State Bank of Pakistan

5.4 Exchange Rate and Reserves

Pakistan's liquid foreign exchange reserves declined by US$ 2.7 billion in H1-FY19 compared to the US$ 1.2 billion fall registered in H1-

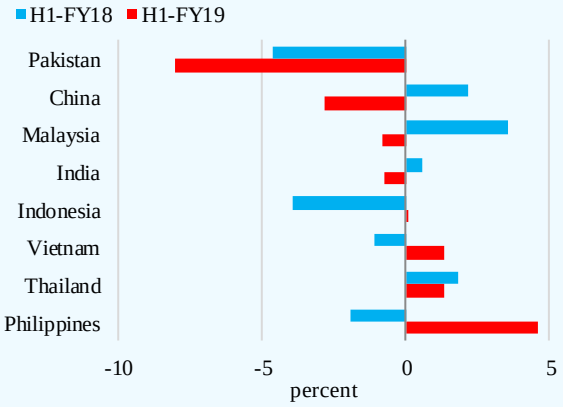
[7] According to market experts, after the exclusions, Pakistan's earlier assigned weight in the MSCI EM index is likely to fall from 0.075 percent to 0.037 percent.

FY18. SBP's reserves, specifically, witnessed a steep decline from US$ 9.8 billion to US$ 7.2 billion between end-June to December 2018 (**Figure 5.9**). Though the floatation of Eurobond and Sukuk had provided some comfort to the falling liquid FX reserves last year, in H1-FY19, Pakistan had received US$ 4.0 billion in financial support from China and Saudi Arabia.

Meanwhile, given the elevated current account deficit, the PKR continued to be under pressure and depreciated 12.5 percent against the US dollar in H1-FY19. That said, the currency was more strained in the second quarter, when the current account gap widened to US$ 3.9 billion from US$ 3.8 billion in Q1-FY19; also bilateral BoP support from Middle Eastern countries had yet to fully materialize. As a result, the PKR depreciated by a relatively higher 10.5 percent during Q2-FY19, as opposed to a more contained drop of 2.2 percent during Q1-FY19.

In real terms, the PKR weakened by 8.0 percent in H1-FY19, against a depreciation of 4.6 percent observed last year (**Figure 5.10**). This was mainly driven by a sharp NEER depreciation, as the local currency weakened significantly against all the major currencies during the first six months of FY19.

Figure 5.10: REER of Selected Asian Currencies



Data source: Haver Analytics and State Bank of Pakistan

5.5 Trade Account[8]

The trade deficit declined 5.3 percent YoY to US$ 16.8 billion in H1-FY19, with the drop in overall imports offsetting the impact of decelerating export growth. The second quarter was more prominent, as overall imports declined more sharply than they did in Q1 (**Figure 5.11**).[9]

Notably, the growth in energy imports in Q2-FY19 slowed down to its lowest in the past nine quarters, as relatively moderate growth in quantum LNG imports and continuously declining quantum imports of both POL products and crude oil

[8] This section is based on customs data reported by the PBS. The information in this section may not tally with the SBP data reported in **Section 5.1**. To understand the difference between these two data series, please see Annexure on data explanatory notes.

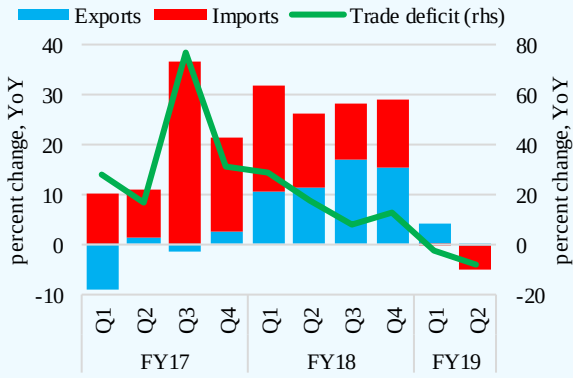
[9] In fact, imports of *all* product categories or their growth rate dropped more significantly in Q2 than they did in Q1.

partially suppressed the upward pressure from higher international oil prices during the period.[10]

The deepening of the import decline is in response to the ongoing slowdown in economic activity in the wake of policy efforts to achieve macro stabilization, as well as the drop in CPEC-related machinery imports.[11] With regards to the policy side, hefty cut in development spending; the exchange rate adjustment; and the hiking of regulatory duties on non-essential consumer imports, all played a role (**Table 5.4**).[12] In response to the cut in PSDP, the construction activity contracted, which, in turn, lowered the import demand of raw materials of the domestic steel industry.[13]

Yet, at the same time, the export growth slowed down to just 1.9 percent in H1-FY19, against the rise of 10.9 percent recorded in H1-FY18. In case

Figure 5.11: Growth in Pakistan's Exports, Imports and Trade Deficit



Data source: Pakistan Bureau of Statistics

Table 5.4: Import of Selected Consumer Goods during H1
(values in million US$ and change in percent)

	FY18	FY19	Change
Food items			
Almonds, walnuts & pistachios	75.3	12.0	-84.1
Cocoa & cocoa items	18.1	22.2	22.5
Butter and cheese	8.3	6.8	-18.6
Fish and seafood	12.5	6.8	-45.9
Fresh apples and pears	29.5	13.8	-53.2
Tea and coffee	306.0	288.9	5.9
Fruit juices	6.9	3.2	-54.2
Electronics items			
LCD TVs	47.7	27.7	-41.9
Cellular phones	376.5	364.0	-3.3
Air-conditioners (inc. parts)	56.5	49.4	-12.7
Electric fans	6.2	7.4	19.8
Bulbs and lamps	63.0	40.7	-35.4
Personal care items			
Perfumes and colognes	2.76	2.83	-2.5
Make-up items and prep	16.4	13.3	-18.9
Hair preparations (inc. shampoos)	14.8	13.2	-11.0
After-shave, deodorants, bath salts	6.2	4.7	-23.7

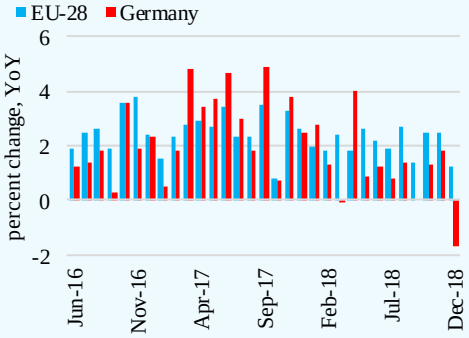
Data source: Pakistan Bureau of Statistics

[10] Quantum LNG imports grew by 19.1 percent YoY during Q2-FY19, after growing at a much higher rate of 44.3 percent during Q1-FY19.
[11] The large-scale manufacturing declined more sharply in Q2 (by 2.5 percent) than in Q1-FY19 (0.6 percent).
[12] The PKR depreciated by 10.5 percent during Q2-FY19, after dropping by a more contained 2.2 percent during Q1-FY19. Development spending continued to be curtailed during the period as well, dropping by 32.5 percent YoY in Q2, after declining by 42.9 percent in Q1-FY19.
[13] The drop in demand for this imported raw material corresponded with an 8.5 percent decline in domestic steel production in H1-FY19. In comparison, local production had risen 38.1 percent in the same period last year.

of many exporting items, particularly high value added textiles like readymade garments, overall export values were pulled down by lower unit prices in dollar terms following the PKR depreciation.[14]

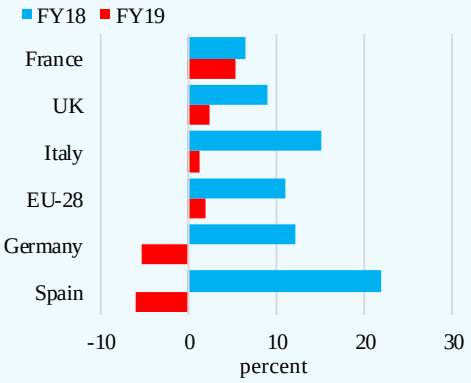
In terms of export destinations, the key EU market has emerged as a major concern. Political unrest is taking its toll on the French and Italian economies, whereas Germany finds itself in the crosshairs of the US-China trade war.[15] The unfolding developments have led to a slump in consumer demand in the bloc, and is reflected in a slowdown in retail sales (**Figure 5.12a**). As a result, the bloc's demand for imported products has also been hit, to the detriment of Asian exporters like Pakistan (**Figure 5.12b**).

Figure 5.12a: Growth in Retail Sales in the EU & Germany*



* Excluding auto sales, seasonally adjusted by source
Data source: Eurostat

Figure 5.12b: Growth in Pakistan's Exports to EU Countries during H1



Data source: Pakistan Bureau of Statistics

Exports

Pakistan's exports rose 1.9 percent to US$ 11.2 billion in H1-FY19, after rising 10.9 percent YoY in the same period last year. The major reason was a sharp pullback in the textile sector's export growth, which remained stagnant in the six-month period. The second quarter presented an even starker picture, as textile exports declined for the first time in a quarter since Q1-FY17.

Lower unit prices suppressed export values of the key knitwear and readymade garment segments, largely offsetting the healthy rise in their quantum exports (**Table 5.5**). By contrast, heavy quantum decline in yarn and cotton led to a drop

[14] With a depreciating PKR, Pakistan's export earnings (in dollar terms) will only rise if the rise in quantum exports more than offsets the drag from lower unit prices.
[15] Real GDP growth in the EU averaged 1.6 percent during H1-FY19, down from 2.7 percent in H1-FY18. Growth in Germany slowed even more sharply, from 2.7 percent to just 0.9 percent. Similarly, the Italian economy grew just 0.4 percent, from 1.7 percent (source: Haver Analytics).

in their export values. Lower quantums were also responsible for suppressed exports of key agricultural commodities, i.e. sugar, wheat and rice. In case of sugar and wheat, exporters could not compete in the international market in the wake of tapering export subsidies.[16]

Table 5.5: Pakistan's Major Exports during H1

			Abs. change	Quantum impact	Price impact	Contribution to Growth	
	FY18	**FY19**	**FY19**			**FY18**	**FY19**
	million US$					percentage points	
Food group	**1,935.1**	**1,994.9**	**59.8**	**-**	**-**	**2.8**	**0.5**
Basmati rice	203.7	244.2	40.5	53.0	-12.5	0.3	0.4
Non-basmati	645.9	573.8	-72.1	-101.6	29.5	1.1	-0.7
Wheat	0.0	53.5	53.5	126.4	-72.9	0.0	0.5
Sugar	181.5	79.5	-102.0	-85.4	-16.7	0.0	-0.8
Seafood	200.6	183.6	-17.0	-9.7	-7.2	0.17	-0.2
Fruits & veg.	243.9	312.0	68.1	109.0	-41.0	-0.13	0.6
Textile group	**6,641.6**	**6,644.3**	**3.1**	**-**	**-**	**5.0**	**0.0**
Raw cotton	53.3	14.1	-39.2	-38.9	-0.3	0.2	-0.4
Cotton yarn	661.5	548.4	-113.1	-128.9	15.8	0.04	-1.0
Cotton fab.	1,066.9	1,052.3	-14.6	287.9	-302.4	0.0	-0.1
Knitwear	1,334.6	1,475.6	141.0	165.2	-24.1	1.6	1.3
Bedwear	1,124.4	1,161.2	36.8	182.3	-145.5	0.7	0.3
Towels	385.8	378.0	-7.8	-51.9	44.0	0.1	-0.1
R. garments	1,249.4	1,259.7	10.3	328.0	-317.7	1.5	0.1
Other Manuf.	**1,702.3**	**1,708.1**	**5.8**	**-**	**-**	**1.8**	**0.2**
Leather	159.7	128.3	-31.4	-28.1	-3.4	-0.1	-0.3
Leather manuf.	265.2	247.4	-17.8	-5.7	-12.2	0.1	-0.2
Plastic	114.3	155.7	41.4	2.0	31.0	0.2	0.3
Cement	104.8	157.0	52.2	65.8	-27.4	-0.27	0.4
POL group	**163.6**	**269.5**	**106.0**	**-**	**-**	**0.8**	**1.0**
Crude oil	75.2	145.9	70.7	37.4	33.3	0.4	0.6
All other items	**533.8**	**564.4**	**30.6**	**-**	**-**	**-**	**-**
Total exports	**10,976.4**	**11,181.2**	**204.8**	**954.4**	**-817.0**	**10.9**	**1.9**

Data source: Pakistan Bureau of Statistics

In this scenario, the petroleum group actually emerged as the single-largest contributor to the export growth in H1-FY19, with higher quantities of crude oil condensate being exported to a couple of African countries, and jet fuel to Afghanistan under a government-to-government contract. Higher international oil

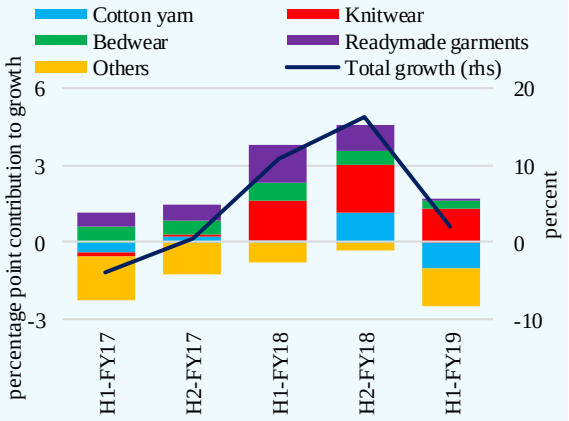
[16] For wheat, freight subsidies had pushed up quantum exports during Q1-FY19, and their absence during Q2-FY19 corresponded with an abating of shipments going abroad. Of the total wheat exports of US$ 53.5 million during H1-FY19, US$ 49.1 million (or 91.7 percent) were realized during Q1-FY19.

prices on YoY basis further supported export values from this segment.

Slowdown in EU suppresses textile exports

The overall textile exports stayed almost flat at US$ 6.6 billion in H1-FY19. In terms of products, a deceleration in exports of high value added items, specially readymade garments, and a decline in exports of low value added items (particularly yarn) was mainly responsible for this stagnation (**Figure 5.13**).

Figure 5.13: Breakdown of YoY Growth in Textile Exports



Data source: Pakistan Bureau of Statistics

So far this year, garment exporters across the world are facing challenges in the EU, as the bloc's quantum imports of textile and apparel items has slowed down dramatically from last year (**Table 5.6**). China and India have borne the brunt of this slowdown. Pakistan, which, along with Bangladesh and Cambodia, enjoys zero-rated access to the bloc, managed to increase its apparel shipments to the EU during the period.

Table 5.6: Growth in the EU's Quantum Textile & Apparel Imports

percent change

	H1-FY18	H1-FY19
Bangladesh	6.2	9.3
Cambodia	17.7	7.9
China	-0.1	-6.8
India	-0.9	-4.5
Indonesia	-2.5	-4.3
Pakistan	13.0	4.3
Turkey	3.4	6.2
Vietnam	7.2	3.1
Total extra-EU imports	**4.1**	**1.4**

Data source: Eurostat

However, Pakistan and Cambodia were also not completely immune from the slowdown in demand from the EU, as their quantum of textile and apparel exports to the bloc grew at a much lower rate this year than last year. In contrast, the growth in Bangladesh's quantum textile and apparel exports accelerated in H1-FY19. One possible reason can be that European importers brought forward their purchases from Bangladesh in anticipation of higher prices in the future. A pick-up in Bangladesh's export prices is expected after the government announced a minimum wage hike for garment workers effective from February 2019.

Meanwhile, the US' textile and apparel market is in flux, as uncertainty surrounds

the outcome of the country's trade negotiations with China.[17] As such, US importers are said to be bringing forward their purchases from China, as well as looking to other markets to line up alternative supplies in case of an adverse outcome. Resultantly, China's quantum textile and apparel exports to the US rose significantly, along with its market share. On the other hand, Pakistani exporters are facing challenges in the US market, with quantum textile and apparel exports staying flat on YoY basis (**Table 5.7**).

Table 5.7: Growth in US' Quantum Textile & Apparel Imports
percent change (YoY)

	H1-FY18	H1- FY19
Bangladesh	1.8	3.7
Cambodia	8.2	11.3
China	5.8	8.7
Honduras	-9.7	-0.2
India	6.9	10.3
Indonesia	-8.8	-2.5
Pakistan	4.6	0.5
Vietnam	7.1	0.3
Total imports	**4.0**	**7.4**

Data source: OTEXA

Mindful of the challenging external environment and the necessity to boost export earnings, the government is providing subsidized energy to the exporting industry, and the rates on SBP's financing schemes for export refinancing and fixed investment are still unchanged at low levels, despite the 425 bps hike in the policy rate over the past 12 months. Moreover, the government has proposed to ease the industry's liquidity constraints from stuck-up refunds by issuing promissory notes, and further lower the cost of production by abolishing regulatory duty on cotton imports.

However, all this support would not amount to much-desired forex earnings if the exporters continue to chase the same markets without making concerted efforts to improve their product quality and brand image. Exporters ought to diversify from the EU and US markets and focus on areas like the Middle East, where they currently have minimal presence.[18]

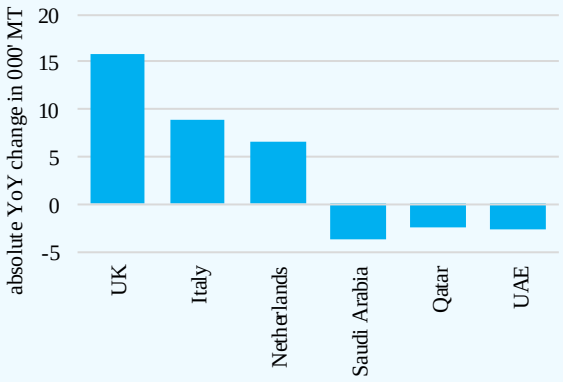
Underwhelming non-basmati rice exports offset healthy basmati performance
Pakistan's overall rice exports presented an unimpressive picture, with export values declining 3.7 percent YoY to US$ 817.9 million in H1-FY19. The decline was driven by a quantum-led drop in non-basmati exports.

[17] China's textile and apparel exports are currently not attracting additional tariffs, but this may change if the US administration follows through on its threat to target all the Chinese products that are currently not attracting the tariffs in case the ongoing negotiations fail.
[18] For instance, in the UAE's textile and apparel market of US$ 5.2 billion, Pakistan had only a 3.2 percent share as of 2017 (source: International Trade Center).

The top markets for Pakistani non-basmati rice, namely Kenya, Madagascar, Benin and Guinnea-Bissau, were responsible for the decline in quantum exports this year. Pakistani exporters are facing a tough time against Chinese competitors in these markets, as the latter are said to be offloading their record stockpiles at lower prices. According to Chinese customs data, the country's rice export quantums rose by a mammoth 299.7 percent during Jan-Dec 2018. The USDA has also estimated China's rice exports to have almost doubled in 2018 over 2017.

By contrast, during H1-FY19, basmati rice exports extended their growth momentum to the second consecutive year, with a solid 26.0 percent uptick in quantum exports entirely offsetting the drag from lower international prices.[19] As a result, export values rose 19.9 percent to US$ 244.2 million during the period. Major European markets, such as the UK, Italy and Netherlands, accounted for the bulk of the increase in quantum exports, and compensated for the continuing decline in Pakistan's share in the Middle East market (**Figure 5.14**).

Figure 5.14: Growth in Pakistan's Basmati Exports to Major Markets during H1-FY19



Data source: Pakistan Bureau of Statistics

Non-traditional items emerge as saving grace

Among other products, the withdrawal of subsidies and completion of earlier announced quotas led to an expected drop in sugar exports, which fell 56.2 percent to US$ 79.5 million during H1-FY19. This drop was large enough to wipe out the meager US$ 53.5 million in export earnings from wheat during the period.

However, weak export performances of these two major agricultural commodities were compensated by a healthy quantum-led uptick in exports of vegetables and fruits (**Table 5.5**). Within this segment, exports of potato remained quite strong, on the back of a good harvest and comfortable domestic supplies.[20] The GCC

[19] Export prices for Pakistan's basmati rice were, on average, 14.5 percent lower in H1-FY19 as compared to H1-FY18 (source: FAO).

[20] Pakistan's potato exports rose 97.3 percent YoY to US$ 37.8 million during H1-FY19. Domestic potato production had rebounded strongly last year, rising by 35.1 percent YoY on the back of a significant increase in yields (source: Economic Survey of Pakistan 2017-18). Comfortable

economies, particularly the UAE, along with Sri Lanka, emerged as key buyers of Pakistani potatoes. Meanwhile, Pakistan's mango exports also increased by 78.4 percent to US$ 51.7 million during H1-FY19, with most of the increase coming from Middle Eastern and European countries. The mango segment has recently received support from USAID, which may have helped Pakistan to market quality mangoes.[21]

Among other products, cement exports grew 32.4 percent to US$ 157.0 million during H1-FY19, led by a 55.5 percent growth in shipments. In the wake of significant capacity additions and faced with declining domestic sales, cement manufacturers have turned to foreign markets, such as Sri Lanka, South Africa, Madagascar and Mozambique. However, exporters are facing a challenging external environment with declining unit prices.

Table 5.8: Pakistan's Major Imports during H1
(million US$)

Items	FY18	FY19	Abs. change	Quantum impact	Price impact
Energy group	**6,675.1**	**7,665.0**	**989.9**	-1,335.8	2,325.6
POL prods.	3,881.2	3,415.1	-466.1	-1,384.8	918.8
Crude	1,756.1	2,426.0	669.9	-170.7	840.6
LNG	876.2	1,709.3	833.1	271.3.1	561.8
Agri and chem	**4,278.8**	**4,584.1**	**305.3**	-	-
Fertilizer	512.8	646.2	133.3	53.0	80.3
Plastic mat.	1,090.4	1,080.4	-10.0	26.7.1	-36.8
Transport group	**2,012.6**	**1,507.6**	**-505.0**	-	-
Cars	670.4	582.8	-87.6	-	-
Truck & buses	305.1	282.7	-22.4	-	-
Aircraft & ships	358.0	166.3	-191.7	-	-
Metals group	**2,566.1**	**2,500.4**	**-65.7**	-	-
Steel scrap	777.3	765.6	-11.7	-41.7	30.1
Iron & steel	1,135.9	1,124.6	-11.3	-30.6	19.2
Food group	**3,242.1**	**2,966.2**	**-275.9**	-	-
Tea	283.6	301.7	18.1	70.1	-52.0
Palm oil	1,037.4	931.7	-105.7	90.9	-196.7
Pulses	269.9	287.8	17.9	146.8	-128.9
Textile group	**1,378.5**	**1,344.5**	**-34.0**	-	-
Raw cotton	97.1	120.2	23.1	12.3	10.8
Syn. yarn	321.5	302.2	-19.3	-26.9	7.7
Machinery group	**5,501.9**	**4,479.3**	**-1,022.6**	-	-
Power gen	1,239.3	661.9	-577.4	-	-
Electrical	1,075.1	881.2	-198.9	-	-
Construction	190.2	129.8	-60.4	-	-
Cell phones	376.5	364.0	-12.4	-	-
Other machinery	1,678.3	1,606.6	-71.7	-	-
All other items	**2,386.9**	**2,394.2**	**7.3**	-	-
Total imports	**28,694.9**	**27,952.5**	**-742.4**	**-1,144.4**	**2,015.5**

Data source: Pakistan Bureau of Statistics

Imports

In H1-FY19, Pakistan's imports declined for the first time in a half-yearly period since H1-FY16, as macro stabilization measures took hold and the economy showed signs of slowing down. A heavy decline in non-energy imports completely offset a price-led increase in energy imports.

domestic supplies, despite exports, kept local potato prices 23.0 percent lower, on average, in H1-FY19 as compared to the same period last year.

[21] USAID had provided 13 mango graders under a grant program in 2017.

Imports of power, electrical and construction machinery, along with railway locomotives, were markedly lower this year in the wake of a hefty drop in PSDP spending and completion of early harvest CPEC projects (**Table 5.8**). The slowdown in construction activity also curtailed the demand for imported raw materials by the domestic steel industry (i.e. old ships for shipbreaking, and iron and steel scrap).

The lower ship imports contributed to a sizable drop in transport imports, accentuating the impact of a drop in purchases of aircraft- and railway-related parts. Furthermore, lower international palm oil prices suppressed import values, despite an increase in the commodity's quantum imports during the period.

The broad-based and quantum-led slowdown in import growth implies that the PKR's 24.1 percent depreciation since November 2017, along with other demand compression measures, have had some impact. Specifically, the growth in imports of consumer items and associated raw material fell to just 4.0 percent YoY this year, against a much higher 12.9 percent rise recorded last year.

Energy imports

The country's energy imports grew 14.8 percent to US$ 7.7 billion during H1-FY19; this growth was much lower than the 33.4 percent uptick recorded during H1-FY18. The increase stemmed from the fact that international oil prices, though trending downwards from early October 2018, were still at a higher level on YoY basis for even most of Q2-FY19. Arab Light prices were, on average, 16.4 percent higher in Q2-FY19 as compared to the same period in FY18.

As a result, in case of crude oil, the higher prices pushed up import values by a hefty 38.1 percent during H1-FY19, completely offsetting the effect of a 9.7 percent drop in quantum imports. Refineries have curtailed their crude oil imports to prevent a glut of domestic furnace oil (FO) from building up as a result of the crude refining process. Given the switch from furnace oil-based power generation to LNG and coal, refineries have found it challenging to offload their FO stocks.[22]

On the other hand, the drop in POL product imports intensified during H1-FY19, as the country severely curtailed its furnace oil purchases from abroad (**Table 5.9**). Further support came from a 35.9 percent drop in HSD imports, as per OCAC data. Importantly, the imports declined despite lower domestic

[22] Power generation from furnace oil declined 60.0 percent YoY during H1-FY19 (source: NEPRA). In tandem, both local production and quantum imports of furnace oil dropped heavily as well (by 12.2 percent and 61.2 percent respectively during H1-FY19, according to the PBS and the OCAC).

production of the fuel. Demand for HSD seems to have tapered this year, in line with the slowdown in construction and broader economic activity, as well as the wrapping up of transport needs of vehicles involved in early harvest CPEC projects.

Table 5.9: Growth in Energy Production, Sales & Imports (Quantum) during H1 (in percent)

	Production[1]		Sales[2]		Imports[2]	
	FY18	FY19	FY18	FY19	FY18	FY19
Furnace oil	5.4	-12.2	-13.3	-61.2	-18.8	-90.4
HSD	7.5	-4.7	12.5	-20.6	14.5	-35.9
Petrol	11.6	13.1	12.6	0.3	5.1	-0.4
Total products	8.1	-4.9	2.8	-27.2	-2.8	-43.7
Crude oil	-	-	10.5	2.5	20.5	-7.1
LNG	-	-	-	-	57.6	31.0

Data source: [1]:Pakistan Bureau of Statistics, [2] Oil Companies Advisory Council

In case of petrol, a marginal growth in demand this year was met by a 13.1 percent increase in domestic production, which negated the need for higher imports. The production gains materialized after a few refineries had upgraded their facilities to produce higher quantities of petrol instead of naphtha during the crude refining process. These upgrades started coming online from Q4-FY18 onwards, and have led to a healthy uptick in local petrol production this year.[23]

Meanwhile, LNG imports continued to be the biggest contributor to the rise in energy imports. In value terms, LNG imports surged by 95.1 percent and reached US$ 1.7 billion during H1-FY19; higher international prices were responsible for 67.4 percent of this YoY increase. The higher quantum LNG imports reflected both the shift in the energy mix away from furnace oil towards gas-based generation, as well as the government's decision to provide LNG to the industrial sector during the winter months at subsidized rates.

Table 5.10: Breakdown of Transport Imports during H1

(million US$)	FY18	FY19	Abs. change
Aircrafts, ships and boats	358.0	169.4	-188.6
Aircraft (complete)	53.1	4.9	-48.2
Aircraft (parts)	89.4	32.0	-57.4
Ships for shipbreaking	261.7	98.3	-163.4
Cars	670.4	584.8	-85.6
CBU	275.8	156.4	-119.3
CKD	394.6	428.4	33.7
Buses & trucks	305.1	295.6	-9.6
CBU	118.8	77.4	-41.5
CKD	186.3	218.2	31.9
Other transport equipment	191.9	19.3	-172.5
Railway locomotives & parts	194.6	20.1	-174.2
Motorcycles	55.5	54.9	-0.5
Transport group	**2,012.6**	**1,510.7**	**-501.9**

Data source: Pakistan Bureau of Statistics

Non-energy imports

Non-energy imports contracted by 7.9 percent during H1-FY19, after rising 14.0 percent in H1-FY18. The sharp pullback in power generation and electrical

[23] Expectedly, domestic production of naphtha declined by a massive 41.6 percent during H1-FY19.

machinery imports drove most of this decline, with further relief coming from the transport and food segments. Within transport, most of the decline came from the aircraft and ship category, followed by CBU cars and *other transport equipment* (**Table 5.10**).

CBU car imports declined significantly in the wake of subdued consumer demand, following the PKR depreciation as well as the ban on non-filers from purchasing vehicles. Customs data indicates that a total of 31,644 cars were imported in the country during H1-FY19, down 42.4 percent from 54,961 units imported in the same period last year. Meanwhile, imports of *other transport equipment* (dominated by railway-related parts and locomotives), were quite strong last year and have dropped this year.

Among other non-energy products, a decline in construction activity amid cuts in PSDP spending has led local steel firms to cut back on their production. This, in turn, has lowered their demand for imported raw materials, which tend to be either in the form of scrap, or old ships that are acquired and then disbanded at ship breaking yards to produce scrap. Quantum imports of both these product categories declined this year, leading to lower import values.[24] Cotton and fertilizer imports were much higher than last year, with lower domestic production of both items necessitating purchases from abroad.

[24] Quantum iron and steel scrap imports declined 5.9 percent YoY during H1-FY19. Pakistan also imported 20 ships for breaking during H1-FY19, down from 62 units imported in the same period last year.

Special Section 1: The Importance of Human Capital in the Context of CPEC

S1.1 Introduction

Pakistan has a total population of around 207.8 million as per the 2017 census, which is rising rapidly at an annualized growth rate of 2.4 percent. Similarly, the work force of the country has also been expanding, growing from 39.4 million in FY00 to 65.5 million in FY18 – an addition of approximately 1.5 million workers each year. This has been aided by the gradual increase in the share of youth (15-29 years of age) in the total population, which currently stands at 26.8 percent. This makes it an issue of national importance to facilitate the absorption of the work force in the labor market via job creation and skill-building. With the focus under China Pakistan Economic Corridor (CPEC) shifting towards agricultural development, industrial advancement, and technological investments, the country has an opportunity to gain on this front.

CPEC is expected to generate significant avenues of employment for the domestic labor force, especially after the establishment of the proposed Special Economic Zones (SEZs). However, as this development takes shape, the job requirements would gradually become more demanding. Accordingly, Pakistan needs to focus on improving the level of human capital in the economy so as to ensure that both the existing and the incoming labor force is skilled enough to meet the growing technical requirements of the evolving nature of work.

In this regard, this section intends to: (i) analyze the present state of the country's human capital; (ii) highlight the employment opportunities emerging for Pakistani workers under the next stage of CPEC; (iii) gauge the preparedness of the work force to maximize returns from these opportunities; and (iv) discuss some recommendations and recent developments to address the skill-deficit of the domestic labor force.

S1.2 The existing level of human capital development in Pakistan is low

In macroeconomic terms, human capital can be defined as the level and amount of abilities possessed by a set of individuals that can help increase labor productivity in an economy. Though education is generally considered a major determining factor in this context, aspects such as physical health, skill-set and societal attributes, etc. also influence the overall state of the human capital.

Recently, the World Bank introduced its Human Capital Index (HCI) in 2018, ranking 157 countries across certain variables to deduce the measure of human capital that a child born today can expect to attain by the age of 18. The index is

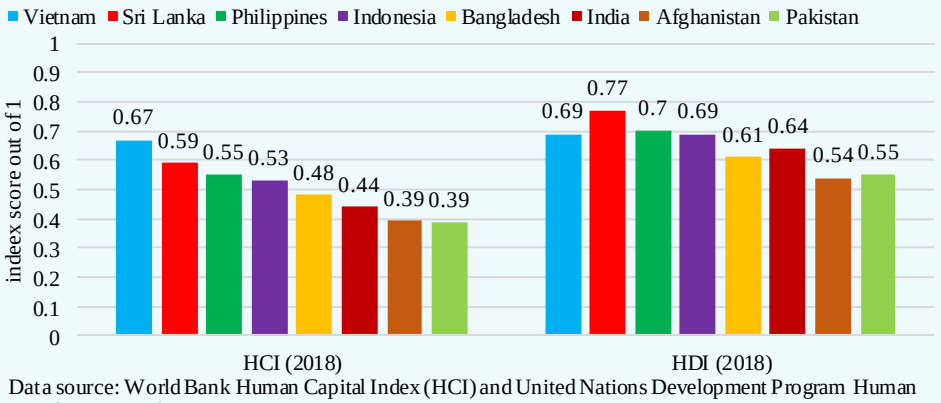
based on five education and health indicators: (i) probability that a child would survive to the age of 5; (ii) expected years of schooling of children; (iii) harmonized test scores as a measure of learning quality (to arrive at the "learning-adjusted" years of schooling); (iv) adult survival rate till the age of sixty; and (v) fraction of children under 5 years of age who are not stunted.

Table S1.1: Human Capital Index (HCI) 2018 and Ranking - Performance of Pakistan

Component	Boys	Girls	Overall	Ranking#
Survival to Age 5	0.92	0.93	0.93	142
Expected Years of Schooling	9.5	8.1	8.8	127
Harmonized Test Scores	335	343	339	145
Learning-Adjusted Years of Schooling	5.1	4.4	4.8	134
Adult Survival Rate*	0.82	0.86	0.84	93
Not Stunted Rate**	0.52	0.58	0.55	103
Overall HCI	**0.39**	**0.38**	**0.39**	**134**

Data source: World Bank
Rank out of 157 countries
*Data available for 156 countries; **Data available for 109 countries

Figure S1.1: A Regional Performance Comparison in Human Capital and Development Indices



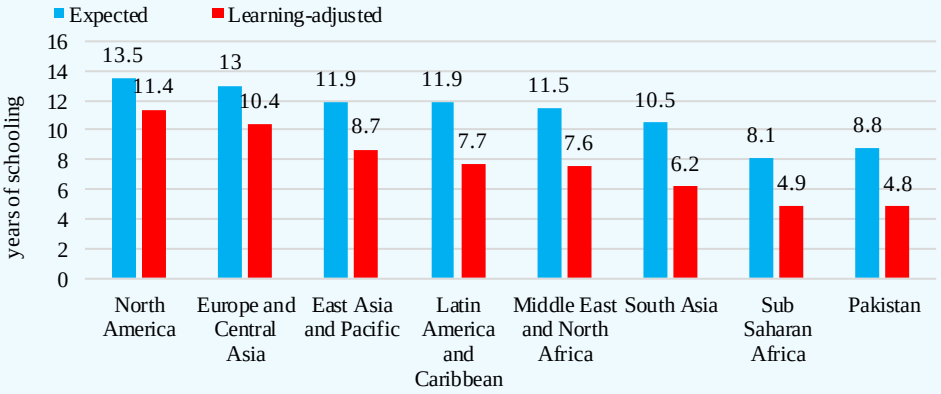
Data source: World Bank Human Capital Index (HCI) and United Nations Development Program Human Development Index

In overall terms, Pakistan ranks 134th out of 157, scoring lower than both its regional and peer economies. Component-wise performance is also poor, with Pakistan faring unsatisfactorily against all the indicators (**Table S1.1**). The findings are in line with the United National's Human Development Index (HDI) (**Figure S1.1**). According to 2018 HDI rankings, Pakistan ranks 150th out of 189 countries.

Coming back to the findings of the HCI, it is worrying to note that the average expected years of schooling for children in Pakistan is 8.8 years, ranking 127 out of 157 countries. The finding that exacerbates the problem, however, is that the level of "learning-adjusted education" - the number of years that the attained

education is actually worth in terms of quality (this is done so using standardized test scores across countries) - is estimated to be around 4.8 years for the children enrolled in Pakistan, the lowest when compared to regional averages (**Figure S1.2**). This results in the learning gap in Pakistan of 4 years being significantly higher than the overall world average of 3.3 years.

Figure S1.2: Learning-Adjusted Education - A Comparison



Data source: World Bank Human Capital Index (2018)

The national Education Survey conducted by Alif Ailaan, a not-for-profit private sector institution in Pakistan, for 2013 (the latest survey available) shows that Pakistani citizens are concerned about the shortage of quality education avenues available to them. About 45 percent of the respondents termed the state of education quality in the country as "poor", with 49 percent fearing that the students are resultantly falling behind those belonging to the neighboring countries. Furthermore, 65 percent of the participants stated that the low quality of education in the country is resulting in the poor economic performance of Pakistan compared to other countries.

Table S1.2: National Estimates of Out of School Children (OOSC) by Level of Education

Level	Age Group	Population	Enrolment	OOSC	OOSC (percent)
Primary	5 to 9	22,670,715	17,574,849	5,095,866	22.5
Middle	10 to 12	12,781,300	6,119,197	6,662,103	52.1
High	13 to 14	8,520,866	2,835,326	5,685,540	66.7
Higher secondary	15 to 16	8,934,989	1,356,825	7,578,164	84.8
Overall	5 to 16	52,907,870	27,886,197	25,021,673	47.3

Data source: Alif Ailaan. 2014. 25 Million Broken Promises: The Crisis of Pakistan's Out-of-School Children. Islamabad: Alif Ailaan.

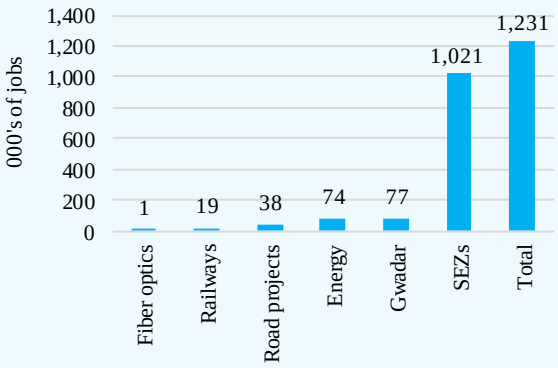
It is important to note that the indices referred above do not take into account the proportion of out of school children in a country while measuring the level of human capital or development. Worryingly, in the case of Pakistan, around 25.0 million children between the ages of 5 and 16 are out of school, equivalent to 47.3 percent of the total school-age population, with the levels increasing as the point of reference in terms of level of education rises (**Table S1.2**).

S1.3 The incoming labor force would face increasingly higher skill and knowledge requirements under CPEC

On November 4, 2018, a joint statement between Pakistan and China on "Strengthening China-Pakistan All-Weather Strategic Cooperative Partnership and Building Closer China-Pakistan Community of Shared Future in the New Era" was released. It officially signaled the commencement of the next stage of development under CPEC, with emphasis shifting from energy and rail/road infrastructure towards the fields of industry, agriculture mechanization, tourism, high-tech finance, port development and digital and technological advancement.

With the first stage of the CPEC already in near-completion, gauging its impact in terms of employment is now possible. According to a recently published working paper by the CPEC Center of Excellence,[1] the various energy, road and rail projects have resulted in the creation of around 124,470 direct jobs across the country between FY15 and FY18. Encouragingly, the number is estimated to rise to 1.2 million by FY31 after factoring in the development of nine proposed Special Economic Zones (SEZs) (**Figure S1.3**).[2]

Figure S1.3: Employment Potential under CPEC from FY15 to FY31



Data source: CPEC Center of Excellence (2018)

[1] Rashid, S., Zia, M.M., & Waqar, S. (2018). *Employment Outlook of China Pakistan Economic Corridor: A Meta-Analysis*. CPEC Center of Excellence. Working Paper 21.

[2] International Labor Organization envisages generation of 400,000 jobs in Pakistan due to CPEC, while the Applied Economic Research Center in Karachi puts the number at 700,000 between 2015 and 2030. Ministry of Planning Commission, meanwhile, expects CPEC to generate around 800,000 jobs over the next fifteen years.

However, the study also finds that the ratio of Chinese to Pakistani workers during construction and operational phases of some of these projects stood at 58:42 and 37:63, respectively.[3] While it is common for Chinese firms to bring along substantial number of workers from China (as has been the case in other Belt and Road (BRI) countries, such as Sri Lanka and Bangladesh), at least a part of the reason of a large share of the Chinese workers in Pakistan can be explained by the shortage of medium to high-skilled workers in the domestic market.

Table S1.3: Sector-wise Distribution* of Potential Jobs under CPEC

Sector	Low-Skilled	Medium-Skilled	High-Skilled
Agriculture	Sowing; cultivation; logistics; fish catching; storing; security guarding; packaging	Machinery installation; information dissemination via electronic means; operating refrigeration systems; fish preservation mechanisms	Processing machineries; supply chain tracking and monitoring; R&D; experimentation and demonstration centers; implementing water preservation mechanisms; development of e-agri applications; training
Industry	Packaging; basic processing; equipment fitting and fixing; procurement; manual labour; security guarding	Assembling; Machine installation and operations; advanced technical works	R&D; petrochemicals (advanced cracking, etc.) and pharmaceutical operations (drug related research); marketing; skill-building; managing; training
Services	Transportation; hospitality; basic plumbing, carpentry and electricity works; security guards	Tour guides; port machinery and electricity installments; machine operations; big ship vessel maintenance engine repairing; language skills; electronic supervision	Complementary services (accounting, legal, advisory, consultancy, etc.); digital finance and insurance; ICT port engineering (heavy machinery usage); tracking systems; medical; e-commerce; informatization; R&D; training; regulations

*Classification according to International Labor Organization's (ILO) skill-base definitions and the associated International Standard Classifications of Occupations 2008 (ISCO-08).

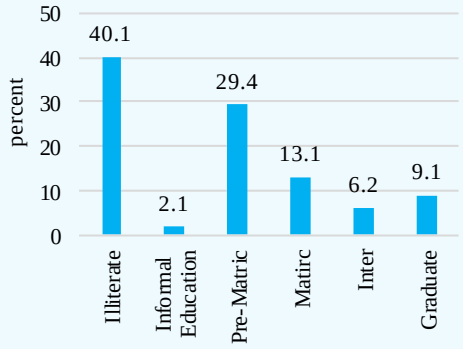
Worryingly, this deficit may further widen going forward as the focus shifts towards more knowledge-intensive fields such as digitization/mechanization of agricultural processes and joint ventures in financial and technological sectors of the economy (**Table S1.3**).

(i) Inadequate education is affecting the skill levels of the work force

As **Figure S1.4** shows, of the total civilian labor force, 40.1 percent of the workers are illiterate; at the same time, 74.5 percent of the literate workers have education up to the matriculation (Class-10) level only. Furthermore, the Annual State of

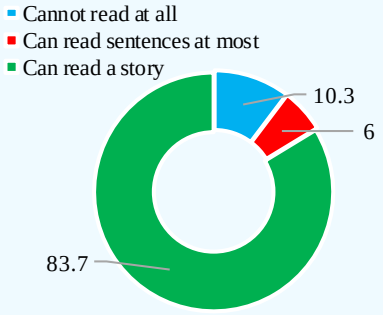
[3] Authors of the study take labor force distribution ratio observed under the construction and near-completion stages of Sahiwal coal power plant project as a benchmark for the analysis.

Figure S1.4: Civilian Labor Force by Education Status in FY18



Data source: Labour Force Survey 2017-18 and Pakistan Bureau of Statistics

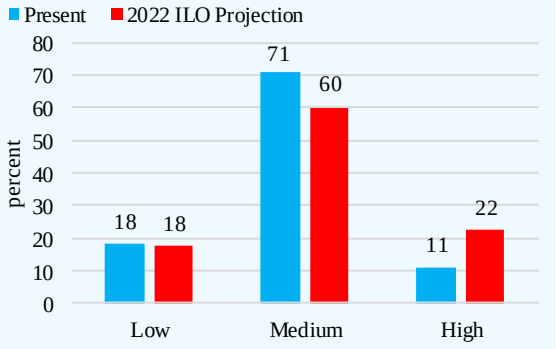
Figure S1.5: Percentage Distribution of Rural Area Class 10 students by Reading Ability in Urdu, Sindhi and Pushto



Data source: Idara-e-Taleem-o-Aagahi (ITA) 2016-State of Education Report

Education Report (ASER) for 2016, published by Idara-e-Taleem-o-Aagahi (ITA) in association with UK's Department for International Development (DFID) and Foundation of Open Society Institute (FOSI), reported that on average 10.3 percent of rural Class-10 students enrolled in schools all over the country could not read even a single word in Urdu and other regional languages (**Figure S1.5**). This unsatisfactory performance in the school results in the labor force not being prepared enough for the technically demanding jobs. At present, the Pakistani labor market is creating jobs requiring low, medium and high skill-sets in the ratio of 18:71:11, respectively, as per the latest labor force survey (LFS) statistics using International Labor Organization (ILO) skill group classifications. However, ILO projects the ratio to stand at 18:60:22 by 2022, further highlighting the need to train the work force to be prepared for relatively advanced jobs going forward (**Figure S1.6**).

Figure S1.6: Distribution of Occupations by Skill Requirements

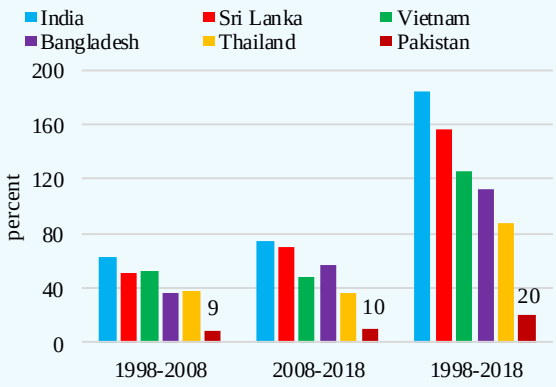


Data source: Labour Force Survey for Present; ILO for 2022 projections

(ii) Labor force productivity levels are also on the downside

As a result of the lost human capital potential, labor force of the country does not fare well in terms of productivity.[4] In fact, from 1998 to 2018, Pakistan has exhibited the lowest cumulative growth in labor productivity (20 percent) amongst all regional countries. For comparative purposes, India, Sri Lanka, Bhutan, Vietnam and Bangladesh all experienced labor productivity growth in excess of 100 percent during the same period (**Figure S1.7**).

Figure S1.7: Change in Labor Productivity Over the Last 20 Years



Data source: ILO

(iii) The work force fares poorly in terms of technical capabilities as well

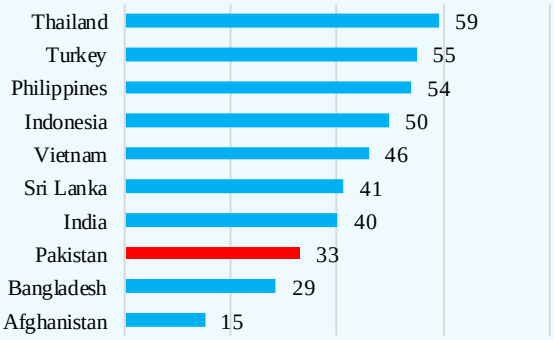
The next stage of CPEC is envisaged to bring substantial gains on the technology front. For example, laying down of 820 km long optical fiber cable (stretching from Khunjerab to Rawalpindi) is proposed to provide a fast and secure internet connection to the previously underserved segments of the society. The tech sector is also expected to benefit from the development of an IT park in Islamabad, as well as from training programs for the Pakistani labor force being rolled out by Chinese firms (like the Alibaba eFounders Fellowship Program for startups). Furthermore, after the establishment of the envisioned SEZs, the country is poised to experience technology transfers and spillovers, especially in the industrial sector.

However, the low level of human capital development over the past decades has resulted in Pakistan lagging behind comparable economies in terms of informatization - the extent to which an economy, or a geographical area, is becoming information-based (i.e. transitioning towards a knowledge-based economy). According to an index developed by the Chinese State Information Center in 2018, Pakistan ranks 54th in terms of informatization amongst the 64 countries that are officially deemed part of the Belt and Road Initiative (BRI)

[4] Note that factors such as persistently low capital investment levels and minimal gains from technological advancements (total factor productivity) over the years also played a part in keeping the overall labor productivity level in the country constrained. Source: Amjad, R., & Awais, N. (2016). Pakistan's Productivity Performance and TFP Trends, 1980–2015: Cause for Real Concern.

(**Figure S1.8**),[5] with an overall score of 33.0 out of a possible 100. This is indicative of severe supply and demand side constraints that are currently holding back the potential of the country's IT sector to develop and complement the growth of the economy.

Figure S1.8: BRI Informatization Index Scores of Selected Economies



Data source: State Information Center of China (Score out of 100)

Furthermore, the level of internet inclusivity in Pakistan is also below-par. According to The Economist Intelligence Unit's Inclusive Internet Index of 2018, Pakistan ranks 68th in overall terms amongst the 86 countries surveyed, with a mean score of 54.5 relative to the South Asian and world averages of 61 and 67, respectively (out of 100).[6]

S1.4 Policy recommendations and outlook

In conclusion, to maximize returns from the opportunities arising out of the implementation of CPEC projects, Pakistan would have to take serious notice of its human capital deficiency. The government needs to devise a framework focusing on skill-development of the workforce and adequate provision of associated services in order to stand on an equal footing with the rest of the regional economies, who are intently focusing on reskilling, digitization and technological advancements to gain a competitive advantage.

Firstly, a significant overhaul of the education system of the country is required to address the dearth of adequately skilled graduates entering the labor force. As the findings from the Human Capital Index reveal, the effectiveness of the primary education needs to be enhanced significantly in order to improve the level of knowledge-absorption and increasing the level of enrollment in schools. Of equal importance is the need for revising the curriculum of academic institutions to better reflect the needs of current and future occupations.

[5] The BRI Informatization Development Index ranks countries coming under the Belt and Road initiative along different indicators such as ICT foundation (GDP per capita, higher education enrollment, broadband speeds), ICT application (broadband and internet access levels), and ICT industry (export capacity of IT and IT-enabled products and services).

[6] For more details, refer to "Box 2.3: State of Internet Inclusiveness in Pakistan" in the SBP's Third Quarterly Report for FY18.

Secondly, focus on vocational and skills training of the work force is critical in ensuring that the employability levels of the domestic workers remain intact, or ideally increase, during the transitional stage of job transformation and technical advancement. A welcome development in this regard is that the Chinese firms are already involved in technical skill building of the Pakistani youth to enable them to be prepared for work under the CPEC programs. This includes emphasis on vocational training (such as the construction of Pak-China Technical and Vocational Institute at Gwadar), scholarships and exchange programs for university and college students as mentioned in the Joint-Statement, and collaborative efforts with Pakistani technological platforms (such as the AliBaba eFounders Fellowship program with NIC Karachi).

However, as stressed in previous reports, there needs to be an overarching policy to govern the skill-building process from the public domain to keep the progress aligned with the national objectives. The devolution of labor administration to provinces under the 18th Amendment, though, means that provinces must also facilitate the center in this regard. Recently, Sindh, Punjab and Khyber Pakhtunkhwa, all have launched labor policies with the objective of increasing jobs, providing a safe and healthy work environment, ensuring gender parity in employment, and training their respective labor force according to the needs of a transitioning economy.[7] This is an appreciable step, but it is important that these policies are also implemented in letter and spirit to actually realize the envisioned gains.

Another encouragement development is that the National Vocational and Technical Training Commission (NAVTCC) of Pakistan is in the process of introducing officially defined skill-set categorizations to help improve the placement and skill matching in the domestic labor market. Under the revised National Vocational Qualifications Framework (NVQF), an assessment criterion is being developed to classify workers according to skill-sets and to facilitate their gradual promotion to higher levels.[8] On parallel terms, the TVET (Technical and Vocational Education and Training) sector institutions would also be assessed based on indicators such as affiliation/accreditation with relevant bodies;

[7] The province of Sindh announced its "1st Sindh Labour Policy 2018" in February 2018, with KP following suit by approving K-P Labour Policy and a Child Labor Policy in May, 2018. The Punjab government passed its Labour Policy 2018 in November, 2018.

[8] The eight reference levels of the NVQF are described in terms of learning outcomes (LOs) under "Knowledge & understanding", "Skills", and "Responsibilities". They complexity of LOs are defined from basic knowledge, basic skills and working under the direct supervision (level 1) to advanced knowledge, specialist technical skills and supervision & management responsibilities (level 5). Levels 6 to 8 are assigned to bachelor and above level students and fall under the domain of the Higher Education Commission (HEC) of Pakistan.

adequacy of training facilities; teaching staff quality; type of trades being offered; employability of graduates; alignment with NVQF; and health and safety requirements, etc. The objective is to foster a sense of healthy competition amongst the training institutes to bring overall improvement in the sector.

Thirdly, on the technology front, the Digital Pakistan Policy released last year includes an optimistic blueprint for the enhancement of human capital via expansion of digitization in the country.[9] Emphasis on digital and financial literacy and inclusion would be vital to enable both individuals and businesses to take advantage of the ICT in e-commerce, Fintech and BPO segments of the market. Finally, a strong focus on higher-level education pertaining to the complementary services sector (such as accountancy, consultancy, legal, etc.) would be needed so that the domestic labor force can fulfil the associated requirements of new industries enacted under the proposed SEZs.

If implemented in an effective manner, these measures hold the potential to gradually improve the labor standards and provide the country with means to maximize returns from the potential opportunities arising both under CPEC and because of the rapid global shift towards knowledge-intensive and technology driven economic growth models.

[9] The listed objectives include: (i) focusing on ICT education to increase the knowledge base of the youth at par with the global standards; (ii) promoting innovation and entrepreneurship in the country; (iii) bridging the gap between industry and academia; and (iv) emphasis on increasing the local language web content to increase both the reach and relevancy of digital platforms for the masses.

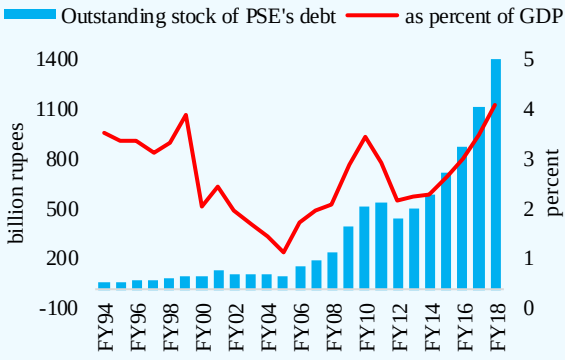
Special Section 2: Evaluating the Fiscal Burden of State-owned Enterprises in the Power Sector[1]

S2.1 Introduction

The performance of state-owned enterprises in Pakistan is typically characterized by weak financial management stemming from poor governance, excessive staff recruitment and political interference in day-to-day operations. Over the past couple of decades, the consistent loss accumulation by some SOEs and their fiscal spillovers have prompted successive governments to initiate policy-oriented and institutional reforms in these entities. However, commitment issues have persisted. Privatization agendas were also formulated, but the progress remained lackluster due to recurring financial losses, non-viability of commercial operations and other structural bottlenecks.

In the absence of decisive policy actions, problems in financially constrained SOEs have exacerbated, leading to heavy debt accumulation by these entities (**Figure S2.1**). This section intends to evaluate on a macro level the financial position of the SOE sector as a whole and provide perspectives on the assessment of actual fiscal burden these enterprises incur. The section particularly highlights the role of sectoral policies and overall business conditions in the power distribution sector, which has hampered the financial performance of associated SOEs.

Figure S2.1: Stock of SOEs Debt



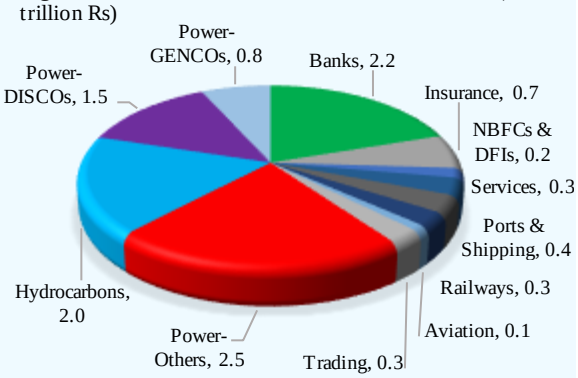
Data source: Ministry of Finance and Pakistan Bureau of Statistics

[1] This special section draws heavily from various published documents including "Circular Debt, Issues and Solutions" presented to Senate, different editions of "Federal Foot Print - SOE Annual Report" published by Ministry of Finance, different editions of 'State of Industry Report' by Nepra and financial reports of related entities. In addition, our discussions with National Electric Power Regulatory Authority (Nepra); Ministry of Finance, Power Holding Private Limited (PHPL), Central Power Purchasing Agency (CPPA), Islamabad Electric Supply Company (IESCO), Sukkar Electric Power Company (SEPCO) and commercial banks were useful in developing insights about the sector.

S2.2 Current size and aggregate financial position of SOEs

The aggregate assets of state-owned enterprises (SOEs) have increased by 11.3 percent CAGR between FY13 and FY16, and stood at Rs 11.5 trillion (US$ 110.3 billion) at end June 2016. This large asset base, spread across 197 entities, is equivalent to around 40 percent of Pakistan's GDP (**Figure S2.2**). Energy predominantly constitutes the bulk of SOEs' business. Right from upstream activities (oil & gas exploration), these entities are engaged across the entire energy sector value chain in the country. Their involvement in financial business also remains strong, as public sector institutions (comprising 20 percent share in aggregate financial sector assets) continue to operate along with the private institutions. Transport, storage and communication is another area where SOEs are operating while also enjoying a near-monopoly in their segments, especially in the case of railways (Pakistan Railways – PR) and international aviation (PIA).

Figure S2.2: Sectoral Classification of SOEs' Assets (in trillion Rs)



Data source: Federal Foot Print 2015-16, Ministry of Finance

Table S2.1: Net Profit/Loss of SOEs
billion rupees

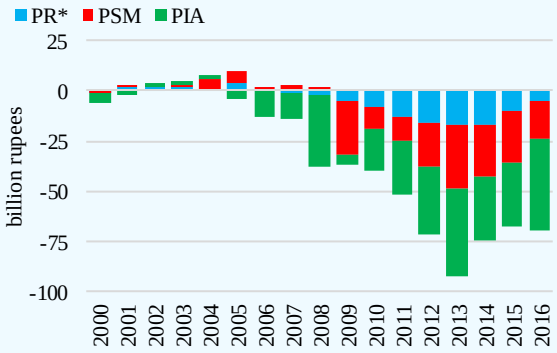
	2012-13	2013-14	2014-15	2015-16
Total SOEs	163.5	193.5	52.9	-44.8
Commercial	158.2	217.6	67.4	-43.9
1.Energy	225.6	256.5	125.0	6.0
Hydrocarbons	173.8	225	145.7	115.4
Power	51.9	31.5	-20.7	-109.4
2. Financial	19.3	32.6	36.3	34.5
3. Industrial & engineering	-24.6	-23.4	-25.7	-17.8
Pakistan Steel Mills	-28.4	-25.8	-25.7	-18.8
4. Trading	3.4	7.1	1.3	0.2
5. Services	-2.9	-3.8	-10	-6.6
6. Promotional & advocacy	1.4	1	3.1	1.8
7. Transport	-65.5	-54.3	-52.4	-62.8
PIA	-45.1	-30.7	-32.1	-45.3
Pakistan Railway	-30.5	-32.5	-27.2	-27.0
Non commercial	-	1.7	0.3	1.2
DFIs	5.3	6.2	5.6	7.4

Data source: Ministry of Finance

As shown in **Table S2.1**, the overall SOE sector had posted a net *profit* of Rs 410 billion between FY13-FY15. This performance owed primarily to healthy earnings of entities operating in the upstream energy and financial sectors, which more than offset the losses incurred by the entities operating in power distribution, industrial and transport sectors. However, the situation reversed in FY16, when the drag from loss-making entities increased significantly and more than offset the earnings of profitable entities (a sharp fall in global crude prices had led to a decline in revenues of oil and gas exploratory firms). This resulted in the net loss of Rs 44.8 billion in the aggregate SOE sector during the year. In terms of dispersion, however, more than 80 percent of the entities posted operating profits during FY16, whereas 55.6 percent were able to post strong bottom lines.

This basically suggests that, though large in size, losses in the SOE sector are limited to only a few entities. Among these, transport and industrial entities, such as Pakistan Steel Mills, PIA and Pakistan Railways, have posted persistent losses over the past decade due to overstaffing, operational inefficiencies, regulatory bottlenecks and lack of new investments (**Figure S2.3**). Policy-related issues are also partly responsible; their role is evident in sub-par performance of private operators in these sectors (especially aviation). The issues of service quality also crop up from time to time. While these entities are off the privatization list, structural revamping plans in these entities are being mulled over.

Figure S2.3: Losses of Major Non-Energy SOEs



* PR data shows operating profit/loss calculated as operating revenues minus operating expenses
Data source: PBS, Year Book of Railways, MoF and PSM

In the meantime, the most pressing issue that has emerged in recent years is of the circular debt, which has escalated financial constraints of the energy sector SOEs. As shown in **Table S2.2**, these entities have contributed the most to overall SOE debt accumulation as well as fiscal support over the past few years.

S2.3 Losses in some SOEs are high, but the aggregate fiscal burden needs careful assessment and attribution

The government provides details of its support to SOEs in an annual publication, "Federal Footprint – SOE Annual Report". According to this document, the

support mechanism includes subsidies, loans and grants provided by the federal government to these entities. Guarantees are also included since these represent contingent liabilities of the government. However, in order to assess the overall impact of SOEs' financial health on the fiscal accounts, one must understand the nature and objective of this support and also account for the revenue stream that the government generates from the operational activities of SOEs.

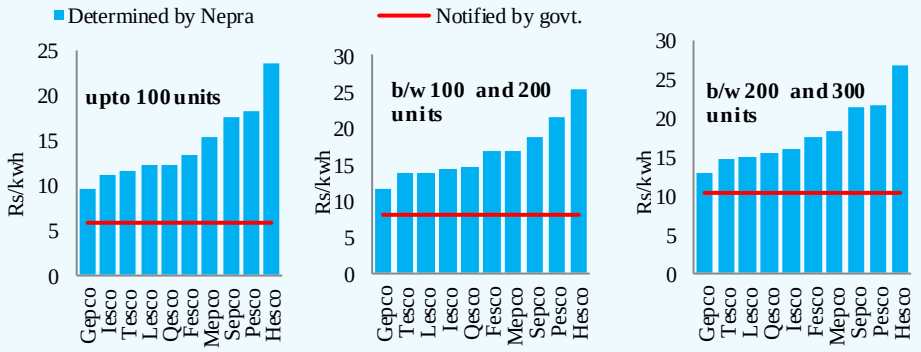
Table S2.2: Annual Fiscal Expense on SOEs
billion rupees

	FY13	FY14	FY15	FY16
A. Loans	80.4	150.5	110.3	181.3
o/w Energy sector	*29.6*	*57.5*	*29.0*	*80.2*
B. Guarantees	123.6	99.7	154.8	128.5
o/w Energy sector	103.1	57.0	96.0*	114.2
C. Subsidies	281.2	271.8	229.3	223.1
o/w Energy sector	260.0	228.0	221.0	171.2
D. Grants to Pakistan Railway	35.4	33.5	37.0	37.0
E. Total support (A+B+C+D)	520.6	555.5	531.4	569.9
F. Fiscal expense (A+C+D)	397.0	455.8	376.3	441.4
as % of GDP	*1.8*	*1.8*	*1.4*	*1.5*
G. Total income/revenues	75.8	133.0	88.3	146.3
as % of GDP	*0.3*	*0.5*	*0.3*	*0.5*
Mark- income	12.3	67.0	14.2	57.7
Dividend income	63.5	65.9	74.1	88.5
H. Net expenditures (F-G)	321.2	322.8	324.0	295.1
as % of GDP	*1.4*	*1.3*	*1.2*	*1.0*
as % of FBR Revenue	*15.7*	*13.6*	*11.5*	*8.7*

*Since decomposition of guarantees was not available for the year, this number was calculated by subtracting guarantees to PIA from total guarantees (for other years, this amount was almost equal to guarantees to the energy sector)
Data source: Federal Foot Print SOE Annual Report, 2015-16, 2013-14, MoF, PBS

First, the support: as shown in **Table S2.2**, subsidies are the heaviest item on government's books. The bulk of these subsidies are energy-related, and represent the government's policy decision to provide electricity to consumers at below-market price. Technically, this expense comprises the difference between the Nepra-determined power tariff (based on the generation cost, margins, T&D losses of Discos) and the tariff notified by the government. It is important to highlight here that end-consumers, not the PSEs, are the beneficiaries of the subsidy [thus, it is not surprising to see that the K-Electric, which is the only generation and distribution company in the *private* sector, was the recipient of one-third of total energy-related subsidies during the past 3 years]. This is because: (i) subsidies represent the government's effort to unify the electricity tariff across the country despite a wide disparity in Discos' efficiency levels; and (ii) these also shield consumers from the impact of high input costs and inefficiencies across the energy value-chain. As shown in **Figure S2.4**, for household consumers who consume up to 200 units of electricity, the government notifies the tariff at a level which is even lower than what Nepra determines for most efficient Discos. Certainly, political considerations make it hard for the federal government to pass on the impact of prevalent inefficiencies in the power sector value-chain to end-consumers.

Figure S2.4: Difference b/w Tariff Determined by Nepra and GoP Notified Tariffs for Different Consumer Slabs



Data source: SRO 01 (I)/2019, Ministry of Energy, Government of Pakistan

This practice of allowing untargeted subsidies has two negative fallouts. First, the unintended consequence of implementing a unified tariff across the country is that it feeds into inefficiency. Specifically, in the current scheme of things, Nepra penalizes inefficient Discos by allowing certain percent of transmission and distribution (T&D) losses to be included in the base tariff, with additional losses eating into the Discos' earnings. However, by absorbing Discos' losses via subsidies, the government alleviates public pressure on inefficient Discos to put their house in order. This practice also lifts pressures from inefficient power producers who continue to use more expensive fuels for thermal generation. On aggregate, this inter-Disco tariff differential subsidy constitutes 60 percent of the total subsidy expense budgeted for FY19 (**Table S2.3**).

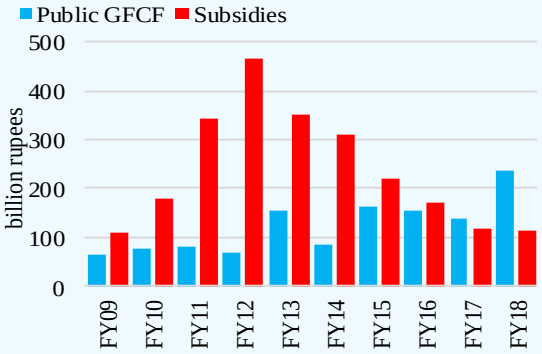
Table S2.3: Subsidies Profile
billion Rs

	Revised Estimates		Budget
	2016-17	**2017-18**	**2018-19**
Subsidy to Wapda/Pepco	**102.6**	**81.5**	**134.0**
Inter-Disco tariff differential	91.0	57.5	105.0
Tariff differential for agriculture tube wells in Balochistan	1.7	0.0	5.0
To pick up Wapda/Pepco receivables from FATA	9.9	10.0	12.0
Subsidy to Wapda	0.0	14.0	12.0
Subsidy to K-Electric:	**15.4**	**33.5**	**15.4**
To pick up K-Electric's tariff differential	10.2	11.0	15.0
For tariff differential for agriculture tube wells in Balochistan	0.6	0.4	0.4
Subsidy to Discos & K-Electric on A/c. of industrial customers	4.7	22.1	0.0
Total power sector subsidies	**118.0**	**115.0**	**149.4**
Overall subsidies	**169.0**	**147.6**	**174.7**

Data source: Budget in Brief for Fiscal Year 2017-18 and 2018-19

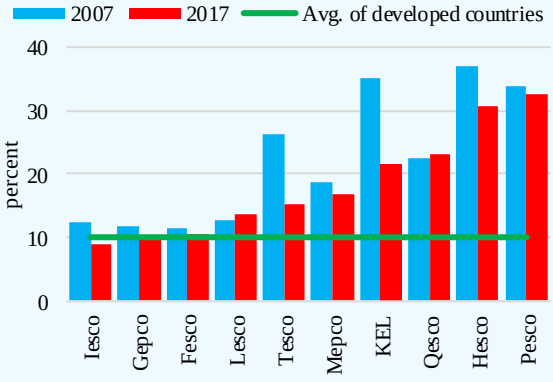
The second fallout is that over the past decade, subsidies have eaten up the bulk of fiscal resources, leaving fewer resources for capacity expansion/ upgradation (**Figure S2.5**). Although public investments picked up some pace between FY15 and FY18 (including FDI inflows), these were concentrated heavily in power generation. Expansion and up-gradation of distribution infrastructure (for instance, installing high voltage transformers and smart grids; discarding obsolete grids; ensuring safety protocols such as proper earthing and plugging current leakages) was mostly left for Discos to manage, who consistently underinvested in the area due to financial constraints, mis-governance, and commitment issues. As shown in **Figure S2.6**, no major improvement was seen in T&D losses in the distribution sector, except for the privatized K-Electric, and the company responsible for power distribution in tribal areas.

Figure S2.5: Comparison of Fiscal Expenses on Energy: Subsidy vs. GFCF



Data source: Ministry of Finance and Pakistan Bureau of Statistics

Figure S2.6: T&D Losses of DISCOs



Data source: State of Industry Report 2008 and 2017, Nepra

As far as loans to SOEs are concerned, it is clear that the bulk of loans to SOEs is actually PSDP spending by the government in strategically important sectors like roads, energy and transport. Specifically, the government's development expenditures in these sectors comprise of loans to the relevant entities. In FY16, for instance, half of the loans to SOEs were received by National Highway Authority for the completion of various public projects, such as Faisalabad-Khanewal expressway; Lowari tunnel and access roads; and CPEC funded Thakot to Havelian section. In the energy sector, major recipients of development loans were Neelum-Jhelum hydropower project and National Power Parks (for the

completion of LNG-based power plants in Baloki and Haveli Bahadurshah). Importantly, the mark-up that the federal government charges on development loans to SOEs is slightly higher when compared with the SOEs' cost of borrowing from commercial banks (**Table S2.4**).

Table S2.4: A Comparison of SOEs' Borrowing Cost from Federal Government and Commercial Banks

	Rate of mark-up chargeable on development loans by the federal govt.*	Weighted average lending rates on bank lending to non-financial PSEs (end June)**
FY15	10.53	6.8
FY16	7.37	6.66
FY17	6.5	4.98
FY18	6.62	7.04

Data source: *Notification No. F.8(2)GS-I/2018-196, Ministry of Finance, **State Bank of Pakistan

As for the revenue stream for the government, the two major sources from SOEs are mark-up income on government loans to these entities, and the dividend income from the profit-making entities. Combining these two sources, the government earned 0.4 percent of GDP on average between FY13 and FY16. This suggests that in overall terms, the actual (net) burden of SOEs on the fiscal account, which has been expensed out, was on average 1.2 percent of GDP and 12.4 percent of FBR's revenues during this period.

However, it is important to note that a major fiscal burden has not been expensed out yet: the guarantees. While notional amounts of government guarantees during the previous 3 fiscal years were large (**Table S2.4**), the real concern lies with their accumulated volume (PSE debt), which has touched 4 percent of country's GDP by end December 2018. It is important to recall here that the federal government encourages SOEs to borrow directly from commercial banks to finance their capex as well as working capital needs. However, the disaggregated data showed that nearly half of these guarantees (46.5 percent) merely represented cash flow constraints in the energy sector stemming from circular debt. At end December 2018, banks' exposure to Power Holding Private Limited (on whose books the bulk of circular debt is parked) increased to Rs 516.5 billion[2]. To alleviate this burden, the government has recently issued Sukuks worth Rs 200 billion, following which the state-owned CPPA was able to make payments to power generation companies. However, such measures would be effective only in the short-term; for a sustainable functioning of the sector, a massive overhaul is needed as described below.

[2] In overall terms, energy sector entities constituted 73 percent of the total lending to SOEs by commercial banks at end December 2018

S2.4 Improvement requires a massive overhaul of the sectoral policy, not just SOEs' inefficiencies [Case Study: Public Sector Discos]

Disaggregated data shows that in the energy supply chain, the hydrocarbon sector comprised of oil and gas exploration firms, refineries and OMCs, has been making decent profits over the past decade. The margins, however, shrink once the focus is shifted towards the electricity generation and distribution sector, where most of the entities are making substantial losses (**Table S2.5**). When it comes to losses (and thus the need for fiscal support) incurred by Discos, the reasons typically boil down to the issue of managerial and technical inefficiencies prevailing in these entities.

Table S2.5: Net Profit/Loss of Key Energy Sector Entities
billion rupees

	FY13	FY14	FY15	FY16	FY17	FY18
OGDCL (67.5%)	91.3	123.9	87.2	59.97	63.8	78.74
Parco (60%)	13.1	10.4	13.6	18.8	NA	NA
GHPL (100%)	24.0	25.8	24.3	18.1	20.3	27.5
PPL (67.5%)	42.1	50.9	38.4	17.2	35.7	45.7
PSO (22.5%)	12.6	21.8	6.9	10.3	18.2	15.5
SSGC (53.2%)	0.4	-3.8	-5.4	-6.1	1.3	NA
Genco-II (100%)	-3.3	-2.4	3.8	-1.5	NA	NA
Genco-I (100%)	0.7	1.5	0.8	-2.4	0.7	0.3
Genco-III (100%)	-4.3	-5.1	-1.5	-3.9	0.7	NA
Wapda (100%)	20.5	23.2	33.3	19.5	17.0*	NA
NTDC (88%)	59.4	7.3	8.9	9.2	10.6	14.7
Gepco (100%)	7.1	-1.6	5.8	10.2	7.5	-5.0
Tesco (100%)	-5.1	-2.3	0.9	0.2	NA	NA
Iesco (100%)	10.2	22.7	2.7	-7.7	-11.9	-27.3
Mepco (100%)	11.9	9.9	9.8	-10.3	-17.9	-33.8
Lesco (100%)	13.8	10.4	-8.9	-11.2	NA	NA
Fesco (100%)	24.1	29.5	5.2	-13.3	-14.2	NA
Pesco (100%)	-32.5	-34.4	-15.1	-14.5	-19.4	-43.0
Sepco (100%)	-19.4	-14.8	-17.7	-21.7	NA	NA
Hesco (100%)	-16.5	-12.6	-19.8	-27.2	NA	NA
Qesco (100%)	-13.8	9.1	-35.1	-34.6	NA	NA

*Hydroelectric-Nepra regulated business. Figures in parenthesis represent government's share in entities
Data source: Ministry of Finance; Companies' Annual Reports

In particular, low recoveries, large T&D losses and governance problems have left little cash with these entities over the years that could have been invested for the up-gradation of transmission and distribution infrastructure. While this line of reasoning can easily be validated by poor financials of most Discos, it is equally important to highlight the role of the prevalent policy and regulatory practices in explaining some of the financial woes of the distribution sector. To understand this phenomenon, three major aspects stand out:

(i) Even the most efficient Discos are facing serious financial constraints:
The case in point is Islamabad Electric Supply Company (Iesco) and Faisalabad Electric Supply Company (Fesco). These Discos are incurring T&D losses equivalent to those in developed countries (**Figure S2.6**). On the recovery side also, Iesco and Fesco have appreciably high recovery rates of 92 and 97 percent, respectively. It is not surprising, therefore, that these two have consistently been

at the top positions on the regulator's (Nepra) performance evaluation ranking, outperforming the only Disco operating in the private sector (K-Electric).

Despite the performance advantage, however, the entities incurred operating losses between FY16 and FY18. Importantly, these entities were enjoying steady net profits up till FY16, when their bottom-lines were hit by a snag in the determinantion of multi-year tariff (MYT). In 2015, Nepra introduced multi-year tariffs (MYT) for some profit-making discos in order to prepare them for privatization (**Box SS2.1**). Although these Discos had themselves requested for the MYT, they were dissatisfied with the notified tariffs, and filed a petition against the decision with Nepra (**Table S2.6**). Later, these Discos sought legal recourse for the reconsideration of notified tariffs; the government (Ministry of Energy) lodged a complaint in the high court on behalf of the affected Discos. In 2017, the court decided in favor of the enterprises, advising Nepra to revise the tariffs.

Table S2.6: Different Components of MYT Determination: Iesco's Case

Adjustments	Requested by Iesco	Granted by Nepra
Return on rate base	18.85%	11.83%
Return on equity	19.0%	16.67%
Cost of debt	16.15%	3m kibor+2.75
Prior year adjustment (billion Rs)	1.0	-10.8
Additional recruitment	10,304 persons	None

Source: Various tariff petitions of Iesco extracted from website of Nepra

Importantly, for the years ending FY16, FY17 and FY18 when their tariff determination was under litigation, these companies had to bill their customers as per the tariff last notified (in 2015). This meant that the growth in electricity revenues could not keep pace with the expense on electricity purchase. After the court verdict, Nepra re-determined their tariffs (in September 2017), but marked the same as post-dated; the expenses of the past couple of years were ultimately borne by the enterprises, and they had to incur financial losses. By FY18, when the MYT regime was eventually revised, the net loss of Iesco had accumulated to Rs 46.9 billion between FY16 and FY18. Fesco, on the other hand, had incurred a cumulative loss of Rs 27.5 billion during FY16 and FY17 (it has withheld its financial statement for FY18).

This suggests that tariff determination and associated procedural delays also create financial challenges for Discos. As per the report presented in the Senate, titled "Circular Debt: Issues and Challenges", delays in determination of consumer tariffs contributed almost a third to gross receivables of Central Power Purchasing Agency, which is responsible for power procurement for Discos.

Box SS2.1: Multi-year Tariff Regime

Under the "Regulation of Generation, Transmission and Distribution of Electric Power Act 1997" Nepra is responsible for determining tariffs and other terms and conditions for the entire electricity supply chain including generation, transmission and distribution. To determine tariffs of distribution companies, Nepra practices two different method: (i) Single Year Tariff Regime (SYT) for annual tariff determination; and (ii) Multi Year Tariff Regime (MYT) for more than a year.

The MYT is a framework for regulating return/profits of entities over a period of time, keeping in view their projected revenue and cost stream. The methodology of MYT adjustment takes into account multiple factors, including future power purchase cost, transmission cost, and cost of capital. Specifically, the MYT is based on (i) indexation/adjustments of various components of distribution margin; (ii) targets of T&D losses; and (iii) future investments for the MYT period. Moreover, certain costs such as variation in power purchase price (PPP) and delay in notification leading to prior year adjustments (which comprise of under/ over recovery of the different components of tariff) are adjusted in timely manner to ensure sustainability of operations.

Discos prefer to get MYT regime since: (i) MYT is considered less volatile and is subject to fewer intra period adjustments, which may reduce the frequency of revisions in base tariff and cost of capital; (ii) the MYT puts in place a performance-based tariff structure where Discos get benefits of improved efficiencies and lower T&D losses; (iii) it protects companies against uncontrollable risks, such as unexpected changes in PPP; and (iv) it reduces the frequency of regulatory protocols (e.g., time required for petitioning and hearings).

(ii) Qesco's recoveries are suppressed due to a 10-year long subsidy on tubewells, and delays in subsequent tariff notifications

Qesco is incurring one of the highest T&D losses and lowest recovery ratios of the power distribution industry. Over 75 percent of the electricity being supplied by Qesco is utilized by agriculture consumers for running tubewells. Between 2001 and 2010, a subsidy was given for tubewell connections: agri consumers were to pay Rs 4,000 per month of the bill, and the remaining amount was to be borne by Qesco, the government of Balochistan and the federal government in a ratio of 30:30:40, respectively.

With the completion of initially announced duration, the subsidy program ceased for a period of 27 months, but was later restored with effect from December 2012. Importantly, no clarification/notification was provided for the distribution of dues across farmers, Qesco, and the provincial and federal governments. Agri consumers were reluctant to pay their share of electricity bills beyond what they were burdened with during the subsidy regime, and therefore defaulted on their bills for these 27 months. This amount alone equals Rs 55.3 billion. Furthermore, subsequent billing was also affected as consumers were required to make their pending payments before they could pay their current dues. This meant that even if the consumers wanted to pay off current period liabilities, they were unable to do so without clearing the accumulated backlog.

The said notification regarding the proportion and liability of payments is still pending. It is pertinent to note here that the average recovery (3-year) ratio by Qesco before 2010 was 80 percent; this had come down to only 43.6 percent by end-2017. While agri consumers constitute the bulk of Qesco's defaulters, the Government of Balochistan and the federal government also collectively owe Rs 44.8 billion to the entity.

(iii) Enforcement issues[3]

The third aspect is the issue of electricity theft or low recoveries. Over 5.3 million electricity connections in Pakistan are getting electricity despite having defaulted on payments. At end June 2018, the outstanding balance of these defaults stood at Rs 404.8 billion, which makes up nearly half of the total receivables of Discos. These defaults are concentrated primarily in 4 Discos, including those operating in Quetta, Peshawar, Sukkur and Hyderabad. Furthermore, it appears that while recovery efforts on the part of these Discos are falling short, security conditions and law enformcent issues also impede collection process. Political considerations cannot also be ruled out when it comes to enforcing disconnections upon defaults.

In case of Sepco, for instance, the lack of cooperation from law enforcement agencies was important. Private sector receivables of this entity have been increasing at the rate of Rs 8-10 billion per annum for the past 3 years, primarily on account of theft, to stand close to Rs 84.6 billion at end FY18. In this regard, the distribution companies requested the help of law enforcement agencies to enable recovery and minimize losses from the affected and sensitive areas, but this did not help.[4] Similarly, Peshawar Electric Supply Company (Pesco) also finds it difficult to take action against defaulters due to administrative and political obligations. Sometimes, the worst case scenario following permanent disconnection saw the company staff facing road blockages and attacks, and transmission towers being blown off.

In addition to this, distribution companies also have sizable proportion of pending receivables from provincial governments. The non-actualizaiton of the amount for an extended period of time exacerbated the liquidity woes of these entities.

[3] The issues highlighted and the data presented in this section have been taken from "Circular Debt: Issues and Solutions" authored by Senator Shibli Faraz, August 2018

[4] After conducting a survey, Sepco found out that close to 400,000 illegal connections were operating in its jurisdiction. According to Sepco, 11,905 FIRs were lodged with local police between FY16 and FY18 (Jul-May), of which only 79 were registered.

S2.5 Unless the policy and overall business conditions change, a change in management of SOEs may not suffice

While too much emphasis is being given to privatization of Discos (and other SOEs), it is equally (if not more) important to devise a time-bound action plan to (i) shift towards efficient power generation; (ii) do away with costly and poorly targeted subsidies; (iii) address deficiencies in governance and regulatory infrastructure; (iv) remove price distortions; and (v) launch an effective crackdown against defaulters in security-wise challenging areas. While privatization might be helpful, its effectiveness will hinge on how the structural and political challenges facing these SOEs are addressed.

To bring down the Discos' T&D losses, heavy capital investments are required to phase out unreliable and old generation plants and replace low-voltage transmission and distribution lines. Therefore, the foremost step the government should take is to rationalize its subsidy outlay and expedite its investments in modernizing and revamping the distribution sector. Furthermore, both the federal and the provincial governments must step up their efforts and align their spending structures with the capital needs of the energy sector. Here, it is important to note that Discos are currently not in a position to undertake the needed up-gradation of their distribution infrastructure because of their persistent cash flow constraints. Over the medium-term however, Discos' reliance on PSDP can be reduced, and these entities should be able to seek financing based on the strength of their own balance sheets.

Furthermore, the involvement of provincial governments in the operational and managerial processes of the SOEs is also of significance. By facilitating loss recovery, provincial authorities can help the energy sector SOEs in tackling major financial issues, like theft and post-disconnection electricity consumption.

In sum, in order to improve the performance of the overall SOE sector, decisive action is required in the energy sector, along with a general improvement in the institutional governance of these entities. Efforts should particularly be taken to create an environment where the sector could be run on commercial basis, and SOEs operate independent of any political interference. In this context, a national consensus is required towards the formulation of a coherent energy sector policy, with a clear buy-in from all stakeholders at the government level.

Annexure: Data Explanatory Notes

1) **GDP:** SBP uses the GDP target for the ongoing year, as given in the Annual Plan by the Planning Commission, for calculating 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 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:

Period average inflation (π_{Ht}) = $$\left(\frac{\sum_{i=0}^{t-1} I_{t-i}}{\sum_{i=0}^{t-1} I_{t-12-i}} - 1 \right) \times 100$$

YoY inflation (π_{YoYt}) = $$\left(\frac{I_t}{I_{t-12}} - 1 \right) \times 100$$

Monthly inflation (π_{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.

3) **Change in debt stock vs. financing of fiscal deficit:** The change in the stock of 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 borrowing is adjusted for government deposits with the banking system, when calculating the financing data; (ii) changes in the stock of debt also occur due to changes in the exchange rate, which affects the rupee value of external debt, and (iii) the movement of various other cross-country exchange rates also affect the US Dollar rate and, hence, 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). The Ways and Means Advance is extended for the government borrowings up to Rs 100 million 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 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.

Borrowing from scheduled banks: This is mainly through the fortnightly auction of 3, 6 and 12-month Market Treasury Bills (MTBs). The Government of Pakistan also borrows by auctions of 3, 5, 10, 15, 20 and 30 year Pakistan Investment Bonds (PIBs). 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, public debt, debt servicing, foreign trade, etc., often does not match with the information provided by MoF and PBS. This is because of differences in data definitions, coverage, etc. Some of the typical cases are 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 exchange record 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). Furthermore, SBP reports both exports and imports as free on board (fob), while PBS records exports as free on board (fob) and imports include the cost of freight and insurance (cif).

In addition, the variation in import data also arises due to differences in data coverage; e.g., SBP import data does not include non-repatriable investments (NRI) by non-resident Pakistanis;[1] imports under foreign assistance; land-borne imports with Afghanistan, etc. In export data, these differences emerge as PBS statistics do not take into account short shipments and cancellations, while SBP data does not take into account land-borne exports to Afghanistan, export samples given to prospective buyers by exporters, exports by EPZs, etc.

[1] The non-repatriable investment (NRI) consists of small investments made by expatriate Pakistanis transporting machinery into the country that has been bought and paid for abroad and the purchases made from the *duty-free shops.*

Acronyms

3m	Three month
AC&MFD	Agricultural Credit and Microfinance Department
APCMA	All Pakistan Cement Manufacturers Association
Avg	Average
AWD	Alternate Wet and Drying
BISP	Benazir Income Support Program
bln	billion
BMR	Balancing, Modernization and Replacement
BoP	Balance of Payments
BPO	Business Process Outsourcing
CAD	Current Account Deficit
CAGR	Compound Annual Growth Rate
CBU	Completely Built Up
cc	cubic centimeters
CKD	Completely Knocked Down
CNG	Compressed Natural Gas
CPEC	China Pakistan Economic Corridor
CPI	Consumer Price Index
CPPA	Central Power Purchasing Agency
CSF	Coalition Support Fund
DAP	Diammonium Phosphate
DFIs	Development Financial Institutions
Disco	Distribution Companies
DRAP	Drug Regulatory Authority of Pakistan
DSC	Defence Savings Certificate
EM	Emerging Markets
EU	European Union
FAO	Food and Agriculture Organization
FBR	Federal Board of Revenue
FDA	United States Food and Drug Administration
FDI	Foreign Direct Investment
FED	Federal Excise Duty

FESCO	Faisalabad Electric Supply Company
FIPI	Foreign Investors Portfolio Investment
FMD	Foot and Mouth Disease
FO	Furnace Oil
FX	Foreign Exchange
FY	Fiscal Year (July to June)
GCC	Gulf Cooperation Council
GDP	Gross Domestic Product
Genco	Power Generation Companies
Gepco	Gujranwala Electric Power Company
GFCF	Gross Fixed Capital Formation
GHPL	Government Holdings (Private) Limited
GoP	Government of Pakistan
GSTS	General Sales Tax on Services
H1	First Half (July-December)
H2	Second Half (January-June)
HCI	Human Capital Index
HDI	Human Development Index
Hesco	Hyderabad Electric Supply Company
HRW	Hard Red Winter (wheat)
HSD	High Speed Diesel
ICT	Information and Communications Technology
Iesco	Islamabad Electric Supply Company
ILO	International Labor Organization
IMF	International Monetary Fund
IMPACT	International Model for Policy Analysis of Agriculture Commodities and Trade (FAO)
IPPs	Independent Power Producers
IT	Information Technology
JPY	Japanese Yen
KEL	K-Electric Limited
KIBOR	Karachi Interbank Offer Rate
KP	Khyber Pakhtunkhwa
KSA	Kingdom of Saudi Arabia
LC	Letter of Credit

Lesco	Lahore Electric Supply Company
LIBOR	London Interbank Offer Rate
LNG	Liquefied Natural Gas
LPG	Liquefied Petroleum Gas
LSM	Large Scale Manufacturing
LT	Long Term
LTFF	Long Term Financing Facility
M^3	Cubic meters
MAF	Million Acre-Feet
Mepco	Multan Electric Power Company
mln	million
mmbtu	One Million British Thermal Units
MNFSR	Ministry of National Food Security and Research
MoF	Ministry of Finance
MPC	Monetary Policy Committee
MSCI	Morgan Stanley Capital International
MT	Metric Ton
MTO	Money Transfer Operators
MW	Megawatt
MYT	Multi Year Tariff
NCCPL	National Clearing Company of Pakistan Limited
NDFC	National Development Finance Corporation
NEER	Nominal Effective Exchange Rate
NEPRA	National Electric Power Regulatory Authority
NFNE	Non-food-non-energy
NIC	National Incubation Center
NPL	Non-Performing Loan
NSS	National Saving Scheme
NTDC	National Transmission and Dispatch Company
O/N	Overnight
OCAC	Oil Companies Advisory Committee
OGRA	Oil and Gas Regulatory Authority
OGDCL	Oil and Gas Development Company
OMCs	Oil Marketing Companies

OMOs	Open Market Operations
OTEXA	Office of Textiles and Apparel
PAMA	Pakistan Automotive Manufacturers Association
Parco	Pak Arab Refinery Ltd
PASSCO	Pakistan Agricultural Storage and Services Corporation Limited
PBS	Pakistan Bureau of Statistics
Pesco	Peshawar Electric Supply Company
PHPL	Power Holding Private Limited
PIA	Pakistan International Airlines
PIBs	Pakistan Investment Banks
PKR	Pakistani Rupee
POL	Petroleum, Oil and Lubricants
PPL	Pakistan Petroleum Limited
PR	Pakistan Railways
PR	Policy Rate
PSDP	Public Sector Development Program
PSEs	Public Sector Enterprises
PSM	Pakistan Steel Mills
PSO	Pakistan State Oil
PTA	Pakistan Telecommunication Authority
Q1	First Quarter (Jul-Sep)
Q2	Second Quarter (Oct-Dec)
Q3	Third Quarter (Jan-Mar)
Q4	Fourth quarter (Apr-Jun)
Qesco	Quetta Electric Supply Company
REER	Real Effective Exchange Rate
RIC	Regular Income Certificate
RLNG	Re-Gasified Liquefied Natural Gas
RM	Malaysian Ringgit
Rs	Pakistan Rupees
SA	Savings Account
SBP	State Bank of Pakistan
Sepco	Sukkur Electric Supply Company
SNGPL	Sui Northern Gas Pipelines Limited

SOEs	State Owned Enterprises
SRO	Statutory Regulatory Order
SSA	Special Saving Account
SSC	Special Saving Certificate
SSGC	Sui Southern Gas Company Limited
ST	Short Term
SYT	Single Year Tariff
T-bill	Treasury Bill
Tesco	Tribal Electric Supply Company
T&D	Transmission and Distribution
UAE	United Arab Emirates
UBL	United Bank Limited
UK	United Kingdom
US$	US Dollar
USA/US	United States of America
USAID	United States Agency for International Development
USDA	United States Department of Agriculture
WALR	Weighted Average Lending Rate
WAPDA	Water and Power Development Authority
WPI	Wholesale Price Index
YoY	Year-on-Year