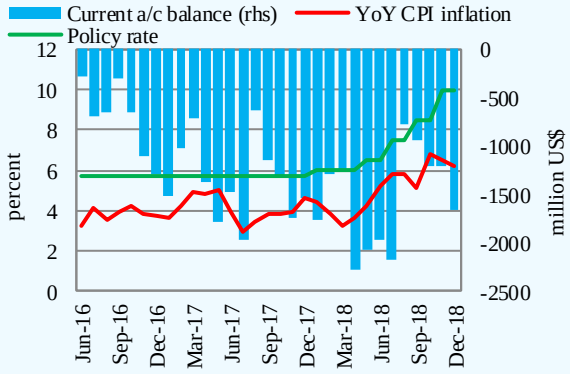
3 Inflation and Monetary Policy

3.1 Overview

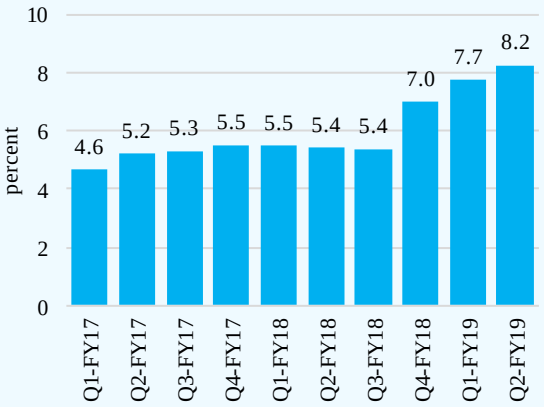
Challenges to macroeconomic stability persisted throughout the first half of FY19 in the form of rising inflationary pressures, elevated levels of twin deficits and low foreign exchange reserves (**Figure 3.1**). Importantly, pressures on core inflation, as measured by NFNE component of CPI, deepened 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

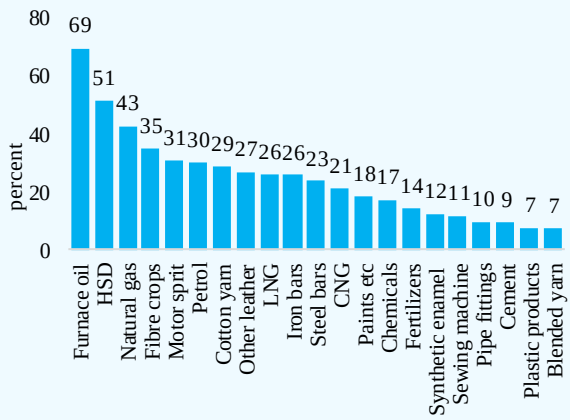
These developments also had implications for the conditions in the credit market as well as the transmission of changes in the policy rate to the lending rates. Specifically, during the first two months of the quarter, the government's entire financing burden was borne by the SBP, as banks were not willing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

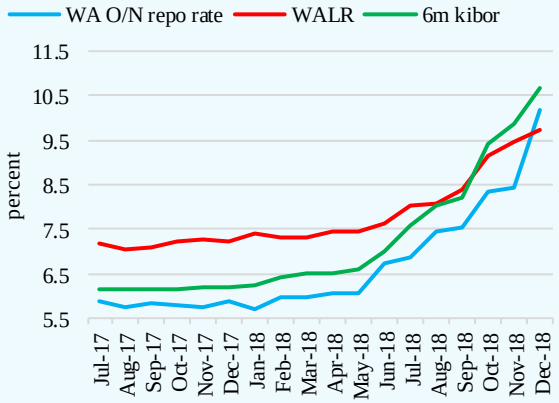
For instance, the demand for working capital loans remained strong particularly from export-oriented industries of textiles and basmati rice. Input purchases in these two sectors were quite upbeat, as an improved demand prevailed for their products in advanced economies. The impact of these purchases 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**).

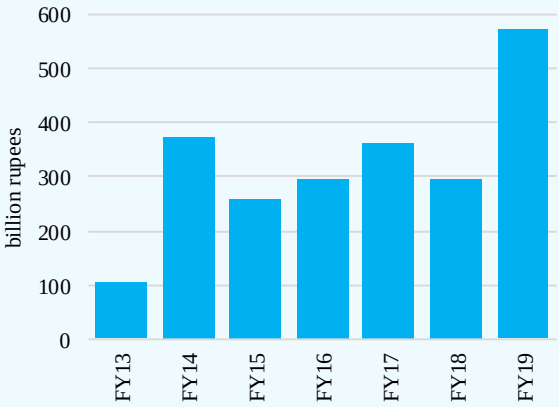
With government borrowings already growing at a rapid pace, the large volume of private credit off-take led to a steep rise in net domestic assets of the banking system during Q2-FY19 (**Table 3.2**). This increase was large enough to offset the contraction in net foreign assets of the banking system,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

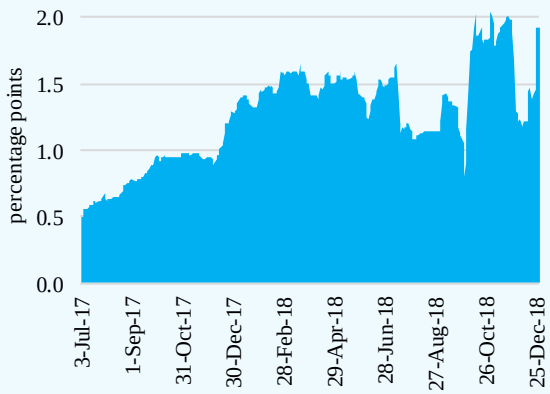
* Offered amount excludes non-competitive bids

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

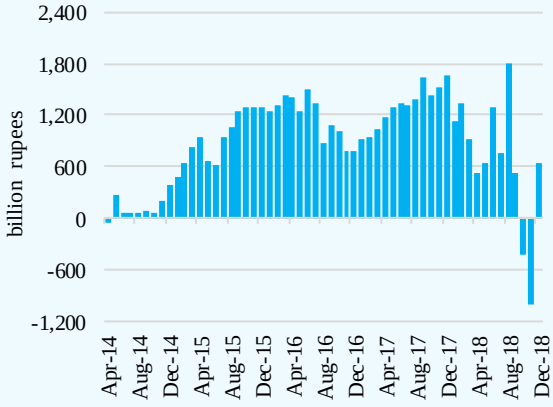
Meanwhile, floating rate PIBs attracted higher amount of offers compared to fixed rate in all tenors combined; however, majority of the offers were placed at higher margins than the previously accepted cut-off. Since the margin remains constant throughout the life of this instrument, the government scrapped 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,

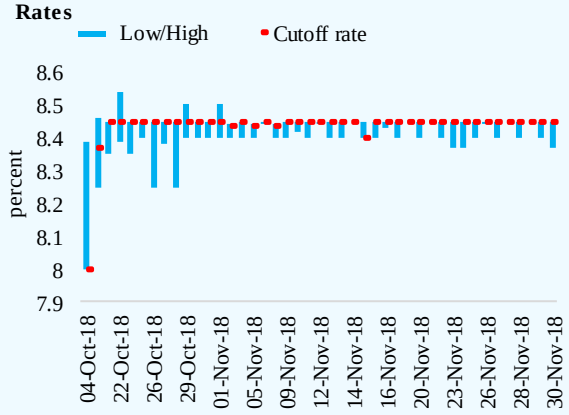
Figure 3.7: Trend in Monthly Average of OMOs



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

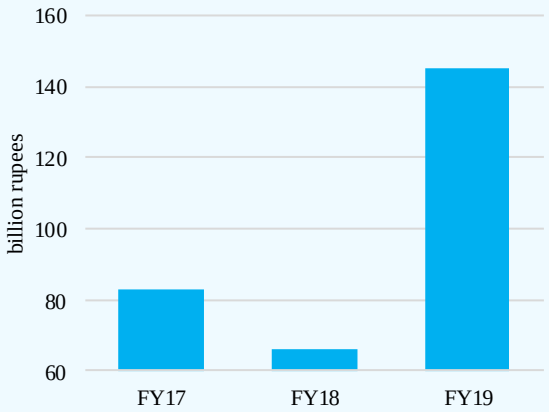
However, as mentioned earlier, in the month of December scheduled banks' interest in the government securities was revived after the policy rate hike on 30th November 2018. Liquidity pressures stemming from their voluminous participation in the T-bill auctions were further deepened by a sharp increase 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

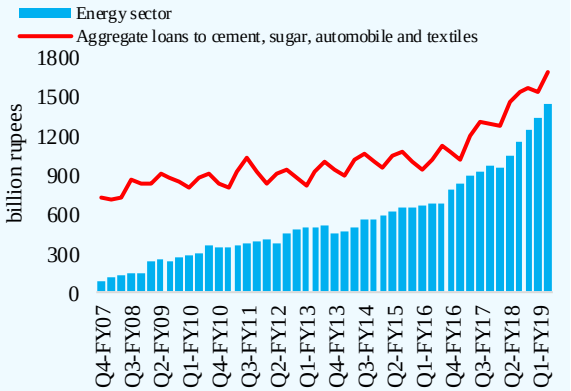
During the last decade, domestic banks' exposure to the energy sector has steadily increased.[4] Advances to the energy sector, which accounted for only 4.8 percent of total advances of the banking system at end-December 2007, jumped to around 17 percent by end-December 2018.

[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

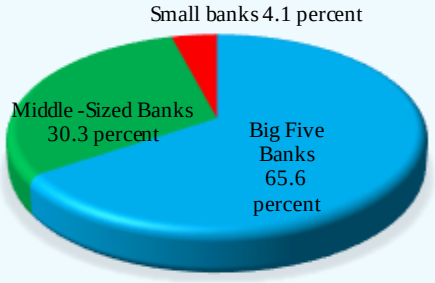
Data source:*For 2018, Senate Report, NTDC and KEL, for 2008, and 2012 Energy Year Book and NEPRA; **For 2008, 2012 and 2017 Energy Year Book, for 2018 Economic Survey.

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

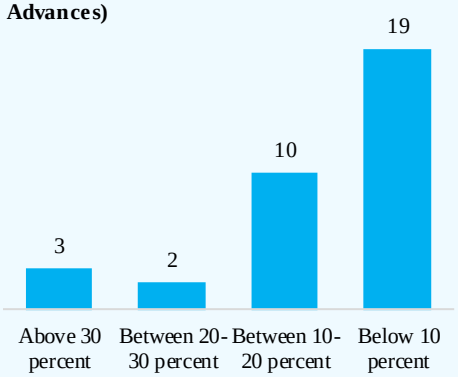
Bank-wise analysis suggests that almost all the scheduled banks are involved in lending to the energy sector, irrespective of their size as well as ownership (**Figure 3.1.2**). However, the level of exposure varies; for instance, in case of four largest banks, the share of energy in total advances ranged 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.

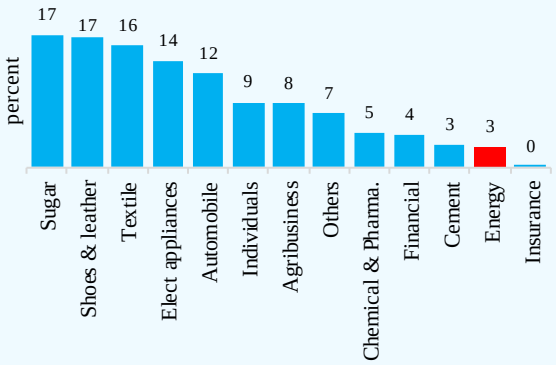
Table 3.1.3: Loans to Major Parties within Energy
billion Rupees

	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)

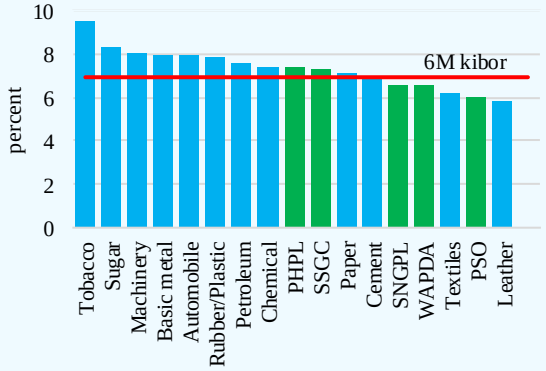


Data source: State Bank of Pakistan

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)



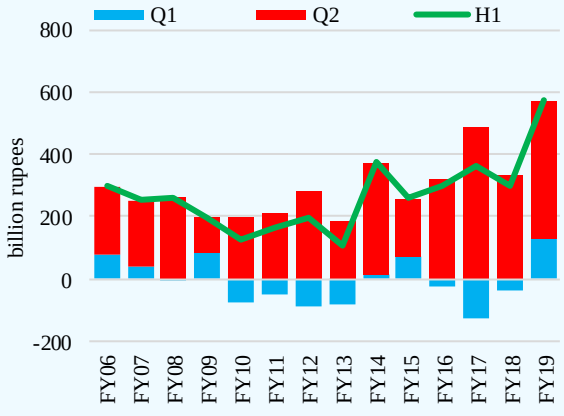
Data source: State Bank of Pakistan

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



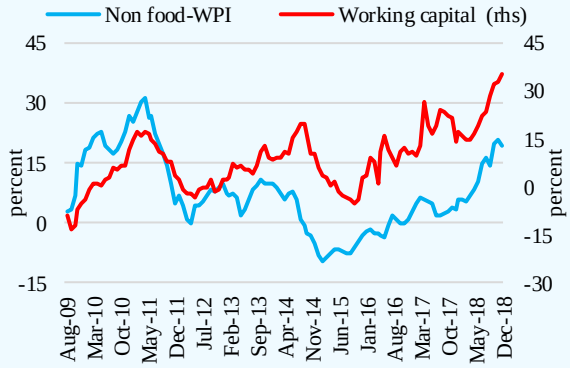
Data source: State Bank of Pakistan

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).

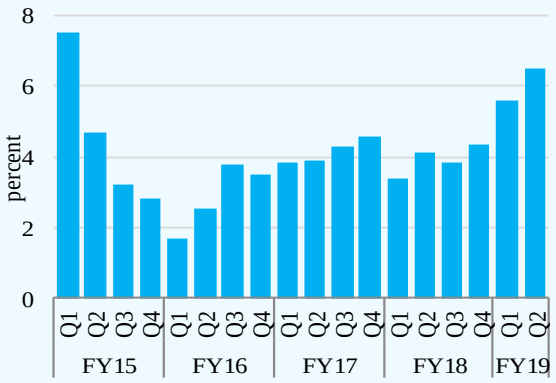
billion last year. Though manufacturing concerns in textile, cement and power generation cumulatively borrowed Rs 52.5 billion in H1-FY19, non-manufacturing sectors such as transport, storage & communication, construction and agriculture diluted the impact by retiring long-term loans during the period. 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).

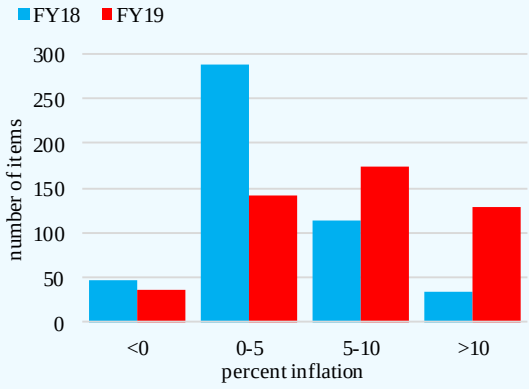
demand in the economy, as well as continued pass-through of exchange rate depreciation and higher fuel prices.

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.

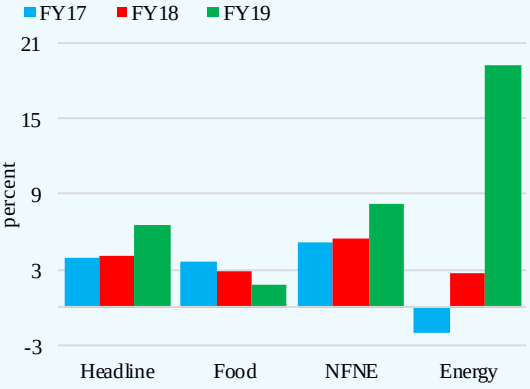
Oil and Gas Regulatory Authority revised the retail prices of natural gas for various consumers after keeping them unchanged for about 2 years (**Figure 3.15**). With effect from 27th September 2018, the hike was primarily recorded in high-level slabs, that is, for users of more than 400 m^3 per month. 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



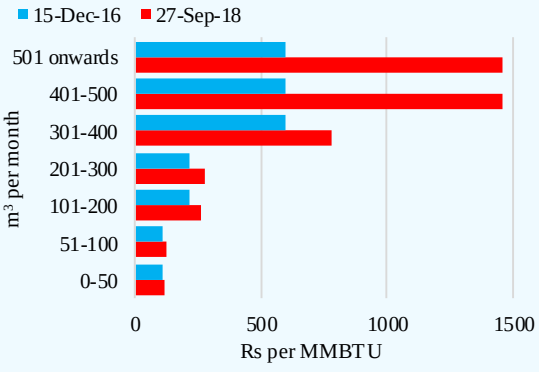
Data source: Pakistan Bureau of Statistics

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

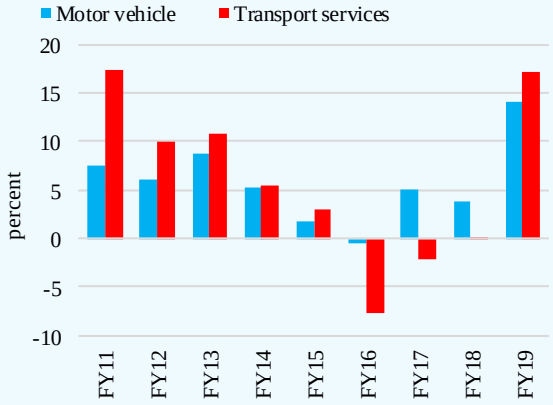
The core measure of inflation (non-food non-energy) rose considerably from 5.4 percent in Q2-FY18 to 8.2 percent during Q2-FY19. Importantly, YoY inflation has shown a rising trend for each month since March 2018. On the face of it, the consistently rising inflation in NFNE represents underlying demand 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