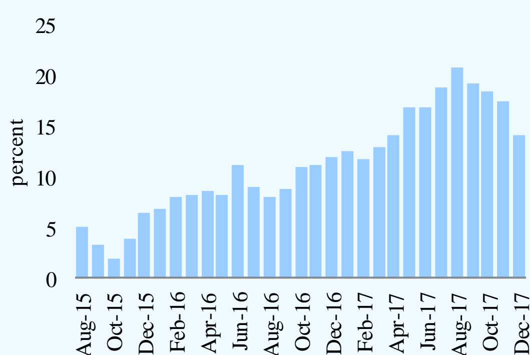
3 Inflation and Monetary Policy

3.1 Overview

With the arrival of the financing season of the year, credit momentum began to weaken. Although the private sector continued to pursue fresh additions in capacities during Q2-FY18, it scaled down its borrowings from the banking system for both operational and capital expenditures (**Figure 3.1**). The broad-based moderation in fixed investment loans was particularly notable, as it coincided with a weakening in machinery imports. Some tapering was expected with early harvest projects maturing under the CPEC, as well as scheduled repayments associated with earlier capex in manufacturing, power and construction sectors; however, anecdotal evidence suggests that a few long-term projects were postponed just because corporates got increasingly apprehensive about the general elections later this year, the PKR's trajectory, and the increasing fuel cost.

Figure 3.1: Trend in YoY Growth of Private Sector Credit



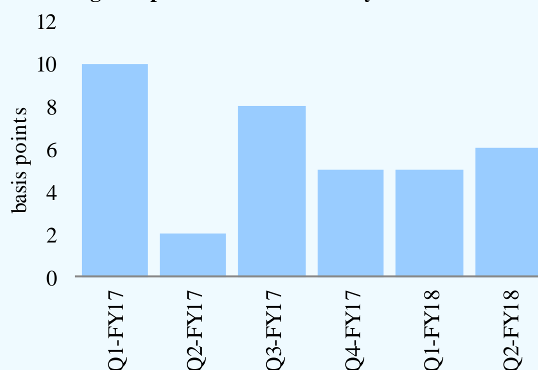
Data source: State Bank of Pakistan

As for working capital loans, inventory build-up in sugar and fertilizer sectors caused the slowdown. Despite subsidy-induced exports of sugar in Q2-FY18, no respite was seen in its stockpile; sugar mills limited their purchases of sugar cane, and hence borrowings. Similarly, a glut in the fertilizer sector, coupled with the closure of some medium-sized units due to unavailability of cheap feedstock, dampened the industry's appetite for fresh borrowing during the review period. The retirements in these two industries more than offset the strong credit expansion in textiles, cement, rice processing and commerce sectors.

Nearly all the banks faced a slowdown in aggregate loan expansion. Despite this, liquidity conditions in the interbank market were relatively tight during Q2-FY18: not only was the upward deviation of overnight rates from the policy rate higher than in Q2-FY17 (**Figure 3.2**), but the commercial banks' resort to SBP's reverse

repo facility was also more frequent.[1] These trends were anomalous also because banks received refinancing for nearly a quarter of their loan expansion from SBP.[2] Two factors basically explain this:

Figure 3.2: Quarterly Deviation of Weighted Average Overnight Repo Rates from the Policy Rate



Data source: State Bank of Pakistan

(i) Unlike FY17 when the government relied primarily on SBP funding for budgetary requirements, it opted to borrow from scheduled banks in H1-FY18 and retired some of its SBP debt. During Q2-FY18, the government's borrowing from scheduled banks clocked in at Rs 136.5 billion, which took the cumulative recourse to Rs 334.4 billion in H1-FY18 (**Table 3.1**); and

(ii) FX injections in the interbank drained significant amount of PKR liquidity from the market in Q2-FY18. The volume of these injections was particularly elevated during the month of December 2017, following the exchange rate adjustment in the interbank.

In order to alleviate the ensuing liquidity pressures, SBP stepped up its interventions in the interbank market via open market operations. Outstanding injections rose to Rs 1.6 trillion by the end of December 2017; a more notable development was during the quarter, it surpassed Rs 2 trillion – a level unprecedented before Q2-FY18.

With pressures coming on the overnight repo rates, the benchmark 6-month KIBOR and weighted average lending rates (WALR) also inched up during the quarter (**Figure 3.3b**). However, this upward movement in major interest rates was more of a reflection of expectations of a policy rate increase than just liquidity constraints. Ever since the import pressure started using up the country's FX reserves, the market's expectations for interest rates bottoming out had taken

[1] Commercial banks utilized the SBP window on 9 days during Q2-FY18, borrowing to the tune of Rs 263.3 billion; in comparison, they had utilized this facility on 6 days and borrowed Rs 65.6 billion in Q2-FY17.
[2] SBP refinancing volume, as percent of total private credit expansion, rose to 22.8 percent in Q2-FY18, compared to 13.8 percent in the same period last year.

hold. In Q2-FY18 also, banks' appetite for longer tenor instruments remained non-existent and the secondary market yield spread widened further (**Figure 3.3a**). In fact, the PKR depreciation during the second week of December 2017 strengthened these expectations, as evident from a steep rise in the yield spread from there onwards.

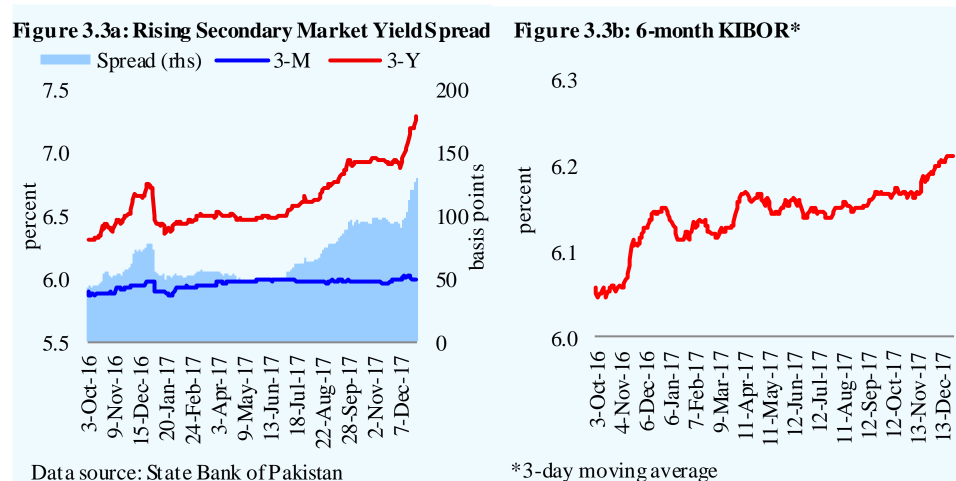


Figure 3.3a: Rising Secondary Market Yield Spread

Figure 3.3b: 6-month KIBOR*

Data source: State Bank of Pakistan

*3-day moving average

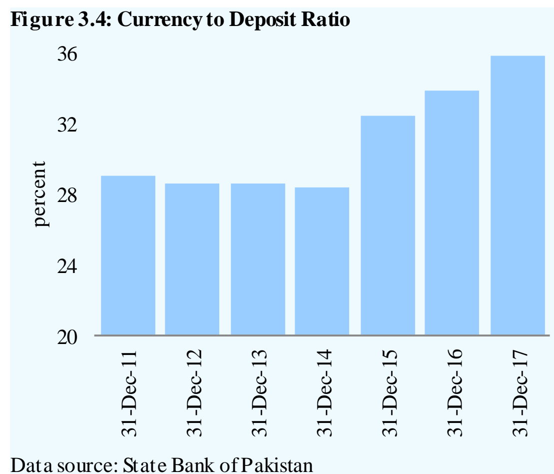
As for the policy rate, the monetary policy committee (MPC) met in November 2017. The committee deliberated on SBP's internal projections, which indicated that the inflation forecast for FY18 was within target, whereas the GDP forecast was falling just a little short. However, inflation expectations were getting stronger given the imposition of regulatory duties, and pass-through of rising international oil prices to domestic market. The situation on the external front was not comfortable either, as imports were not likely to recede, and their growth was estimated to surpass the combined increase in exports and remittances. Therefore, on balance, the nine-member MPC unanimously decided to keep the policy rate unchanged in November 2017 – a contrast to the previous two reviews of September and July 2017, when reducing the policy rate was also voted for.

3.2 Monetary Aggregates

Broad money witnessed a 9-year low expansion of Rs 336.4 billion during H1-FY18, compared to an increase of Rs 645.9 billion in the corresponding period last year **(Table 3.1)**. This modest growth was attributed to: (i) a sharp fall in net foreign assets (NFA) of the banking system, despite the support it received from the issuance of Euro and Sukuk bonds, and (ii) lower expansion in net domestic assets (NDA) compared to last year, explained by subdued growth in both private

sector credit and budgetary borrowings. As far as the liability side is concerned, the overall slowdown in M2 was reflected both in currency in circulation and bank deposits; that said, the currency to deposit ratio continued to inch up for the third consecutive year (**Figure 3.4**). This basically suggests that the repercussions of the imposition of withholding tax on non-cash banking transactions (via Finance Bill 2015) still persist.

Figure 3.4: Currency to Deposit Ratio



Data source: State Bank of Pakistan

Table 3.1: Key Monetary Indicators

flow in billion Rupees	FY17			FY18		
	Q1	**Q2**	**H1**	**Q1**	**Q2**	**H1**
Reserve money	237.5	26.5	264.1	-134.7	151.5	16.8
M2	29.6	616.2	645.9	-88.4	424.8	336.4
NFA	-8.4	-12.2	-20.6	-258.6	84.2	-174.4
SBP	38.0	-3.4	34.6	-237.1	50.6	-186.5
Scheduled banks	-46.4	-8.7	-55.2	-21.5	33.6	12.1
NDA	38.1	628.4	666.5	170.2	340.6	510.8
Budgetary borrowings*	299.6	107.5	407.1	408.2	-76.5	331.8
SBP	567.7	324.9	892.6	210.3	-213.0	-2.7
Scheduled banks	-268.1	-217.4	-485.5	197.9	136.5	334.4
Private sector credit	-124.1	484.8	360.7	-37.4	333.7	296.3
PSE credit	24.5	58.5	83.0	5.1	60.9	66.0
Commodity operations	-30.7	-52.1	-82.8	-36.3	21.8	-14.6

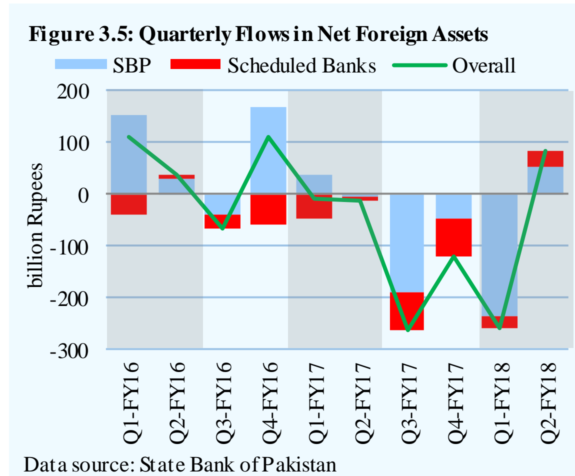
*on cash basis;
Data source: State Bank of Pakistan

Net foreign assets (NFA)

Following a 5-quarter-long contractionary spell stemming from widening current account deficit and external debt repayments, the NFA of the banking system posted a small recovery in Q2-FY18 (**Figure 3.5**). This trend reversal was attributed entirely to the issuance of Euro and Sukuk bonds, which replenished SBP's NFA in December 2017. Meanwhile, the NFA of scheduled banks increased by Rs 33.6 billion, compared to a contraction of Rs 8.7 billion in the

corresponding quarter last year. This improvement primarily reflects a drop in the outstanding position of commercial banks' borrowings from abroad.

Figure 3.5: Quarterly Flows in Net Foreign Assets

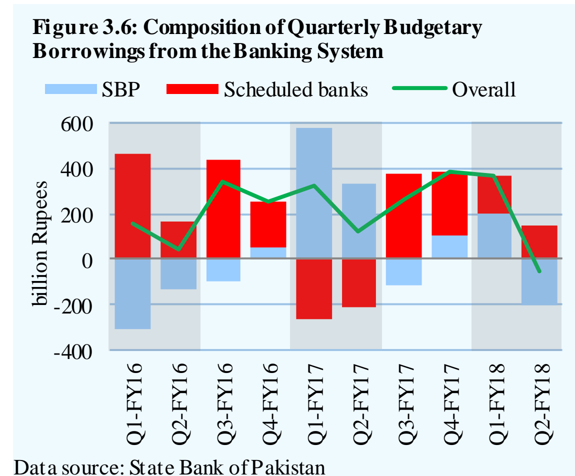


Data source: State Bank of Pakistan

Net Domestic Assets (NDA)
NDA witnessed significantly lower expansion during the first half of the current fiscal year as compared to the same period last year. This slowdown was concentrated in Q2-FY18, when the availability of external funding reduced budgetary dependence on domestic sources, and the private sector's appetite for bank funding also remained low.

Budgetary borrowings
During H1-FY18, budgetary borrowings from the banking system remained significantly lower compared to last year (**Figure 3.6**). This decline was evident primarily in the second quarter, when the availability of external funding allowed the government to retire some of its domestic debt – mainly to SBP.

Figure 3.6: Composition of Quarterly Budgetary Borrowings from the Banking System



Data source: State Bank of Pakistan

As for its borrowings from scheduled banks, these continued to pile on for the 4th quarter in a row during Q2-FY18; this was quite unlike last year when the government borrowed from SBP and retired scheduled banks' debt. Given the perception that interest rates had bottomed out, banks' appetite for T-bills remained strong, as evident by the amount offered in auction biddings (**Table 3.2**). This allowed the government to meet its pre-auction targets.

Table 3.2: Auction Profile of Government Securities*

billion Rupees	T-bills			PIBs		
	Target	**Offered**	**Accepted**	**Target**	**Offered**	**Accepted**
In gross terms						
Q1-FY17	1,450.0	3,066.0	1,763.9	300.0	980.8	646.3
Q2-FY17	1,300.0	1,710.6	1,099.6	200.0	234.6	-
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	-
Net of maturity						
Q1-FY17	272	1,887.9	585.9	-1,127.3	-431.9	-781.0
Q2-FY17	241.6	652.2	41.2	200.0	234.6	-
Q1-FY18	218.5	829.7	724.8	-296.6	-489.6	-541.0
Q2-FY18	-5.0	981.5	-3.8	200.0	54.3	-

*In face value. 'Offered' columns contain competitive bids only. 'Accepted' columns contain all acceptances (i.e. including non-competitive and special auction).
Data source: State Bank of Pakistan

Moreover, the market players were keen only on 3-month T-bills.[3] To put this into perspective, no bid was received for 6- and 12-months T-bills in the 20-Dec-2017 auctions. In particular, such a disinterest in longer tenor instruments was last recorded in the auction held on 16-Oct-2013. It would appear that the PKR depreciation in December 2017 added to inflation expectations and an anticipation of impending monetary tightening, as indicated by a spike in the secondary market yield spread.

From commercial banks' profitability perspective also, reliance on 3-month T-bills was a viable short-term strategy. This was because the average spread between the 3-month T-bill and the cut-offs of OMO injections, which had squeezed considerably during the first half of FY17, posted a steady increase from H2-FY17 onwards (**Figure 3.7**). On average, this spread stood at 21 basis points in H1-FY18, compared to only 8 basis points in H1-FY17.

Meanwhile, PIB auctions remained dull across the board, regardless of tenor (i.e. 3-, 5- and 10-year). All three auctions during the quarter were scrapped amid relatively low participation; this was the general pattern of PIB auctions for the fifth consecutive month in a row as of December 2017.

[3] Three-month T-bills accounted for nearly 93 percent of offers and 92 percent of accepted bids, as a proportion of offers and acceptances against all tenors during Q2-FY18.

Commodity operations
Retirements by government procurement agencies to commercial banks shrank to Rs 14.6 billion in H1-FY18 compared to Rs 82.8 billion last year (**Figure 3.8**). Lower retirements were particularly visible in case of wheat, which has a share of 86.5 percent in the outstanding stock of commodity finance.

Figure 3.7: Spread between 3-month T-bill and OMO*

*Weighted average yield of T-bill auctions and cut-off of OMO injections

Data source: State Bank of Pakistan

Figure 3.8: Trend in Outstanding Commodity Loans

Data source: State Bank of Pakistan

The stock of hypothecated wheat has increased by 26.6 percent on YoY basis as of December 2017 compared to 8.7 percent last year, and is likely to inch up further in the following months, since harvesting typically begins in March. Due to excess supply in the domestic market and a significant price differential compared to private suppliers, government procurement agencies are finding it difficult to offload their stocks. At the same time, wheat export remains a big challenge due to low international wheat prices vis-à-vis domestic prices.

Among the procurement institutions, the Punjab Food Department deals with largest volumes and its borrowings constitute more than half of the outstanding commodity finance. So far in FY18, the department has incurred Rs 16 billion mark-up cost (at 6.3 percent interest rate), which is likely to increase to Rs 21 billion for the full year. Similar to other provincial food departments, this is a major fiscal expense over and above the subsidy expense, which the Punjab Food Department is burdened with. Importantly, this is not the only one: in addition to mark-up cost, procurement departments are also spending heavily on storage-related expenses. This department has an operational storage capacity up to 1.7

million MT, but due to difficulties in offloading stocks over the last couple of years, it is currently carrying 5.6 million MT of wheat. To accommodate this stock, the department has acquired open spaces as well as rental silos to store the commodity with minimum wastages. Other expenditures are also significant, including procurement of packaging bags; transportation cost from farms to storage areas; taxes and duties on physical inputs such as tents and coolers at the storage site; handling charges; bank commissions; salaries of chowkidars and storekeepers etc.

The bottom line is that the current mechanism of support prices and commodity operations requires a significant reorientation. As a result of these, Pakistan's wheat has become one of the most expensive in the world; moreover, the aggregate fiscal cost of these operations has also escalated due to the inability of the procurement agencies to break even and the resultant stuck-up bank liabilities. The government must hold strategic reserves of important cereals, and take necessary steps to ensure food security in the country, but perhaps more focus is needed on the production front; i.e., increasing yields, enhancing competitiveness, volatility in global prices, and improving farmers' adaptation and mitigation responses to climatic changes and volatility in commodity prices.

Credit to PSEs

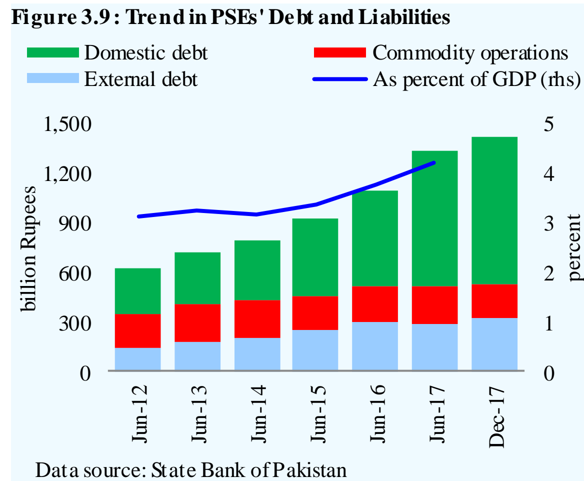
During Q1-FY18, credit offtake by PSEs remained on the lower side due to a major one-off retirement by PSO. However in Q2-FY18, the credit offtake by PSEs grew by Rs 60.9 billion, as compared to Rs 58.8 billion during the same period last year. Similar to the past couple of years, the bulk of these borrowings was associated with energy-related entities. For instance, Sui Southern Gas Company Limited is in the process of building a LNG pipeline from Karachi to Lahore as part of the third regasification (RLNG III) project. The project has an estimated cost of Rs 64.9 billion, which the corporation is mobilizing from domestic banks against government guarantees.

In addition to these, the oil sector also increased its borrowings from domestic banks: (i) Parco took a dollar-denominated loan to settle its oil L/C, and (ii) PSO borrowed again from banks to compensate for growing receivables from its major consumers.

It must be noted that PSEs have been borrowing quite aggressively over the past couple of years, during which the stock of PSE credit has doubled (**Figure 3.9**). The size of PSE debt and liabilities as percent of GDP has surpassed 4 percent. Moreover, these loans constituted nearly 16.9 percent of total non-government credit at end December 2017, and as such, these enterprises have become

systemically important for the domestic banking industry. In addition to infrastructure spending, rising volume of circular debt in the energy sector also explains the continued expansion in PSE credit. Nonetheless, as highlighted in some of our earlier reports, most of the enterprises already have sizable amount of funds available as deposits with commercial banks; if utilized efficiently, these would significantly reduce the additional burden of financing cost.

Figure 3.9: Trend in PSEs' Debt and Liabilities

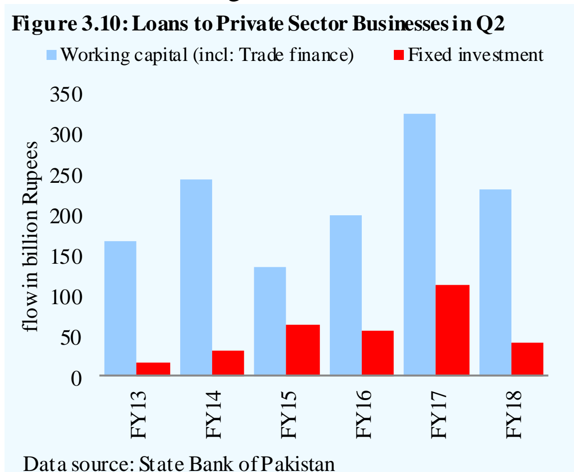


Data source: State Bank of Pakistan

3.3 Credit to Private Sector

Credit to private sector grew by Rs 296.3 billion in H1-FY18, compared to Rs 360.7 billion in the same period last year. The entire slowdown was evident in business loans, as consumer financing recorded a marginal increase.

Figure 3.10: Loans to Private Sector Businesses in Q2



Data source: State Bank of Pakistan

Fixed investment loans

The capex drive in the domestic industrial sector entered its 13th quarter, albeit at a much reduced pace, during Q2-FY18. Maturing investment projects in power and construction sectors have reduced the demand for additional borrowings. This led to a significant decline in the offtake of fixed investment loans (especially in Q2-FY18), which was a major driver of the overall credit flows over the past 3 years (**Figure 3.10**). Furthermore, anecdotal evidence suggests that due to political uncertainity and FX strains in the economy, businesses have adopted a wait-and-see approach and postponed some of their projects.

The power sector retired Rs 6.2 billion during Q2-FY18, compared to a net offtake of Rs 23.4 billion last year. This behavior was also consistent with the YoY fall in the import of power machinery in Q2-FY18.[4]

In contrast, construction allied sectors are progressing more assertively as demand prospects are still upbeat. The case in point is cement and steel sectors. In case of cement, although the sector borrowed additional Rs 3.0 billion in Q2-FY18, it was half the amount it had borrowed in the same period last year (**Table 3.3**). This trend is primarily explained by the fact that almost half of the manufacturing firms are already in a mature stage of capacity expansions. It is expected that 14.2 million MT additional capacity (30 percent addition) will come online by end FY18, whereas another 9.9 million MT will be commissioned by end FY19. At such advanced project stages, it is not surprising to see limited requirement for fresh borrowings.

Table 3.3: Loans to Private Sector Businesses in Q2

flow in billion Rupees	**Total loans**		**Working capital***		**Fixed Investment**	
	FY17	**FY18**	**FY17**	**FY18**	**FY17**	**FY18**
Total	436.6	273.4	323.7	231.5	112.9	41.8
Manufacturing	287.9	183.1	237.5	161.7	50.3	21.4
Textiles	123.0	131.3	103.5	103.1	19.5	28.3
Rice processing	39.7	51.5	39.1	51.0	0.6	0.5
Cement	14.1	15.1	8.0	12.0	6.2	3.0
Machinery and equipment	2.0	5.4	2.6	4.5	-0.5	0.9
Edible oil and ghee	6.7	1.0	6.8	2.2	0.0	-1.2
Fertilizers	-3.4	-29.8	2.3	-25.4	-5.8	-4.5
Sugar	39.8	-36.6	31.7	-33.1	8.1	-3.6
Commerce and trade	28.9	39.6	26.0	34.3	2.9	5.3
Transport, storage and communications	2.8	13.5	1.0	1.5	1.8	12.0
Electricity, gas and water supply	47.6	12.4	26.2	13.7	21.3	-1.2
Production, trans. & distrib. of electricity	45.9	2.5	22.6	8.7	23.4	-6.2
Manufacturing and distribution of gas	1.6	9.9	3.7	4.9	-2.1	5.0
Building construction	4.9	3.7	0.9	3.8	3.9	-0.1
Infrastructure construction	12.0	-0.3	5.2	0.5	6.8	-0.9
Agriculture and forestry	-0.1	2.9	4.4	-1.5	-4.5	4.4
Mining and quarrying	7.0	0.5	-0.4	1.3	7.4	-0.8

* includes trade financing
Data source: State Bank of Pakistan

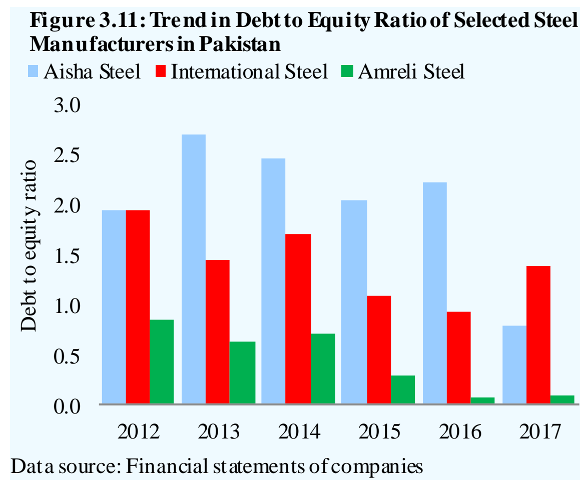
That said, borrowing needs in the sector will remain strong going forward, as major cement manufacturers are expected to invest in cleaner production

[4] According to PBS, the import of power machinery declined by 36.1 percent in Q2-FY18 compared to an increase of 78.6 percent respectively in Q2-FY17.

techniques. The sector has lately started facing stringent regulatory controls due to environmental concerns; provincial governments as well as environment protection agencies are discouraging installation/expansion of production capacities to contain carbon emissions.[5] Therefore, it is becoming increasingly important for firms to embrace more energy-efficient technologies, and use less carbon-intensive (fossil) fuels.

The case of steel is also peculiar. This sector has been adding capacities over the past few quarters as the demand from the domestic construction industry remained strong. However, the sector is relying increasingly on internal funds for capacity additions, instead of getting support from the banking system. Furthermore, major steel players are tapping the equity market to fund their expansion (**Figure 3.11**).

Figure 3.11: Trend in Debt to Equity Ratio of Selected Steel Manufacturers in Pakistan



Data source: Financial statements of companies

In contrast to the above, textiles was the only major manufacturing sector that availed higher fixed investment loans. The sector borrowed more than half of the total fixed investment loans made to private businesses in Q2-FY18. This was in line with the growth in textile exports, as the sector positioned itself to tap the recovery in major markets like the EU. In this regard, SBP's refinancing facilities such as LTFF were quite instrumental. For the past couple of years, textile benefited from attractive rates on SBP's refinance schemes, as the outstanding portfolio of textile under LTFF loans more than tripled between July 2015 and December 2017. While demand has played its part, higher fixed investment loans to textile sector can also be associated with inclination of commercial banks to

[5] As per industry sources, Lucky Cement – the Karachi-based largest producer in the country – was unable to get a mining lease in Punjab. The firm is still seeking the Punjab government's approval for greenfield expansion of 2.3 MT per annum. Moreover, due to continued delay of the project, the firm is planning to expand its existing plant at Pezu, KP. Similarly, Maple Leaf Cement has held back construction work on a new 7,300 tpd line following an order issued by Punjab's Environmental Protection Agency (EPA) in December 2017. However, later in January 2018, the Lahore High Court put aside the EPA order in favor of the firm.

supply more credit to the sector, given the improved credit risk profile of the sector.[6]

Inventory build-up of sugar and urea suppressed working capital loans

The slowdown in LSM during the second quarter of the year, mainly explains lower offtake of working capital loans.
The decline in sugar production significantly contributed to lower working capital requirements of the sector in Q2-FY18, as compared to the same period last year. A bumper sugarcane crop, coupled with a strong offtake in FY17, enabled the sector to produce a record amount of sugar in the year. However, from January 2017 onwards, international as well as domestic prices of the commodity have consistently declined, which resulted in build-up of excess stock in the domestic economy.[7] In order to cope with the situation, the government allowed subsidy on the commodity's export; this propelled sugar exports to 0.4 million MT in Q2-FY18.[8] However, this was not sufficient, as another record high sugarcane production this year would further boost existing stocks.

Importantly, the policy of support prices has created market frictions. Majority of sugar mills have resisted buying sugarcane from growers at government-determined prices. As a result, most mills started the crushing season with a delay of 15 to 30 days than its typical starting period in November. The late crushing cycle resulted in a net retirement of Rs 33.1 billion of working capital loans in Q2-FY18, compared with offtake of Rs 31.7 billion in the same period last year. This was also reflected in a 37.3 percent YoY decline in sugar production in Jul-Dec FY18.

Similarly, surplus inventory of urea created a glut, as the nutrient's offtake declined significantly in the current Rabi season.[9] Moreover, unavailability of cheap gas feedstock resulted in closure of some fertilizer units during the review

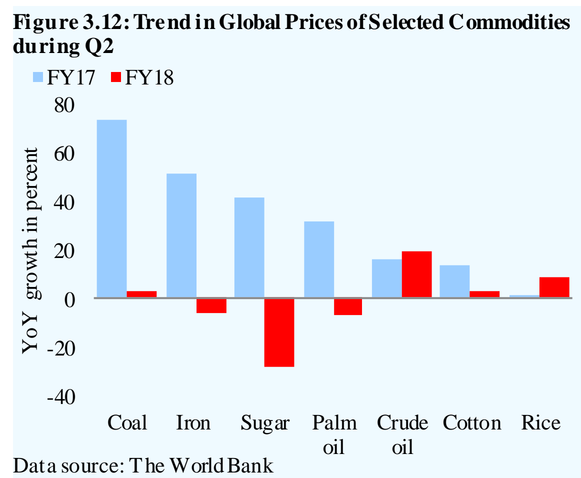
[6] Infection ratio of textile sector has declined from 26.0 percent in December 2015 to 18.5 percent (provisional) in December 2017.
[7] According to industry sources, total available sugar stock surpassed 8.1 million tons, compared to annual domestic demand of 5.1 million tons. A surplus stock of around 3 million tons resulted in supply glut after completion of the crushing season of FY17.
[8] In October, 2017, the government allowed sugar mills to export 0.5 million MT sugar and announced a freight subsidy of Rs 10.70/kg on a sliding scale basis. Then in December 2017, the government allowed export of an additional 1.5 million MT of sugar. For details, see EPD Circular Letter No. 20 of 2017 and EPD Circular Letter No. 23 of 2017.
[9] As per NFDC, fertilizer offtake decreased by 17.6 percent YoY in Q2-FY18, compared with a rise of 15.8 percent in the same period last year.

period.[10] The sector retired Rs 25.4 billion of working capital loans in the quarter, compared to a net offtake of Rs 2.3 billion in the same period last year.

Trends in commodity prices during FY18 affected financing requirements

During Q2-FY17, the growth in private credit was attributed to both a sharp jump in input prices (e.g., cotton, coal and palm oil) as well as increased activity in the industrial sector. This year, however, while the activity remained robust, the increase in input prices was modest (**Figure 3.12**).

Figure 3.12: Trend in Global Prices of Selected Commodities during Q2



Data source: The World Bank

For instance, despite the double-digit growth in exports and firms' increased procurement of cotton, the textiles sector's demand for working capital loans remained unchanged; this was explained primarily by the fact that cotton prices remained stable. Specifically, cotton prices were up by 13.6 percent YoY last year, which had pushed up the overall financing needs of textile firms; this year, the increase in cotton prices moderated to only 3.2 percent. Similarly in case of cement, the growth in credit offtake would have been much higher, if coal prices had increased at last year's pace. The overall activity in the sector sustained an upbeat momentum this year as evident in higher sales (**Chapter 2**).

Table 3.4: Consumer Financing

flow in billion Rupees	Q1		Q2		H1	
	FY17	**FY18**	**FY17**	**FY18**	**FY17**	**FY18**
Total	20.3	18.4	13.5	17.1	33.8	35.5
House building	1.8	6.3	2.9	6.1	4.7	12.4
Car financing	5.7	11.2	9.9	9.6	15.7	20.7
Credit cards	1.5	1.6	1.3	2.5	2.8	4.1
Consumer durables	-0.1	-1.5	0.8	3.5	0.7	2.0
Personal loans	11.4	0.8	-1.5	-4.6	9.9	-3.8

Data source: State Bank of Pakistan

Consumer financing

Banks continued to expand their consumer loan portfolio during H1-FY18. Most segments recorded robust expansion; however, the slowdown in car financing during Q2-FY18 (**Table 3.4**) stemmed from the issue of timely delivery of locally

[10] According to industry sources, gas from LNG (at Rs 1300/MMBTU) is not feasible compared to rates for natural gas (Rs 123/MMBTU). Therefore, some fertilizer firms closed their plants (with a capacity of 0.9 million MT per year) in Q1-FY18.

assembled cars, as banks focused more on clearing the delivery backlog of existing customers than catering to the demand of new customers. Among other segments, housing finance took the lead, as banks diversified their portfolios in favor of high yielding assets.

3.4 Inflation

CPI inflation remained at 3.8 percent during the first half of FY18 as compared to 3.9 percent during H1-FY17 (**Table 3.5**). The decline in food inflation helped contain the headline numbers at low level, even though fuel prices rebounded. Meanwhile, with a continuous increase in education and healthcare costs, core inflation remained higher on average in H1-FY18, compared to the same period last year. Its pace has nonetheless slowed in recent months.

Table 3.5: Average CPI Inflation and Contribution

percent		Growth in FY17			Growth in FY18			Contribution in H1	
	Wt	**Q1**	**Q2**	**H1**	**Q1**	**Q2**	**H1**	**FY17**	**FY18**
Overall CPI	**100.0**	**3.9**	**3.9**	**3.9**	**3.4**	**4.1**	**3.8**	**3.9**	**3.8**
Food *of which*	**37.5**	**4.0**	**3.6**	**3.8**	**1.2**	**2.8**	**2.0**	**1.6**	**0.8**
Cigarettes	1.4	17.8	15.3	16.5	-16.4	-17.2	-16.8	0.4	-0.4
Pulses	1.1	23.8	13.0	18.1	-17.5	-20.4	-18.9	0.3	-0.3
Sugar	1.0	7.1	15.8	11.3	-17.5	-20.4	-18.9	0.1	-0.2
Fresh vegetables	1.7	19.5	19.2	19.4	-5.7	-1.4	-3.6	0.4	-0.1
Tomato	0.4	21.1	-25.4	-5.7	-12.9	75.9	27.7	0.0	0.1
Onion	0.5	-31.6	-50.1	-41.9	63.6	165.9	112.4	-0.3	0.5
Rice	1.6	-7.8	0.4	-3.9	13.7	14.3	14.0	-0.1	0.2
Meat	2.4	4.4	3.8	4.1	7.0	7.5	7.3	0.1	0.2
Milk fresh	6.7	4.1	3.7	3.9	3.7	3.9	3.8	0.3	0.3
Non Food *of which*	**62.5**	**3.7**	**4.1**	**3.9**	**5.0**	**5.0**	**5.0**	**2.3**	**2.9**
House rent	21.8	5.8	6.7	6.2	7.2	6.5	6.8	1.1	1.3
Education	3.9	8.3	11.3	9.8	10.1	12.1	11.1	0.4	0.5
Drug medicine	1.3	5.0	8.4	6.7	18.6	15.2	16.8	0.1	0.2
Motor fuel	3.0	-10.4	-7.9	-9.2	7.2	10.9	9.1	-0.2	0.2

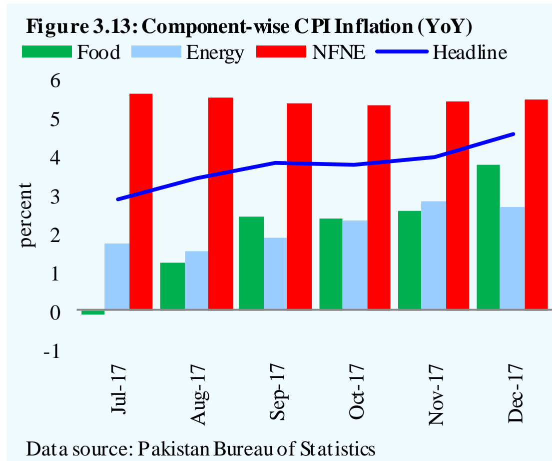
Data Source: Pakistan Bureau of Statistics and SBP calculations

Food inflation recovered from a very low level

The fiscal year started with food inflation (YoY) for July 2017 at the lowest ever level (-0.1 percent) since the rebasing of the CPI index in FY08. Cigarette prices – having a 3.7 percent share in the food index – fell by an unprecedented 16.1 percent YoY during the month, and played a crucial role in lowering the food inflation in the month. Inventories of sugar, pulses and wheat in the country also contributed in keeping the inflation at low level. Their combined impact was strong enough to offset a higher level of non-food inflation stemming from strong

domestic demand as well as a sharp increase in motor fuel prices. However, as the year progressed, food inflation crept up steadily as supply disruptions of key vegetables (tomatoes and onion) started to hit – by end-December, the level of food inflation came closer to the non-food inflation (**Figure 3.13**). This increase notwithstanding, the average food inflation in Q2-FY18 was 0.6 percentage points lower than the same period last year.

Figure 3.13: Component-wise CPI Inflation (YoY)

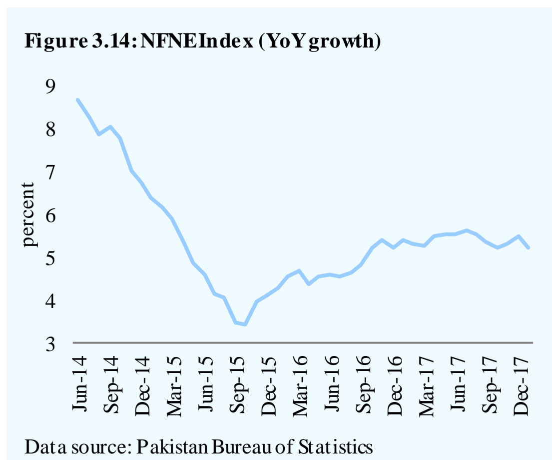


Data source: Pakistan Bureau of Statistics

Core inflation tapered

Core inflation, which was increasing steadily since September 2015, stabilized in H1-FY18 (**Figure 3.14**). The average non-food-non-energy inflation clocked in at 5.4 percent in Q2-FY18, which was slightly lower than 5.5 percent in Q1-FY18. Nonetheless, it is expected that the second-round impact of rising fuel prices and PKR depreciation will be felt on this component of CPI going forward.

Figure 3.14: NFNE Index (YoY growth)

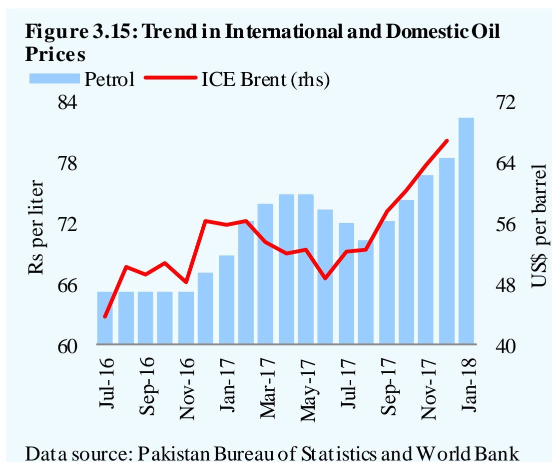


Data source: Pakistan Bureau of Statistics

Global oil prices and the pass-through on domestic fuel

As shown in **Figure 3.15**, crude oil prices have risen steeply since June 2017, reflecting: more disciplined cuts by OPEC (mainly Saudi Arabia) and Russia; strong global demand; decline in crude stockpiles; and

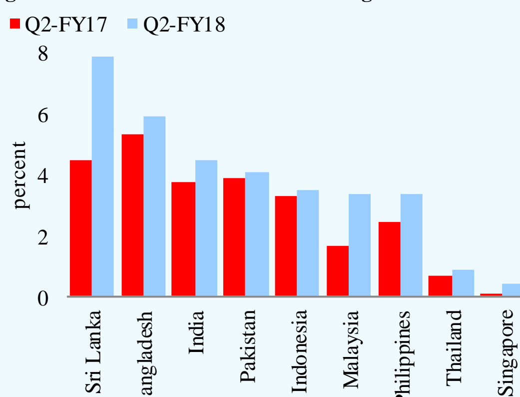
Figure 3.15: Trend in International and Domestic Oil Prices



Data source: Pakistan Bureau of Statistics and World Bank

uncertainty associated with protests in Iran (**Box 3.1**). Meanwhile, the pass-through of the increase in international oil prices to domestic consumers has been quite frequent this year. The government incrementally increased domestic petrol prices by a cumulative Rs 16.6 per liter during Sep-Feb FY18. Apart from Pakistan, a number of emerging market economies felt the burden of this global rally, as reflected in higher inflation in Q2-FY18 compared to last year (**Figure 3.16**).

Figure 3.16: Inflation in Pakistan and Regional Economies

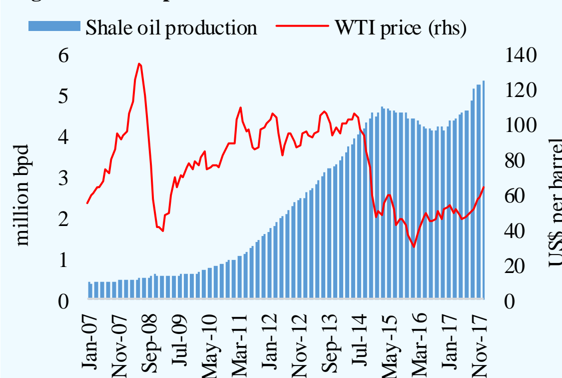


Data source: Haver Analytics

Box 3.1: Current Trends and Developments in the Global Oil Market

The global oil market has undergone significant structural changes over the past few years. Technological advancements – particularly in the shape of improved drilling techniques – have had a significant impact on supply-side dynamics of crude oil. For instance, shale oil producers in North America have posted nearly a fourfold increase in their output in the past 10 years; this has contributed to a global oil glut in recent years as the US' reliance on imported crude oil has declined drastically (**Figure 3.1.1**).[11] Likewise, geopolitical tensions, especially in oil and gas producing regions (MENA and Eastern Europe), and removal of economic sanctions on Iran, have exerted significant and often contrasting forces on crude oil prices. As a result, the global oil prices have remained fairly volatile over the past few years.

Figure 3.1.1: Impact of Oil Prices on Shale Oil Production



Data source: Energy Information Administration (EIA), Bloomberg

It is important to recall here that the oil price crash that began in the second half of 2014, was mainly triggered by OPEC's decision of not cutting its crude output in the wake of lower demand from major consumers like the US (on the back of increase in shale oil production), and China (which has

[11] The US is the largest consumer of crude oil in the world, accounting for a fifth of global oil consumption in 2015 (source: EIA). Reduced demand for imported oil by the country naturally creates a demand-supply imbalance in the global oil market.

already built up sizable reserves of the commodity in recent years). Consequently, within a short span of six months, oil prices plunged by almost 56 percent.[12]

Due to this abrupt price adjustment, US shale oil producers were forced to abort their least productive wells; this led to a decline in shale output, just as envisaged by the OPEC. However, as it turned out, many shale companies continued to bring efficiencies into their processes, which helped to lower their breakeven price of oil and allowed them to survive in the under-US$ 50 price environment.

In its December 2015 meeting, OPEC reiterated its decision against production cuts, believing that the market should be left to correct itself. This led further to a fall in crude prices: in January 2016, oil prices dropped to a 13-year-low of US$ 27 per barrel. However, the prolonged spell of low oil prices had a serious impact on the fiscal positions of oil-exporting economies, particularly those in the Middle East. After much internal debate, OPEC members (and Russia) finally decided in December 2016 to cut their oil production (Saudi Arabia and Russia agreed to the bulk of these cuts). Besides, US shale producers – though not completely knocked out of the market by lower prices – had nonetheless significantly reduced their output (**Figure 3.1.1**). As a result of this dual supply-side squeeze, global oil prices that started to rise steadily from early 2017 got more traction from May 2017 onwards, when the impact of OPEC's supply cut began to be felt – just as cartel members that were earlier not complying with prescribed cuts began to follow them more closely.

Since October 2017, a separate set of factors fueled a further increase in crude oil prices. These include: (i) persistent fall in Venezuela's oil production; (ii) upbeat global economic growth forecasts; a fall in crude inventories in the US and other OECD countries (indicating strong economic turnaround); (iii) extreme winters in the US, which led to an increase in demand for oil for heating purposes; and (iv) OPEC's monitoring committee meeting held in January 2018 in which a few members insisted on extending production cuts beyond current expiration.[13] This increase in global oil prices has implications for shale oil producers as well: those productive wells that had gone out of production became feasible again and went online.

Table 3.1.1: New-well Oil (Primarily Shale) Production Per Rig (bbl per day)

Region	Jan-16	Jan-18	% Change	Share*
Permian	498.6	627.6	25.8	44%
Eagle Ford	1,105.0	1,230.9	11.4	19%
Bakken	687.7	1,383.6	101.2	18%
Niobrara	869.5	1,120.8	28.9	9%
Anadarko	310.5	387.2	24.7	7%
Appalachia	101.4	143.7	41.7	2%
Haynesville	28.3	24.8	-12.3	1%

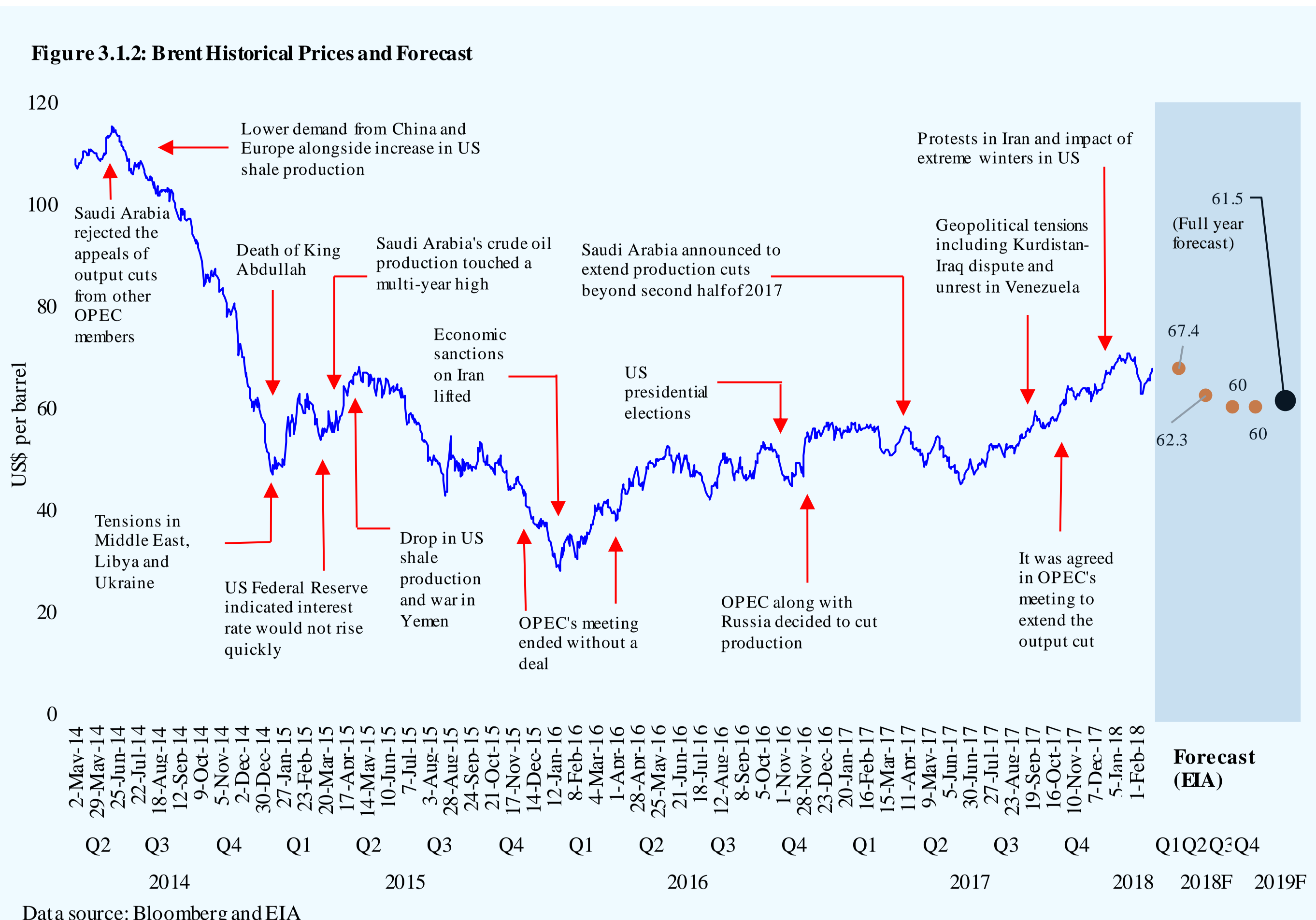
* share in total shale output as of Jan 2018
Data source: Energy Information Agency

Average Brent crude oil prices have recently softened from US$ 70.5 per barrel to US$ 63. A correction was due since rising oil prices have not only revived shale production, but producers have surpassed their previous output levels. Interestingly, not only are current prices quite favorable for shale companies, but a significant increase in their productivity has helped them slash their break-even wellhead prices even further (**Table 3.1.1**).

[12] Brent spot price fell from US$ 114 per bbl in June 2014 to US$ 47 per bbl in January 2015.
[13] Joint OPEC-Non-OPEC Ministerial Monitoring Committee (JMMC) was established in Nov 2016 to monitor the compliance and developments in global oil market. Initially, supply cuts were agreed upon for six months starting January 2017. On 25th May 2017, cuts were extended for another nine months commencing 1st July 2017. On 30th Nov 2017, it was agreed to extend the cuts up to December 2018.

Going forward, the expectations of an increase in supply from non-OPEC member countries would help relieve short-term upward pressure on crude prices. Importantly, total US crude oil production on average remained 9.3 million bpd in 2017; this is expected to jump to 10.6 million bpd in 2018, according to EIA estimates. To put this in perspective, OPEC, along with a few other major oil-producing countries, have agreed to a cut of 1.8 million bpd of oil, whereas the US' production is expected to increase by nearly 1.3 million bpd. Consequently, the EIA expects Brent prices to remain around USD 60 per barrel by the end of 2018 (**Figure 3.1.2**).

Figure 3.1.2: Brent Historical Prices and Forecast



Data source: Bloomberg and EIA