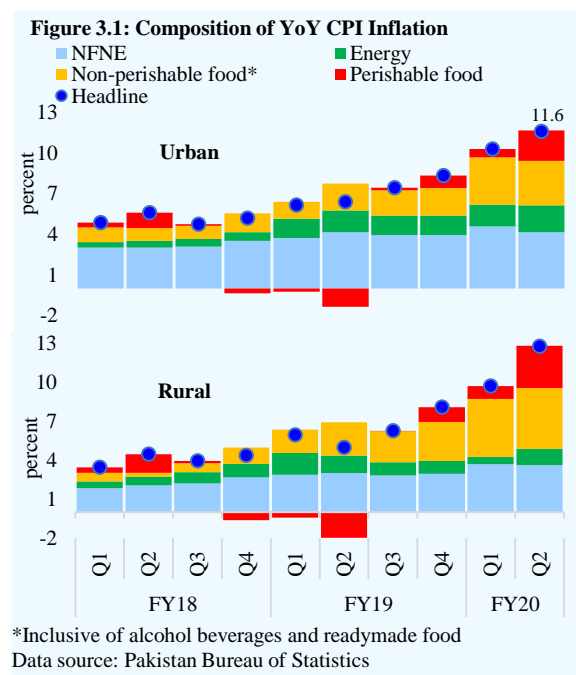


3 Inflation and Monetary Policy

3.1 Overview

Inflationary pressures continued to build up throughout the first half of FY20. While the non-food-non-energy (NFNE) inflation exhibited stability on account of subdued demand conditions in the economy, food inflation surged steeply in both the quarters of FY20. Whereas pressures on food inflation in the first quarter stemmed mainly from non-perishable items, the increase in the second quarter was contributed largely by perishables (**Figure 3.1**).¹ Increase in administered prices of energy items also contributed to higher inflation. Other components of inflation remained almost unchanged during the second quarter, especially in urban areas. This trend suggests that the surging inflationary pressures during this period was an outcome of supply disruptions, which are typically seasonal and temporary.

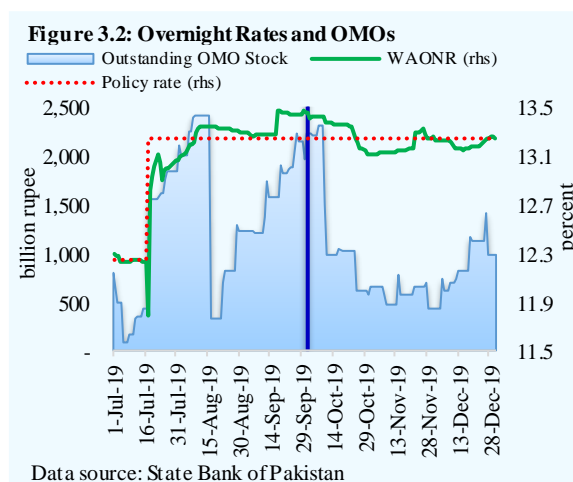


Therefore, the SBP's projections for the average headline inflation for FY20 remained broadly unchanged at 11-12 percent. This projection was premised on an ease in inflationary pressures during the second half of the year on the back of sluggishness in domestic demand, and temporary nature of perishables' shortages. In addition, the improvement in the balance of payments (that led to an

¹ Inflation in perishable food and non-perishable food items during Q2-FY20 clocked in at 60.1 percent and 11.2 percent respectively, compared to 16.6 percent and 11.2 percent in Q1-FY20. Importantly, the rise in perishable inflation was more pronounced in rural areas; since the country relied heavily on imports to plug the domestic demand-supply gap, this trend represented delays and costs involved in transporting these items from entry points (e.g., Torkham, Taftan and Karachi Port) to the rural areas.

appreciation in the Pak rupee) and the government's adherence to fiscal discipline, also continued to provide comfort to the short-term inflation outlook. Therefore, the SBP's Monetary Policy Committee (MPC) decided to keep the interest rates unchanged at 13.25 percent in its November 2019 meeting. The current level of interest rates also seemed appropriate to the MPC to bring the inflation down to the target range of 5-7 percent over the medium term.

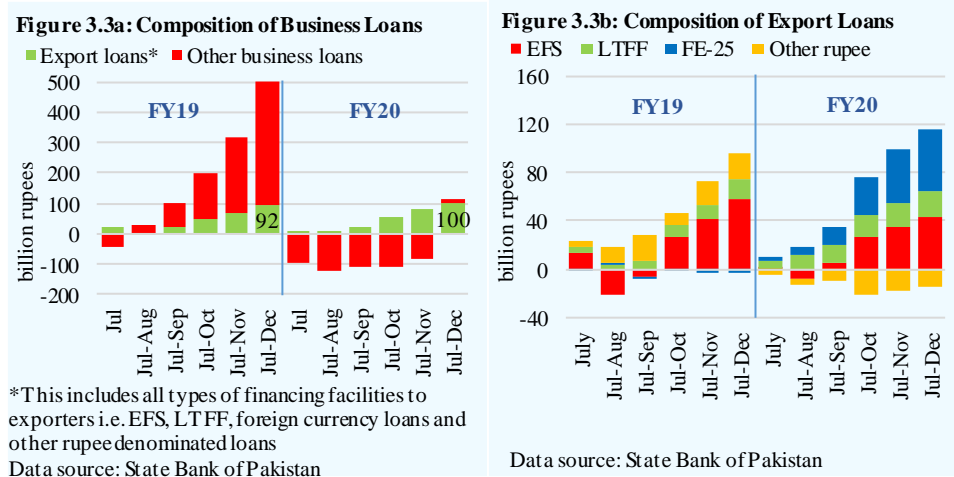
Implementing the policy rate required fewer interbank market interventions in the second quarter, compared to the first. Both the outstanding OMO injections and volatility in the interbank overnight rates remained lower in Q2-FY20 compared to the preceding quarter, whereas limited activity was observed at the SBP's standing facility (**Figure 3.2**). This ease in the interbank liquidity stemmed primarily from net retirements by the government to scheduled banks and SBP's foreign exchange purchases. Although the overall fiscal deficit during the quarter remained higher than last year as well as the preceding quarter, the government had sufficient financing available from external and non-bank sources. Furthermore, the government also tapped on cash buffers it had placed with SBP during the previous two quarters.



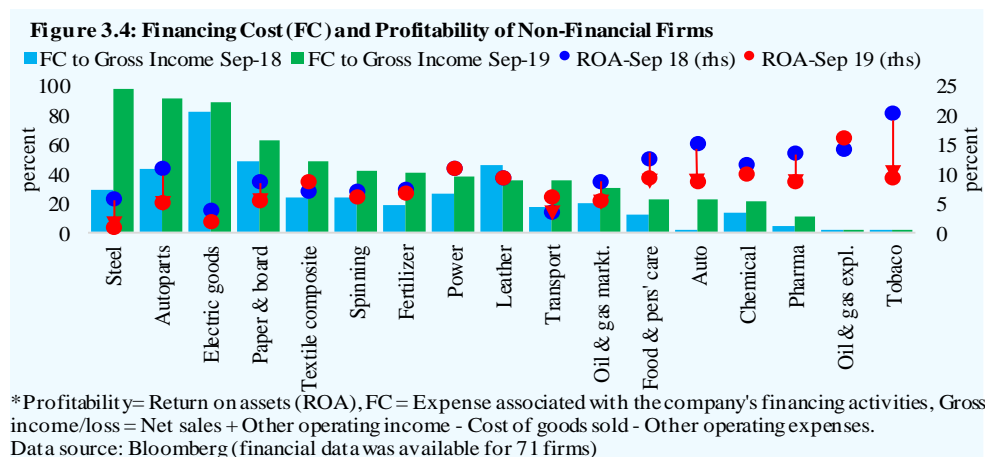
In addition, credit demand from the private sector was also not forthcoming, as the industrial recovery on the whole remained elusive. Though the export-oriented sectors exhibited vibrancy during the quarter, their loan offtake from the banking system was only slightly higher than last year (**Figure 3.3a**). This probably represents firms' sound liquidity position on the back of significantly high export earnings in Rupee terms and relatively smoother tax refunds during the quarter.² However, an important development throughout the first half of FY20 was the switching between domestic and foreign currency loans. As shown in **Figure 3.3b**, firms heavily utilized Libor-based foreign currency (FE-25) loans, and relied

² In H1-FY20, the government's tax refunds grew by 37.0 percent to Rs 75.5 billion from Rs 55.1 billion in the same period last year.

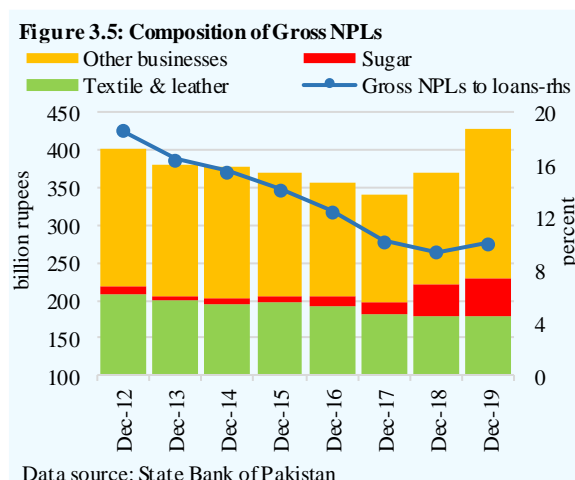
less on expensive rupee denominated loans as well concessional facility of SBP (EFS).



In contrast, the financial position of non-exporting sectors remained generally weak. In H1-FY19, the firms had leveraged excessively to address their cash flow constraints emanating from inventory build-ups and higher raw material and operational costs, which had inflated their financing expenses in subsequent months. In some industries such as steel, auto parts and electric goods, financing expenses had even touched 80 percent of firms' gross profit margins by end-September 2019 (**Figure 3.4**). As such, further leveraging did not seem to be a viable option for these firms, especially keeping in view the prevailing interest rate levels.



Therefore, a weakening in the repayment capacity of these firms in the first half of FY20, was not surprising. As shown in **Figure 3.5**, while the gross non-performing loans of major exporting sectors (textiles and leather) continued to decline, the NPLs in other sectors increased during this period. Importantly also, the overall NPLs as percent of total loans have also inched up slightly after declining steadily over the past 6 years.



3.2 Monetary Aggregates

The broad money posted an expansion of Rs 812.1 billion during Q2-FY20, compared to Rs 554.8 billion in Q2-FY19 (**Table 3.1**). Bulk of this increase was due to a sharp expansion in the NFA of the banking system, specifically of the SBP. Meanwhile the expansion in NDA was quite modest, as credit demand from both the government and private sectors remained lower than last year.

This expansion in the SBP's NFA reflects improvement in the current account deficit and growing confidence of IFIs and foreign investors. As a result, the SBP was able to rebuild its foreign exchange reserves through purchases from the interbank market, inflows from multilateral agencies, and the government's commercial borrowings (**Chapter 5**).

Table 3.1: Monetary Aggregates in H1^P

| billion Rupees | FY19 | | FY20 | |
|----------------------|---------|---------|---------|--------|
| | Q1 | Q2 | Q1 | Q2 |
| M2 (A+B) | 22.4 | 554.8 | 105.2 | 812.1 |
| A. NFA | -148.5 | -532.6 | 259.6 | 618.4 |
| B. NDA | 171.0 | 1,087.5 | -154.4 | 193.7 |
| Budgetary borrowing* | 84.6 | 566.0 | 156.0 | 30.6 |
| SBP | 1518.3 | -261.2 | -1586.9 | 846.4 |
| Scheduled banks | -1433.7 | 827.3 | 1742.9 | -815.7 |
| Commodity operations | -10.8 | -74.6 | -15.6 | -12.9 |
| Private sector | 127.9 | 442.5 | -16.9 | 232.5 |
| PSEs | 60.7 | 84.4 | -2.0 | -0.3 |
| Other items net | -91.8 | 66.5 | -275.2 | -58.8 |
| Reserve money | -31.0 | 198.5 | -207.4 | 372.6 |

P: Provisional

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

Data source: State Bank of Pakistan

On the liability side, the growth of currency in circulation remained higher during the first half compared to last year.

Meanwhile, deposits with the scheduled banks grew by Rs 587.4 billion during H1-FY20 compared to Rs 433.8 billion last year. Bulk of this increase was due to the growth in personal deposits.

Encouragingly, the trend in personal deposits did not show a reversal after the month of December 2019, which is

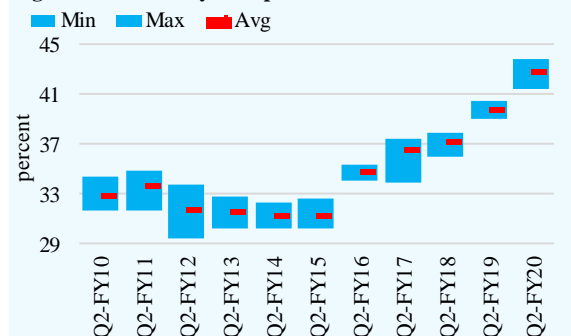
generally a period associated with a seasonal increase. This growth can potentially be attributed to attractive deposits rates, which was also reflected in the increase in the share of remunerative deposits from 59.3 percent at end-June 2019 to 61.3 percent at end-December 2019.³

In contrast, almost the entire increase in the deposits of private businesses and NBFIs was only temporary in nature. Particularly, this trend highlights continued apprehensions of businesses over tightening of the noose around tax evasion, as well as financial scrutiny under AML/CFT regulations. In overall terms, the currency to deposit ratio continued to follow the upward trend that began in FY16 (**Figure 3.6**).

Government Borrowings

Government borrowings from the banking system (on cash basis) declined significantly during Q2-FY20 to Rs 164.7 billion, from Rs 485.1 billion last year. This was despite a marked increase in the

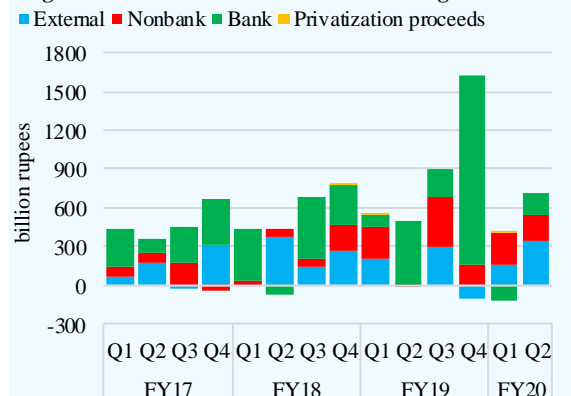
Figure 3.6: Currency to Deposit Ratio*



* The blue bars represent the min/max of currency to deposit ratio observed on a weekly basis during the quarter, whereas red lines indicate its quarterly averages.

Data source: State Bank of Pakistan

Figure 3.7: Sources of Fiscal Deficit Financing



Data source: State Bank of Pakistan

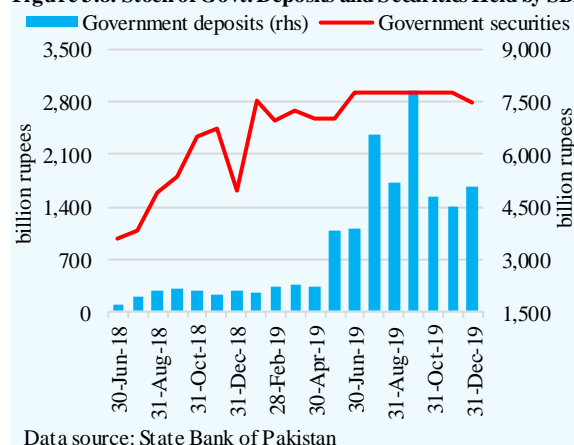
³ The weighted average deposit rates (excluding zero-markup and interbank deposits) increased from 10.2 percent in June 2019 to 10.9 percent in December 2019.

financing gap, which widened to Rs 708.7 billion from Rs 488.2 billion last year. Bulk of the government's financing needs were met through external and domestic non-bank sources (**Figure 3.7**).

Within the banking system, the increase was reflected in borrowings from the SBP, as the government made retirements to scheduled banks. However, it is worth mentioning here that this *net increase* in SBP borrowings reflects the impact of the government drawing its deposits held with the SBP. In *gross terms*, the government retired Rs 285.0 billion worth of MRTBs to the central bank (**Figure 3.8**).

The pre-auction targets for market treasury T-bills were considerably low as compared to the maturities falling during the second quarter (**Table 3.2**). The government preferred adhering to the auction targets, as this provided an opportunity to reduce the borrowing cost at the shorter end of the yield curve. Specifically, in the first three auctions, the government slashed the cut-off rates by 44 bps, 55 bps and 106 bps for 3M, 6M and 12M T-bills, respectively. As a result, the net-of-maturity acceptances in the auctions remained negative.

Figure 3.8: Stock of Govt. Deposits and Securities Held by SBP



Data source: State Bank of Pakistan

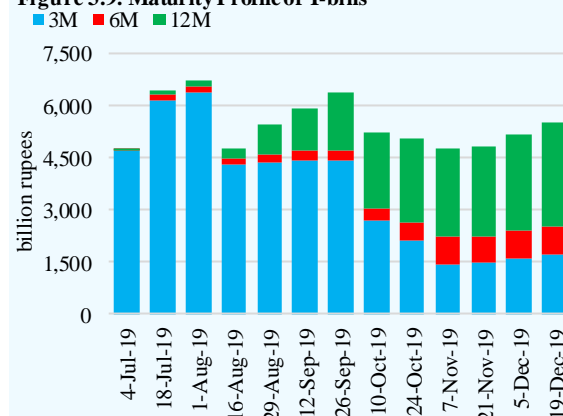
Table 3.2: T-bill Auction Summary during Q2-FY20

| billion rupees | | | | |
|----------------|----------------|----------------|----------------|----------------|
| Auction Date | Target | Maturity | Offered* | Accepted |
| 09-Oct-2019 | 1,000.0 | 2,064.5 | 2,563.3 | 883.5 |
| 23-Oct-2019 | 600.0 | 822.1 | 1,963.8 | 670.6 |
| 06-Nov-2019 | 600.0 | 1,174.4 | 1,513.0 | 887.8 |
| 20-Nov-2019 | 500.0 | 175.8 | 518.3 | 256.0 |
| 04-Dec-2019 | 300.0 | 74.9 | 1,147.8 | 398.4 |
| 18-Dec-2019 | 300.0 | 125.5 | 817.71 | 484.2 |
| Q2-FY20 | 3,300.0 | 4,437.2 | 8,523.7 | 3,580.7 |

*competitive bids only

Data source: State Bank of Pakistan

Figure 3.9: Maturity Profile of T-bills



Data source: State Bank of Pakistan

With plunging rates, the participation of scheduled banks witnessed a slump in the fourth auction. This led the government to recalibrate the yields upwards for the 3M and 12M papers.

This not only revived market's interest in T-bills, but also helped the government borrow in excess of the maturities in the last three auctions of the quarter. Meanwhile, the government's maturity profile of short-term papers improved considerably during the quarter (**Figure 3.9**). At the close of Q1-FY20, around 70 percent of outstanding T-bills comprised of 3M papers. By end-December, this had reduced to only 31 percent, whereas the share of 12M papers rose to 55 percent. Going forward, less frequent maturities of T-bills would also help to restrict volatility in the interbank market.

Deeper rate cuts for longer duration bonds

In case of PIBs, the government had set a target of Rs 450.0 billion (fixed and floating rate combined) against maturities of Rs 255.4 billion during Q2-FY20 (**Table 3.3**). In case of fixed-coupon PIBs, though the market's response was not as pronounced in Q2-FY20 as it was in Q1-FY20, the offer-to-target ratio remained, on average, at 3.3 times – indicating the market's continued preference for long-term securities. However, just like T-bills, the acceptances remained on the lower side, which constrained the liquidity of the long-term bonds in the secondary market. With a relatively low supply and expectations of a rate-cut in the near term, the yields on long-term bonds declined sharply. This also helped the government reduce the cut-off

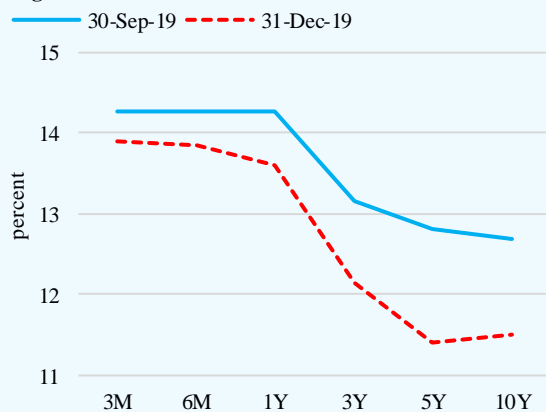
Table 3.3: PIB Auction Summary
in billion rupees

| | Target | Maturity | Offered* | Accepted |
|----------------------|--------------|--------------|----------------|--------------|
| Fixed rate | | | | |
| Q1-FY19 | 150.0 | 461.1 | 64.1 | 20.6 |
| Q2-FY19 | 150.0 | 0.0 | 45.3 | 22.5 |
| Q1-FY20 | 325.0 | 275.9 | 2,521.2 | 963.5 |
| Q2-FY20 | 300.0 | 255.4 | 1,003.5 | 411.4 |
| Floating rate | | | | |
| Q1-FY19 | 150.0 | - | 151.5 | 108.3 |
| Q2-FY19 | 150.0 | - | 93.4 | - |
| Q1-FY20 | 400.0 | - | 334.2 | 219.4 |
| Q2-FY20 | 150.0 | - | 468.7 | 178.6 |

*competitive bids only

Data source: State Bank of Pakistan

Figure 3.10: Yield Curve



Data source: Mutual Funds Association of Pakistan

rates by 117 bps, 123 bps and 120 bps for the 3Y, 5Y and 10Y PIBs, respectively, during the quarter, while comfortably meeting its pre-auction targets.

Consequently, the yield curve shifted downwards, with yields falling more steeply at the longer end (**Figure 3.10**). This was due to two reasons: (i) on the demand side, market players continued to place bids at lower rates for longer duration bonds in anticipation of monetary policy easing; and (ii) on the supply side, the government proactively aligned the long-term rates to reduce its cost of borrowings.

3.3 Credit to Private Sector

Credit to the private sector continued its downward trajectory in H1-FY20, as businesses continued to scale down their activities and increasingly resorted to internal financing (**Table 3.4**). This trend was consistent with the subdued industrial production (mainly LSM) and a broad-based decline in imports during the quarter. Notably, the entire offtake was driven by working capital loans; in case of fixed investment loans, net retirements by non-manufacturing sectors such

Table 3.4: Loans to Private Sector Businesses H1*
flow in billion rupees

| | Total Loans | | Working Capital** | | Fixed Investment | |
|---|--------------|--------------|-------------------|--------------|------------------|-------------|
| | FY19 | FY20 | FY19 | FY20 | FY19 | FY20 |
| Private sector businesses | 506.7 | 111.9 | 469.7 | 112.8 | 37.0 | -0.8 |
| Manufacturing | 385.9 | 122.7 | 349.8 | 107.5 | 36.1 | 15.1 |
| Textile | 202.5 | 112.4 | 187.4 | 96.1 | 15.1 | 16.3 |
| Motor vehicles | 21.5 | 38.4 | 19.7 | 36.2 | 1.8 | 2.2 |
| Rice processing | 46.0 | 26.6 | 42.9 | 26.1 | 3.1 | 0.6 |
| Cement, lime and plaster | 27.2 | 10.2 | 7.5 | 12.8 | 19.7 | -2.6 |
| Basic iron and steel | 6.3 | 10.4 | 6.8 | 3.0 | -0.5 | 7.4 |
| Fertilizers | 17.0 | -0.1 | 22.1 | -0.7 | -5.1 | 0.6 |
| Paper & paper products | 0.9 | -6.5 | 2.3 | -4.5 | -1.4 | -2.0 |
| Vegetable and animal oils and fats | 25.9 | -10.3 | 29.5 | -10.7 | -3.6 | 0.4 |
| Refined petroleum | 33.0 | -14.2 | 36.6 | -14.3 | -3.5 | 0.1 |
| Sugar | -59.4 | -45.6 | -62.3 | -41.5 | 2.9 | -4.1 |
| Telecommunications | -5.8 | 13.1 | 6.9 | -2.9 | -12.7 | 15.9 |
| Mining and quarrying | 5.8 | 1.2 | 2.5 | -2.3 | 3.3 | 3.4 |
| Real estate activities | 6.5 | 5.2 | 2.0 | 5.1 | 4.5 | 0.0 |
| Power generation, transmission and distribution | 49.0 | 21.6 | 31.3 | 23.8 | 17.7 | -2.2 |
| Transportation and storage | 10.5 | 17.2 | 11.2 | 21.9 | -0.7 | -4.7 |
| Construction | -6.1 | -26.1 | 6.6 | -19.2 | -12.7 | -6.9 |
| Wholesale and retail trade | 52.2 | -38.8 | 50.5 | -28.1 | 1.7 | -10.7 |

* The sector-wise data for FY19 and FY20 may not be fully comparable, as the flows for H1-FY19 are based on ISIC 3.1 whereas the flows for H1-FY20 are based on ISIC 4.0 classification.

**includes trade financing;

Data source: State Bank of Pakistan

as construction, power and transport more than offset the increase in manufacturing sectors' loans (by sectors like textile).

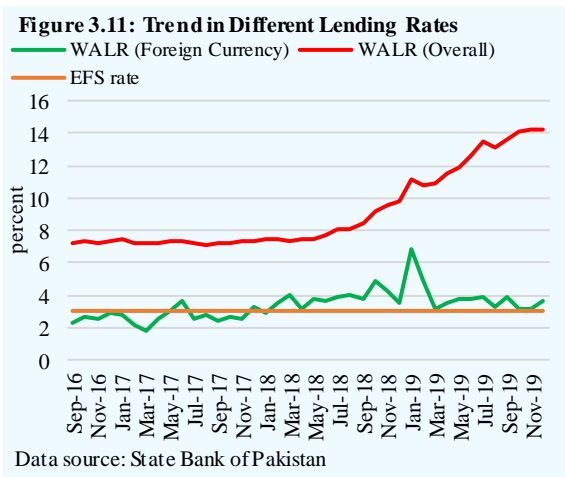
Working capital loans

The increase in the stock of working capital loans in H1-FY20 was only a quarter of the increase observed in H1-FY19. This trend was explained both by lower offtake by textiles and rice processing sectors, as well as deleveraging by the sugar, petroleum refining and edible oil industries.

In case of export-oriented sectors, lower bank financing despite visibly buoyant sectoral activity mainly represents better liquidity conditions this year due to higher export values in Pak rupee terms, and a relatively smoother release of tax refunds by the FBR.

Because of these factors, firms were not keen on borrowing against the SBP's concessional Export Finance Scheme (EFS), where the interest rate gap had widened to 10.81 percent, on

average. Borrowing under EFS in fact fell to Rs 42.5 billion in H1-FY20 from Rs 58.0 billion in H1-FY19. Meanwhile, some exporters (likely those ineligible for EFS) opted for foreign currency financing (against FE-25 deposits) for trade purposes, given that rates on this type of financing were close to those on EFS (**Figure 3.11**). As it turned out, exporters were more drawn towards this financing; probably firms not eligible for EFS led this behavior.



As for the sectors that preferred to deleverage this year, the sugar sector figured prominently by making heavy seasonal retirements. In contrast, oil refineries opted to deleverage to shield their profit margins from getting further eroded by high financial charges in the current interest rate environment. As per the available balance sheet data, finance cost has even exceeded the operational income for most of the listed refineries during Q2-FY20. It may be recalled that the refining sector is already facing serious cash flow constraints stemming from regulatory changes and import-led compression in the commercial transport activity in the country. Facing restrictions with respect to the use of furnace oil in thermal power generation, refineries continue to struggle with inventory build-up

of furnace oil, which is constraining their operational activity (**Chapter 5**). In case of fertilizer, the liquidity situation was relatively better this year, as the sector's sales revenue was Rs 2.1 billion higher in H1-FY20 as compared to the same period last year. In this regard, a strong urea offtake of 1.3 million metric tons in December 2019 played a crucial role in enhancing fertilizer sales. With this comfort, the sector marginally retired Rs 0.7 billion in H1-FY20, compared to borrowing Rs 22.1 billion last year.

In contrast, automobile assemblers increased their reliance on bank financing further. Struggling with unsold stocks that created cash flow constraints, auto assemblers borrowed heavily from banks to finance their operational activities. Before the current downtrend, this sector used to make little use of bank borrowing and mainly financed its working capital from customers' prepayments.

Among non-manufacturing businesses, short-term borrowing by the power sector was noteworthy. The increase could mainly be attributed to working capital requirement of a major IPP during Q2-FY20. Another notable increase was recorded in the transport sector, whose short-term borrowing rose by Rs 21.9 billion in H1-FY20 compared to Rs 11.2 billion last year. This mainly represents borrowing by a deep sea port operator that is modernizing its operations.

Fixed investment loans

Fixed investment loans marginally declined by Rs 0.8 billion in H1-FY20, compared to an increase of Rs 37.0 billion in the same period last year, as net retirements in construction and power sectors more than offset borrowings by manufacturing businesses, mainly textile and fertilizer.

Textile firms continued to position themselves to take advantage of pricing edge stemming from the exchange rate realignment and improved market opportunity in the key destinations (US and the EU) amid China's retreat from the apparel segment. Textile firms enjoyed lucrative rates of 5 percent under the SBP's Long Term Financing Facility (LTFF) for export-oriented projects. LTFF loans constituted around 95 percent of the textile sector's overall fixed investment borrowing during H1-FY20, compared to 77.5 percent last year.

3.4 Inflation

Following a steep rise in food prices, the overall inflationary pressures in the economy intensified for the fourth quarter in a row during Q2-FY20 (**Figure 3.12**). National CPI inflation clocked in at 12.1 percent during the quarter as food supplies were disrupted in both urban and rural areas. Moreover, while the landed cost of imported food items remained significantly higher than last year, a rise in transport costs and sales tax rates on major kitchen items

(edible oil and sugar) put additional pressure on food inflation. Nonetheless, non-food-non-energy (NFNE) inflation observed stability; not only did it remain almost at last year's level in Q2, it also declined from the preceding quarter. This stability in NFNE signifies weak demand in the economy and well anchored-inflation expectations.

Nonetheless, with a combined 36.8 percent and 46.0 percent share in the consumption basket of urban and rural consumers respectively, rising food prices kept consumer confidence subdued (**Figure 3.13**). Struggling to preserve their purchasing power, households perceived current times to be challenging to purchase automobiles, durable household items and new houses, as noted in all the waves of the IBA-SBP surveys conducted in H1-FY20. Importantly, the overall consumer confidence showed a weaker reading in every successive wave.

Figure 3.12: Quarterly Average of National CPI Inflation

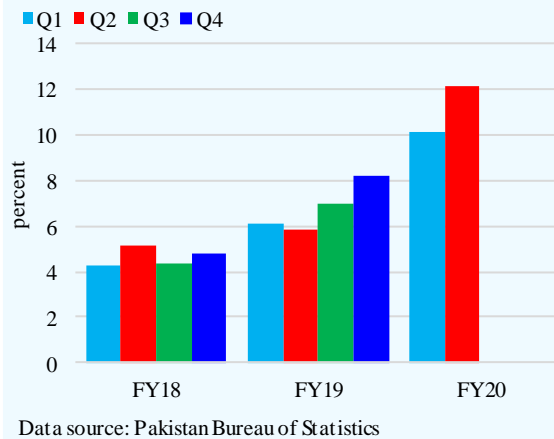
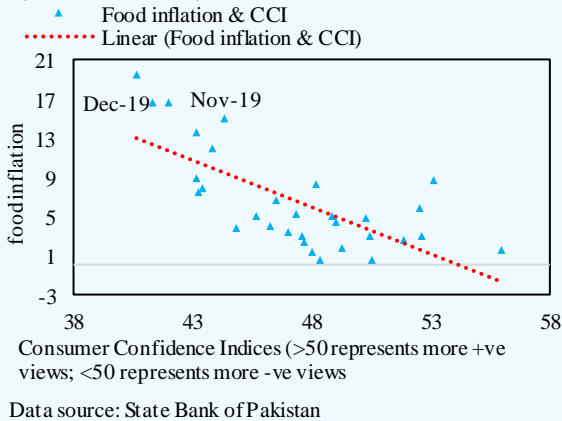
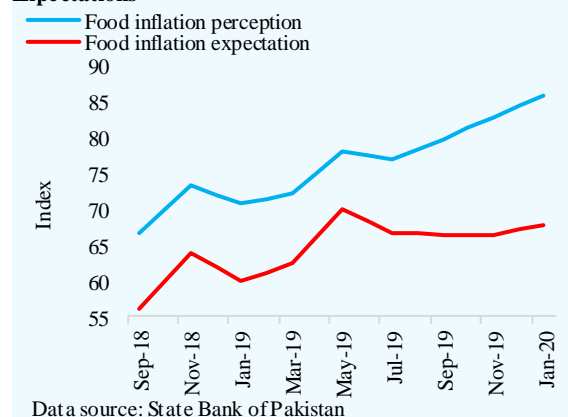


Figure 3.13: Food Inflation and Consumer Confidence Index (Jul 2017-Dec 2019)



However, households' expectations with respect to food and overall inflation presents a silver lining. Given the seasonal nature of food price increases, inflation expectations remained broadly anchored. Importantly, although households' *perception* of food prices (which represents how they view current food prices compared to past 6 months) has increased steadily since the July 2019 wave, their *expectations* of food prices for the next 6 months have remained mostly unchanged (**Figure 3.14**).

Figure 3.14: Comparison of Food Inflation Perception and Expectations



Food inflation

Food inflation, which began to surge from the third quarter of FY19, increased to an 8-year high level in Q2-FY20. With a 36.8 percent weight in the urban CPI basket and 46.0 percent weight in the rural CPI basket, the food price increase during the quarter emerged as a major policy challenge (**Table 3.5**). From the monetary policy perspective, a persistent surge in these prices can potentially lead to faster wage growth in household services, triggering a wage-price spiral. From the fiscal policy perspective also, any subsidy-centric response to a persistent surge in food prices and the associated political challenges can dent the ongoing expenditure control efforts. For instance, to improve market sentiments, the ECC not only increased the support price for wheat for the next season (to encourage farmers to expand the cultivated area), but also allocated additional funding to save the upcoming wheat and minor crops from locust attack. Furthermore, the government also provided a food subsidy of Rs 15.0 billion to be spent through the utility stores network.

In this context, and before presenting a detailed analysis of developments in Q2, three aspects are important to note. First, the role of depreciation of the Pak rupee in FY19, continued increase in motor fuel prices, and the increase in sales tax rate on essential items (e.g., sugar and edible oil) appeared important in explaining the broad-based increase in food prices. Barring a further policy change down the road, the impact from these measures will dissipate on food inflation going forward.

Table 3.5: Average CPI Inflation and Contribution

| | Urban | | | | | | Rural | | | | | |
|------------------------|-------|-------|-------|-------|-------|--------|-------|-------|-------|-------|-------|--------|
| Items | Wt.* | H1 | | Q2 | | | Wt.* | H1 | | Q2 | | |
| | | FY19 | FY20 | FY19 | FY20 | Cont.* | | FY19 | FY20 | FY19 | FY20 | Cont.* |
| CPI | 100.0 | 6.3 | 11.0 | 6.4 | 11.6 | 11.6 | 100.0 | 5.5 | 11.3 | 5.0 | 12.8 | 12.8 |
| Food & non-alcoh. bev. | 30.4 | 1.6 | 14.8 | 0.8 | 17.4 | 5.0 | 40.9 | 1.6 | 15.5 | 0.5 | 18.7 | 7.4 |
| Wheat | 0.6 | 3.8 | 12.5 | 3.9 | 15.3 | 0.1 | 3.5 | 3.5 | 13.3 | 3.4 | 17.2 | 0.5 |
| Wheat flour | 3.0 | 3.2 | 12.2 | 2.2 | 14.5 | 0.4 | 3.4 | 3.7 | 14.1 | 2.8 | 16.8 | 0.5 |
| Potato | 0.4 | -22.4 | 39.8 | -25.3 | 53.7 | 0.2 | 0.7 | -27.3 | 37.4 | -29.1 | 51.1 | 0.4 |
| Onions | 0.6 | -42.7 | 109.6 | -55.1 | 150.7 | 0.6 | 0.9 | -45.8 | 112.7 | -58.2 | 152.9 | 0.8 |
| Tomatoes | 0.3 | -28.1 | 62.4 | -51.4 | 187.1 | 0.6 | 0.5 | -23.9 | 64.3 | -48.0 | 179.2 | 0.8 |
| Fresh vegetables | 1.5 | -5.0 | 28.2 | -17.7 | 51.0 | 0.8 | 2.1 | -5.3 | 30.1 | -14.0 | 48.8 | 1.0 |
| Sugar | 1.1 | -1.7 | 33.1 | 0.2 | 32.0 | 0.3 | 2.0 | -0.8 | 34.2 | 0.8 | 32.7 | 0.5 |
| Clothing and ft.wear | 8.0 | 5.0 | 8.9 | 5.3 | 9.2 | 0.7 | 9.5 | 8.1 | 9.1 | 7.8 | 9.8 | 1.0 |
| Cotton cloth | 2.2 | 5.0 | 13.0 | 5.6 | 13.1 | 0.3 | 2.8 | 10.6 | 11.3 | 11.0 | 12.9 | 0.4 |
| Housing, Elec., Gas | 27.0 | 7.9 | 8.7 | 8.8 | 9.1 | 2.5 | 18.5 | 8.5 | 4.5 | 8.1 | 6.1 | 1.2 |
| Electricity charges | 4.6 | 9.8 | 6.0 | 9.1 | 15.4 | 0.7 | 3.4 | 9.8 | 6.0 | 9.1 | 15.4 | 0.5 |
| Gas charges | 1.1 | 19.3 | 79.9 | 38.6 | 54.8 | 0.7 | n.a | n.a | n.a | n.a | n.a | n.a |
| Health | 2.3 | 6.2 | 11.2 | 6.5 | 10.9 | 0.3 | 3.5 | 6.2 | 12.1 | 6.9 | 12.3 | 0.5 |
| Transport | 6.1 | 19.3 | 17.2 | 19.0 | 16.0 | 1.0 | 5.6 | 17.5 | 14.9 | 17.4 | 13.3 | 0.8 |
| Motor fuel | 2.9 | 27.8 | 19.8 | 25.8 | 18.3 | 0.6 | 2.5 | 27.6 | 19.7 | 25.1 | 18.5 | 0.5 |
| Communication | 2.4 | 2.1 | 5.4 | 2.3 | 5.2 | 0.1 | 2.0 | 2.2 | 1.9 | 2.3 | 1.8 | 0.0 |
| Education | 4.9 | 12.7 | 6.6 | 11.2 | 6.3 | 0.4 | 2.1 | 7.4 | 5.2 | 7.1 | 5.2 | 0.1 |
| Restaurants and hotels | 7.4 | 6.0 | 5.1 | 6.2 | 5.0 | 0.4 | 6.2 | 5.6 | 7.9 | 4.9 | 8.3 | 0.5 |

*wt. = weight and Cont.= Contribution for Q2

Data source: Pakistan Bureau of Statistics

Second, in the case of wheat and wheat flour, speculative activity seems to have engulfed the market during the period, as sufficient stocks were available in the country. Third, supply disruptions played an important role in case of perishables, which were seasonal and temporary in nature.

Here, it is important to note that for the government to control excessive variability in food prices, timely flow of information and an effective early warning system to predict imminent demand-supply gaps is extremely important. Unless information gaps are plugged, domestic food prices will remain vulnerable to weather-related agriculture outcomes (for details, see **SBP Staff Note 02/20, April 2020⁴**).

⁴ Asma Khalid and Sabahat (April 2020), "Price Stabilization Mechanism in Pakistan's Food Market: Exploring Issues and Potential Challenges", SBP Staff Note 2/20. (<http://www.sbp.org.pk/publications/staffNotes.htm>)

Higher transport cost, revenue-led fiscal measures and PKR depreciation led to a broad-based increase in prices across the food basket

As highlighted in the heat map for both urban and rural areas (**Figure 3.15**), inflation pressures grew intense through most of the sub-indices by the end of Q2-

Figure 3.15 a: Heat Map- YoY Urban Food Inflation

| | Wt. | Dec-18 | Jan-19 | Feb-19 | Mar-19 | Apr-19 | May-19 | Jun-19 | Jul-19 | Aug-19 | Sep-19 | Oct-19 | Nov-19 | Dec-19 |
|-----------------------|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Food Index | 36.8 | 0.6 | 2.6 | 5.9 | 8.8 | 8.3 | 9.0 | 7.5 | 7.9 | 11.9 | 15.0 | 13.7 | 16.6 | 16.7 |
| Perishable food | 4.5 | -29.7 | -15.3 | 6.8 | 27.6 | 25.4 | 29.7 | 14.3 | 5.4 | 13.3 | 27.2 | 35.9 | 66.0 | 76.4 |
| Non-perishables | 26.0 | 5.3 | 4.9 | 5.7 | 6.5 | 6.0 | 6.3 | 6.5 | 8.1 | 12.5 | 14.4 | 11.1 | 10.8 | 10.8 |
| Dairy (Chicken, Eggs) | 1.9 | 0.2 | -13.6 | -4.1 | 1.7 | 2.1 | -7.1 | -12.4 | -6.6 | 50.0 | 52.0 | -0.3 | -13.0 | -11.5 |
| Pulses | 0.7 | 2.6 | 4.2 | 4.1 | 7.7 | 8.8 | 12.2 | 15.1 | 16.9 | 18.6 | 18.7 | 19.0 | 22.8 | 21.7 |
| Fresh fruits | 1.4 | 0.7 | -1.7 | -1.1 | 0.0 | 11.0 | 24.5 | 0.6 | 9.7 | 8.2 | 6.7 | 5.4 | 7.9 | 9.1 |
| Condiments & spices | 1.3 | 14.0 | 16.3 | 17.7 | 17.3 | 18.7 | 19.8 | 20.3 | 18.9 | 21.9 | 20.5 | 18.1 | 19.2 | 17.6 |
| Vegetables | 2.9 | -42.1 | -23.3 | 10.8 | 47.2 | 34.8 | 32.4 | 23.3 | 2.1 | 13.3 | 34.5 | 47.5 | 92.5 | 118.3 |
| Grains | 4.9 | 2.7 | 2.4 | 2.2 | 2.5 | 2.4 | 5.1 | 6.0 | 7.7 | 7.9 | 9.8 | 9.2 | 12.9 | 13.9 |
| Edible oil | 2.2 | 6.8 | 8.1 | 8.6 | 8.8 | 12.3 | 12.1 | 12.4 | 13.9 | 18.4 | 19.3 | 18.0 | 16.0 | 16.5 |
| Readymade Food | 5.5 | 4.8 | 4.5 | 4.5 | 5.4 | 5.6 | 5.1 | 5.2 | 6.1 | 5.8 | 6.3 | 6.2 | 6.6 | 6.2 |
| Meat (Meat, Fish) | 2.4 | 8.2 | 8.7 | 8.6 | 8.9 | 8.1 | 10.5 | 11.1 | 11.8 | 12.2 | 12.6 | 13.5 | 13.2 | 13.5 |

Figure 3.15 b: Heat Map- YoY Rural Food Inflation

| | Wt. | Dec-18 | Jan-19 | Feb-19 | Mar-19 | Apr-19 | May-19 | Jun-19 | Jul-19 | Aug-19 | Sep-19 | Oct-19 | Nov-19 | Dec-19 |
|-----------------------|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Food Index | 45.9 | 0.5 | 1.8 | 5.2 | 9.3 | 9.3 | 9.7 | 9.1 | 9.3 | 12.6 | 15.0 | 14.6 | 19.3 | 19.7 |
| Perishable food | 5.8 | -33.4 | -21.5 | -2.4 | 30.2 | 24.7 | 27.6 | 14.7 | 12.1 | 17.3 | 26.1 | 34.3 | 73.9 | 89.3 |
| Non-perishables | 35.1 | 5.6 | 4.3 | 5.2 | 6.4 | 7.1 | 7.3 | 8.0 | 8.2 | 11.4 | 12.3 | 10.6 | 12.0 | 12.0 |
| Dairy (Chicken, Eggs) | 2.0 | 7.6 | -14.2 | -5.9 | 1.6 | 4.0 | -7.4 | -6.4 | -9.3 | 37.3 | 42.1 | 4.4 | -10.4 | -13.9 |
| Pulses | 1.1 | 2.6 | 2.6 | 5.3 | 6.1 | 11.4 | 13.9 | 16.3 | 17.8 | 19.9 | 18.1 | 19.5 | 23.9 | 23.7 |
| Fresh fruits | 1.5 | -3.8 | -2.3 | -5.6 | -0.4 | 13.9 | 17.6 | 3.6 | 15.9 | 14.7 | 10.7 | 6.7 | 13.2 | 21.5 |
| Condiments & spices | 1.5 | 15.5 | 16.1 | 14.9 | 17.2 | 15.9 | 15.4 | 15.2 | 11.5 | 13.4 | 13.7 | 11.1 | 14.7 | 22.1 |
| Vegetables | 2.1 | -34.1 | -19.1 | -10.5 | 34.5 | 24.9 | 26.8 | 17.0 | 1.1 | 9.8 | 20.1 | 34.7 | 42.2 | 80.2 |
| Grains | 8.5 | 4.2 | 3.3 | 3.7 | 4.6 | 5.0 | 8.5 | 9.9 | 9.4 | 9.2 | 10.7 | 10.5 | 17.4 | 17.8 |
| Edible oil | 3.0 | 9.5 | 9.2 | 9.8 | 8.1 | 9.0 | 9.1 | 9.7 | 14.0 | 16.8 | 17.9 | 17.8 | 17.5 | 19.1 |
| Readymade food | 3.8 | 7.2 | 7.3 | 6.6 | 6.1 | 6.4 | 5.1 | 4.6 | 7.0 | 7.8 | 7.8 | 7.7 | 8.4 | 8.1 |
| Meat (Meat, Fish) | 2.0 | 9.5 | 10.3 | 12.6 | 12.0 | 14.0 | 12.0 | 13.0 | 12.5 | 11.3 | 12.1 | 12.7 | 12.0 | 12.2 |

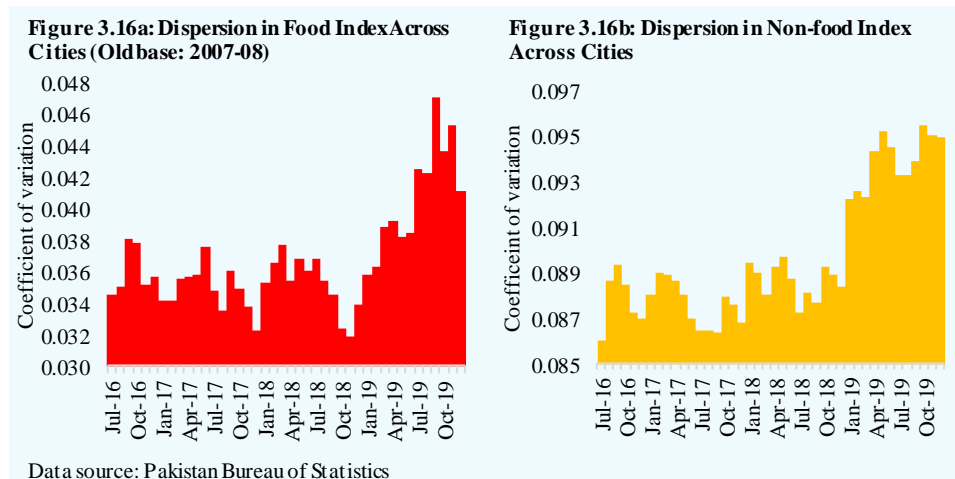
Data Source: Pakistan Bureau of Statistics

FY20. While prices of perishables observed the steepest rise compared to last year, some non-perishables, such as pulses, edible oil, condiments and grains, also felt heavier on consumers' pockets. A similar trend was observed in price trends in rural areas.

The broad-based nature of food inflation can be attributed to a number of policy measures taken over the past few months. First, prices of imported food items (such as pulses, edible oil and condiments) as well as imported farm inputs (mainly fertilizers) remained higher than last year due to a weaker Pak rupee. Second, revenue-enhancing measures, which involved raising the sales tax rate on sugar and edible oil and a significant revision in FED on cigarettes, put upward pressure on prices of these items. Third, higher diesel and petrol prices and the implementation of axle load management increased the transportation cost of food items to retail markets.

As shown in **Figure 3.16**, the dispersion in food prices has been quite large across various cities throughout the first half of FY20. This increase mainly reflects

localized supply shortages and the impact of transportation cost (both higher fuel prices and axle load) from farms/entry points to retail markets.

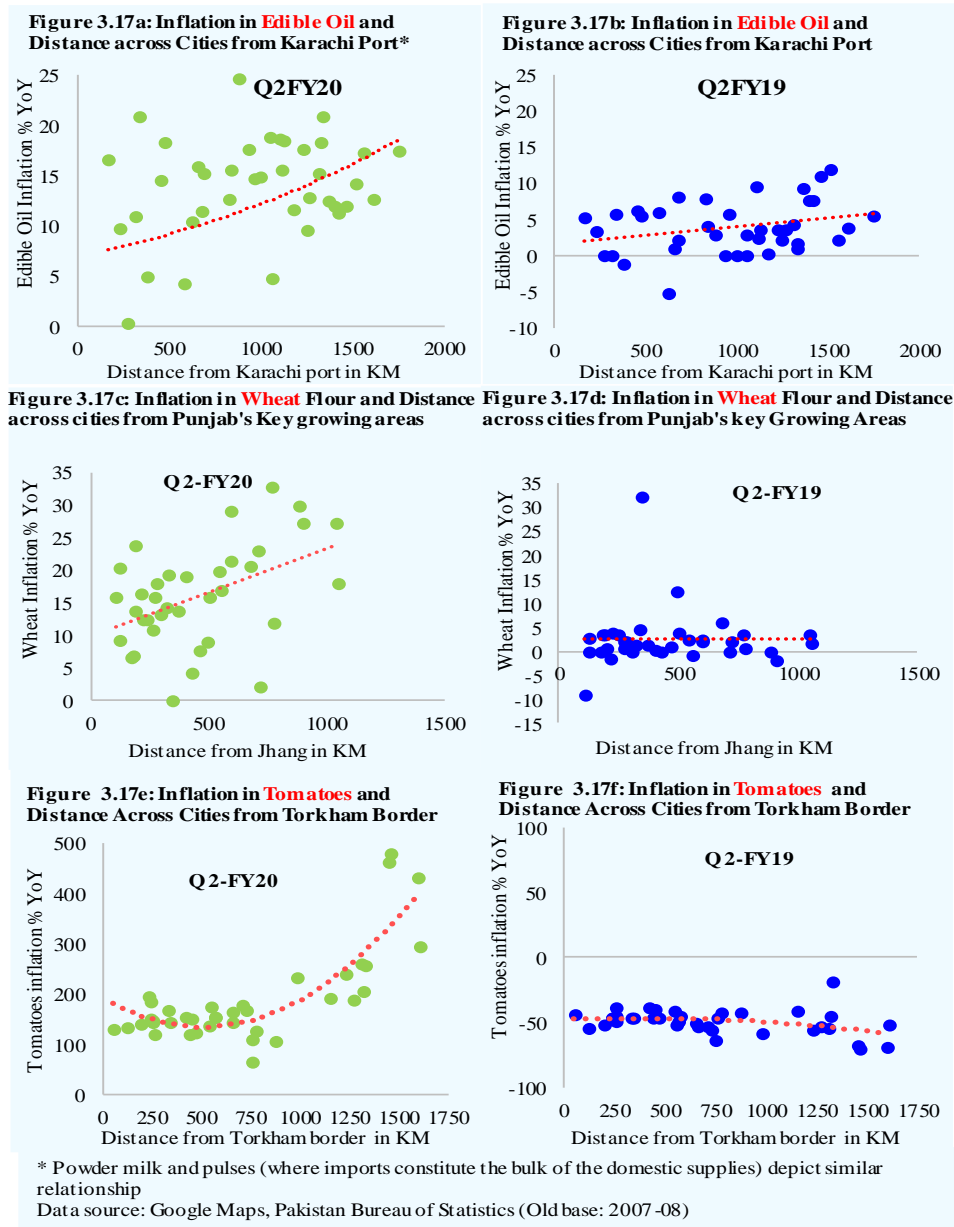


Specifically, most non-perishable food items land in the country via Karachi port (e.g., pulses, edible oil, powdered milk, etc.). If we plot the distance of each city from Karachi against the edible oil inflation it experienced during the quarter, we see a visible positive trend (**Figure 3.17a**). Such a trend was not observed last year (**Figure 3.17b**). Similarly, in case of perishables that Pakistan imported from Afghanistan to overcome the domestic shortfall (mainly tomatoes), a positive trend can be seen between the distance of each city from the Torkham border and the regional food inflation (**Figure 3.17e**). Finally, a similar positive trend is visible in case of wheat inflation when plotted against the distance from Punjab's wheat growing areas (**Figure 3.17c**).

ii. Trade barriers and speculative activity intensified the impact of temporary supply disruptions

It is important to mention here that the increase in vegetable prices was a regional concern in the second half of 2019, as weather-related shocks (high temperatures and untimely heavy rains) damaged harvests in India – the largest producer and exporter of onion, tomatoes and potatoes in the region. However, countries had been taking measures to control price hikes. For instance, India put an explicit ban on the export of onions and tomatoes in September 2019; it also made special arrangements to *import* onion from Egypt, Turkey, Afghanistan and Iran. Similarly, Bangladesh arranged onion airlifts from Myanmar, China, Turkey and Egypt to control their prices.

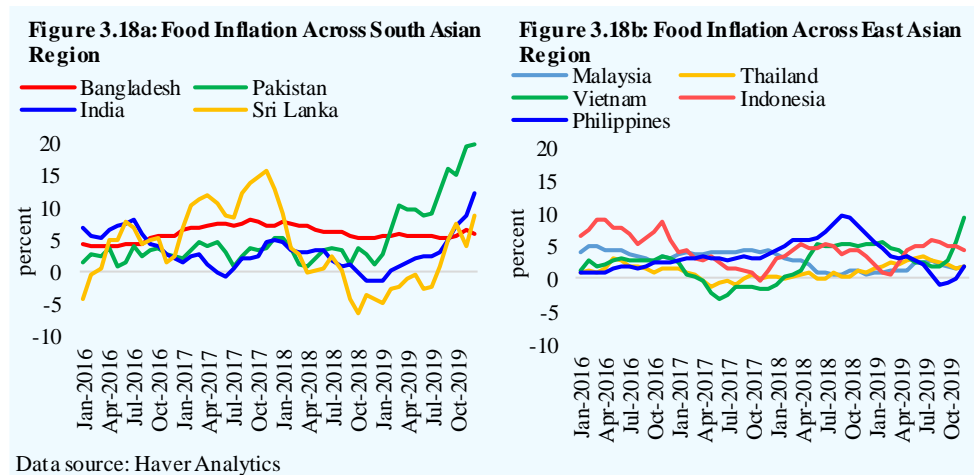
In case of Pakistan, however, production losses in food crops were relatively



contained.⁵ Production of potatoes, onions and tomatoes were largely stable,⁶ whereas the decline in wheat output in 2019 was limited to only 3.2 percent as

⁵ Official data on minor crops production for FY20 was not available at the time of writing this report.

compared to the preceding season. However, speculative activity in the wheat market, lower procurements by government agencies and delays in the harvest of tomatoes and onions in Sindh, triggered price pressures in the domestic market. These pressures were intensified and prolonged by the import barriers and structural weaknesses in the overall price control mechanism for essential food items (for details, **SBP Staff Note 02/20, April 2020**). As a result, despite a reasonably good agriculture outcome, food inflation in Pakistan turned out to be the strongest among regional countries during the Jul-Dec 2019 period (**Figure 3.18**).



In case of tomatoes, untimely rains in the sowing season wiped out pre-winter plantations in Sindh and caused a delay in the harvest, which was expected to hit the market around October. Prices began to increase from mid-October as supplies became squeezed. In case of onions, the impact on domestic prices initially appeared to be linked with the regional phenomenon, but the crop estimates and trade data make it hard to comprehend market dynamics. First, India imposed a ban on exports in September 2019 following a large decline in onion production there. As a result, prices surged steeply in the South Asian region, and since these markets started eyeing Chinese varieties, prices of onion in China also increased.

It appears ambiguous as to how Pakistan was affected by these developments. As

⁶ In FY19, the potato crop was estimated to have grown by 6.45 percent compared to last year, whereas production of tomatoes and onion remained more or less unchanged with growth of -1.9 and -0.2 percent respectively (Source: Federal Committee on Agriculture, Rabi Working Paper for 2019-20).

per estimates from provincial food authorities, Pakistan had a bumper onion crop this year. Still, prices rose over 150 percent YoY during Q2-FY20. A part of this increase can be explained by exports of nearly 72,000 MT during October and November 2019 – if we extrapolate this quantity to the full-year, it becomes equivalent to 20 percent of the country's annual onion production. However, it is equally important to note that the country also *imported* about half of this quantity (i.e., 36,000 MT) in the same months. Furthermore, a very strong correlation between onion inflation in India and Pakistan, despite the non-existent formal trade between the two countries, is also puzzling (for details, see **SBP Staff Note 02/20, April 2020**).

As far as wheat and wheat flour are concerned, their prices had been edging up since the beginning of the 2019 procurement season (i.e. mid-April). Crop shortfall, limited procurement by government agencies, falling operational reserves, continued exports and a ban on imports, all triggered speculative activity in the wheat market.⁷ In September 2019, the government put an explicit ban on the commodity's exports to help alleviate pressure on domestic prices. Furthermore, the ECC repeatedly advised provincial procurement agencies to release their wheat stocks in the market to bridge the demand-supply gap. However, private traders maintained their positions; media reports with respect to restrictions on inter-provincial movement of wheat by the Punjab government further fueled speculative activity. As a result, retail wheat price touched Rs 426.3 per 10 kg by end December 2019, whereas retail flour price soared to Rs 463.9 per 10 kg.

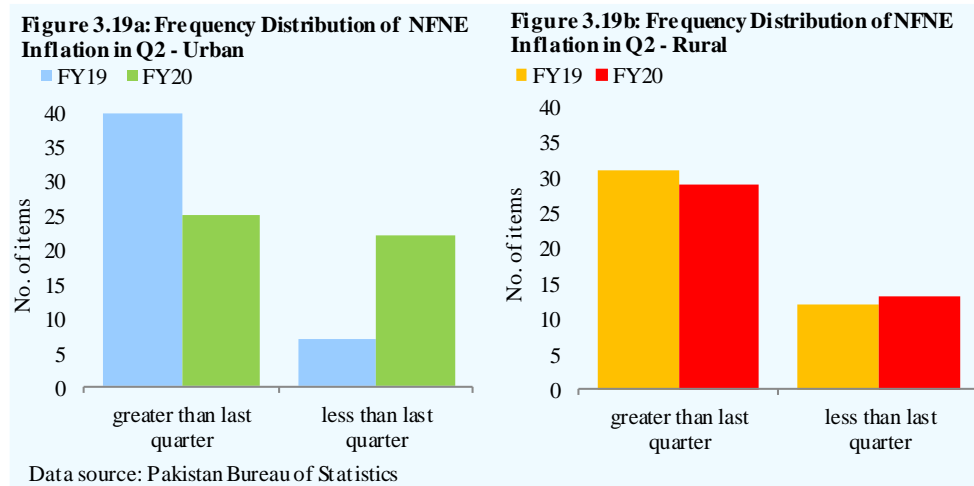
Core inflation softened

The inflationary pressures in non-food-non-energy (NFNE) moderated during Q2-FY20 for urban areas, whereas rural inflation depicted a slightly increased trend. Almost half of the indices within NFNE registered lower inflation in Q2-FY20 as compared to the same period last year for urban areas (**Figure 3.19**). This signifies that the macroeconomic stabilization measures (including the increase in interest rates, fiscal consolidation and realignment of the exchange rate with fundamentals), have proved largely effective.

Component-wise analysis suggests that house rent and education played a significant role in driving down the overall NFNE inflation for urban areas. In education, the decline in inflation came from private school and coaching center

⁷ Wheat production in 2019 was recorded at 24.3 million MT. Total availability of wheat was estimated at 28 million MT, including leftover stocks of 3.8 million MT. This compares with the national requirement of 26.9 million MT.

fees. This can be attributed to the Supreme Court's decision in September 2019 to restore school fees to the 2017 level, on which it fixed the maximum increase in fees at 5 percent a year.



Within NFNE, the goods' index posted a double-digit inflation during Q2-FY20. It appears that this increase partially represents the impact of the increase in motor fuel prices and the axle load management, which increased the overall transport cost in the country. Furthermore, revenue-enhancing measures taken in the budget 2019-20 have also affected goods' prices in the NFNE basket:

- (i) Inflation in the clothing and footwear group rose in both urban and rural areas. Within this group, cotton cloth, and woolen and readymade garments posted significant price rises, as producers passed on the impact of ending of the zero-rating regime (effectively, an imposition of 17 percent GST) onto end-consumer prices;
- (ii) The government imposed 17 percent federal excise duty (in sales tax mode) on various steel products, including billets, ingots, bars, etc. Previously, the steel sector was subject to fixed sales tax; and
- (iii) The increase in cement prices reflects the impact of the increase in FED from Rs 1.5 per kg to Rs 2 per kg this year.

In contrast, inflation on services items remained on the lower side. However, within services, an upward pressure on low-end wages and service charges was visible, especially in urban areas (**Figure 3.20**). The index of low-end urban wages and service charges (with 3.4 percent weight in overall CPI), which represents services such as household servants, cleaning & laundering, tailoring, garbage collection, motor cycle tyre puncture, car service, carpenter, mason,

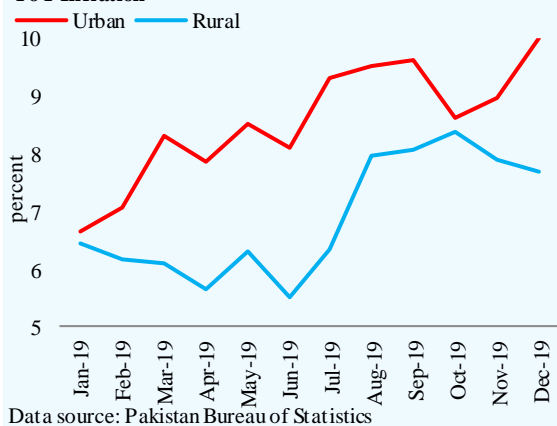
plumber and electrician, posted 9.2 percent inflation, on average, during Q2-FY20. This increase can possibly be viewed as the impact of overall inflationary pressures in the economy, which have affected real incomes of the low-income group the most.

Energy inflation continued to increase steadily

Despite a sizable drop in international oil prices, domestic energy prices continued to rise steadily. This trend represents the impact of previous policies that had led to generation of arrears in both the power and gas sectors, financial constraints for generation and distribution companies, and technical losses/theft. The unsustainable financial position of power and

gas firms and its fiscal and quasi-fiscal impact, has made it inevitable for the government to carry out comprehensive reforms in these sectors; among others, this includes streamlining the tariff procedures and their timely notification.

Figure 3.20: Index of Low-end Wages and Service Charges - YoY Inflation



The urban energy index registered a 19.9 percent increase during Q2-FY20, whereas the rural index increased by 10.6 percent over the same period last year. Disaggregated analysis suggests that the largest impact on the urban energy index came from adjustments in gas tariffs in July 2019, which the Oil and Gas Regulatory Authority (OGRA) made to minimize the accumulation of arrears in the sector from delays in tariff notifications and technical losses. Another upward revision was expected in December 2019, in order to meet the additional revenue requirement of SSGC and SNGPL. However, this decision was deferred and gas tariffs were kept unchanged. Nonetheless, the impact of tariff revisions in October 2018 and July 2019 remained pronounced in Q2-FY20 inflation over a YoY basis. Since gas tariffs are not included in the CPI basket of rural areas, their energy index remained largely stable.

Similarly, electricity prices in both the urban and rural areas posted 15.4 percent rise during Q2-FY20. This rise represents the impact of quarterly tariff adjustment to cover the cost of rising capacity payments and the sector's losses, as well as fuel price adjustments. It is important to recall here that these quarterly

adjustments are part of the government's comprehensive plan to reduce the accumulation of power sector arrears.

In case of motor fuels, prices remained stable during Q2-FY20. However, the inflation remained pronounced on year on year basis, as the urban fuel index grew by 18.3 percent in Q2-FY20 compared to 25.8 percent rise in the same period last year, whereas rural prices grew by 18.5 percent in Q2-FY20 compared to 25.1 last year same period. Soft international oil prices over bleak global economic outlook and a stable domestic currency helped contain the inflationary impact in motor fuel segment (**Figure 3.21**).

