3 Monetary Policy and Inflation

Amid multi-decade high inflation outturns and persistent pressures on PKR, the monetary policy committee (MPC) continued the tightening stance and increased the policy rate by a cumulative 225 bps during H1-FY23. As the economy entered the first half of FY23, the risks to macroeconomic stability had increased. Elevated inflation expectations, alongside a range of domestic supply side factors, including scarcity of food commodities amid floods, large depreciation of PKR, temporary restriction on imports, administrative increase in electricity and fuel prices, and second round effect of spike in food and energy prices pushed the national consumer price inflation to 25.0 percent during H1-FY23, from 9.8 percent in the same period last year. Meanwhile, the contractionary measures introduced since the last year weighed down domestic demand during the first half. However, despite the sharp decline in import demand and hence current account deficit, lower than expected realization of external inflows and tightened global financial conditions, kept external account under significant pressure during H1-FY23, leading to a large depreciation in PKR. Hence, the rising interest rates, overall deterioration in macroeconomic environment, and a contraction in domestic demand discouraged private sector credit offtake during H1-FY23. Specifically, the growth in working capital loans weakened considerably, whereas fixed investment loans remained around the last year level.

3.1 Policy Review

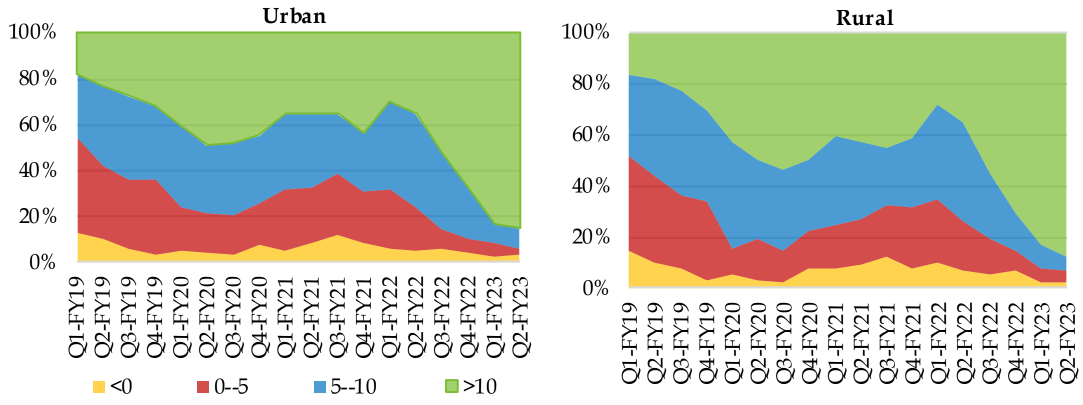
The Monetary Policy Committee (MPC) continued the contractionary stance and increased the policy rate by a cumulative 225 bps, amid worsening inflationary pressures and consistent deterioration in external account during H1-FY23. Elevated inflation expectations along with a range of domestic supply side factors pushed the national CPI (NCPI) inflation to a multi-decade high level in H1-FY23, despite the policy-led moderation in the pace of economic activity and softening of global commodity prices. In the external sector, regardless of notable contraction in the current account deficit (CAD), stringent external financing conditions resulted in a signficant decline in SBP liquid reserves, which kept PKR under pressure.

Considering the trend of macroeconomic indicators and anticipating strong second round impact of the supply side shock in the shape of energy price increase, the Monetary Policy Committee (MPC) projected average NCPI inflation for FY23 to fall within the range of 18-20 percent at the time of July 2022 meeting.

Furthermore, the MPC envisaged the real economic growth for FY23 to moderate to a range of 3-4 percent on the back of monetary tightening and commitment of fiscal consolidation in the FY23 budget. The MPC emphasized the need to introduce additional policy measures to contain energy demand to bring trade deficit to a sustainable level. Based on these measures, with a significant retrenchment in import growth, the current account deficit was projected to narrow to around 3 percent of GDP during FY23.

However, the summer flash floods materially altered the macroeconomic outlook. Hence, at the time of November 2022 MPC meeting, the committee made two revisions to these projections after incorporating Post Disaster Needs Assessment of the floods carried out by the government. First, the committee reduced the real GDP growth projection for FY23 to 2 percent from the earlier estimated range. Second, the MPC increased the inflation forecast for FY23 to 21-23 percent from the pre-flood projection of 18-20 percent.

Frequency Distribution of Inflation **Figure 3.1**



Source: Pakistan Bureau of Statistics

NCPI inflation soared to 25.0 percent in H1-FY23, nearly three times greater compared to the same period last year's level of 9.8 percent. Maintaining the steep uptrend of Q4-FY22, inflationary pressures continued to widen, as more than three-fourth of the entire CPI items witnessed double-digit inflation across rural and urban areas, in both quarters of FY23 **(Figure 3.1)**. In addition, the disaggregated data suggests that inflation momentum also remained elevated almost throughout H1-FY23 as indicated by monthly inflation outcomes.

Four factors underpinned the surge in inflation during H1-FY23. First, the flood induced losses to agricultural produce and livestock caused shortages of food commodities and drove a sharp increase in food prices. Particularly, inflation in perishable commodities including fresh vegetables and fruits shot up to around 50 percent across urban and rural segments. Second, since the country was reliant on the imported food commodities, consistent depreciation of PKR further augmented increase in domestic prices of food group, despite softening global commodity prices. Third, continuing the energy and fiscal reforms under the IMF EFF, the government introduced increase in power tariffs and re-instated Petroleum Development Levy (PDL) on petroleum products, which led to a sharp increase in energy inflation during H1-FY23. Finally, depicting second round effects of food and energy inflation into broader prices and wages, and elevated expectations core inflation rose to double digits during H1-FY23. Importantly, core inflation explained over one-quarter of the urban and rural inflation during H1-FY23. This was despite a notable contraction in domestic demand since the start of FY23.

Amid the ongoing demand compression measures and the fallout of floods, domestic economic activity considerably weakened during H1-FY23. Almost all high frequency demand indicators showed double-digit declines during H1-FY23 on yoy basis – including sales of cement, automobiles and petroleum products (POL). On the supply side, LSM posted a broad based 3.7 percent yoy contraction during Jul-Dec 2022.

The slowdown in demand translated into a sizeable reduction in imports and hence CAD during H1-FY23. However, despite this improvement, domestic uncertainity and tightened global financial conditions kept PKR under pressure during H1-FY23. On the fiscal side, as opposed to the consolidation envisaged in FY23 budget, the budget deficit for H1-FY23 remained around the level seen in the comparable period last year. Lower than target collection of tax revenues and sharp increase in interest payments were mainly responsible for this deterioration.

In this stressed macroeconomic environment, SBP faced the challenge to minimize risks to price stability and financial stability, and to support economic growth. Hence, to prevent a de-anchoring of inflation expectations and provide support to PKR, SBP continued the contractionary stance. The committee noted that a strong, timely and credible policy action was a key to curtail domestic demand, prevent a de-anchoring of inflation expectations and reduce risks to external stability. A delay in introducing the required policy adjustment could lead to greater macroeconomic instability that would have required more aggressive tightening and would be more disruptive for economic growth.

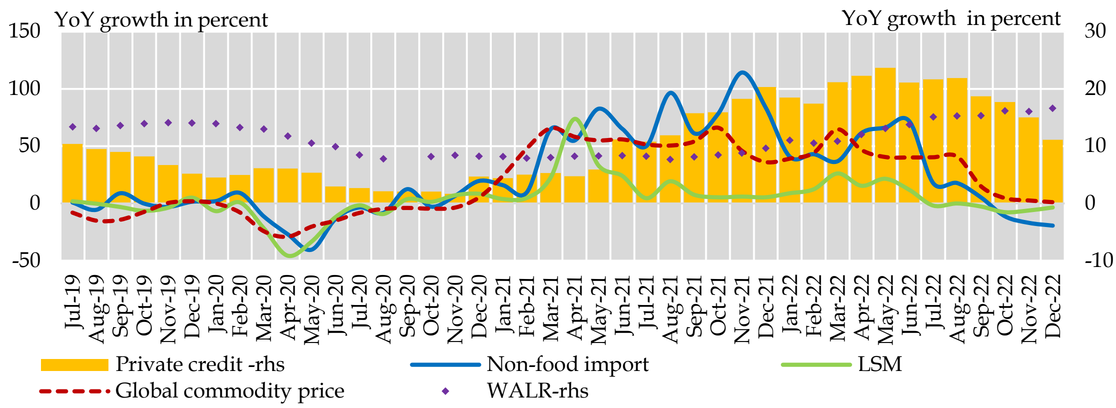
In addition to changes in the policy rate, the rates of EFS and LTFF were also linked to SBP policy rate to strengthen the monetary policy transmission.[1] Furthermore, the MPC emphasized the need of continued fiscal consolidation to complement monetary tightening for preventing inflation from becoming entrenched and achieving stability in the external account. The committee also suggested the use of introducing administrative measures to minimize supply chain disruptions to contain food inflation.

Pakistan's policy experience was in line with the global developments. In response to the multi-decade high inflation, countries across the globe continued to raise policy rates during H1-FY23 **(Box 3.1)**, despite concerns about slowdown in global growth.

In line with the increase in policy rate, the weighted average lending rate moved up sharply during H1-FY23. The increase in lending rates during H1-FY23, alongside the lagged impact of demand compression measures introduced since last year, discouraged private sector credit uptake during H1-FY23. Specifically, growth in working capital loans lowered substantially, whereas fixed investment showed a tepid increase during H1-FY23. In addition to demand management measures, import restrictions, which constrained the availability of raw materials to industry, flood-induced disruptions to economic activity as well as slowing global demand also discouraged LSM production and hence borrowing by the industry. Similarly, softening global commodity prices of input items, compared to the sharp increase seen in

[1] In July 2022, SBP linked the rates of EFS and LTFF with policy rates by keeping these rates 5 percent below the policy rate. Mark up rate for financing under EFS (Part-I and Part-II) was increased from 7.5 percent to 10 percent per annum; and mark up rate for financing under LTFF is raised to 10 percent per annum from 7 percent per annum. In December 2022, the mark-up rates of EFS and LTFF were increased to 13 percent from 11 percent per annum by keeping the gap between these rates and policy rate at 3 percent. *Sources:* Infrastructure Housing and SME Finance Department. Circular No. 11 and 13 dated July 07 and December 29th, 2022. Karachi: SBP

Factors Affecting the Private Sector Growth **Figure 3.2**



Source: State Bank of Pakistan, International Monetary Fund, & Pakistan Bureau of Statistics

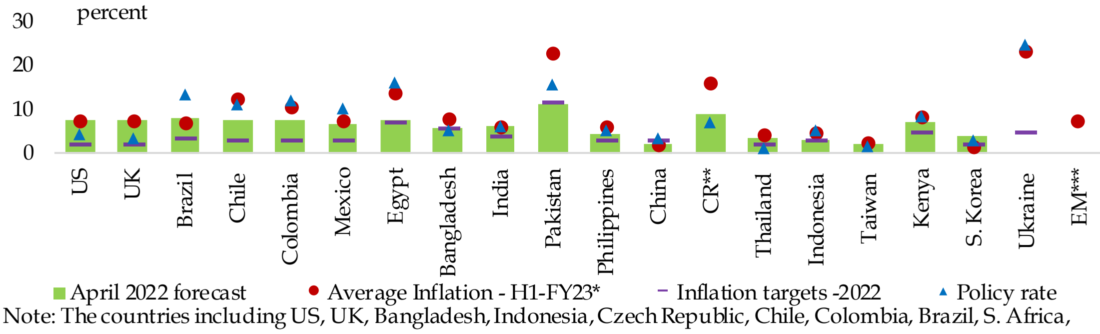
the same period last year (particularly, palm oil and iron ore), partly explain the moderation in private sector credit during H1-FY23 (**Figure 3.2**).

Box 3.1: Rising Inflation and Global Monetary Policy Responses

Global inflation soared to 8.8 percent in 2022 as compared to 4.7 percent the last year. In advanced economies, inflation rose to 7.3 percent on average (as compared to 3.1 percent in 2021) while in emerging and developing market economies (EMDEs), inflation climbed to 9.9 percent in 2022 (in contrast to 5.9 percent in 2021).[2] Higher food and energy prices mainly propelled the rise in global inflation.

The surge in inflation throughout 2022 was a collective outcome of a number of factors. First, from the demand side, generous policy support to counter the pandemic-led recession resulted in quicker-than

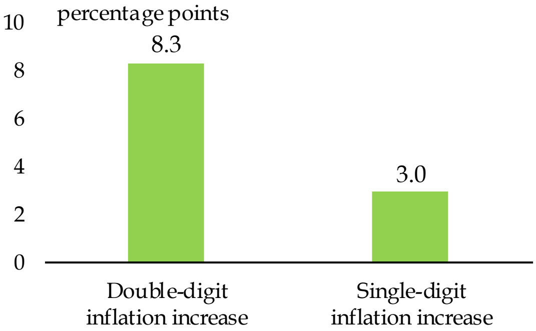
CPI Inflation - Forecast versus Actual **Figure 3.1.1**



Note: The countries including US, UK, Bangladesh, Indonesia, Czech Republic, Chile, Colombia, Brazil, S. Africa, Thailand, Mexico, Philippines, India, and Ukraine are the inflation targeting countries. *On fiscal year basis. Jul-Dec covers data up till Nov 2022 for UK. Note: The inflation targets and forecasts are taken for 2022 (calendar year basis) except for India, Pakistan, and Bangladesh (FY23 targets). ** Czech Republic; ***Emerging Markets
Source: Haver Analytics, IMF (WEO April 2022); Jahan 2012; Cbonds; and websites of respective central banks

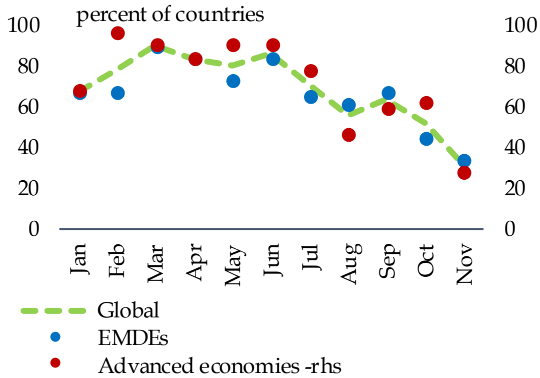
[2] International Monetary Fund (2023). *World Economic Outlook*. Washington D.C: International Monetary Fund

Policy Tightening in 2022 by Inflation Increase in EMDEs Since end-2021 **Figure 3.1.2**



Source: World Bank (GEP, January 2023)

Share of Economies with Rising Inflation in 2022 **Figure 3.1.3**

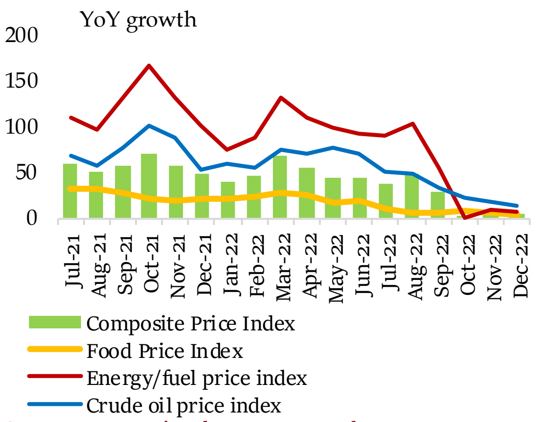


Source: World Bank (GEP, January 2023)

expected global economic recovery. Hence, the broadening supply-demand gaps, along with soaring freight costs gave rise to inflationary pressures in various economies. Second, from the supply side lens, shortages of key commodities (such as wheat and crude oil) followed by Russia-Ukraine conflict hit the food and energy segments that seeped into various sectors of the economy thus augmenting the overall inflation. Specifically, the low income economies where the share of food is highest in the overall inflation basket, witnessed surge in inflation. Third, some countries also experienced supply-demand gap in labor markets, which further added to rising wages and higher input and production costs. Fourth, despite the slowdown in global commodity prices, currency depreciation in many economies amid capital outflows following US hawkish monetary policy stance, intensified the price pressures in local currencies.[3] As a result, the levels of actual inflation exceeded both the target of 2022 as well as forecast levels in various economies across the globe during H1-FY23 **(Figure 3.1.1)**.

Rising price pressures prompted monetary policy tightening across advanced economies and most EMDEs. Out of the sample of 71 EMDEs, forty-nine with a single digit inflation since 2021, on average, increased the policy rates by around 3.0 percentage points. However, the twenty-two economies with double-digit inflation raised the interest rates by a cumulative 8.3 percentage points **(Figure 3.1.2)**. Particularly, economies such as Argentina and Ghana with double-digit inflation in H1-FY23, introduced steeper increases.[4] Furthermore, the developed economies such as UK and US also introduced substantial increase in policy rate in H1-FY23 to arrest inflation. Weakening global demand,

Trend in Global Commodity Prices **Figure 3.1.4**



Source: International Monetary Fund

3 World Bank (2023). Global Economic Prospects. Washington D.C.: World Bank
4 The central bank of Argentina raised the policy rate to 75.0 percent in H1-FY23 (an increase of 1,250 basis points). Likewise, Ghana's monetary policy decided to lift the policy rate to 27.0 percent with an increase of 800 basis points. Source: Respective central banks.

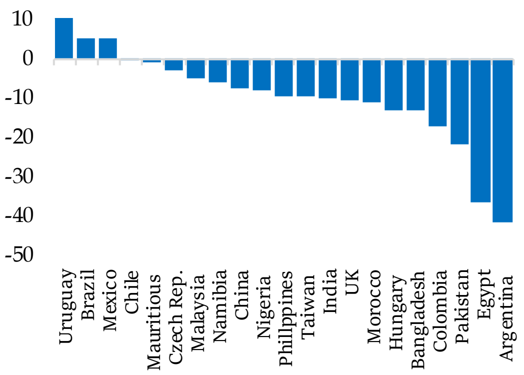
Trend in Major Food Prices **Table 3.1.1**

YoY growth

	H1-FY22	H1-FY23
Wheat	46	16.8
Dairy	16.3	16.6
Meat	21.6	5.3
Palm oil	54.6	-25.1
Food Index	**29.9**	**4.2**

Source: FAO and IMF

YoY Percent Change in Foreign Exchange Rates during H1-FY23 **Figure 3.1.5**



Source: Haver Analytics

tight monetary conditions and easing supply conditions of various commodities pulled down global inflation towards the end of 2022 **(Figure 3.1.3)**.

Amid the slowdown in global growth, commodity prices somewhat eased in H1-FY23 albeit at varying rates. In particular, global crude prices exhibited a sharp slowdown towards the end of 2022 **(Figure 3.1.4)**. Although food prices continued to remain elevated during Jul-Dec 2022, especially the food staples such as wheat and dairy products, the pace of increase was lower **(Table 3.1.1).**

Pakistan witnessed relatively higher inflation compared to various EMDEs, which mainly reflects the impact of domestic factors and larger currency depreciation **(Figure 3.1.5)**. The country has introduced aggressive tightening in policy rate since FY21 to quell inflationary pressures.[5] However, in the face of supply side issues, inflationary pressures gained further momentum during H1-FY23.

3.2 Monetary Aggregates

The broad money growth slowed to 1.2 percent during H1-FY23 compared to 4.3 percent during the same period last year. Growth in the Net Domestic Assets (NDA) of the banking system, with an increase of Rs 1,489.3 billion, primarily drove the expansion in money supply during H1-FY23. However, a sharp contraction of Rs 1,150.4 billion in the Net Foreign Assets (NFA) mostly offset this impact during the review period **(Table 3.1).**

On the asset side, higher government budgetary borrowing from the banking system was instrumental in expanding NDA during H1-FY23. Given the large fiscal deficit and inadequate inflow of external financing in H1-FY23, net budgetary borrowings from the banking system remained at an elevated level of Rs 457.2 billion compared to Rs 246.8 billion in H1-FY22. Meanwhile, private sector credit also edged up during the review period amid growing inflationary pressures, which drove the demand for credit to meet high input costs.

Meanwhile, despite the improvement in CAD, the dearth of external financing amid uncertainty surrounding the resumption of IMF program and deteriorating macroeconomic conditions, along with scheduled repayments of external

[5] SBP increased the policy rate by 900 basis points from end-June 2020 (7.0 percent) till end-November 2022 (16.0 percent). Source: State Bank of Pakistan

Monetary Aggregates (P) **Table 3.1**

flow in billion Rupees; growth in percent

	Change in Stock						Growth in H1	
	FY22			FY23			FY22	FY23
	Q1	Q2	H1	Q1	Q2	H1		
M2 (A+B)	149.5	897.9	1047.3	331.6	7.3	338.9	4.3	1.2
A. NFA	-32.8	-194.7	-227.5	-561.7	-588.7	-1150.4	-	-
B. NDA	182.3	1092.6	1274.9	893.3	596.0	1489.3	5.4	5.3
Budgetary borrowing*	76.7	170.0	246.8	551.6	-94.4	457.2	1.6	2.5
SBP	-212.7	185.1	-27.6	441.9	-294.5	147.4	-0.5	2.9
Scheduled banks	289.5	-15.1	274.4	109.7	200.1	309.8	2.7	2.3
Commodity operations	9.5	-24.1	-14.6	-6.9	12.1	5.2	-1.6	0.5
Private sector credit	226.4	816.7	1043.1	86.2	310.2	396.4	13.7	4.3
PSEs	11.6	55.5	67.1	76.9	3.9	80.8	4.8	5.9
Other items net	-141.5	70.8	-70.7	185.6	-153.2	32.3	3.9	-1.6
Reserve money	-195.9	236.7	40.8	-30.3	6.8	-23.4	0.5	-0.3
Currency in circulation	111.6	-41.9	69.7	80.2	34.5	114.7	1.0	1.5
Deposits	35.6	924.0	959.6	248.4	-31.3	217.1	5.5	1.1

P: provisional

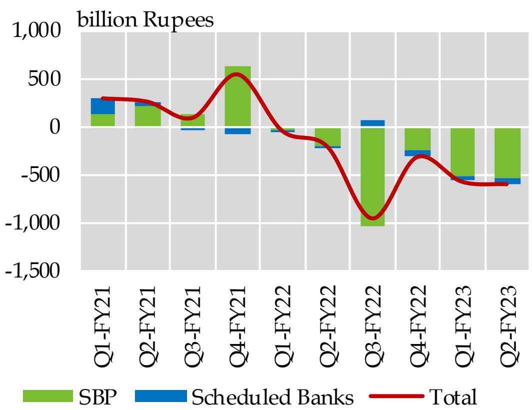
*These numbers are based on accrual basis. They do not tally with the amount of bank financing on cash-basis, as presented in **Table 4.1.**

Source: State Bank of Pakistan

debt resulted in sharp contraction of NFA of the banking system in both the quarters of FY23. Cumulatively, in H1-FY23, the NFA fell sharply by Rs 1,150.4 billion compared to a decrease of Rs 227.5 billion in the same period last year **(Figure 3.3).** The impact mainly came from the contraction in NFA of the SBP as the NFA of commercial banks only posted a decrease of only Rs 116.7 billion compared to Rs 8.0 billion in the corresponding period last year.[6]

As far as the liability side of broad money is concerned, the growth of currency in circulation accelerated to 1.5 percent during H1-FY23 compared to a growth of 1.0 percent in the corresponding period last year, whereas the deposit mobilization slowed from 5.5 percent in H1-FY22 to 1.1 percent during the review period **(Figure 3.4).** On cumulative basis, during H1-FY23, the deposits of commercial banks grew by Rs 217.1 billion, against Rs 959.6 billion in the

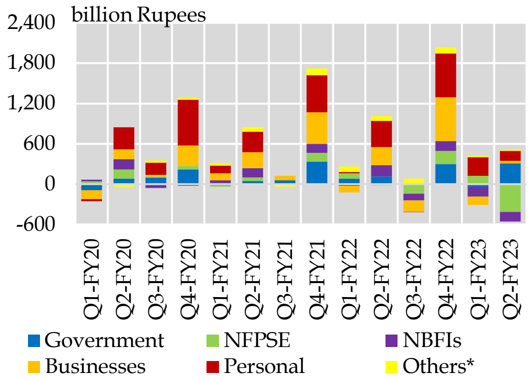
Quarterly Flows of NFA **Figure 3.3**



Source: State Bank of Pakistan

[6] The contraction in NFA of the SBP was on the back of bilateral and multilateral loan repayments during H1-FY23 including Eurobond payments of US$ 1 billion and some long-term loan repayments of US$ 1.2 billion.

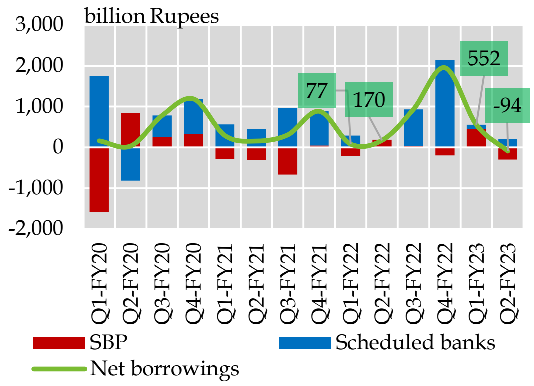
Quarterly Deposit Flows **Figure 3.4**



* Others include: trusts and non-resident deposits

Source: State Bank of Pakistan

Government Borrowings from the Banking System **Figure 3.5**



Source: State Bank of Pakistan

same period last year. However, the overall currency to deposit ratio slightly improved to 38.5 percent, on average, during H1-FY23, from 41.2 percent in the same period last year.

The deceleration in deposit mobilization mainly came from decline in the deposits of NBFIs and private businesses.[7] As suggested by an uptick in non-bank budgetary borrowings during H1-FY23, NBFIs shifted a portion of their investments portfolio from bank deposits to government securities for higher returns. Meanwhile, in the case of business deposits, the rising cost of borrowing amid persistent inflationary pressures have caused businesses to utilize their existing funds for increased liquidity requirements. On the contrary, personal deposits posted a slight growth on YoY basis during H1-FY23. The increasing macroeconomic uncertainty along with growing inflationary pressures might have restricted a sharp increase in these deposits despite the favorable interest rates.

Government Borrowings

The government budgetary borrowing from the banking system increased during H1-FY23, compared to the same period last year **(Figure 3.5)**. Specifically, in H1-FY23 the government ended up borrowing Rs 309.8 billion from scheduled banks against Rs 274.4 billion in the corresponding period last year. This mainly reflects the impact of an overall large fiscal deficit and the absence of adequate external inflows, which amplified the financing pressure on scheduled banks.

On the other hand, the government deposits held by the central bank posted a considerable decline during the review period, which inched up the government's net liability to the SBP by Rs 147.4 billion.[8]

[7] The deposits of non-financial public sector enterprises (NFPSEs) also posted a decline during H1-FY23, however, this was mainly on account of the reclassification of some NFPSEs as federal government institutes from December 2022 onward.

[8] During H1-FY23, the government deposits held by the SBP posted a decline of Rs 525.5 billion against Rs 476.9 billion in the corresponding period last year.

Primary Auctions

During H1-FY23, the government was able to meet its deficit financing requirements through treasury bills and floating coupon PIBs (PFLs). Cumulatively, the government assigned around 63 percent of the targets on net-of-maturity basis to PFLs, followed by around 37 percent to Ijarah Sukuk. However, for T-bills and fixed rate PIBs, on cumulative basis, the pre-auction targets were slightly lower than their respective maturities during the first half of FY23. Consequently, the government relied on floating rate PIBs and Ijarah Sukuk to meet its financing requirements (**Table 3.2**).

In the case of MTBs, the government allocated highest pre-auction target to 6M T-bills followed by 12M paper. Contrary to the targets, the market was increasingly keen on investing in 3M T-bills: The offered to target ratio for 3M T-Bills stood at 3.7 times compared to 0.6 times and 0.8 times for 6M and 12M T-bills, respectively. Amid expectations of further monetary policy tightening, the market's participation was heavily concentrated in 3M T-Bills.

As a result, the government made large acceptances of 3M T-bills, to rollover 96 percent of its maturing amount due during H1-FY23 **(Figure 3.6)**. However, in overall

Auction Summary **Table 3.2**

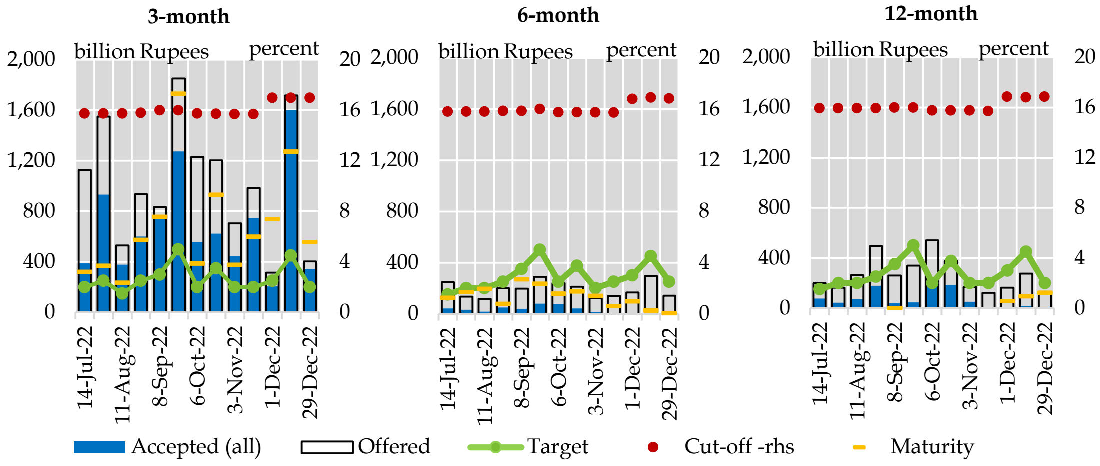
billion Rupees

	Target	Maturity	Offered*	Accepted
			Treasury Bills	
3-month	3,500.0	8,857.7	1,2901.2	8,515.3
6-month	3,725.0	1,727.8	2,307.5	422.5
12-month	3,575.0	274.5	2,996.1	839.2
Jul-Dec FY23	**10,800.0**	**10,860.0**	**18,204.8**	**9,776.9**
			Pakistan Investment Bonds	
Fixed Rate				
3-year	350.0	658.0	656.5	238.5
5-year	350.0		1,497.8	689.8
10-year	205.0	474.0	794.6	14.3
15-year	60.0		5.7	0.0
20-year	30.0		0.0	0.0
30-year	30.0		0.0	0.0
Jul-Dec FY23	**1,025.0**	**1,132.0**	**2,954.5**	**942.6**
Floating ate				
2Y-Quarterly	405.0		1,341.5	846.9
3Y-Quarterly	405.0		1,919.8	1,185.2
5Y-Semi annual	325.0		1,821.6	1,232.3
10Y-Semi annual	325.0		188.8	99.6
Jul-Dec FY23	**1,460.0**	**-**	**5,271.7**	**3,363.9**
			Ijarah Sukuk	
GIS-VRR	505.0		592.3	344.9
GIS-FRR	195.0		83.7	19.9
Jul-Dec FY23	**700.0**	**-**	**676.0**	**364.8**

*Competitive bids only

Source: State Bank of Pakistan

Auction Summary of T-bills during H1-FY23 **Figure 3.6**



Source: State Bank of Pakistan

terms, the government mobilized slightly lower-than target amount from short-term MTBs.

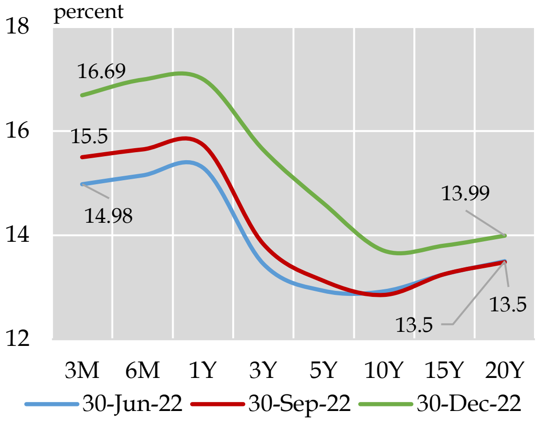
In the long-term bonds, the market's interest remained intact in floating coupon PIBs with offers reaching nearly four-times the amount of pre-auction target. The rising interest rate environment made investment in floaters more lucrative and safe as they provide variable return in line with the interest rate cycle to better hedge against the repricing risk and have medium to long-term maturities. In this backdrop, the government mobilized Rs 3,363.9 billion from PFLs against the target of Rs 1,460.0 billion during H1-FY23. This is likely to have favorable implications for diversifying the outstanding stock of sovereign bonds and curtailing the roll over risk emanating from excessive reliance on short-term MTBs. However, it will increase the government's debt servicing cost in an increasing interest rate scenario.

On the contrary, in the case of fixed rate PIBs, despite the market's preference to lock funds in long-term bonds at high interest rates, the government made close-to-target acceptances. On aggregate, the government made issuances amounting to Rs 942.6 billion of fixed coupon PIBs against the target of Rs 1,025.0 billion, leaving almost 68 percent of the offers unmet to avoid high cost of borrowing, as the market offered amounts on significantly higher rates.

Besides, the government continued to raise financing via Shariah-compliant instruments. In line with the trend observed in conventional bonds, the market's interest remained skewed towards investing in variable rental Sukuk (GIS-VRR). In comparison, the participation remained muted in fixed rental Sukuk (GIS-FRR). Likewise, the government made higher cumulative acceptances amounting to Rs 354.9 billion of GIS-VRR **(Table 3.2)**.[9]

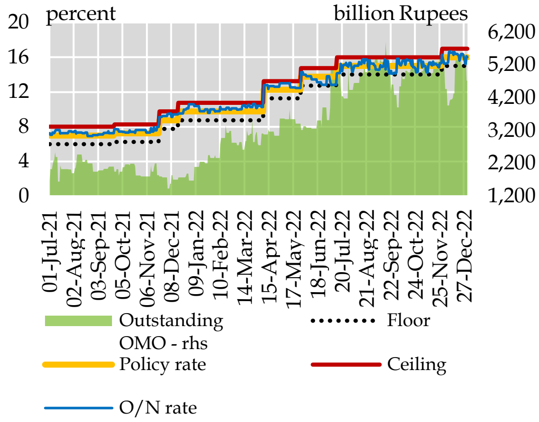
[9] In line with the government efforts to diversify its debt stock, the share of Ijara Sukuk in domestic debt rose from 5.3 percent in December 2021 to 8.1 percent in December 2022.

Secondary Market Yields **Figure 3.7**



Source: Financial Markets Association of Pakistan

Overnight Repo Market **Figure 3.8**



Source: State Bank of Pakistan

In the secondary market, the short-term yields exceeded the long-term yields, highlighting increased expectations of a rate-cut in the near term. Consequently, the yield curve became downward slopping, with yields falling steeply for longer-tenor bonds **(Figure 3.7)**. The persistently high inflation, external sector weaknesses, global as well as domestic economic uncertainty, and limited financing avenues for the government resulted in pushing the yields of up to one-year papers above the longer-maturity bonds.

In response to a cumulative 225 bps hike in the policy rate during H1-FY23, 3-month yields rose by 171 bps, while for 6M they picked up by 184 bps. However, at the longer end of the curve, the yields for 10-year, 15-year and 20-year bonds rallied by 78 bps, 55 bps and 49 bps, respectively.

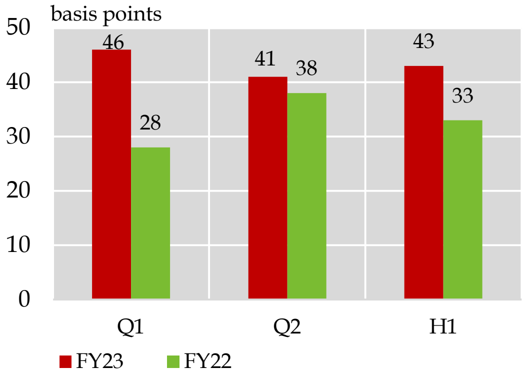
Interbank Liquidity

The liquidity conditions in interbank money market remained relatively tight throughout H1-FY23 compared to the corresponding period last year. A sizeable increase in government budgetary borrowings from scheduled banks augmented the liquidity requirements of the banking system. Meanwhile, amid slower deposit mobilization, commercial banks were not able to meet the additional high liquidity needs.

Keeping in view the pressures stemming from insufficient inflows in the system, the SBP scaled up its OMO injections. As a result, the average outstanding OMOs soared from Rs 1,983.7 billion in H1-FY22 to a high of Rs 4,887.5 billion during the review period (**Figure 3.8**). Additionally, in order to ease out liquidity pressures in the market, twenty-two longer tenor OMO injections were conducted during Jul-Dec FY23, that included 60-day, 63-day, 70-day, 73-day, and 74-day auctions.

On quarterly basis, the liquidity conditions particularly tightened during Q2-FY23. Pressures emanating from pick up in private sector demand for credit alongside the government's increased reliance on scheduled banks for its financing needs in the absence of central bank borrowing, affected the liquidity conditions. However, with regard to the supply of funds, the

Average Absolute Deviation of Overnight Rates from the Policy Rate **Figure 3.9**



Source: State Bank of Pakistan

deposits of scheduled banks posted a decline during Q2-FY23, which weighed on the interbank liquidity, resulting in an increase in average outstanding OMO stock to Rs 4,935.9 billion in Q2-FY23 against Rs 4,839.1 billion in the preceding quarter (**Figure 3.8).**

Meanwhile, the overnight money market displayed signs of higher volatility in H1-FY23. The average absolute deviation of overnight rates from the policy rate increased to 43 bps during the review period compared to 33 bps in H1-FY22 (**Figure 3.9**). The market's underlying expectations of rate hikes in the light of rising inflationary pressures; growing borrowing needs of the government coupled with greater demand for credit from the private sector resulted in higher volatility in the overnight lending rates.

In addition, the SBP conducted Shariah Compliant Mudarabah Based Open Market Operations for Islamic Banking Institutions (IBIs). The average outstanding stock of these weekly OMO auctions stood at Rs 490.8 billion during H1-FY23. These injections help the Islamic banking institutions in effectively managing their liquidity. Currently, this mechanism only allows Islamic banks to borrow from the central bank via OMO injections or through the ceiling facility; while OMO mop-ups and floor facility are not available to the market yet.

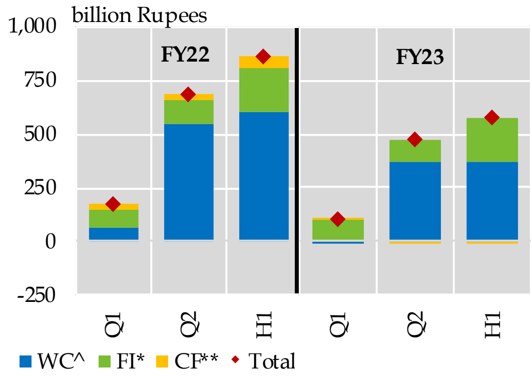
3.3 Credit to Private Sector

The uptrend in private sector credit witnessed during the previous year, lost steam in H1-FY23. The growth in loans to private sector businesses almost halved to 8.3 percent in H1-FY23, from 15.1 percent in the same period last year.[10] This slowdown was mainly seen in working capital loans, while fixed investment loans posted a marginal increase **(Figure 3.10a).** In overall terms, most of the expansion in private loans to businesses came in the month of December 2022 **(Figure 3.10b).**

A range of factors shaped private sector credit dynamics during H1-FY23. First, policy driven moderation in the pace of economic activity pared credit demand of industries. In particular, SBP raised the policy rate by a further 225 bps in H1-FY23 on the heels of a 675 bps increase during FY22. In addition, for strengthening the transmission mechanism of monetary policy, the central bank also linked the rates on EFS and LTFF to the policy rate.[11] On the fiscal side, the government significantly scaled back development spending during H1-FY23, which in turn discouraged credit

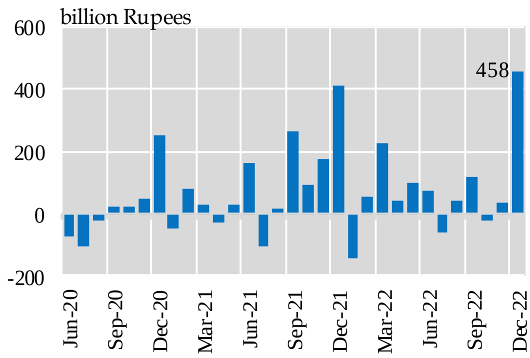
[10] The growth in credit to private sector decelerated to 4.3 percent in H1-FY23 from 13.7 percent last year.
[11] SBP raised the rates of EFS (from 3 percent in H1-FY22) and LTFF (from 5 percent in H1-FY22) to over 10 percent in H1-FY23. Source: IH&SMEFD Circular No. 6, 7, 11 and 13 of 2022, State Bank of Pakistan

Quarterly Credit Flows **Figure 3.10a**



^Working capital, *Fixed investment, **Constr. fin.
Source: State Bank of Pakistan

Loans to Private Sector (Monthly Flows) **Figure 3.10b**



Source: State Bank of Pakistan

uptake by construction industry. Amid the ongoing demand compression measures economic activity visibly slackened during H1-FY23, as seen from a decline in LSM production.

Second, in addition to the policy-led slack, domestic demand received a further blow from the disruptions caused by flash floods at the start of the year that caused significant loss of lives, livelihood and infrastructure. Hence, all major high frequency demand indicators including POL, cement, and automobiles sales posted double-digit declines during H1-FY23 **(Table 3.3).**

Third, following the dearth of external financing SBP and the government took some regulatory measures to contain imports.[12] Furthermore, in June 2022 and August 2022, the government imposed/ raised regulatory duties on the import of some luxury and non-essential items.[13] In addition, amid the deteriorating external

Credit Demand Slows Down Amid Lower Economic Activity **Table 3.3**

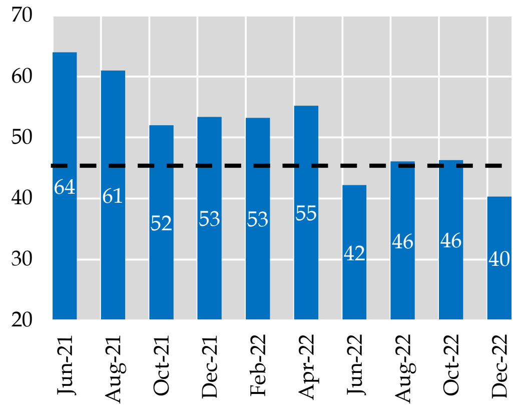
percent change

	Jul-Dec	
	FY22	**FY23**
Cost of production		
Exchange rate* (PKR/USD)	-10.7	-9.5
Electricity tariffs	32.1	31.4
Domestic fuel prices	26.3	70.5
Construction input items	9.9	28.3
Economic activity		
LSM	7.7	-3.7
Electricity (Jul-Nov)	9.0	-8.3
Export volume index (Jul-Sep)	19.9	0.4
Automobile sales	8.6	-34.8
PoL sales	12.1	-19.2
Cement dispatches	1.9	-16.9
PSDP	40.2	4.5
Remittances	11.4	-11.1

* end-period exchange rate, on mark-to-market basis
Source: SBP, MoF, PBS, PAMA, World Bank

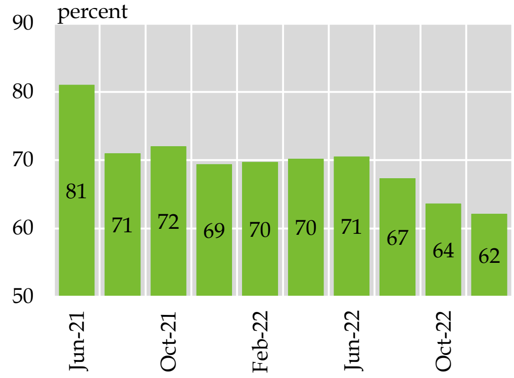
[12] Source: EPD Circular Letter No. 09 and 11 of 2022; and BPRD Circular Letter No. 09 and 25 of 2022
[13] Source: FBR, S.R.O. 966(l)/2022, dated June 30, 2022; and S.R.O. 1571(I)/2022, dated August 22, 2022.

Business Confidence Index **Figure 3.11**



Source: State Bank of Pakistan

Current Capacity Utilization of Industry **Figure 3.12**



Source: Business Confidence Survey, State Bank of Pakistan

liquidity condition of the country, international rating agencies downgraded Pakistan's credit ratings, which further hampered imports, as foreign banks became cautious in confirming the letters of credit (L/Cs) opened by local banks.[14] The decline in imports of raw material and capital goods discouraged manufacturing operations and hence discouraged credit uptake.

Fourth, the global economic slowdown weighed on manufacturing activity of export sectors. Specifically, with the exception of wearing apparel, exports of almost all textile products edged down compared to last year, which reflected in a notable slowdown in credit uptake by textile sector during H1-FY23. Lastly, some ease in the international prices of input items (particularly, palm oil and iron ore) lowered borrowing needs of few manufacturing businesses, such as edible oil, and basic iron and steel.

In overall terms, the unfavorable macroeconomic environment as reflected by a spike in the cost of production, flood-induced disruption in economic activity, uncertainty surrounding the resumption of IMF program and import restrictions amid the dearth of foreign exchange lowered the overall business confidence during H1-FY23. As gauged by the SBP Survey, the overall business confidence remained significantly lower in H1-FY23, compared to a year ago **(Figure 3.11).** The deterioration in business sentiments led various industries to partially close manufacturing operations, which is also evident from a notable decline in capacity utilization during H1-FY23 **(Figure 3.12).**

Low economic activity dampened the demand for working capital loans

Working capital loans rose by Rs 370.1 billion in H1-FY23, compared to Rs 607.7 billion in

[14] Moody's downgraded its outlook on Pakistan from stable to negative in June 2022, and further downgraded the country's rating from B3 to Caa1 in October 2022, citing external vulnerability risks and higher debt sustainability risks, in the aftermath of devastating floods that hit the country since June 2022. Source: Moody's

Loans to Private Sector Businesses in H1 **Table 3.4**

flow in billion Rupees

	Total Loans*		Working Capital**		Fixed Investment	
	FY22	FY23	FY22	FY23	FY22	FY23
Private Sector Businesses	**860.2**	**574.5**	**607.7**	**370.1**	**199.8**	**205.4**
Manufacturing	670.9	503.1	527.4	343.2	136.3	161.1
Textile	326.5	188.2	260.1	137.3	63.3	51.8
Rice Processing	70.5	67.9	67.4	68.0	2.9	-0.1
Fertilizers	5.9	53.7	-5.6	45.7	11.5	8.1
Refined petroleum	35.9	42.6	34.4	37.2	1.5	5.4
Cement, lime and plaster	11.6	45.8	10.0	23.6	1.6	22.3
Wearing apparel	22.5	28.8	15.1	23.4	7.0	5.4
Motor vehicles	13.5	14.4	6.9	13.8	6.6	0.6
Paper & paper products	24.8	20.8	17.6	9.5	7.2	11.3
Basic pharmaceutical products	-3.2	10.8	-2.1	9.2	-1.4	1.9
Basic chemicals	16.0	22.8	12.2	8.9	3.7	13.8
Electrical equipment	22.5	14.7	23.1	6.3	-0.5	7.5
Basic iron and steel	57.8	7.4	49.6	4.2	8.2	3.3
Vegetable and animal oils and fats	17.4	3.2	15.4	2.6	1.7	0.6
Sugar	-45.9	-64.6	-45.3	-59.7	-0.6	-4.9
Agriculture, forestry and fishing	30.6	23.5	23.9	9.7	5.6	13.9
Construction	31.1	11.0	0.3	7.5	-3.6	1.6
Mining and quarrying	-0.9	1.2	-2.0	3.5	1.2	-2.3
Telecommunications	20.8	35.0	-13.2	3.4	34.0	31.6
Power generation, transmission and distribution	27.4	2.7	7.6	0.2	19.9	2.6
Real estate activities	3.8	0.6	1.0	0.2	-0.5	0.3
Transportation and storage	11.4	-5.9	8.6	-2.2	2.2	-3.7
Wholesale and retail trade	49.3	-7.4	46.9	-2.8	1.2	-4.6

*Total loans in H1-FY22 and H1-FY23 include net borrowing of Rs 52.7 billion and net retirement of Rs 1.0 billion, respectively, under construction financing. The data on credit/loans has been revised since June 2020 due to inter-sectoral adjustment in private sector business (see IH&SMEFD Circular Letter No. 28 of 2020). As fixed investment loans exclude construction financing; therefore, in this table, total loans may not be equal to the sum of working capital and fixed investment loans. ** Working capital includes trade financing

Source: State Bank of Pakistan

the same period last year (**Table 3.4)**. The disaggregated analysis shows that around 80 percent of this increase came solely in December 2022**.** This is partially attributed to the seasonal borrowings by rice processing and sugar businesses. Specifically, sugar firms resorted to bank financing in December 2022 due to a delayed start of crushing season than last year.[15] In addition, fertilizer sector increased borrowings in order to finance the import of fertilizers, as reflected by a fivefold increase in quantum imports of fertilizers in December 2022, over last year.

[15] After a persistent retirement of Rs 123.4 billion working capital loans during Jul-Nov FY23, sugar-manufacturing businesses availed Rs 63.7 billion loans in December 2022.

Lower external demand along with import restrictions trimmed textile sector's loan offtake

Although textile sector dominated the overall borrowings, the sector posted a relatively lower offtake of Rs 137.3 billion during H1-FY23, compared to Rs 260.1 in the same period last year. Three main factors explain this decline. First, the global economic slowdown amid inflationary pressures and rising cost of living has also affected the demand for Pakistan's textile products, as reflected by lower export volumes of major textile products during H1-FY23 **(Chapter 5).** Second, the summer flash floods induced significant damage to crops. In particular, according to preliminary estimates, cotton crop production fell by 24.7 percent during FY23, which constrained the availability of domestic cotton for textile industry.[16, 17] Sluggish global demand and low domestic cotton availability led textile sector to partially close manufacturing units.[18] Hence despite a 23.2 percent YoY increase in the domestic cotton prices, working capital requirements of the sector during H1-FY23, remained lower than last year.[19] Lastly, in order to further improve the monetary policy transmission, SBP linked EFS rates with the policy rate, raising the rate of EFS from 3 percent during H1-FY22 to over 10 percent in H1-FY23. Consequently, textile businesses retired Rs 10.4 billion loans under EFS in H1-FY23, compared to an offtake of Rs 43.8 billion last year.[20]

Rising cost of production along with worsening financial positions raised borrowing needs of few sectors

The deteriorating macroeconomic environment dented financial position of various businesses. Amid weakening domestic demand, a number of industries such as fertilizers, refined petroleum and automobiles saw piling up of inventories that weakened their cash flow positions. Sluggish sales together with rising cost of production eroded profitably of these sectors **(Figure 3.13).** Hence, deteriorating financial indicators led these businesses to resort to bank financing to finance their working capital needs.

Multifaceted issues including government fiscal constraints, impact of demand management policies, rising cost of construction inputs, weakening real incomes and flash floods suppressed construction activity in both public and private sectors during H1-FY23 **(Figure 3.14).** Hence, local cement dispatches fell by 16.9 percent on YoY basis during H1-FY23, which led to piling up of inventories in the sector.[21]

Furthermore, cement production witnessed 15.1 percent decline during H1-

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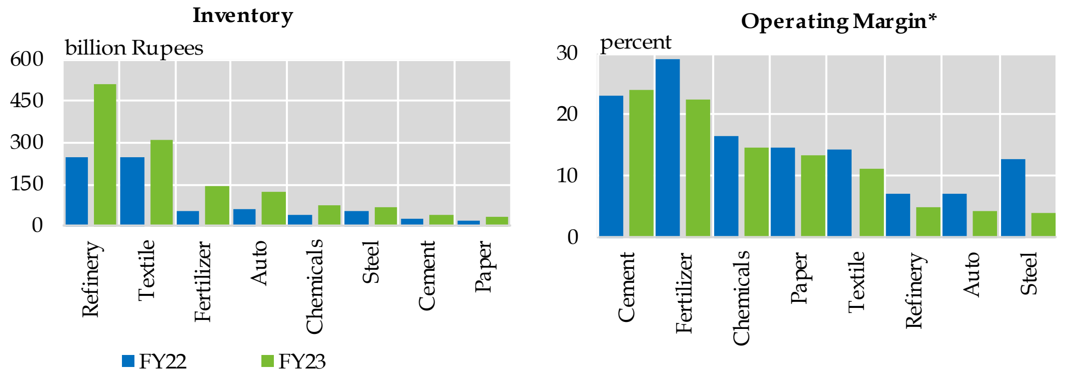
16 Source (cotton production data): Federal Committee on Agriculture
17 Textile manufacturing declined by 13.1 percent YoY in H1-FY23. Source: PBS
18 For details, see Interloop Limited's Half Year Report for the period ended December 31, 2022.
19 Source: Karachi Cotton Association.
20 The mark-up on EFS was increased in April 2022 (5.5 percent), May 2022 (7.5 percent), July 2022 (10.0 percent), November 2022 (11.0 percent), and December 2022 (13.0 percent). Source: IH&SMEFD Circular No. 6, 7, 11 and 13 of 2022, State Bank of Pakistan
21 Cement sector's inventories jumped by around 69 percent YoY in Q1-FY23.

Selected Financial Indicators of Major Private Sector Businesses (Jul-Sep) **Figure 3.13**



*Operating margin = operating profit/sales

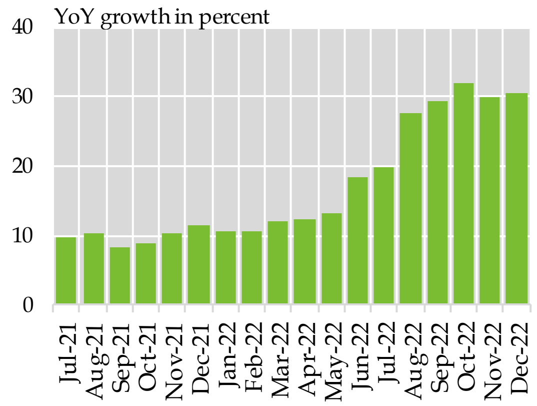
Source: SBP - Quarterly financial statement analysis of selected non-financial listed companies, SBP staff calculation

FY23, over the same period last year. Despite the decline in production, borrowing by cement sectors rose to Rs 23.6 billion during H1-FY23, compared to an offtake of Rs 10.0 billion in the same period last year. A general increase in cost of production amid rising fuel, power and coal prices contributed in raising the sector's borrowing needs.[22]

Likewise, fertilizer sector borrowed Rs 45.7 billion in H1-FY23, compared to a net retirement of 5.6 billion, a year earlier. The cash flow constraints stemming from lower sales and inventory buildups induced many firms to leverage during the period.[23] In addition, a 7.4 percent YoY increase in DAP prices in the international market, coupled with the depreciation in the Pak rupee jacked up firms' short-term financing requirements, despite 2.0 percent decline in fertilizer manufacturing during the period **(Figure 3.15).**

With regards to refined petroleum, the impact of higher oil prices in the international market, along with PKR depreciation seems quite dominant in the increased borrowings by petroleum refineries. In addition to this, lower demand, increase in fuel prices and overall economic slowdown led to the sector's inventory buildup.[24] Consequently, the sector

Prices of Construction Input Items **Figure 3.14**



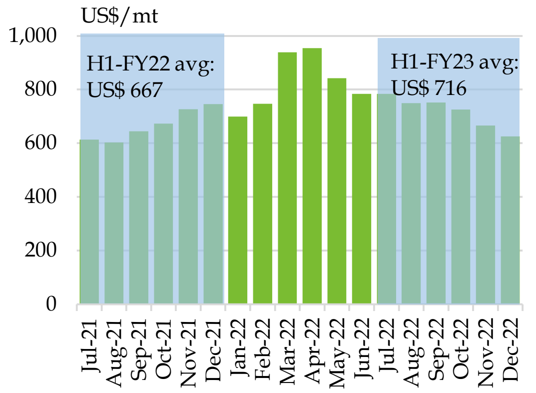
Source: Pakistan Bureau of Statistics

[22] Coal prices in the international market rose by 103.6 percent YoY during H1-FY23. Source: International Monetary Fund

[23] Fertilizer sector's operating profit declined by around 29 percent YoY during Q1-FY23. Source: State Bank of Pakistan, Financial Statements Analysis of Non-Financial Listed Companies for September 2022

[24] POL sales declined by 19.2 percent YoY in H1-FY23.

International DAP Prices **Figure 3.15**



Source: World Bank

borrowed Rs 37.2 billion in H1-FY23, slightly higher than Rs 34.4 billion offtake during the same period last year.

Borrowings by sugar and rice processing firms followed seasonal pattern

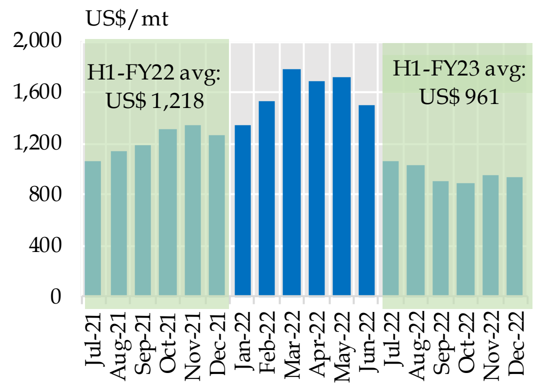
Borrowings by the rice processing firms remained around the last year's level. While the borrowing in H1-FY22 was attributed to higher production and exports of rice, this time around, rice production and quantum exports posted a YoY decline of 12.3 percent and 23.0 percent, respectively.
The lower production pushed up the rice WPI by 27.7 percent YoY in H1-FY23, which propped up the borrowing needs of rice processors during the review period.

On the other hand, after posting the seasonal loan retirements by the sugar sector in Q1-FY23, the sector resorted to bank financing in the subsequent quarter. However, offtake in Q2 was unable to offset loan retirements in the preceding quarter. On a cumulative basis, sugar sector retired Rs 59.7 billion in H1-FY23, compared to a net retirement of Rs 45.3 billion last year.

Sluggish demand and declining production restricted borrowing by iron & steel, basic chemicals and paper & paper products

The working capital borrowing of iron and steel firms rose only by Rs 4.2 billion during H1-FY23, compared to an increase of Rs 49.6 billion during the same period last year. An overall slowdown in the construction activity tapered off the demand for construction-allied sectors, including iron and steel. This is in line with a marginal 4.5 percent rise in PSDP spending during H1-FY23, compared to a growth of 40.2 percent last year. Furthermore, import restrictions impeded the availability of raw material for the industry and discouraged steel manufacturing during H1-FY23, [25] which also explain the sector's muted demand for working capital loans. In addition, a decline in prices of base metals in the international

International Palm Oil Prices **Figure 3.16**



Source: World Bank

[25] Steel manufacturing declined by 2.1 percent on YoY basis during H1-FY23, whereas import quantum of iron and steel products dipped by 40.3 percent YoY in this period.

market also contributed in lowering the borrowing needs of iron and steel sector.[26]

Apart from iron and steel, borrowings by paper and paper products and basic chemicals sectors remained lower than last year. The underlying factor is 2.8 percent and 1.1 percent YoY decline in the production of paper and board and chemicals during H1-FY23, which reduced the borrowing needs of these sectors.

Some ease in input prices lowered borrowing needs of edible oil sector

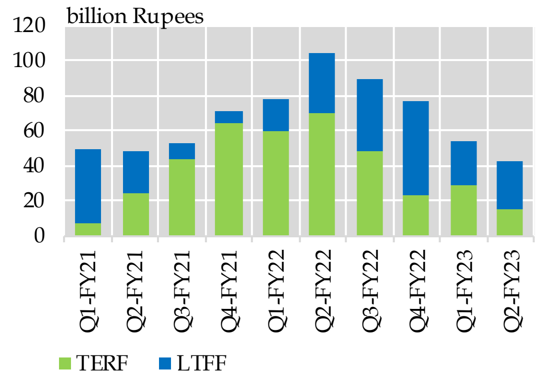
Another drag to working capital loans came from relatively lower offtake by edible oil manufacturing businesses. Borrowings by the edible oil sector dropped to Rs 2.6 billion in H1-FY23, compared to an offtake of Rs 15.4 billion in the same period last year. Weakening edible oil prices in the international market leading to a notable deceleration in the unit value of edible oil imports mainly explain the sluggish credit offtake in this sector **(Figure 3.16).**

Fixed investment loans remained intact

The borrowings under fixed investment loans were Rs 205.4 billion in H1-FY23, slightly higher than the offtake of Rs 199.8 billion last year. The increase was despite a slowdown in the disbursement of SBP's concessionary financing schemes (LTFF and TERF), which almost halved in H1-FY23, compared to last year **(Figure 3.17).** Two factors explain the lower disbursements. First, SBP linked LTFF rates with the policy rate in order to further improve the monetary policy transmission, raising the rate of LTFF from 5 percent during H1-FY22 to over 10 percent in H1-FY23.[27] Second, the disbursement under TERF remained significantly lower in H1-FY23, compared to the same period last year. This is because of the fact that this scheme had matured in March 2021, after which no further financing limits were available. Out of the approved amount, bulk of the disbursements had been already made by end-June 2022.[28]

It is pertinent to mention that beside capacity expansion, some of the sectors including chemicals, fertilizers, cement, paper and paper products have borrowed long-term loans for balance sheet re-profiling, owing to deteriorating financial positions. Basic chemicals borrowed Rs 13.8 billion in H1-FY23, compared to an offtake of Rs 3.7 billion last year. The increase is explained by higher borrowings by a leading chemical

Gross Disbursements under LTFF & TERF **Figure 3.17**



Source: State Bank of Pakistan

[26] During H1-FY23, the prices of base metals dropped by 26.5 percent YoY, in the international market. Source: World Bank

[27] Source: IH&SMEFD Circular No. 6, 7, 11 and 13 of 2022, State Bank of Pakistan

[28] Out of the total approved amount of Rs 436 billion under TERF, Rs 383 billion (around 88 percent) were disbursed by end-December 2022.

manufacturer during Q2-FY23 for balance sheet re-profiling, beside capacity expansion. On the other hand, paper sector borrowed Rs 11.3 billion in H1-FY23, compared to an offtake of Rs 7.2 billion last year, as paper and paperboard manufacturers resorted to bank financing for capacity expansion, up-gradation of paper & board machinery and rescheduling their loans.

Within the manufacturing sector, textile businesses dominated in the fixed investment loans by borrowing of Rs 51.8 billion during H1-FY23, compared to an offtake of Rs 63.3 billion last year. Textile businesses borrowed long-term loans in order to enhance production capacity, besides rescheduling their loans.

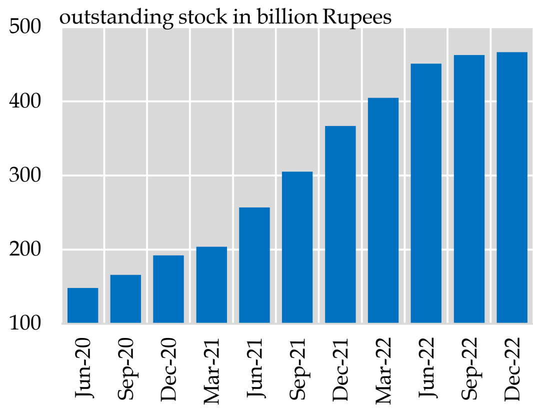
Cement was the second biggest user of fixed investment loans in the manufacturing sector after textile, as it increased borrowings by Rs 22.3 billion during H1-FY23, compared to Rs 1.6 billion last year. The entire increase was concentrated in Q1-FY23, as a major listed cement manufacturer resorted to bank financing for capacity expansion, which includes investing in a cement plant in Mianwali district and another in Haripur district of KP. Another listed firm borrowed for capacity expansion, and investing in solar power projects at its plants in KP and Sindh provinces for cost saving purpose by reducing the reliance on costlier fuel.

Among non-manufacturing entities, the telecommunications sector dominated by availing long-term loans amounting Rs 31.6 billion during H1-FY23, compared to an offtake of Rs 34.0 billion last year. The increase represents syndicate financing facility availed by a major telecom firm for the purpose of equity injection into its wholly owned subsidiary, during the review period.

Net retirement in construction financing amid slowdown in construction activities

The vibrancy in construction activities witnessed in FY22 on the back of support measures introduced by government and SBP lost momentum even before H1-FY23 **(Figure 3.18)**.[29] Construction financing posted net retirement of Rs 1.0 billion in H1-FY22, compared to an offtake of Rs 52.7 billion last year. Three factors underpin the sluggishness in construction activities. First, a rise in cost of inputs affected the demand for construction-allied sectors, as supported by 28.3 percent YoY jump in prices of construction input items during H1-FY23. Second, policy measures such as temporary halt in fresh disbursements under the '*Mera*

Housing and Construction Finance **Figure 3.18**



Source: State Bank of Pakistan

[29] Beside government's incentive package for the construction sector, SBP announced targets for banks in July 2020 to increase their housing and construction finance portfolio. For details, see Chapter 3 of SBP's Annual Report FY22 on the State of the Pakistan's Economy.

Consumer Financing **Table 3.5**

flow in billion Rupees

	H1-FY22	H1-FY23
Total loans	**104.8**	**-2.6**
House building	40.2	14.2
Credit cards	10.1	13.8
Personal loans	7.3	0.2
Consumers durable	1.7	-0.5
Auto loans	45.5	-30.4

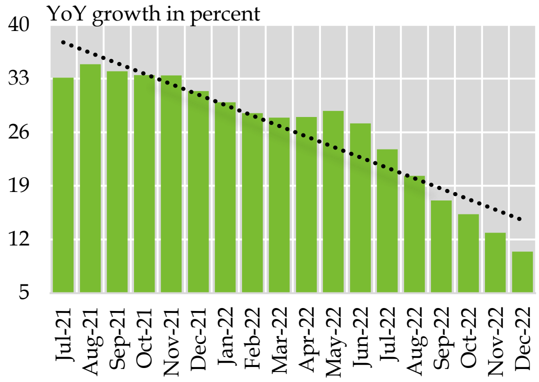
Source: State Bank of Pakistan

Pakistan Mera Ghar' scheme, and suspension of SBP's targets for housing and construction contributed to waning demand for construction financing.[30] Third, heavy floods and rising domestic policy uncertainty also dampened the demand for construction financing.

Consumer financing dwindled

Consumer financing posted a net retirement of Rs 2.6 billion in H1-FY23, compared to an offtake of Rs 104.8 billion last year **(Table 3.5).** The major drag came from automobile loans, which posted a net retirement of Rs 30.4 billion in H1-FY23, compared to an offtake of Rs 45.5 billion a year earlier. Besides higher interest rates, the decline is due to the lagged impact of SBP's macro-prudential measures aiming to moderate the domestic demand in the economy by slowing the overall import growth in general, and automobile imports in particular to support the country's balance of payments position.[31, 32] In addition, the government increased federal excise duty (FED) on locally

Consumer Loans **Figure 3.19**



Source: State Bank of Pakistan

manufactured or assembled cars during January 2022.[33] The lag impact of regulatory measures was visible in the overall slowdown in consumer financing **(Figure 3.19).** Furthermore, following the increase in cost of production, automobile manufacturers have introduced multiple increases in car prices since last year, which further slumped vehicle's demand. On the other hand, raw material availability issues led to drastic reduction in automobile production during H1-FY23. The combination of these factors pulled down auto financing during H1-FY23.

Other than auto loans, slowdown in house building loans also contributed to the contraction in consumer loans during the review period. Amid the sluggishness in construction sector, house-building segment borrowed Rs 14.2 billion during H1-FY23,

[30] Source: IH&SMEFD Circular Letter No. 08 of 2022, State Bank of Pakistan

[31] SBP policy rate increased by 900 bps during September 2021 to December 2022.

[32] These measures included: (i) reduction in maximum tenure of the auto finance facility from seven years to five years; (ii) maximum limit of Rs 3 million in aggregate, allowed to be availed by a person from all banks/DFIs; (iii) increase in the minimum down payment for auto financing from 15 percent to 30 percent. Source: SBP press release, dated September 23, 2021

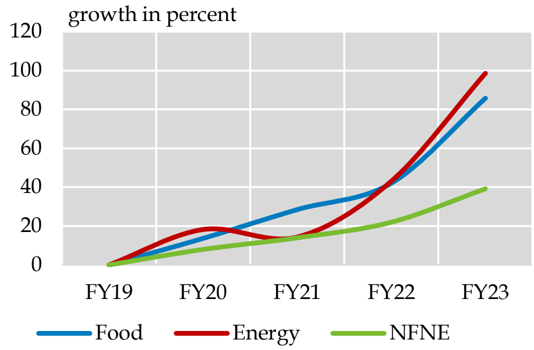
[33] In January 2022, the FED was raised to 2.5 percent on up to 1300cc cars, 5 percent on 1301-2000cc cars, and 10 percent on greater than 2000cc cars. Source: www.fbr.gov.pk/Categ/Federal-Excise-Act/346

compared to an offtake of Rs 40.2 billion last year.

3.4 Inflation

The NCPI inflation rose to a multi-decade peak of 25.0 percent in H1-FY23 compared to 9.8 percent during the same period last year, with inflation in rural areas being higher than in the urban. In terms of composition, while food inflation remained the major driver of NCPI inflation, the core inflation also edged up followed by energy inflation in H1-FY23. Following the global commodity super-cycle, NCPI inflation has been on a sharp uptrend since last year. To put things in perspective, the domestic factors further augmented the impact of global supply shock pushing the food and energy prices above the pre-pandemic level by around 90 percent during H1-FY23 **(Figure 3.20)**.

Inflation Trends during H1 (Urban) **Figure 3.20**



*FY19 is taken as base year.

Source: Pakistan Bureau of Statistics

While domestic demand showed visible slowdown, a confluence of supply side factors compounded inflation dynamics during H1-FY23. First, the outbreak of large-scale flash floods in July 2022, inundated a large part of the country, and inflicted heavy losses to agriculture produce that caused supply shortages in the food market and further exacerbated the effect of higher global commodity prices. Second, continuing the fiscal and power sector measures, the government introduced increase in electricity tariffs and imposed PDL on POL products that lifted energy inflation during H1-FY23 **(Figure 3.21)**.

Third, despite a sharp contraction in current account deficit during H1-FY23, amid the uncertainty surrounding the resumption of IMF EFF program, PKR depreciated by 24.1 percent during H1-FY23.[34] This along with the lagged impact of 23.1 percent PKR depreciation in FY22, fueled imported inflation. Fourth, the temporary restrictions on imports, raised concerns about continued domestic supplies of various commodities which further stoked inflationary pressure during this period. Finally, the sharp increase in food and energy prices also seeped into broader prices, wages and inflation expectations that contributed to a large increase in core inflation during H1-FY23, despite sluggishness in domestic economic activity. In addition, few budgetary measures such as increase in tax rates and minimum wage rate also partly contributed to NFNE inflation during H1-FY23.

Food inflation registered at 30.7 percent during H1-FY23 - more than three times the average inflation recorded in the similar period of last five years. Core segment recorded a double-digit inflation since FY13. Similarly, the inflation in the energy group

[34] On average, the PKR depreciated by 24.1 percent in H1-FY23 on YoY basis, as compared to around 3.5 percent depreciation in same period last year.

Supply Side Interruptions **Figure 3.21**

FY22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22
	Losses in agriculture and livestock due to heavy Monsoon rains and associated floods					
Roll back of fiscal package; PKR depreciation of 23.1 percent; A decline of 4 percent (YoY) in wheat production.	- Global commodity prices index increased by 38.9 percent (YoY) - PKR depreciated by 32.1 percent (YoY) - Electricity tariffs: AR*: Rs 3.50 per kwh QTA**: Rs 1.55 per kwh - PDL rate increased to Rs 10 per liter (on average) - Finance Act 2022	- Global commodity prices index increased by 48.1 percent (YoY) - PKR depreciated by 23.9 percent (YoY) - Regulatory duty on import of goods - Electricity tariffs: AR*: Rs 3.50 per kwh QTA**: Rs 0.51 per kwh - PDL rate increased to Rs 20 per liter (on average)	- Global commodity prices index increased by 28.3 percent (YoY) - PKR depreciated by 25.3 percent (YoY) - One time relief on power tariffs - PDL rate increased to Rs 37.5 per liter (on average)	- Global commodity prices index unchanged (YoY) - PKR depreciated by 22.3 percent (YoY) - Electricity tariffs: AR*: Rs 0.91 per kwh QTA**: Rs 3.21 per kwh - PDL rate increased to Rs 39.8 per liter (on average)	- Global commodity prices index increased by 4.7 percent (YoY) - PKR depreciated by 21.5 percent (YoY) - Annual limit of US$ 30,000 per individual on card based cross-border transactions - PDL rate increased to Rs 50 per liter (on average)	- Global commodity prices index increased by 4.2 percent (YoY) - PKR depreciated by 22.0 percent (YoY) - PDL rate increased to Rs 50 per liter (on average)

* Annual re-basing; **Quarterly tariff adjustment
Source: SBP, PBS, IMF, NEPRA, and MoF

elevated to 38.8 percent during H1-FY23 against 25.1 percent a year ago. Nonetheless, the energy inflation slowed down in Q2-FY23 after rising sharply in Q1-FY23 **(Figure 3.22)**.

Reflecting these developments, the inflation expectations of both consumers and businesses increased as gauged by SBP-IBA Consumer Confidence Survey (CCS) and Business Confidence Survey (BCS) **(Figure 3.23)**. Households' perceptions about expected inflation mainly track the trend in energy prices.[35] In addition, the likely course of current and expected food, non-food and non-energy prices, employment situation, interest rates and household income also have a bearing on these expectations. As regards the business confidence surveys, these depict the expectations of the business community regarding current and expected economic conditions and average exchange rates, employment, average selling price, financial conditions, and demand.[36, 37] A

[35] H. Abbas, S. Beg, and M.A. Choudhary (2015). Inflation Expectations and Economic Perceptions in a Developing Country Setting. www.dsqx. sbp. org. pk/ccs/survey% 20information/paper. pdf.
[36] Source: State Bank of Pakistan Surveys
[37] Literature also suggests that inflation expectations are based on trend in energy and food prices, average exchange rate, global commodity price outlook, previous expectations regarding inflation and

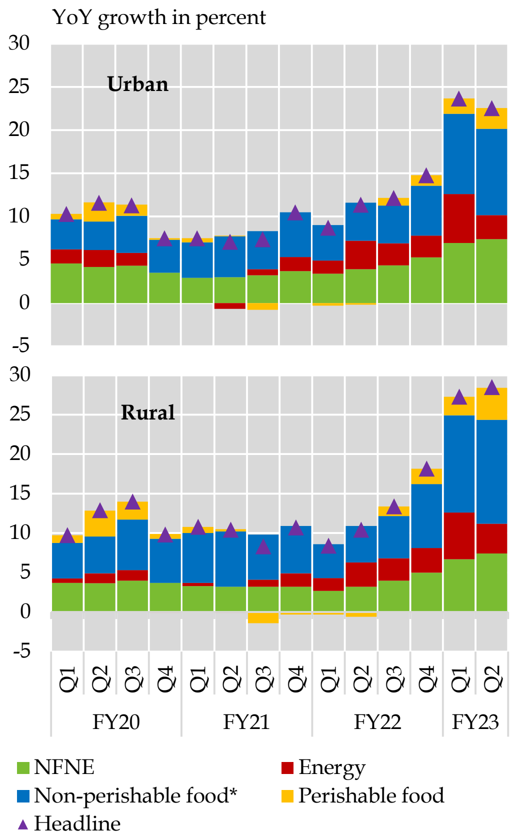
persistent uptrend in domestic prices amid supply shocks, increase in global commodity prices, and ER pressures led to worsening of inflation expectations during H1-FY23.

Food group remained the major driver of inflation

Food group contributed nearly one-half to NCPI inflation during H1-FY23. In terms of contribution, non-perishable segment was the major driver of this increase. Specifically, price pressures in milk fresh, wheat, wheat flour, ready-made food, and edible oil (cooking oil and vegetable ghee) were the major contributors to the rising non-perishable food inflation. Quarter-wise analysis suggests that the flood induced damages to agriculture produce and livestock that caused supply shortages of both perishable and non-perishable commodities, exacerbated food inflation during Q2-FY23 **(Figure 3.22)**.

The supply shortages of food products necessitated greater imports of wheat and pulses **(Table 3.6)**. While the global food prices had started to ease from August 2022, a steep depreciation of PKR partly neutralized the impact of lower prices and added further pressure to the price uptrend in food group. Specifically, imported commodities in the non-perishable food basket (wheat, cooking oil, vegetable ghee, tea, pulses) contributed around 6.7 percentage points in food inflation in urban areas during H1-FY23 against 2.9 percent, a year earlier **(Figure 3.24)**.[38]

Composition of CPI Inflation **Figure 3.22**



*inclusive of alcohol beverages and readymade food
Source: Pakistan Bureau of Statistics

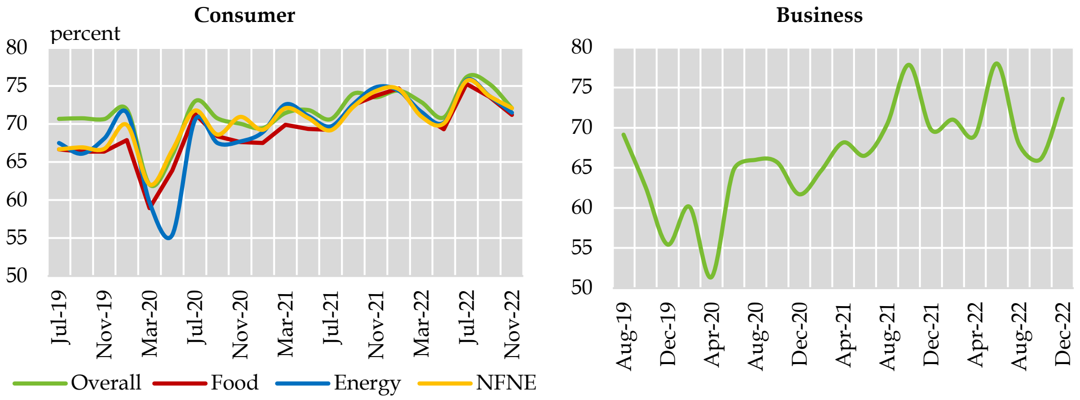
Soaring operational & transportation cost and worsening supplies explain inflation in fresh milk

Inflation in fresh milk more than doubled in both urban and rural areas during H1-FY23 and had the largest contribution in overall

monetary policy decisions. Sources: R. Moessner (2022). Determinants of Inflation Expectations in the Euro Area; M. D. Patra and P. Ray (2010). *Inflation Expectations and Monetary Policy in India: An Empirical Exploration*. International Monetary Fund.

[38] The contribution of wheat, cooking oil, vegetable ghee, pulses, and tea remained around 10.9 percent in the rural segments during H1-FY23 as compared to 3.6 percent in H1-FY22.

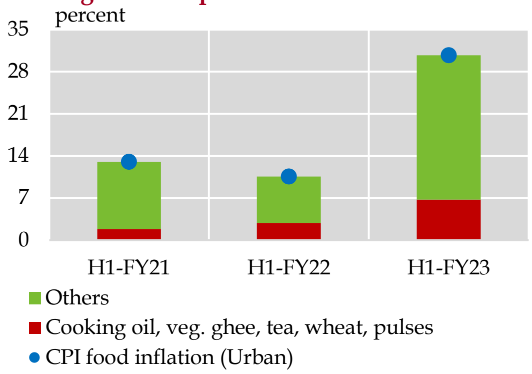
Inflation Expectations **Figure 3.23**



Source: State Bank of Pakistan

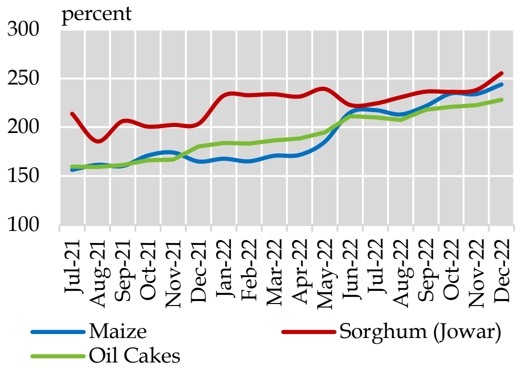
inflation in H1-FY23 **(Table 3.7)**.[39] A number of factors explain this increase. First, amid the ongoing scaricty of agriculture products, the cost of livestock feed input such as maize pith, sorghum, and oil cakes rose substantially, leading to an increase in milk prices **(Figure 3.25)**. Second, the increase in energy and fuel prices amplified operational cost of the sector, which further escalated milk inflation. Third, according to the anecdotal evidence, second round impact of fuel and food inflation to wages also partly contibuted to the uptick in milk inflation. Finally, according to the estimates, 2022 flooding caused significant damage to livetsock population.[40] The loss of such large

Contribution of Items in Food Inflation that Impacted from Exchange Rate Depreciation **Figure 3.24**



Source: Pakistan Bureau of Statistics

Average Prices of Livestock Feed Input (Urban) **Figure 3.25**



Source: Pakistan Bureau of Statistics

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[39] Milk inflation contribution in overall inflation rose to 1.9 and 2.5 percentage points in urban and rural areas during H1-FY23, from 0.8 and 0.9 percentage points in the same period last year.
[40] Over 1.1 million livestock was damaged during the heavy rains and associated flash floods. Source: Ministry of Planning Development and Special Initiatives (2022). Pakistan Floods 2022: Post Disaster Need Assessment Supplemental Report. Islamabad: Ministry of Planning Development and Special Initiatives

Average CPI Inflation and YoY Contribution **Table 3.7**

Items	Urban						Rural					
	Wt.*	H1 FY22	H1 FY23	Cont.* H1-FY23	Q1 FY23	Q2 FY23	Wt.*	H1 FY22	H1 FY23	Cont.* H1-FY23	Q1 FY23	Q2 FY23
CPI	**100.0**	**10.1**	**23.1**	**23.1**	**23.7**	**22.6**	**100.0**	**9.4**	**27.9**	**27.9**	**27.3**	**28.5**
Food	**36.8**	**10.6**	**30.7**	**11.8**	**29.0**	**32.4**	**45.9**	**8.4**	**33.6**	**16.0**	**30.9**	**36.2**
Perishable	4.5	-4.8	48.3	2.1	41.9	54.1	5.8	-6.4	52.1	3.0	42.9	68.8
Potatoes	0.4	-20.4	22.5	0.1	20.5	25.1	0.7	-19.6	19.0	0.2	16.1	21.8
Onions	0.6	-15.7	169.1	0.8	69.4	277.1	0.9	-14.8	178.1	1.1	74.8	289.2
Tomatoes	0.3	-17.4	61.5	0.3	55.3	65.8	0.5	-20.4	72.3	0.4	59.2	81.7
Fresh fruits	1.4	9.4	28.5	0.3	27.0	29.9	1.5	7.1	34.3	0.4	31.4	37.2
Fresh vegetables	1.5	1.0	36.1	0.6	50.3	24.3	2.1	3.5	36.6	0.8	50.7	25.7
Non-perishable	25.9	12.9	28.5	9.7	27.4	29.5	35.1	10.8	29.5	12.4	29.3	31.4
Milk fresh	7.1	11.6	26.9	1.9	26.1	27.7	10.4	8.9	26.1	2.5	23.4	28.7
Ready-made food	5.5	11.3	31.0	1.7	28.6	33.4	3.8	10.4	30.7	1.2	30.7	30.7
Vegetable ghee	1.0	44.5	51.9	0.8	66.9	38.7	2.4	43.6	55.9	2.0	70.2	43.2
Cooking oil	1.0	42.9	56.2	0.8	70.8	43.3	0.6	46.3	56.5	0.5	71.2	43.6
Wheat flour	3.0	15.8	31.2	1.0	24.1	37.8	3.4	14.3	28.8	1.0	21.1	36.0
Meat	2.0	16.8	24.5	0.6	25.9	23.3	1.7	17.3	24.7	0.5	25.8	23.6
Chicken	1.4	10.1	32.1	0.4	46.6	20.9	1.5	11.1	32.0	0.5	46.0	20.9
NFNE (Core inflation)	**53.7**	**7.0**	**14.1**	**7.2**	**13.4**	**14.7**	**42.6**	**7.2**	**17.4**	**7.1**	**16.2**	**18.5**
House rent	19.3	6.3	5.4	1.0	5.6	5.3	8.6	6.3	5.9	0.5	5.9	5.9
Transport services	1.7	5.4	38.0	0.6	42.2	34.2	1.8	2.1	57.8	0.9	56.5	58.9
Appliances and articles	2.9	12.0	21.9	0.6	19.2	24.6	2.3	8.8	14.6	0.3	13.0	16.2
Education	4.9	2.2	10.6	0.5	10.2	11.0	2.1	3.8	9.9	0.2	8.9	10.8
Cotton cloth	2.2	9.6	22.2	0.5	21.8	22.6	2.8	8.4	15.5	0.5	15.0	16.0
Washing	1.4	13.4	37.3	0.5	30.5	43.9	1.7	12.4	33.2	0.5	28.9	37.3
Marriage halls	1.7	5.5	21.6	0.4	23.4	19.9	2.2	4.6	19.6	0.4	20.4	18.8
Communication services	1.9	2.3	0.5	0.0	0.5	0.5	1.6	0.7	0.2	0.0	0.2	0.2
Energy	**9.5**	**25.1**	**38.8**	**4.2**	**55.9**	**24.2**	**11.4**	**22.7**	**41.0**	**4.8**	**52.3**	**31.0**
Electricity charges	4.6	32.1	31.4	1.5	56.6	11.4	3.4	32.1	31.4	1.1	56.6	11.4
Gas charges	1.1	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-
Motor Fuel	2.9	26.3	70.5	2.5	88.5	55.2	2.5	25.1	73.4	2.1	92.3	57.3
Liquefied Hydrocarbons	0.5	63.7	23.8	0.2	43.8	7.6	1.0	49.2	36.1	0.4	54.5	20.8
Solid Fuel	0.4	6.1	20.3	0.1	16.0	24.4	4.5	9.5	27.8	1.2	22.8	32.5

*wt. = weight, Cont.= Contribution

Source: Pakistan Bureau of Statistics

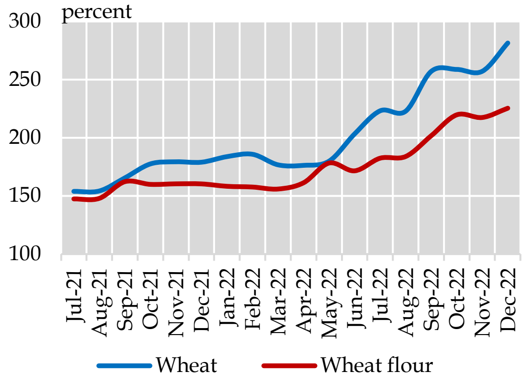
number of animals worsened supply situation in the sector causing upward pressure on prices.

Flood related supply shortages weighed heavily on wheat and wheat flour prices

The inflation in wheat and wheat flour soared to 48.6 and 31.2 percent, respectively in the urban segment during H1-FY23.[41] The country witnessed 4.0 percent yoy decline in wheat production during FY22 giving rise to a demand-supply gap of the commodity, which had started to push wheat price upward since June 2022 **(Figure 3.26)**. The summer flash floods added additional impetus to price uptrend because of various factors. First, the concerns about supply shortages further amplified, as floods partially damaged government's wheat storage facilities as well as the grain stocks stored by farming community for household Consumption.[42, 43] Second, uncertainty about the prospects of timely plantation of wheat, because of delays in drainage of standing water from the fields tainted the outlook for FY23 wheat crop that further swelled wheat inflation. These factors magnified the effect of a large increase in the Minimum Support Price (MSP) of Wheat announced in FY22.[44]

To close the supply-demand gap the government imported a significant quantity of wheat during H1-FY23.[45, 46] However, given relatively higher global commodity prices and persistent depreciation of PKR, the uptrend in wheat flour prices could not be reversed.

Average Wheat Prices (Urban) **Figure 3.26**



Source: Pakistan Bureau of Statistics

Edible oil prices continued uptrend amid increase in cost of production

The prices of edible oil (cooking oil and vegetable ghee) increased by more than 50 percent during H1-FY23 in both urban and

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41 In rural areas, the inflation in wheat and wheat flour accelerated by 46.6 and 28.8 percent, respectively, compared to 5.0 and 14.3 percent same period last year

42 Farmers in Pakistan store around 60 percent of their wheat production for fulfilling requirements of seeds, village and household food consumption. Source: United States Department of Agriculture Grain and Feed Report, April 2020

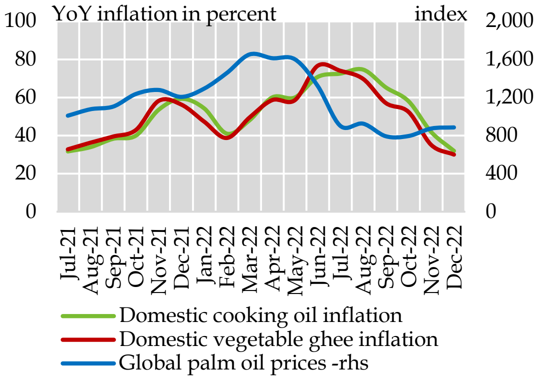
43 International Centre for Integrated Mountain Development and Pakistan Agricultural Research Council (2022). The 2022 Pakistan Floods: Assessment of Crop Losses in Sindh Province Using Satellite Data. Kathmandu: ICIMOD and Islamabad: PARC.

44 The government increased MSP by 22 percent to Rs 2,200 per 40 kg in 2022. Source: Agriculture Marketing Information Service. Source: www.amis.pk/Agristatistics/SupportPrice/wheat/wheat.html

45 The import quantum of wheat jacked up by 9.5 percent in H1-FY23 in contrast to a decline in last year. The ECC permitted to provide 1.00 MMT of imported wheat from PASSCO's stock to Punjab (0.50 MMT), Sindh (0.30 MMT) and KPK (0.20MMT) in view of the urgent demand of Provincial Food Departments of Punjab, Sindh, Khyber Pakhtunkhwa and Baluchistan.
Source: Press Release No. 173 dated October 28, 2022, Finance Division

46 The ECC permitted to provide 1.00 MMT of imported wheat from PASSCO's stock to Punjab (0.50 MMT) , Sindh (0.30 MMT) and KPK (0.20MMT) in view of the urgent demand of Provincial Food Departments of Punjab, Sindh, Khyber Pakhtunkhwa and Baluchistan.
Source: Press release No. 173 dated 28th October 2022. Finance Division

Edible Oil Inflation versus Global Palm Oil Prices **Figure 3.27**



Source: Pakistan Bureau of Statistics

rural segments **(Table 3.7)**. Despite a sharp yoy decline in global palm oil prices from the month of July 2022 (**Figure 3.27**), domestic edible oil prices continued to inch up, albiet at a lower pace, on account of PKR depreciation and increase in domestic cost of production.[47] Particularly, the prices of vegetable ghee especially in the the rural areas also soared sharply during H1-FY23.[48]

Rising cost of food and energy fanned inflation in ready-made food

Inflation in ready-made food spiked by 31.0 percent during H1-FY23 in contrast to 11.3 percent a year earlier. The hike in prices of wheat, edible oil, chicken, electricity and transportation was mainly responsible for this increase. Furthermore, anecdotal evidence suggests that the inadequate availability of gas remained another drag because of supply-demand mismatches particularly at the onset of winters. Given the country's increasing dependence on imports, the uptrend in global LNG price togther with PKR depreciation inflated cost of imported gas.[49] Since, restauarants and various food chains generally use natural gas and LNG cylinders or liquefied hydrocarbons for cooking purposes, higher cost of these energy sources along with lower availability of local supplies spurred price increase in the ready-made food group during H1-FY23.

The prices of chicken also showed a rising trend during H1-FY23. Rising cost of poultry feed including soyabean meal was one of the key factors behind this increase since the country predominantly relies on soybean meal imports. However, during H1-FY23 reportedly the government placed restrictions on the import of the grain because it did not meet certain seed import regulations.[50] This, inturn, led to acute supply shortfall and uptrend in the prices of

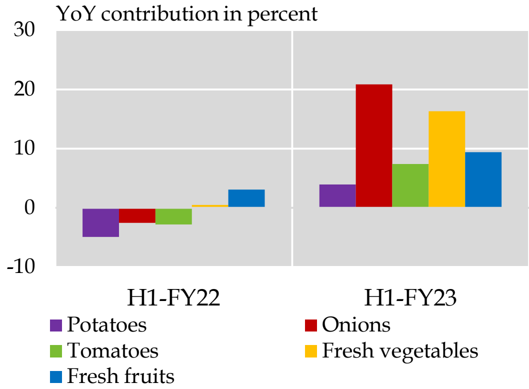
[47] A decline in global palm oil prices during H1-FY23 was due to weaker demand of key buyers of Malaysian palm oil (India and China) emanating from higher preference for soybean oil over Malaysian palm oil. Source: United States Department of Agriculture (2022). Malaysia: Oilseeds and Products Update. Washington D.C.: United States Department of Agriculture

[48] The contribution of vegetable ghee in the rural inflation remained higher than that of urban areas. This is due to the difference of consumption baskets within rural and urban centres. People in rural areas prefer vegetable ghee over cooking oil for cooking purposes; hence, due to higher weight in the rural food basket, vegetable ghee had greater contribution in the rural inflation.

[49] The import value of liquefied gas rose by 6.8 percent in H1-FY23. Although the import quantum declined by 94.4 percent, the import prices increased by 9.6 percent in H1-FY23. Source: Pakistan Bureau of Statistics

[50] Soybean is predominantly a genetically modified crop; its meal is an important component of poultry feed.

Drivers of Perishable Food Inflation **Figure 3.28**



Source: Pakistan Bureau of Statistics

poultry feed. Furthermore, livestock losses followed by the heavy rains and floods also created supply disruptions in chicken and meat (mutton and beef) during H1-FY23 **(Table 3.7)**.[51]

Prices of tea having a share of around 2.3 percent in the urban food basket, rose sharply by 42.7 percent during H1-FY23 in contrast to 4.7 percent increase in the previous period.[52] While the global tea prices had started to decline from September 2022, persistent PKR depreciation kept imported tea prices at elevated level.[53,54] In addition, rising domestic tea prices amid foreign exchange constraints, further exacerbated tea inflation during H1-FY23. Specifcially, tea inflation jumped to 56.0 percent during Q2-FY23, from 27.9 percent in Q1-FY23.

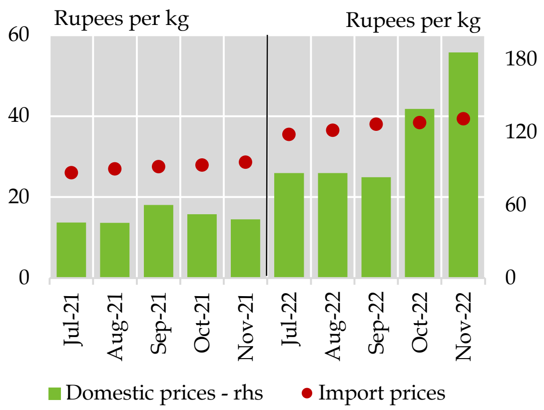
Perishable food inflation rose significantly

Inflation in perishble food group rose substantially by 48.3 percent in H1-FY23 as compared to a decline of 4.8 percent in urban areas. This rise primarily originated from significant losses of fresh fruits and vegetables in summer flooding that lifted inflation in almost all components of the perishable food group during H1-FY23 **(Figure 3.28)**.

In particular, the prices of onions shot up in October 2022 (on m-o-m and y-o-y basis) due to significant damages to onion crop in Sindh and Balochistan that usually arrives in the month of October of every year. The non-availability of onions placed pressures on prices in domestic market in both urban and rural areas. In order to minimze the supply gaps, the country imported the

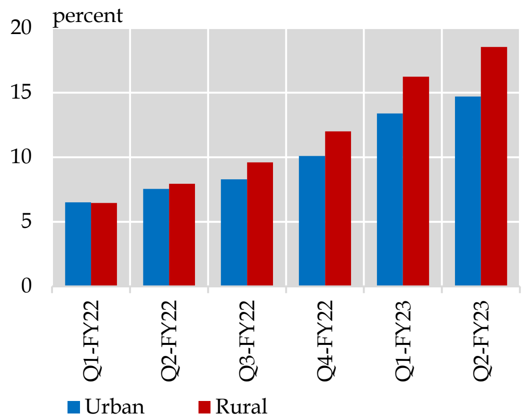
[51] Sindh was the most affected province with a loss of over 378,000 animals. These fatalities were largely reported in goat population followed by sheep, cattle, and buffalo. In addition, Balochistan remained the second most affected province with a loss of 325,000 animals out of which, over 200,000 private poultry facilities ruined in the district of Lasbela alone. In KP, around 93,500 animals lost out of which nearly half are commercial poultry. Approximately 2,150 deaths of mainly goats, sheep, and cattle were reported in other provinces. Punjab and special regions were the least affected areas with around 1,580 and 550 animal losses respectively, mainly goats and sheep.
Source: Ministry of Planning Development and Special Initiatives (2022). Pakistan Floods 2022: Post Disaster Need Assessment Supplemental Report. Islamabad: Ministry of Planning Development and Special Initiatives
[52] The price of tea rose by 38.8 percent in H1-FY23 against 4.0 percent in H1-FY22.
[53] The global tea prices declined by 5.6 percent in H1-FY23 as compared to a growth of 14.5 percent last year. Source: IMF
[54] The import quantum of tea fell by 0.2 percent during H1-FY23, whereas PKR value of imported tea rose by 39.8 percent during this period, compared to same period las year. Source: Pakistan Bureau of Statistics

Onion Prices **Figure 3.29**



Source: Pakistan Bureau of Statistics

NFNE - YoY Trends **Figure 3.30**



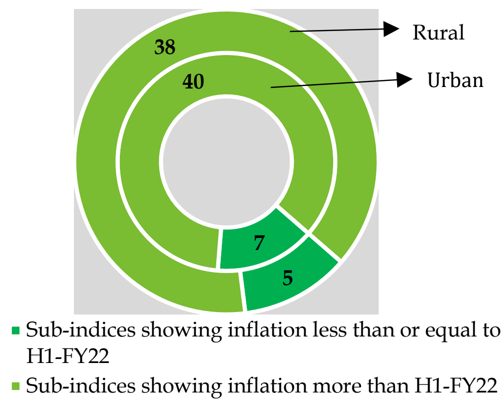
Source: Pakistan Bureau of Statistics

commodity from Iran and Afghanistan.[55] In addition, the import prices remained relatively higher than last year;[56] this together with a sharp PKR depreciation elevated the domestic price of onions on YoY basis **(Figure 3.29)**.

NFNE Inflation intensified in both urban and rural areas

Core (NFNE) inflation reached a nine-year peak of 14.1 percent in H1-FY23, compared to 7.0 percent in H1-FY22.[57] Continuing the double-digit increase of Q4-FY22, core inflation gathered further momentum in both quarters of H1-FY23 across urban and rural segments (**Figure 3.30**). In terms of dispersion, NFNE inflation broadened considerably with about eighty-five percent sub-indices in urban and rural areas showing higher inflation in H1-FY23 in contrast to a year ago **(Figure 3.31)**. In addition to elevated inflation expectations, the rising trend of core inflation also mirrors cost-push factors, whereas aggregate demand showed clear signs of contraction

NFNE Dispersion - H1-FY23 **Figure 3.31**



Source: Pakistan Bureau of Statistics

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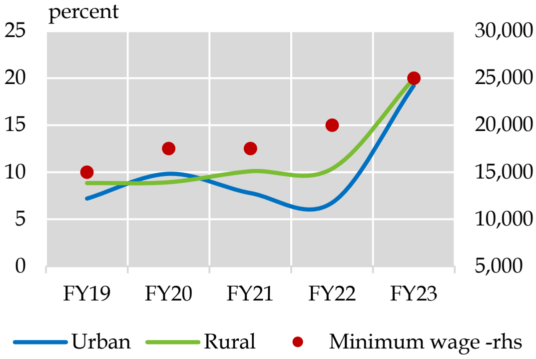
[55] The import quantum of onions from Afghanistan rose sharply by almost 87 percent to 188 thousand metric tons during Jul-Oct FY23. Furthermore, the country also imported from Iran (47 thousand metric tons) during the same period with no onion imports in the last corresponding period. Source: Pakistan Bureau of Statistics

[56] The import prices of onions in PKR (per kg) in Jul-Nov FY23 increased by 37.0 percent as compared to a decline of 0.4 percent in the last corresponding period. Source: Pakistan Bureau of Statistics

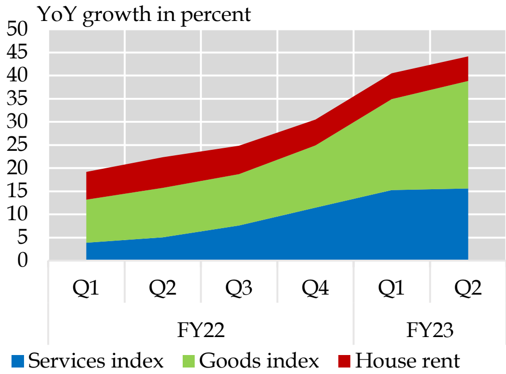
[57] NFNE inflation (urban) recorded double-digit inflation soaring to 14.1 percent in H1-FY23 - first time in nine years since H1-FY13.

Wage Inflation during H1 **Figure 3.32**



Source: Pakistan Bureau of Statistics & Ministry of Finance

Sources of NFNE Inflation (Urban) **Figure 3.33**



Source: Pakistan Bureau of Statistics

during H1-FY23. A host of factors such as the demand compression measures introduced since last year, flood-induced losses to agriculture, temporary restrictions on imports, and overall deterioration in macroeconomic environment weighed down economic activity and hence domestic demand during H1-FY23. In particular, LSM production dipped by 3.7 percent during July-December FY23, against an 8.2 percent increase in the last corresponding period. In addition, amid a slowdown in global demand and unfavorable domestic economic environment export growth (in rupee terms) fell by 24.3 percent in H1-FY23 from 29.5 percent growth in H1-FY22.

The significant contraction in economic activity dented incomes of various sectors of the economy. Moreover, as indicated by the significant damage to agriculture production and livestock caused by floods, rural incomes also weakened during H1-FY23. In addition, remittances also saw a substantial YoY decline in H1-FY23. As a result, all major domestic demand indicators including sales of automobiles, cement, and petroleum products showed considerable yoy declines during H1-FY23 **(Table 3.3)**.

On the other hand, the combined effect of higher energy and fuel prices, PKR depreciation, temporary restrictions on selected imports, and increase in taxes and other levies propelled cost-push inflation in NFNE segment.[58] Furthermore, heightened food and energy prices squeezed real incomes and wellbeing of labor that pushed up wage inflation in both urban and rural areas during H1-FY23.[59] Moreover, the

[58] The government started to charge Petroleum Development Levy (PDL) in the petroleum prices with effect from July 1, 2022. Source: OGRA (www.ogra.org.pk/e-10-gasoline-prices). The regulatory duty on paper and paperboard, wires (made of iron and alloys), and optic fiber cable was increased to 10, 30, and 20 percent, respectively. The regulatory duty on motor vehicles also increased from 15 percent to 100 percent in August 2022. Source: Revenue Division (MoF) and FBR

[59] The wage index comprises of the prices of tailoring, cleaning and laundering, construction wage rates, garbage collection, household help, doctor fee, dental services, mechanical services, and personal grooming services.

Top Contributors of NFNE Inflation (Urban), YoY growth **Figure 3.34**

		2021						2022											
	Wt.	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Core Inflation	**53.7**	**6.8**	**6.3**	**6.4**	**6.7**	**7.6**	**8.3**	**8.2**	**7.8**	**8.9**	**9.1**	**9.7**	**11.5**	**12.0**	**13.8**	**14.4**	**14.9**	**14.6**	**14.7**
House Rent	19.3	6.0	6.0	6.0	6.6	6.6	6.6	6.1	6.1	6.1	5.6	5.6	5.6	5.6	5.6	5.6	5.3	5.3	5.3
Transport services	1.8	8.5	-0.8	-0.3	0.8	12.2	12.7	11.6	9.3	19.1	20.3	22.4	34.8	39.7	44.6	42.4	41.3	33.4	28.4
Appliances/articles	3.0	12.1	11.6	12.1	12.5	12.0	11.7	11.6	9.0	9.9	9.5	10.3	14.4	15.8	19.6	22.1	23.8	24.3	25.7
Cotton Cloth	2.2	9.8	9.8	9.8	9.8	8.6	9.9	10.1	11.3	10.9	12.5	12.5	15.7	18.1	23.5	23.7	24.2	22.2	21.4
Washing soap/detergen	1.4	12.2	12.6	12.3	12.5	14.4	16.6	18.0	17.1	16.7	17.2	18.7	22.6	24.7	28.9	37.7	41.5	43.4	46.6
Marriage hall charges	1.8	3.4	2.5	2.6	2.2	9.2	12.6	12.8	13.5	13.3	13.2	13.2	21.5	21.7	24.2	24.3	24.5	18.8	17.0
Motor vehicles	0.8	2.8	2.8	2.4	3.3	8.0	8.0	7.6	8.5	10.3	16.2	19.7	20.9	24.0	38.4	34.9	34.3	28.2	27.5

Red: Highest; Green: Lowest

Source: Pakistan Bureau of Statistics

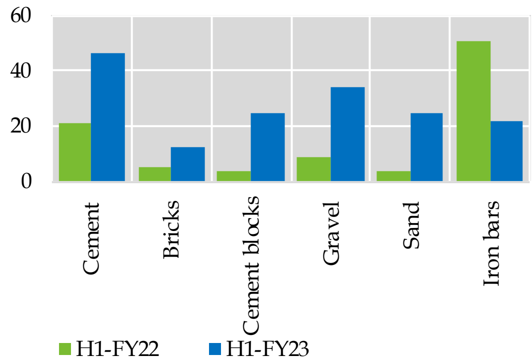
impact of relatively higher minimum wage in FY23 also reflected in the wage inflation during the period under review **(Figure 3.32)**.[60]

In terms of contribution, inflation in goods and services rose considerably during H1-FY23, with a prominent contribution of the former **(Figure 3.33)**. In overall terms, appliances and articles including beauty products and toiletries, transport services, washing items including soaps and detergents, cotton cloth, marriage hall charges, and motor vehicles remained the major drivers of urban core inflation during H1-FY23 **(Figure 3.34)**.

A general hike in cost of production including, electricity and fuel prices, wages, input prices and PKR depreciation mainly explains heightened inflation in these categories. Moreover, the higher prices of cement and cement blocks, bricks, gravel (bajri), sand, and iron bars explained a significant rise in the index of construction input items in H1-FY23 **(Figure 3.35)**. Motor vehicles' price rose considerably during H1-FY23, reflecting the impact of strong depreciation of PKR and rising cost of production.

The services index of core inflation also rose sharply in both urban and rural areas during H1-FY23. The services that are energy-intensive such as transport and personal

Inflation in Construction Input Items (Urban) **Figure 3.35**



Source: Pakistan Bureau of Statistics

[60] The federal government increased the minimum wage to Rs 20,000 (from Rs 17,500) in 2021-22. In 2022-23, the provinces raised the minimum wage rates to Rs 25,000 per month. Source: Notifications pertaining to provincial Labour and Human Resource departments.

Top Contributors to NFNE Inflation in Services (Urban) **Table 3.8**

	Average Inflation	
	H1-FY22	H1-FY23
NFNE Inflation (Services)	**4.4**	**15.4**
Transport services	5.4	38.0
Education	2.2	10.6
Marriage hall charges	5.5	21.6
Personal grooming services	7.0	26.0
Tailoring	8.3	16.6

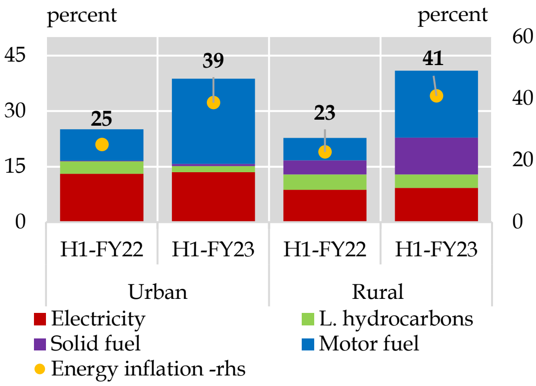
Source: Pakistan Bureau of Statistics

grooming services, took the biggest hit due to higher energy cost. In particular, transport services surged sharply on account of swelling motor fuel prices during H1-FY23 **(Table 3.8).** Other such services related to mechanical, cleaning/laundering, tailoring, and wedding hall arrangements also contributed to the rising prices of services in the non-food non-energy basket.

Energy Inflation continued to rise

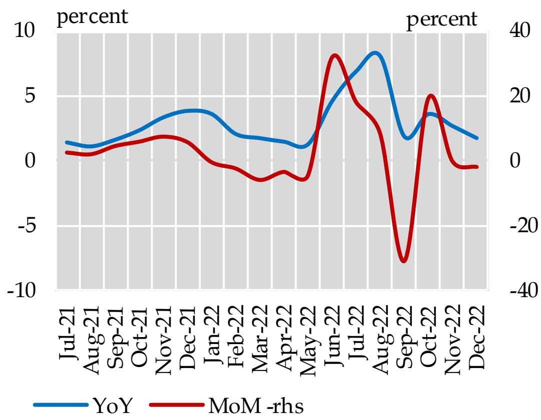
Energy inflation rose significantly on YoY basis in both urban and rural areas during H1-FY23. Hike in motor fuel prices mainly dominated energy inflation in this period,

Contribution in Energy Inflation **Figure 3.36**



Source: Pakistan Bureau of Statistics

Energy Inflation (Urban) **Figure 3.37**



Source: Pakistan Bureau of Statistics

followed by the increase in electricity charges. However, in the case of rural areas, a rise in solid fuel prices also had a noticeable contribution in energy inflation during H1-FY23 **(Figure 3.36)**.

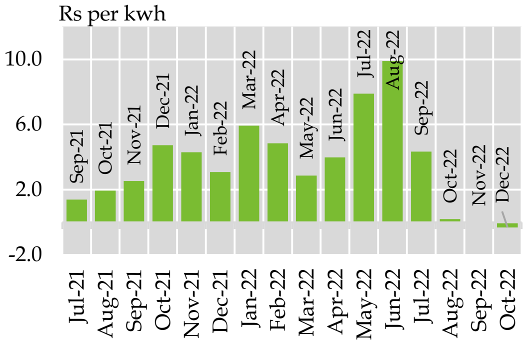
The spike in electricity prices during H1-FY23 emanated from the annual and quarterly adjustment in the electricity tariffs under the IMF program **(Table 3.9)**. Specifically, the government introduced combined annual rebasing of electricity tariffs for FY22 and FY23 in three phases during Jul, August and Oct 2022, which led to increase in power charges in these months **(Figure 3.37)**. However, a downturn in global oil prices from August 2022 onwards,

Annual and Quarterly Adjustments in Electricity Tariff **Table 3.9**

Notified Tariff w.e.f	
Annual Rebasing (AR)	
First stage (Rs 3.50/ kwh)	July 25th 2022
Second stage (Rs 3.50/kwh)	August 1st 2022
Third stage (Rs 0.91/kwh)	October 1st 2022
Quarterly Tariff Adjustment (QTA)	
Q1-FY22 (Rs 0.57/kwh)	June 1st 2022
Q2-FY22 (Rs 1.55/kwh)	July 7th 2022
Q3-FY22 (Rs 0.51/kwh)	August 23rd 2022
Q4-FY22 (Rs 3.21/kwh)	October 20th 2022

Source: IMF, NEPRA, MoF

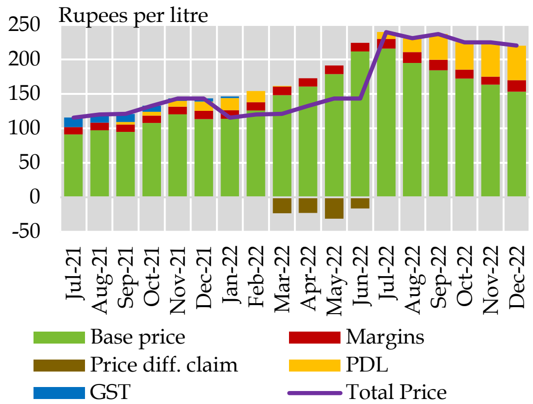
Fuel Charge Adjustment (FCA) **Figure 3.38**



Note: x-axis indicates months for which FCA was charged

Source: National Electric Power Regulatory Authority

Composition of Petrol Prices **Figure 3.39**



Source: Oil & Gas Regulating Authority

contained the pace of increase in electricity tariffs during Q2-FY23 because of lower fuel charge adjustment **(Figure 3.38)**.

Furthermore, during the month of September 2022, the government announced a relief package for power consumers that led to a dip in energy inflation during this month. Reflecting the impact of softening global oil prices and the relief package the m-o-m growth of in energy prices remained negative during September, November and December 2022.[61]

Furthermore, prices of motor fuel edged up during H1-FY23 reflecting the impact of imposition of Petroleum development levy (PDL), higher global prices of oil and ER depreciation. However, the global crude prices started to ease from August 2022, which led to a slowdown in motor fuel inflation on m-o-m basis. Furthermore, as opposed to H1-FY22 when petroleum prices were subject to GST, the absence of sales tax also slightly cushioned petrol prices during H1-FY23 as compared to the last corresponding period **(Figure 3.39)**.

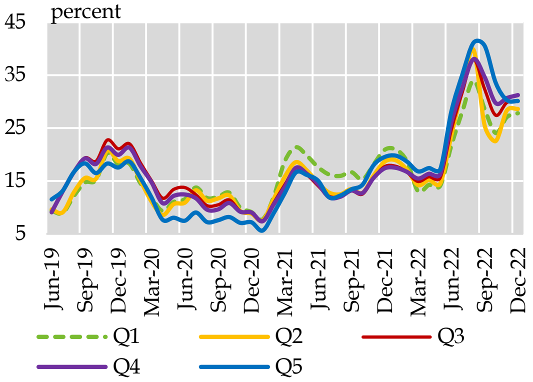
Apart from motor fuel, solid fuel including coal and firewood also contributed to energy inflation in rural areas during H1-FY23. In rural areas, solid fuel is used as a substitute of gas. Anecdotal evidence suggests that the gas shortages further increased the demand for coal and firewood, which led to increase in the prices of solid fuel in H1-FY23.

The higher inflation spell has affected the consumers in highest consumption basket the most

Consumers in all consumption baskets were adversely affected by the surge in inflation during H1-FY23, compared to last year. However, within the consumption groups, the lower consumption quintiles (with consumption up to Rs 17,732 and 22,888) faced relatively lower inflation during H1-

[61] The m-o-m growth in energy prices declined by 31.1, 0.2, and 1.9 percent while the y-o-y price growth in energy was recorded at 18.9, 24.5, and 15.4, in the months of September, November, and December 2022, respectively in urban centers. Source: Pakistan Bureau of Statistics

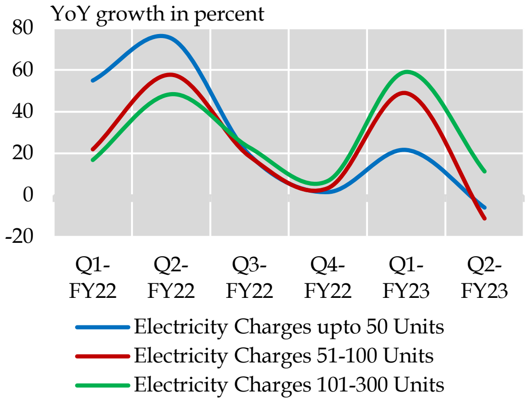
Inflation-Consumption Quintile **Figure 3.40**



Note: SPI is compiled on 2015-16 base

Source: Pakistan Bureau of Statistics

Electricity Price Trends (Urban) **Figure 3.41**



Source: Pakistan Bureau of Statistics

FY23 than the highest consumption basket (more than Rs 44,175) **(Figure 3.40)**.[62]

Difference in the consumption preferences of lowest and highest quintiles mainly explains this trend. Lower consumption quintiles have a larger weight of food products such as wheat, milk, sugar and vegetable ghee. For meeting energy requirements this group prefers low cost products including firewood and agriculture waste.[63] Whereas, in addition to these basic food items, higher consumption quintile has relatively large share of items such as meat and fruits as well as food from hotels and restaurants.[64] In overall terms, the consumption basket of this quintile has lower share of food group and includes broad range of products such as textile, clothing and footwear. Within energy group, consumers in higher consumption quintiles have greater preference for electricity and gas. Hence, the consumers in lower consumption quintiles were relatively less affected by the impact of sharp increase in electricity prices during H1-FY23 **(Figure 3.41)**.

[62] The consumption of quintiles: Q1 (up to Rs. 17,732); Q2 (Rs. 17,733 - 22,888); Q3 (Rs. 22,889 - 29,517); Q4 (Rs 29,518 - 44,175); Q5 (above Rs. 44,175). Source: Pakistan Bureau of Statistics

[63] Source: Household Integrated Economic Survey 2018-19

[64] Source: Household Integrated Economic Survey 2018-19