Chapter 3

Monetary Policy and Inflation

The monetary policy committee (MPC) reversed the accommodative monetary policy stance and increased the policy rate by a cumulative 675 bps during FY22, as a host of domestic and global developments weighed heavily on Pakistan's performance and increased the risks to macroeconomic stability during the year. The post pandemic recovery in global demand and supply chain disruptions had given rise to a global commodity price super cycle in 2021, which was intensified by the outbreak of Russia-Ukraine conflict in February 2022. The spread of a new Covid wave in China in Q2-FY22, added further impetus to global commodity prices. Many central banks across countries responded by increasing policy rates, which led to stringency in financial markets and caused additional pressures on Pakistan's external account. On the domestic side, an unexpected fiscal stimulus, a strong recovery, political instability, and lingering policy uncertainty presented additional risks to the outlook of inflation and external account during the year. In line with these developments, the national consumer price inflation rose to 12.2 percent in FY22, exceeding the government inflation target as well as SBP revised inflation projection range of 9-11 percent for the year. A rising trend was also observed in core inflation, indicating underlying demand-pull inflationary pressures in the economy. Reflecting rising cost-pressures and strong domestic growth outturns, credit growth more than doubled from 10.5 percent to 21.1 percent in FY22. Besides expansion in the working capital loans, the SBP's concessionary financing schemes (LTFF and TERF) augmented the demand for fixed investment loans during FY22.

3.1 Policy Review

Pakistan like other countries across the globe faced significant headwinds from the consistent increase in global commodity prices and the fallout of Russia-Ukraine conflict during FY22. In the case of Pakistan, a host of domestic factors including, a sustained increase in economic activity, an unplanned expansionary fiscal policy, domestic political instability, and uncertainty around the resumption of the IMF program that weighed on the rupee also contributed to higher-than-expected inflation outturns and widening of cuurent account deficit (CAD) during FY22.

The average headline National CPI (NCPI) inflation reached 12.2 percent in FY22, exceeding the government inflation target as well as SBP revised projection range of 9-11 percent for the year (**Figure 3.2**). Pakistan's experience was not different from the other South Asian economies. Rising fuel and food prices alongside the expansion in economic activity pushed the overall headline inflation numbers above targets in these countries in H1-CY22 (**see Box 3.1**).

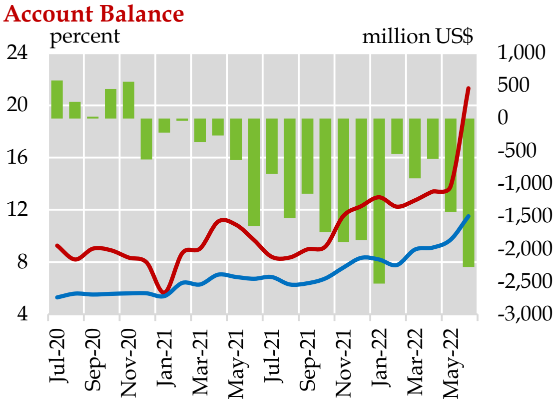
Reflecting the impact of rising commodity prices and domestic demand, CAD in Pakistan also rose to US$ 17.3 billion during FY22, from US$ 2.8 billion last year. The market-based exchange rate played its role as a shock absorber and depreciated considerably by 23.1 percent during FY22. However, this situation presented the need to address the elevated risks to outlook of inflation and external account to avoid

turbulence in the financial markets that could moderate economic growth **(Figure 3.1).** Therefore, after maintaining an accommodative monetary stance during FY21, SBP substantially tightened the policy rate over the course of FY22, raising it by a cumulative 675 bps, from 7.0 percent to 13.75 percent. In addition, SBP also introduced other regulatory measures to rein in demand pressures and anchor inflation expectations.

At the time of the MPC meeting in July 2021, inflationary pressures appeared to have eased. Inflation, although at an elevated level, had declined from 11.1 percent in April 2021 to 9.7 percent in June 2021. Moreover, core inflation remained stable in both urban and rural areas, whereas inflation expectations fell in July 2021. In addition, the macroeconomic rebound from the Covid-led downturn strengthened further. Particularly, large-scale manufacturing (LSM) registered 11.6 percent growth in FY21, while high-frequency demand indicators continued to show robust growth.

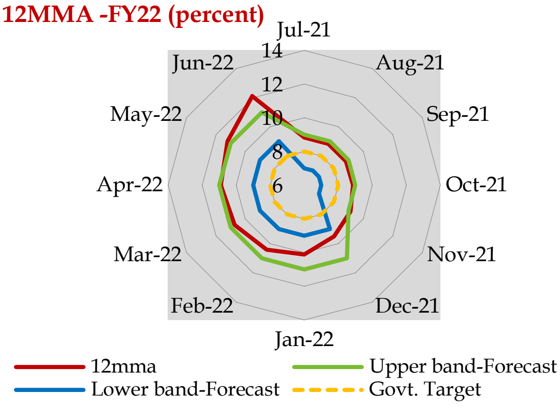
Keeping in view these developments, SBP projected the inflation range for FY22 at 7-9 percent, which was subject to both downside and upside risks. The key upside risks included: (i) higher than expected increase in global commodity prices; (ii) upward adjustment in energy tariffs and petroleum

Inflation and Current Account Balance — **Figure 3.1**



Source: Pakistan Bureau of Statistics & State Bank of Pakistan

Inflation Projection and 12MMA -FY22 (percent) — **Figure 3.2**



Source: Pakistan Bureau of Statistics, Planning Commission and SBP projections and calculations development levy (PDL); (iii) unfavorable exchange rate movement that could exacerbate imported inflation; and (iv) fiscal slippages that could amplify demand pressures. The primary downside factor was a resurgence in the spread of the pandemic that could stall domestic and global economic recovery. In view of the continued domestic recovery and improved inflation outlook, the MPC decided to keep the policy rate unchanged at 7 percent in its July 2021 decision.

As the first quarter of FY22 progressed, the consistent increase in global commodity prices and pressures from domestic demand started to pose risks to the outlook of inflation and CAD. The unexpectedly expansionary fiscal policy and continued supportive stance of monetary policy boosted the pace of economic recovery, above expectations. Agriculture performance was also satisfactory as seen from the increase in area under rice, maize and sugarcane cultivation. Based on these trends, SBP projected the range for real GDP growth for FY22 at 4.0–5.0 percent. However, the combined effect of faster than expected economic recovery, commodity price rally and external account pressures translated into depreciation in PKR that further fueled imported inflation. Hence, not only did monthly inflation momentum pick up in July and August 2021, but the inflation expectations of both households and businesses also inched-up compared to the earlier survey iteration.

The MPC was faced with the challenge of navigating the balance between an adequate policy response to dampen inflationary pressures, and the need to safeguard the economic recovery during the year. With receding uncertainty of the pandemic, the economic recovery appeared to be on a firmer footing, and a shift in monetary policy settings was required to ensure the durability of growth, keep inflation expectations anchored, and tame the growth in CAD. Thus, at this more mature stage of the economic recovery, the MPC decided to increase the policy rate by 25 bps, to 7.25 percent in September 2021, indicating a turning point, as monetary policy shifted gears after maintaining a 14-month spell of unchanged stance.

The persistent increase in global commodity prices, upward adjustment in domestic energy prices and a robust expansion in economic activity further stoked up inflationary pressures during the second quarter; while the risks to CAD outlook also became more pronounced. Specifically, the m-o-m NCPI inflation reached over a decades' high level in November 2021; whereas, trade deficit for the month also stayed elevated. Meanwhile, high-frequency indicators of domestic demand suggested that economic growth remained buoyant, although sales and production levels of some manufacturing items started normalizing, especially in automobiles and consumer durables. With the broadening inflationary pressures, MPC in December 2021 revised the forecast for inflation in the range of 9-11 percent for FY22 upward from 7-9 percent.

Thus, with the balance of risks shifting quicker-than-expected away from growth and towards inflation and the deteriorating current account, the MPC raised policy rates twice in the second quarter: 150 basis points in November 2021, followed by 100 basis points in December 2021. The MPC also provided forward guidance stating that with the increase in the policy rate the end goal of mildly positive real interest rates was close to be achieved and monetary policy settings were forecast to remain broadly unchanged in the near term under the baseline projection. In addition, SBP also introduced other measures to contain strengthening demand pressures. These included: increase in Cash Reserve Requirement (CRR), tightening of Prudential Regulations (PRs) for consumer financing, and imposition of cash margins on import of a number of items (**Table 3.1**). Moreover, in November 2021 the MPC decided to increase the frequency of monetary policy reviews from six to eight times a year, in continuation of efforts to make the process of monetary policy formulation more predictable in line with the international best practices.

The normalization of Pakistan's monetary policy stance was in line with the global experience, as many central banks around the world also increased the policy rate during the year to keep inflation expectations anchored.

Demand Stabilizing Measures-FY22 **Table 3.1**

Category	Description	
Consumer Financing	PRs effectively prohibited financing for imported vehicles, and tightened regulatory requirements for financing of domestically manufactured/ assembled vehicles of more than 1000 cc engine capacity and other consumer finance facilities like personal loans and credit cards. Also, the maximum tenure of auto finance facility was reduced from five years to three years for vehicles above 1,000 cc engine displacement and from seven years to five years for vehicles up to 1,000 cc engine displacement.	Sep-2021
Imports	100 percent cash margin was imposed on the import of additional 114 items	Sep-2021
Prudential Tools	Average Cash Reserve Requirement (CRR), to be maintained during a period of two weeks by scheduled banks, was increased from 5 percent to 6 percent and minimum CRR to be maintained each day from 3 percent to 4 percent.	Nov-2021
Imports	100 percent cash margin on the import of additional 177 items	Apr-2022

Source: State Bank of Pakistan

In line with the forward guidance, MPC kept the policy rate unchanged in Q3-FY22. Around the time of MPC meeting in January 2022, the momentum in inflation (MoM) started to wane, whereas YoY inflation outturns were relatively higher, compared to the earlier readings. Moreover, demand side pressures as gauged by the high frequency demand indicators including, cement dispatches and sales of petroleum products, tractors and commercial vehicles started to moderate. On the supply side, LSM production slowed to 3.3 percent YoY in Jul-Nov FY22, reflecting the impact of rising cost of production and various corrective measures taken to contain the pace of economic activity.

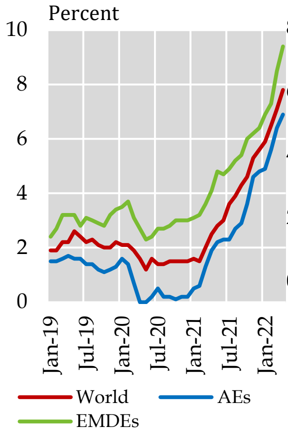
In the subsequent meeting held in March 2022, MPC also maintained status quo, noting that the outlook for inflation had improved amid cuts in fuel prices and electricity tariffs, announced as part of the government's relief package, as long as these were fully financed. Furthermore, enactment of the Finance (Supplementary) Act 2022, represented additional fiscal consolidation compared to the budget and improved the outlook for inflation in FY23. Core inflation fell in urban areas in February 2022, whereas the slowdown in domestic demand also eased pressure on CAD. The trade deficit witnessed a further 10 percent contraction on MoM basis in February 2022, following a 29 percent decline recorded a month earlier despite the rise in global prices. High-frequency indicators suggested that growth continued to moderate.

Inflation expectations of both consumers and businesses, though elevated, remained broadly unchanged in Q3-FY22. In particular, the consumer's inflation expectation index stayed almost unchanged in January 2022 at the level observed in November 2021, indicating that second-round effects from higher commodity prices remained contained. Similarly, inflation expectation index for businesses remained stable in February 2022 at previous level, which dropped significantly in December 2021.

Just when the macroeconomic indicators started to move towards sustainable levels, some unfavorable global and domestic developments posed serious challenges to Pakistan's macroeconomic stability towards the last quarter of FY22. First, the start of Russia-Ukraine crisis introduced a serious supply shock to global economy. As the impact of the conflict propagated globally through supply chain disruptions and fresh hike in commodity prices, it also worsened the outlook for inflation and external account of Pakistan. Second, the US Federal Reserve introduced its first rate hike since 2018, in March 2022 and outlined its program of aggressive tightening of Fed rate during 2022. This, along with the anticipated tightening by major central banks was likely to have implications for global financial conditions. Like other emerging economies, Pakistan was also witnessing net outflows from equity markets, while the cost of external financing had also increased, mounting pressures on Pakistan's external account. Third, domestic political instability, along with policy uncertainty further aggravated the macroeconomic outlook. Fourth, Supply chain disruptions emerging from new Covid wave in China presented fresh risks to inflation outlook.

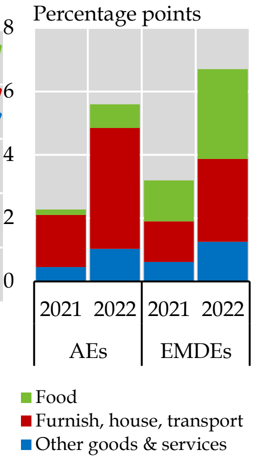
In view of these developments, the MPC increased the policy rate by 250 basis points to 12.25 percent in the emergency MPC meeting in April 2022, whereas a further hike of 150 bps

CPI Inflation Figure 3.1.1a

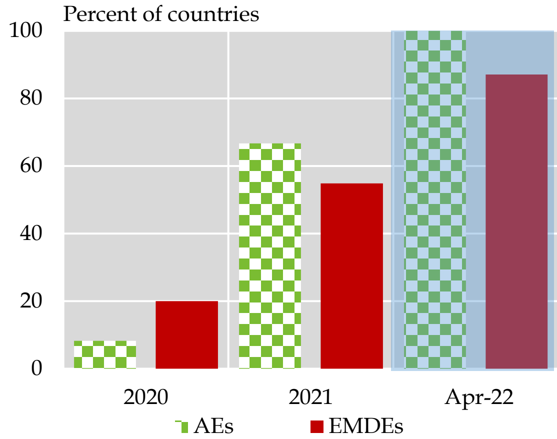


Source: World Bank

Cont. to CPI Figure 3.1.1b



Inflation above Target Figure 3.1.2



Source: World Bank

was introduced in May 2022 to 13.75 percent. The MPC revised the forecast for headline average NCPI inflation to slightly above 11 percent in FY22.

Box 3.1: South Asian Economies- Breaching Inflation Tolerance Bands

The uptrend in global commodity prices strengthened during CY21 amid sustained pace of global economic recovery, Covid-related supply chain bottlenecks and weather uncertainties.[1] The economies faced further price pressures during CY22, on account of the Ukraine-Russia conflict (**Figure 3.1.1a and b)** as the invasion and resulting sanctions on Russia escalated the already surging commodity prices. CPI inflation not only rose significantly but also edged above the central banks' target rates in both advanced economies (AEs) and emerging and developing economies (EMDEs) (**Figure 3.1.2**). In the same vein, the conflict in Ukraine had significant impact on South Asian EMDEs during CY22. Notably, consumer price inflation in South Asia has been rising rapidly and have started exceeding central banks' targets (**Figure 3.1.2).**

In terms of contribution, energy and food groups mainly contributed to headline inflation during CY2022 across regions (**Figure 3.1.1b**). In AEs, the spike in oil and gas prices led to a significant increase in energy costs. However, in EMDEs, given larger share of food in the consumption baskets, rising food prices also played substantial role in overall inflation along with fuel prices. [2] Core inflation also surpassed pre-pandemic rates across most economies amid demand pressures as well as supply-chain issues.[3] Similarly, in Pakistan, inflationary pressures not only surged significantly from January 2022 onwards but also remained higher than other South Asian economies barring Sri Lanka. Rising energy and food inflation mainly contributed to high inflation outturns (**Figure 3.1.3**). However, larger currency depreciation amid rising external sector vulnerabilities amplified the impact of imported inflation in the case of Pakistan (**Figure 3.1.4**).

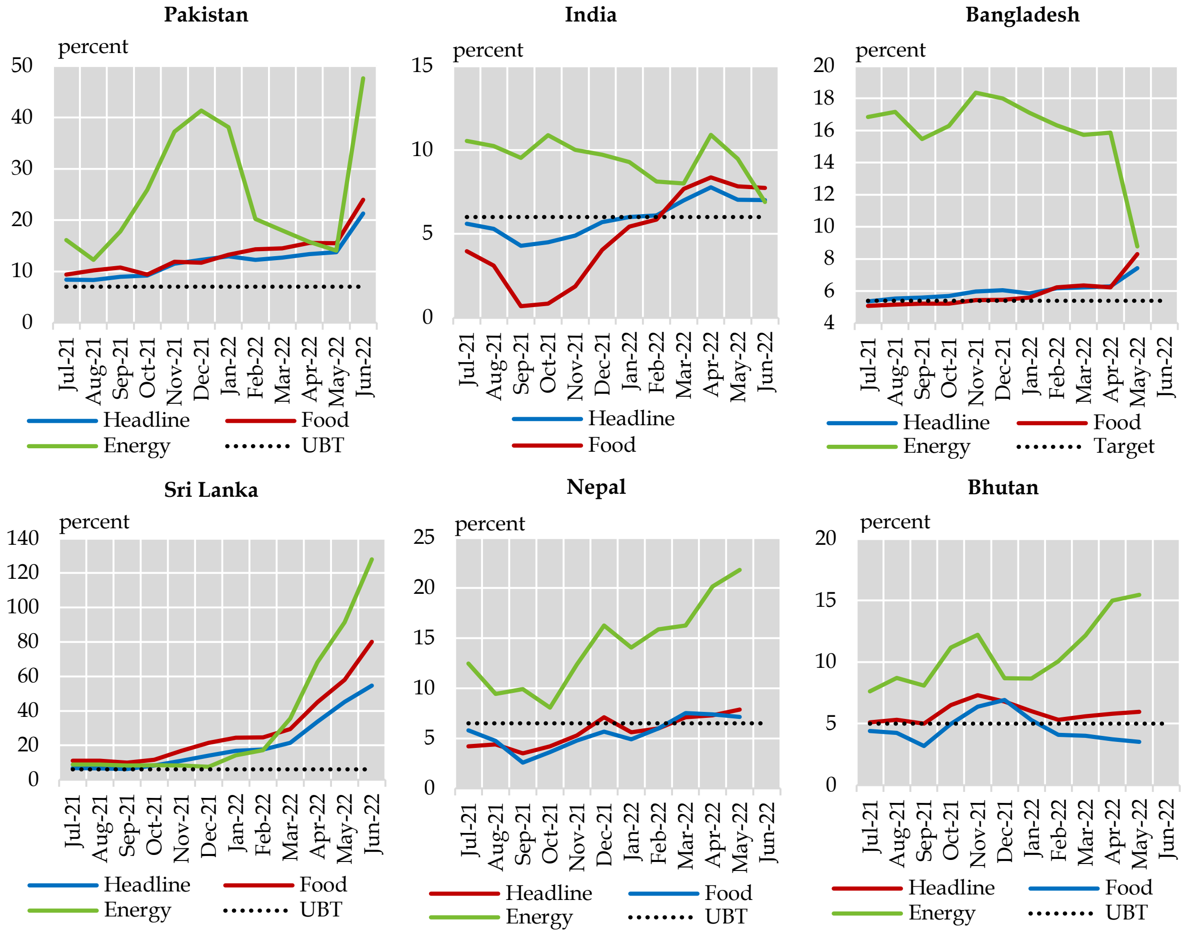
3.2 Monetary Aggregates

The broad money growth stood at 13.6 percent during FY22 compared to 16.2 percent last year.[4] On the asset-side, it was mainly the impact of a sharp contraction in the net foreign assets (NFA) that contained the growth of money supply. In contrast, the expansion in net domestic assets (NDA) was more than double in FY22, compared to last year (**Table 3.2**).

A substantial increase in net government budgetary borrowings from the banking system and private credit offtake propped up NDA, where the impact of the former dominated. The upsurge in commodity prices driven by the global factors, SBP's concessionary financing schemes, and

[1] For details see Box 3.1 of First Quarterly Report FY22 on the State of the Pakistan's Economy
[2] F. Davide (2015), "Global Food Prices and Domestic Inflation: Some Cross-Country Evidence", IMF Working Paper
[3] World Economic Outlook, April 2022
[4] M2 to GDP ratio fell from 44 percent in June 2021 to 41 percent in June 2022.

Inflation in South Asian Economies **Figure 3.1.3**

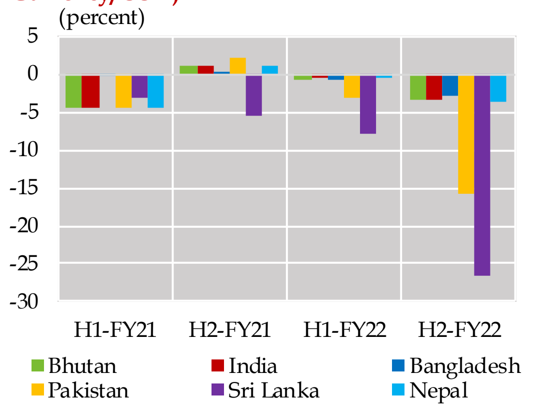


*UBT: Upper Band Target
Source: Central Bank Websites, Haver Analytics

expansion in economic activity, inflated private sector borrowing to Rs 1,612.1 billion in FY22, compared to Rs 766.2 billion in the same period last year. Likewise, the government borrowing needs from the banking system also remained at an elevated level. In addition, higher borrowings by the government commodity procurement agencies amid looming risk of supply shortages and an upward revision in support prices of wheat and sugarcane, also contributed to the expansion in the NDA during FY22.

NFA of the banking system continued to contract in all four quarters of FY22. Cumulatively, during FY22, the NFA fell by Rs 1,481.3 billion compared to an expansion of Rs 1,240.9 billion in the same period last year. The contraction mainly came from SBP's NFA that fell by Rs 1,493.8 billion during FY22, against an increase of Rs 1,111.9 billion in FY21. This reflects the impact of significant deterioration in the current account deficit during the year, which rose to US$ 17.4 billion in FY22

Exchange Rate (National Currency/USD) **Figure 3.1.4**



Source: Haver Analytics

Monetary AggregatesP **Table 3.2**

flow in billion Rupees

	Change in Stock		Growth		Contribution to M2 Growth	
	FY21	FY22	FY21	FY22	FY21	FY22
M2 (A+B)	3,389.7	3,305.3	16.2	13.6	16.2	13.6
A. NFA	1,240.9	-1,481.3	240.4	-204.4	5.9	-6.1
B. NDA	2,148.8	4,786.6	10.0	20.2	10.3	19.6
Budgetary borrowing	1,625.2	3,177.0	11.8	20.5	7.8	13.0
SBP	-1,206.3	-147.1	-18.4	-2.8	-5.8	-0.6
Scheduled banks	2,831.5	3,324.1	39.3	32.9	13.5	13.6
Commodity operations	90.6	229.7	11.1	25.4	0.4	0.9
Private sector credit	766.2	1,612.1	11.2	21.1	3.7	6.6
PSEs	-53.8	-43.3	-3.7	-3.1	-0.3	-0.2
Other items net	-311.0	-193.5	-20.8	-10.7	-1.5	-0.8
Reserve money	983.6	662.9	12.8	7.7	-	-
Currency in circulation	767.9	662.5	12.5	9.6	3.7	2.7
Deposits	2,595.0	2,615.0	17.6	15.0	12.4	10.7

P: provisional

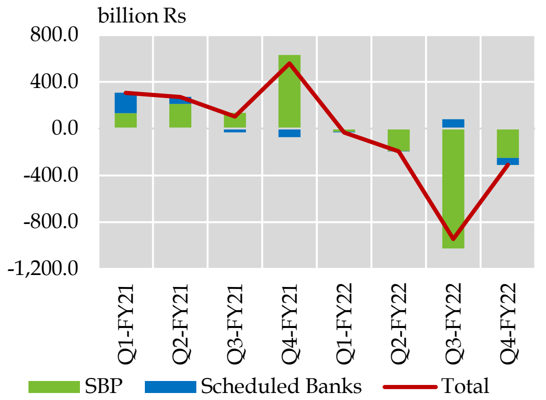
Source: State Bank of Pakistan

compared to only US$ 2.8 billion in last year. In addition, the scheduled repayments of external debt increased the gross financing requirements of the country. However, in the absence of adequate external inflows, these payments were partially financed by drawdown in SBP reserves during FY22.

Bulk of decline in the SBP reserves came in Q3-FY22 (**Figure 3.3**), because of large external debt repayments, leading to a sizeable contraction in SBP's NFA. In contrast, the NFA of commercial banks posted an increase of Rs 12.5 billion compared to an increase of Rs 129.0 billion in last year. This is partially on the back of a 6.1 percent YoY growth in workers' remittances during FY22 compared to last year and inflows in Roshan Digital Accounts.

On the liability-side, currency in circulation grew by 9.6 percent in FY22 compared to a growth of 12.5 percent in FY21. While commercial bank deposits posted a growth of 15.0 percent during FY22, compared to an increase of 17.6 percent in last year. It is important to recall here that during H1-FY22, the deposit growth maintained a positive

Quarterly Flows of NFA **Figure 3.3**



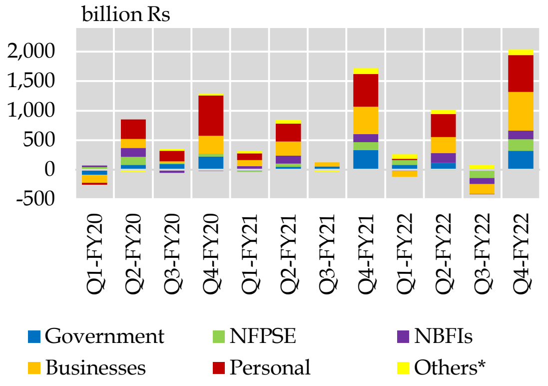
Source: State Bank of Pakistan

momentum, which helped in bringing the currency to deposit ratio to 38.2 percent in Dec 2021 – lowest level since December 2018.

However, in Q3-FY22, deposits posted a contraction as private businesses, PSEs and NBFIs recorded deposit withdrawals (**Figure 3.4**). Three main factors contributed to deposit withdrawals: (i) seasonal impact of a slowdown in deposit growth during the third quarter; (ii) political and policy uncertainty; and (iii) one-off deposit withdrawals driven by three PSEs in Q3-FY22.[5]

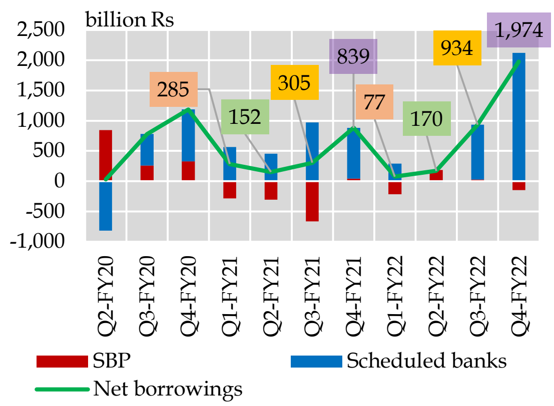
[5] Pakistan Petroleum Limited, Oil and Gas Development Co Limited and Government Holdings (Pvt) Limited posted deposit withdrawals for settlement of acquisition of stake in Tethyan Copper Company Pakistan (Pvt.)

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

However, from May 2022 onwards, the deposit mobilization regained its momentum. This, in turn lowered the currency to deposit ratio to 38.0 percent in June 2022. This was mainly on the back of seasonal factors and stability around the political situation relative to the preceding quarter. Besides, enabling polices for deposit mobilization such as removal of withholding tax on banking transactions at the start of FY22[6] and high interest rates also helped in improving the currency to deposit ratio.

Government Borrowings

The net budgetary borrowings from the banking system nearly doubled to Rs 3,177.0 billion during FY22 compared to Rs 1,625.2 billion in last year. At the start of the fiscal year, the budgetary borrowings from the banking system remained lower compared to last year. However, the government mainly relied on commercial banks to meet its financing requirements in accordance with the SBP Act Amendment (2022). A slight reduction in fiscal deficit during Q1-FY22, compared to same period last year, along with the ample inflow of external financing eased financing pressure on domestic banking system, during the first quarter of FY22.

As the year progressed, the government's reliance on banking system picked up pace. Specifically, in Q3-FY22, the government ended up borrowing Rs 934.1 billion, compared to Rs 304.9 billion in the same period last year. The momentum continued in the fourth quarter as well (**Figure 3.5**). This reflects the impact of a sizeable increase in the fiscal deficit from Q3-FY22 onwards. However, in the absence of adequate external loan inflows, increasing financing requirements elevated pressure on domestic banking system during H2-FY22.

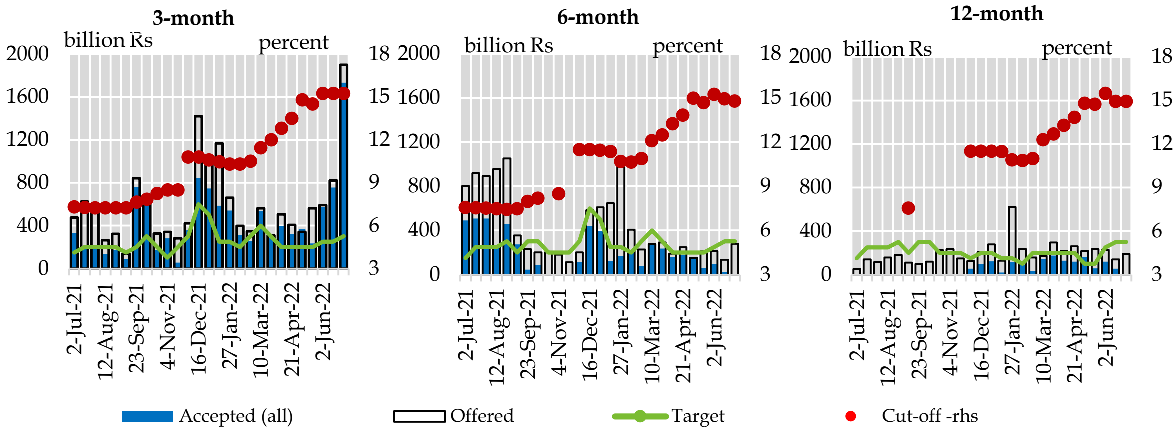
Primary Auctions

The government met its financing requirements mostly through floating rate PIBs during FY22. In overall terms, around 50 percent of the auction targets for government securities, on net of maturity basis, were assigned to floating rate PIBs, followed by 23 percent to MTBs, 20 percent to Sukuks and 6 percent to fixed rate PIBs during FY22.

During FY22, SBP shifted its monetary policy stance and increased the policy rate by a cumulative 675 bps through the course of year. Subsequent to the first rate hike in September 2021, short-term interest rates started to rise that were stable previously (**Figure 3.6**). Relative to short-term rates, the increase in long-term rates was less pronounced, leading to a decline in term premiums. On net of

Limited (TCCP). Source: www.ogdcl.com/sites/default/files/Nine%20Monthly%20Report%20for%20the%20Period%20Ended%2031%20March%202022.pdf
[6] Ministry of Finance, 2021. (www.download1.fbr.gov.pk/Docs/2021751375221891FinanceAct2021.pdf)

Auction Summary of T-bills during FY22 **Figure 3.6**



Source: State Bank of Pakistan

maturity basis, the targets for T-bills during H1-FY22 stood at Rs 772.6 billion. Keeping in view the pressures on short-term yields, the government reduced the net of maturity targets for T-bills during H2-FY22 to Rs 368.5 billion. For PIBs, the government assigned higher targets to floating rate PIBs on net of maturity basis compared to fixed rate PIBs during FY22

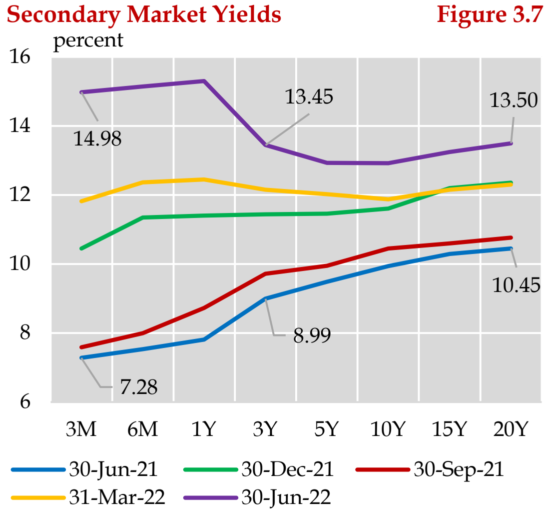
At the onset of the fiscal year FY22, with the expectation of bottoming out of interest rates, the market was more inclined towards shorter tenor MTBs and floating coupon PIBs. In H2-FY22, the market's interest revived in long-term fixed rate bonds to capitalize on flattening of the yield curve.

In the light of market's increasing appetite for fixed rate PIBs during second half of FY22, the government leveraged the opportunity by increasing its acceptances (net-of-maturity) as the year progressed (**Table 3.3). During** FY22, the government mobilized Rs 1839.8 billion from fixed coupon PIBs against the target of Rs 1,400.0 billion. Meanwhile, tightening of the monetary policy continued to attract market participants in the floating rate PIBs. The acceptances were in excess of the pre-auction target: Rs 2,722.3 billion were mobilized compared to the target of Rs 2,475.0 billion during the fiscal year FY22.

As far as the Shariah compliant instruments are concerned, at the start of the fiscal year, the market was mainly interested in Variable Rental Rate Sukuk (GIS-VRR) but as the rates increased sharply, the market's interest in fixed rental rate Sukuk (GIS-FRR) revived from Q2-FY22 onwards. On a cumulative basis, however, the total acceptances of GIS-VRR surpassed the acceptances of GIS-FRR**.** This trend was also in line with the government's higher target for GIS-VRR compared to GIS FRR.

In secondary market, the yields remained relatively stable in the beginning of fiscal year. However, pressures began to emerge in the second quarter subsequent to the first rate hike of the fiscal year **(Figure 3.7)**. As a result, the spread between the policy rate and 3-month T-bill rate continued to indicate a sharp increase on quarter-on-quarter basis, whereby, it stood around 115 bps in Q2, and from there rising to a high of 305 bps in April 2022. This was due

Secondary Market Yields **Figure 3.7**



Source: Financial Market Association of Pakistan

Auction Summary **Table 3.3**

billion Rupees

	Target	Maturity	Offered*	Accepted
		Treasury bills		
Q1-FY22	4,700.0	4,174.6	9,335.2	4,425.4
Q2-FY22	5,950.0	5,702.8	7,821.3	4,375.4
Q3-FY22	4,400.0	4,528.0	7,876.0	4,158.7
Q4-FY22	4,500.0	4,004.00	8,041.91	5,684.82
FY22	**19,550.0**	**18,409.4**	**33,074.4**	**18,644.3**
		Pakistan Investment Bonds		
Fixed Rate				
Q1-FY22	450.0	1,053.0	943.9	399.6
Q2-FY22	300.0	37.0	990.1	287.6
Q3-FY22	300.0	0.0	1,793.2	592.0
Q4-FY22	350.0	0.0	1,075.6	657.9
FY22	**1,400.0**	**1,090.0**	**4,802.8**	**1839.8**
Floating Rate				
Q1-FY22	495.0	0.0	1,325.6	913.1
Q2-FY22	650.0	0.0	1,004.9	606.2
Q3-FY22	600.0	0.0	990.1	794.4
Q4-FY22	700.0	0.0	1,038.6	480.3
FY22	**2,475.0**	0.0	**4,359.2**	**2,722.3**
		Ijarah Sukuk		
GIS-VRR				
Q1-FY22	0.0	0.0	0.0	0.0
Q2-FY22	300.0	0.0	585.4	507.2
Q3-FY22	225.0	0.0	313.0	201.7
Q4-FY22	225.0	0.0	514.9	430.7
FY22	**750.0**	0.0	**1,414.3**	**1,138.6**
GIS-FRR				
Q1-FY22	0.0	0.0	0.0	0.0
Q2-FY22	75.0	0.0	185.2	80.7
Q3-FY22	75.0	0.0	422.9	255.8
Q4-FY22	75.0	0.0	115.8	41.0
FY22	**250.0**	0.0	**746.8**	**374.7**

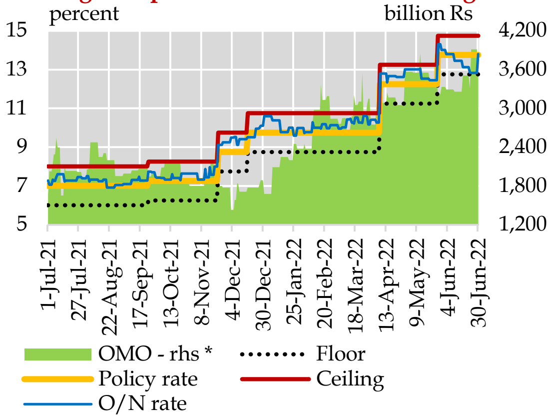
*competitive bids only

Source: State Bank of Pakistan

to a confluence of extraordinary developments such as: (i) expectations of interest rate hikes in the light of heightened inflationary concerns on account of commodity super cycle, Russia-Ukraine conflict, and pressures on exchange rate caused by rising CAD and monetary tightening by the central banks of advanced economies; (ii) increased reliance of the government on domestic banks amid lack of adequate financing from non-bank and external sources and increased financing needs due to widening of budget deficit; (iii) rising demand for private sector credit; iv) heightened policy uncertainty stemming from abolition of energy subsidies, and market expectations of the possibility of emergency monetary policy meetings also resulted in higher spreads**.** This sharp increase in the short-term yields led to the flattening of yield curve after September 2021 reflecting market's concerns of rising inflationary pressures and deterioration of the external sector position.

The continued uptrend in inflation, deterioration in the external account and rising uncertainty about prevailing economic conditions, pushed the yields of up to one-year papers above the long-term bonds from March 2022 onwards. During FY22, SBP increased the policy rate by a cumulative 675 bps, however, the 3M and 6M yields rallied by 739 bps and 716 bps respectively while 10Y and 15Y yields rose by 247 bps and 265 bps respectively.

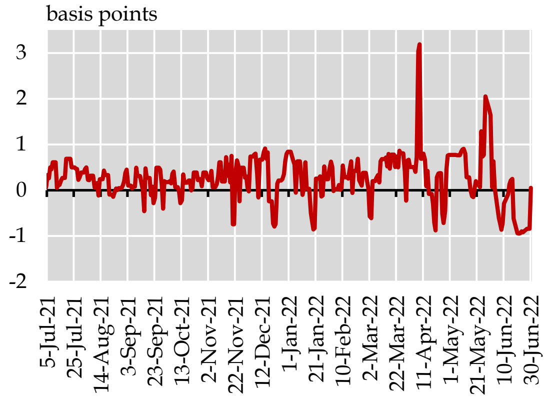
Overnight Repo Market **Figure 3.8**



* Outstanding

Source: State Bank of Pakistan

Deviations of Overnight Rates from the Policy Rate **Figure 3.9**



Source: State Bank of Pakistan

Interbank liquidity

During FY22, the liquidity conditions in interbank money market remained relatively strained compared to last year. The average outstanding OMOs soared from Rs 1,289.5 billion in FY21 to Rs 2,479.9 billion during the review period. On quarterly basis, the money market displayed signs of liquidity pressures throughout Q1-FY22. The SBP's money market injections, however, slowed down during Q2-FY22 as deposit mobilization gained momentum and government borrowings from commercial banks remained restrained on the back of availability of IMF SDR allocations for fiscal needs [7]. On the other hand, high private credit offtake and an increase in the cash reserve requirement partly offset these liquidity inflows in the system. The average outstanding OMO injections decreased as a result, falling to Rs 1,875.0 billion in Q2-FY22 from Rs 2,127.2 billion in the preceding quarter.

During H2-FY22, the government borrowing from scheduled banks increased steadily. Additionally, the demand for credit from the private sector and impact of foreign exchange operations of the SBP further tightened the liquidity conditions. With regard to the supply of funds, the deposits of scheduled banks fell in Q3-FY22. Subsequently, in Q4-FY22, the total deposits exhibited a seasonal growth, but its impact on liquidity of the banking system was more than offset by a sizable increase in the government borrowings. All of these factors combined, increased the average outstanding OMO stock to Rs 2,615.2 billion and Rs 3,349.2 billion in Q3-FY22 and Q4-FY22 respectively (**Figure 3.8)**

Meanwhile, the overnight money market remained more volatile during FY22, whereby the average deviation of overnight rates from the policy rate increased to 27 bps compared to 8 bps in FY21. The spread between the policy rate and the overnight rates continued to inch up in each quarter of the fiscal year, displaying signs of higher volatility in the money market. (**Figure 3.9**).

Key drivers of high money market rates were market's expectations of rate hikes in the light of rising inflationary pressures; rising budgetary borrowing needs of the government coupled with greater demand for credit from the private sector. In order to ease out heightened deviation of overnight rates from the policy rate and to further enhance the forward guidance given in December 2021's policy, eight 63-day OMO injections took place during Dec- Jun FY22 and one 77-day OMO injection on June 30, 2022.

[7] The country received an inflow of US$ 2.8 billion from the IMF under the global SDR allocations during Q1-FY22. In Q2-FY22, the SBP made an exceptional on-lending of this amount equivalent to Rs 474.9 billion to the government for financing of the vaccine drive and effective management of the Covid crisis.

In December 2021, SBP also introduced a Shariah Compliant Mudarabah Based Open Market Operations (Injections) for Islamic Banking Institutions (IBIs).[8] SBP has also offered a reverse repo/lending facility to IBIs. First Shariah compliant OMO auction was conducted on April 1, 2022. Subsequently, through regular weekly OMO auctions, the average Islamic OMO stock stood at Rs 467.3 billion in Q4-FY22. These injections will not only help the Islamic banking institutions in effectively managing their liquidity but it will also augment the liquidity of banking system at large. 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 expansion in economic activity and surge in the cost of production shored up private sector credit growth to 21.1 percent during FY22, compared to 11.2 percent last year (**Figure 3.10).** The increase in working capital loans was mainly responsible for this growth whereas, SBP's concessionary financing schemes (LTFF and TERF) boosted fixed investment during the period. However, in real terms (deflated by WPI), credit to private sector declined by 3.0 percent in FY22, compared to a growth of 1.6 percent last year.

The policy environment was mostly conducive for real economic activity at the start of the fiscal year. Specifically, fiscal policy support in the form of a large increase in development spending, continued tax incentives for industry, export and construction sectors, post pandemic revival in external demand, SBP's targets for housing and construction, capacity expansions under TERF, lagged impact of the accommodative monetary policy stance along with receding intensity of the pandemic were instrumental in driving the growth in LSM and hence private sector credit.

Factors Driving Credit Demand **Table 3.4**

percent change

	FY21	FY22
Increased cost of production		
Exchange rate (PKR/USD)	6.7	-23.1
Electricity tariffs	10.8	22.6
Domestic fuel prices	-1.0	37.8
Cotton prices	17.9	69.1
Construction input items	5.8	11.4
International palm oil prices	45.0	49.6
Economic activity expansion		
LSM	11.6	11.9
Power generation	6.9	9.6
Export volume index	6.0	15.0
Ready-made garments	-23.3	44.5
Sales		
Car sales	56.7	54.9
PoL sales	16.3	14.4
FMCGs	22.3	17.4
PSDP	11.2	33.5
Remittances	27.3	6.1

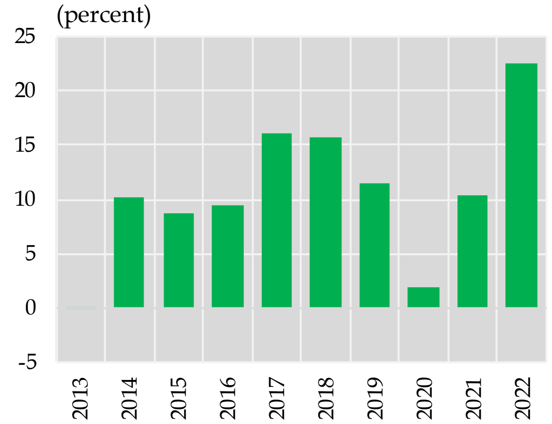
Source: SBP, MoF, PBS, APCMA, PAMA, OCAC, NEPRA, World Bank

As the year progressed, a confluence of factors inflated domestic cost of production that further augmented credit demand during FY22. First, a sharp increase in global commodity prices that translated into a terms of trade shock for the Pakistan's external account and resulted into 23.1 percent depreciation of PKR parity inflated prices of imported inputs **(Table 3.4).** Second, the government increased power tariffs during FY22, under the Circular Debt Management Plan (CDMP),[9] which further spurred cost of production and hence short term financing requirements of the firms.

Working capital loans rose by Rs 698.8 billion in FY22, compared to Rs 169.5 billion last year. Bulk of the increase came during Q2-FY22, as

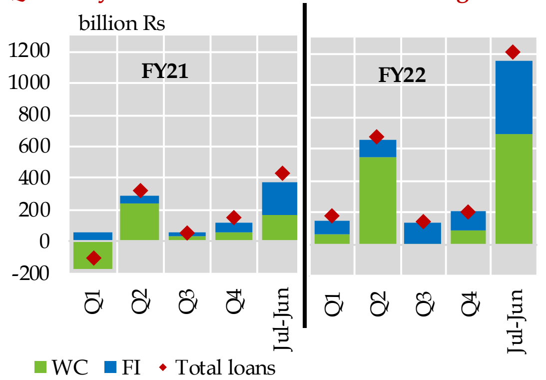
[8] DMMD Circular No. 25 of 2021, State Bank of Pakistan
[9] The CDMP envisaged adjustment in power tariffs to ensure cost recovery. IMF (2021). Second, Third, Fourth, And Fifth Reviews Under The Extended Arrangement Under The Extended Fund Facility And Request For Rephasing Of Access—Press Release; Staff Report; Staff Supplement, And Statement By The Executive Director For Pakistan. Washington D.C.: IMF

Private Sector Credit Growth **Figure 3.10**



Source: State Bank of Pakistan

Quarterly Credit Flows **Figure 3.11**



FI: Fixed Investment; WC: Working Capital

Source: State Bank of Pakistan

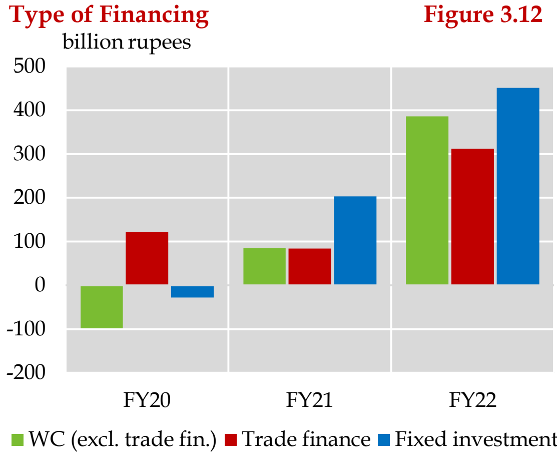
the impact of seasonal borrowing was compounded by higher input costs **(Figure 3.11).**

Export-oriented sector drove short-term financing requirements

Financing requirements of export-oriented businesses remained high due to an increase in export-led activity **(Figure 3.12).** This is in line with a rise in the overall export quantum index by 15.0 percent during FY22, compared to an increase of 6.0 percent last year.

Within manufacturing sector, textile dominated the overall borrowing with an offtake of Rs 237.7 billion during FY22, compared to a net retirement of Rs 42.6 billion last year. Most of this increase was concentrated in H1. During Q3-FY22, textile firms retired Rs 24.9 billion, compared to a retirement of Rs 18.2 billion in the same period last year. Textile businesses availed short-term financing to scale up exports, as reflected by higher quantum of exports of major textile products during the year. For instance, the export volume of ready-made garments posted a growth of 55.3 percent in FY22, compared to a decline of 23.3 percent last year. A host of support factors including post pandemic recovery of external demand, provision of tax and duty incentives and power tariff subsidy encouraged an increase in textile production during Jul-May FY22 **(Chapter 5).** In addition, a sharp uptrend in the domestic cotton prices further intensified the credit demand.

Type of Financing **Figure 3.12**



Source: State Bank of Pakistan

Pakistan's cotton production at 8.3 million bales during FY22 was not adequate to meet the sector demand, leading to 69.1 percent YoY jump in the cotton prices during the year.[10] To meet the domestic supply-demand gap the country imported around 4.6 million bales of raw cotton during FY22.[11] However, a large depreciation of PKR magnified the impact of around 57 percent jump in international cotton prices during FY22, strengthening the credit demand of the sector.

Non-textile sector borrowing remained significant

Sugar sector borrowed heavily

Sugar sector borrowed Rs 49.2 billion during FY22, compared to Rs 16.0 billion last year

[10] Source: The Karachi Cotton Association

[11] The mill sector consumption stood over 12 million bales on average during FY19-21.

Loans to Private Sector Businesses **Table 3.5**

(flow in billion Rupees)

	Total		Working Capital**		Fixed Investment	
	FY21	**FY22**	**FY21**	**FY22**	**FY21**	**FY22**
Private Sector Businesses	**441.4**	**1,215.5**	**169.5**	**698.8**	**203.5**	**451.4**
Manufacturing	258.2	903.0	111.1	610.0	141.5	279.6
Textile	26.3	364.1	-42.6	237.7	66.0	122.2
Sugar	24.1	47.3	16.0	49.2	7.9	-1.9
Basic iron and steel	28.0	44.2	20.4	32.4	7.5	11.8
Rice Processing	28.0	33.1	26.7	27.2	1.3	5.7
Paper & paper products	6.4	40.9	2.3	24.9	4.1	16.0
Motor vehicles	-15.8	29.9	-23.7	18.2	7.9	10.7
Basic pharmaceutical products	18.5	11.0	6.2	9.2	12.3	0.0
Cement, lime & plaster	0.2	42.6	-8.0	7.9	7.8	34.3
Vegetable & animal oils and fats	34.8	6.2	29.2	4.4	5.6	1.5
Refined petroleum	13.7	2.9	13.1	4.4	0.5	-1.5
Fertilizers	37.6	-1.5	41.0	-9.9	-3.4	8.4
Telecommunications	21.8	91.2	9.3	-4.3	12.4	95.4
Power gen, trans & dist.	66.5	58.8	7.2	17.2	59.7	41.7
Agriculture, forestry & fishing	12.1	34.2	17.0	19.2	-5.0	13.9
Mining & quarrying	-15.8	-3.1	-13.4	-8.6	-2.4	5.5
Transportation & storage	-5.9	13.5	-5.9	10.0	-0.1	2.9
Wholesale & retail trade	16.6	69.3	7.5	64.3	8.4	2.7
Real estate activities	1.5	6.2	-1.0	0.7	-2.7	0.7
Construction	24.9	33.9	3.0	-0.4	-16.7	-4.4

*Total loans in FY21 and FY22 include construction financing of Rs 68.4 billion and Rs 65.3 billion, as 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). Therefore, in this table, total loans may not be necessarily equal to the sum of working capital and fixed investment loans; ** working capital includes trade financing

Source: State Bank of Pakistan

(Table 3.5). After making loan repayments during the first quarter of FY22, sugar manufacturers significantly increased borrowings in the subsequent quarters, with the start of crushing season. This trend is explained by 9.6 percent increase in sugarcane production in the country to 88.8 million metric tons in FY22, against 81.0 million metric tons last year.

Rice processing loans inched up in line with rising rice production and exports

Rice processing firms borrowed Rs 27.2 billion during FY22, compared to an offtake of Rs 26.7 billion last year. After the usual seasonal loan retirement in Q1-FY22, the entire borrowing of the sector came from the second quarter, when rice-processing firms availed bank financing to scale-up exports. Particularly, 10.7 percent YoY increase in rice production during FY22 facilitated 35 percent YoY growth in rice export volumes during FY22.

Elevated commodity prices and PKR depreciation increased credit demand of sectors with import dependency

Borrowing by paper and products' manufacturing firms increase

The paper and paper products sector borrowed Rs 24.9 billion during FY22, compared to an increase of Rs 2.3 billion last year. Besides the exchange rate depreciation that inflated the prices of imported raw material, the higher borrowings came on the back of 10.6 percent YoY growth in the production of paper products during FY22, compared to 3.4 percent increase in production in the same period last year.

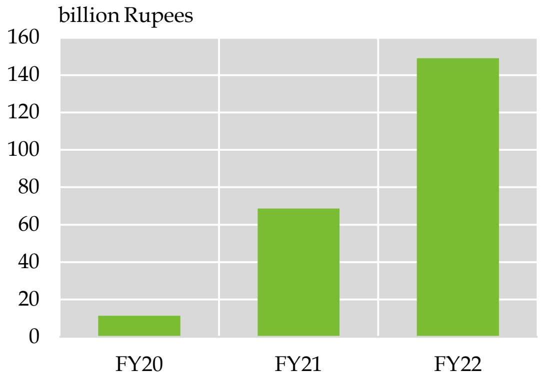
Credit requirement of wholesale and retail trade spikes because of rising petroleum product imports

Wholesale and retail trade availed short-term loans of Rs 64.3 billion during FY22, compared to an offtake of Rs 7.5 billion last year. This mainly reflects borrowings by major oil marketing companies (OMCs) to finance the import of petroleum products. The expansion in economic activity shored up demand for petroleum products in the country, as reflected by 14.4 percent growth in the sales of petroleum products during FY22. A large share of domestic requirements was met through imports, leading to 28.3 percent growth in import volume of petroleum products during FY22. The combination of higher import volume and prices contributed to a sizeable increase in borrowing by OMCs.

Refined petroleum benefited from the uptrend in prices

The petroleum refining sector benefitted from the increase in domestic demand and uptrend in international oil prices as reflected by higher profitability during Jul-Mar FY22 (**Figure 3.13**). The domestic industry is largely dependent on crude petroleum import for refining activity. While the crude petroleum import volume rose by 5.3 percent during FY22, the import unit prices surged by 71.3 percent during this period. A large PKR depreciation further magnified the effect of global price increase, raising the credit requirements of the sector. However, higher borrowings by the refined petroleum sector during H1-FY22 were almost offset by the retirements during H2-FY22, as better profitability and liquidity position helped the sector in retiring its short-term loans during the year.

Petroleum Refining (Profit after tax)*   Figure 3.13



*Financial statement analysis of selected non-financial listed companies during Jul-Mar
Source: State Bank of Pakistan

Fixed investment loans remained upbeat

The borrowings under fixed investment loans more than doubled to Rs 451.4 billion in FY22, compared to an offtake of Rs 203.5 billion last year. Private sector businesses availed SBP's concessionary financing schemes (LTFF and TERF) for machinery imports and capacity expansion**.** Out of the total approved amount of Rs 436 billion under TERF, Rs 340 billion (around 78 percent) were disbursed by end-June 2022 and Rs 201 billion during FY22.

Within the manufacturing sector, textile businesses dominated by borrowing Rs 122.2 billion during FY22, compared to an offtake of Rs 66.0 billion last year. Benefitting from LTFF and TERF, and the improvement in global demand, the textile sector borrowed long-term loans for capacity expansion leading to 29.3 percent YoY growth in the import of textile machinery during FY22.

Besides textile, cement was the second largest user of fixed investment loans in the manufacturing sector. This sector increased borrowings by Rs 34.3 billion during FY22, compared to Rs 7.8 billion last year. Almost the entire increase was concentrated in Q3-FY22, as major cement manufacturers resorted to bank financing for the procurement of machinery and capacity expansion.

Among non-manufacturing entities, the telecommunications sector availed higher fixed investment loans. The sector borrowed Rs 95.4 billion during FY22, compared to an increase of Rs 12.4 billion last year. The increase mainly represents financing facility availed by major cellular firms to finance their license renewal fee and the import of telecom machinery.

Meanwhile, power sector also availed bank financing, albeit lower than last year. The sector borrowed Rs 41.7 billion during FY22, compared to an offtake of 59.7 billion last year. Bulk of the increase came in the first quarter, as a major utility company borrowed in order to partially settle the parent company's loan owing to change of ownership.

Housing and construction finance remained vibrant

Construction allied industries' credit demand remains strong

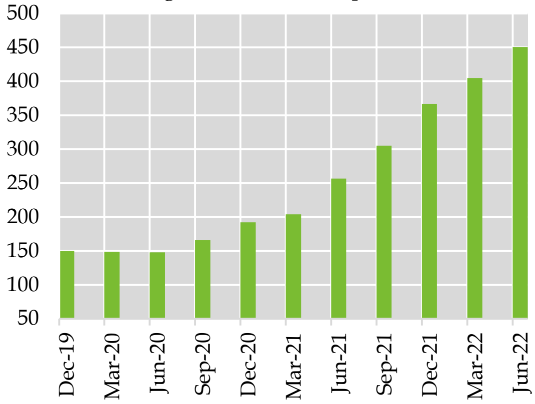
The working capital borrowing of iron and steel firms increased by Rs 32.4 billion during FY22, compared to an increase of Rs 20.4 billion last year. This increase reflect buoyant construction activity in the economy as evidenced from 16.3 percent growth in steel manufacturing during FY22 compared to an increase of 4.9 percent last year. In addition to the government's incentive package for the construction sector, sustained increase in workers' remittances was also instrumental in shoring up activity in the construction and allied industries.

The work on public sector projects also remained upbeat, as seen from 33.5 percent growth in PSDP expenditure by the government during FY22, compared to an 11.2 percent increase last year. Aside from the increase in construction, uptick in the cost of building materials was also partly responsible for the hike in credit requirements of the construction sector. With the government and SBP efforts to promote housing and construction finance, the outstanding stock of housing and construction portfolio almost doubled to Rs 450.8 billion in June 2022 from Rs 256.7 billion a year earlier **(Figure 3.14)**.[12]

Furthermore, the house building loans under consumer financing posted a sharp increase, which is attributed to the measures taken by government and SBP since FY21 in order to promote housing and construction financing in the country. Under the low-cost housing scheme, banks approved a total financing of Rs

Housing and Construction Finance **Figure 3.14**

Outstanding stock in billion Rupees



Source: State Bank of Pakistan

236.0 billion as of end-June 2022, out of which, Rs 99.8 billion were actually disbursed. With a view to further promote housing and construction finance, SBP announced targets for banks in July 2020 to increase their housing and construction finance portfolio to 5 percent of their domestic private sector advances by end-December 2021.[13] As of June 30, 2022, around 98 percent of the overall quarterly targets have been met.[14]

Consumer financing loses steam

FY22 differed from last year in two aspects. First, the policy environment was less

Consumer Financing **Table 3.6**

flow in billion Rupees	FY20	FY21	FY22
Total	**-7.9**	**174.0**	**192.2**
House building	-12.8	23.8	97.1
Auto loans	-4.3	97.0	59.7
Credit cards	-1.3	12.0	17.7
Personal loans	9.2	43.0	16.4
Consumers durable	1.3	-1.8	1.2

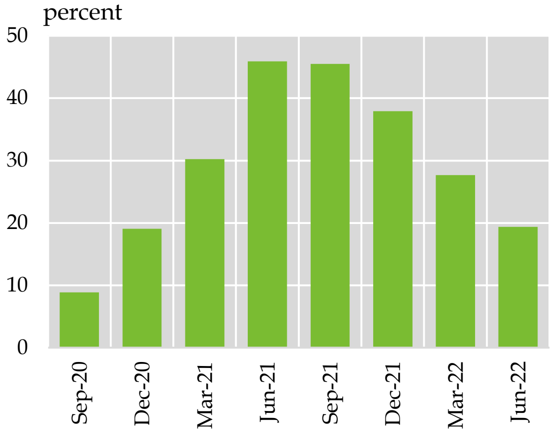
Source: State Bank of Pakistan

[12] Housing and construction portfolio includes: (i) loans to the private sector for construction financing purpose; (ii) house building loans under consumer financing; (iii) Direct financing to/or investments in bonds/TFCs/Sukuk issued by Real Estate Investment Trusts (REITs) Management Companies; (iv) Investments in units/shares issued by Real Estate Investment Trusts (REITs) subject to compliance with all other applicable regulations; (v) Investment in Sukuk/bonds issued by Pakistan Mortgage Refinance Company (PMRC), however, investment in PMRC's Sukuk/bonds and amount of refinancing availed from PMRC shall be netted off towards counting the mandatory target; and (vi) Financing to MFBs for extending housing finance to eligible borrowers to the extent of actual disbursements by MFBs.

[13] In December 2021, these targets were further increased to 7 percent of banks' domestic private sector advances, till December 2022.

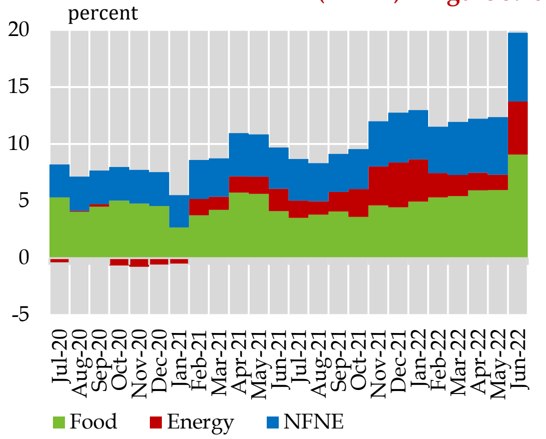
[14] Source: IH&SMEFD Circular No. 02 of 2022, dated January 21, 2022, available at: www.sbp.org.pk/smefd/circulars/2022/C2.htm

Auto Loans - YoY Growth **Figure 3.15**



Source: State Bank of Pakistan

YoY Inflation-Contribution (Urban) **Figure 3.16**



Source: Pakistan Bureau of Statistics

accommodative as compared to last year, with the policy rate up by 675 bps to 13.75 percent in June 2022, from 7.0 percent in June 2021. Second, SBP announced 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. On a cumulative basis, consumer loans inched up by Rs 192.2 billion during FY22, compared to an increase of Rs 174.0 billion last year **(Table 3.6).**

Auto loans decelerated

The auto loans slowed to Rs 59.7 billion in FY22, against Rs 97.0 billion last year. Besides higher interest rates, the slowdown is mainly attributed to two factors. First, the amendment in prudential regulations by SBP led to a gradual decline in the pace of auto financing during FY22. These amendments 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.[15]

Second, the government increased federal excise duty (FED) on locally manufactured or assembled cars during January 2022.[16] The impact of these regulatory measures was visible on auto financing, as the pace of loans continued to moderate during the review period **(Figure 3.15).** Besides, the automobile manufactures considerably increased car prices from Q2-FY22 onwards to pass on the impact of rising cost of production to consumers, as the exchange rate depreciation and surging freight charges pushed the cost of raw materials for the industry **(see inflation)**

3.4 Inflation

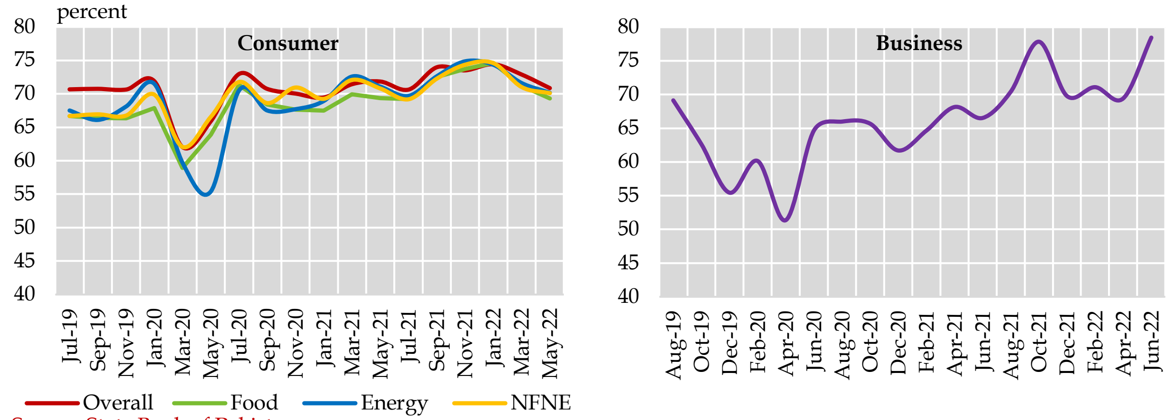
Inflationary pressures continued to strengthen during FY22, with National CPI (NCPI) inflation reaching 12.2 percent compared to 8.9 percent last year, exceeding the SBP's revised projection of 9-11 percent.[17] As the year progressed, price pressures intensified considerably, with NCPI inflation reaching 16.1 percent during Q4-FY22, against 10.6 percent in the same period last year. In particular, both headline and core inflation increased significantly in June 2022 to a 14-year high level **(Figure 3.16).** In terms of dispersion, inflation was broad-based across urban and rural sub-indices.

[15] Source: SBP press release, dated September 23, 2021.

[16] 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)

[17] State Bank of Pakistan projected average annual NCPI inflation to fall within the range of 7-9 percent in FY22, in July 2021. However, because of the realization of upside risks, indicated at the start of the year, actual inflation outturns during the initial months exceeded expectations. Hence, SBP upward revised the range of inflation projection for FY22 in the December 2021 MPC meeting

Inflation Expectations **Figure 3.17**



Source: State Bank of Pakistan

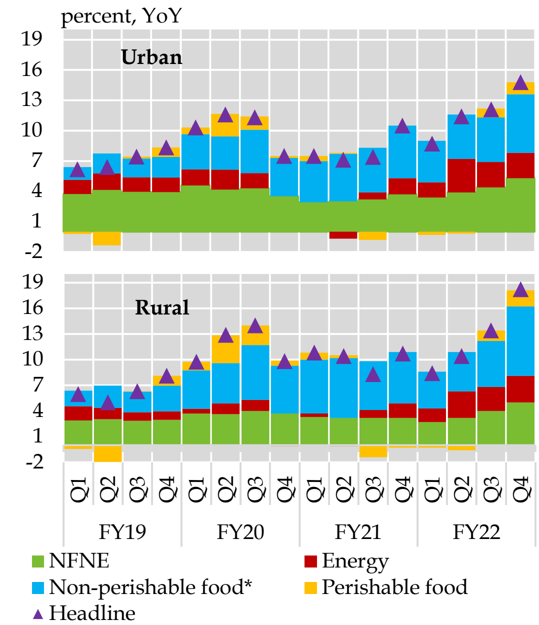
A host of factors were responsible for this upsurge in inflation during FY22. These included: (i) sustained increase in international commodity prices (energy, food and metal group) - on account of various factors such as supply chain disruptions; lingering supply shortages of commodities including edible oil, wheat, and maize; post-pandemic revival in global demand; and Russia-Ukraine conflict; (ii) impact of the unexpected fiscal stimulus in FY22 on domestic demand; (iii) rising income levels amid growth in economic activity; (iv) increase in power tariffs under the CDMP; and (v) a 23.1 percent depreciation in exchange rate during FY22. Reflecting these dynamics, inflation expectations edged up during FY22 as gauged by SBP-IBA Consumer Confidence Survey (CCS) and Business Confidence Survey (BCS) (**Figure 3.17**).[18]

In addition to these key factors, shortages in supplies of some perishable commodities such as tomatoes, fresh fruits and vegetables from Q3-FY22 onwards (**Figure 3.18)** and an increase in tax rates under the Supplementary Finance Act, also added to the inflationary pressures during the year. To contain the inflationary pressures, SBP reversed its policy stance and increased the policy rate by 675 bps during the year. However, given the lag involved in the transmission of monetary policy signals, inflation continued to remain at an elevated level during the year.

Food group was the chief source of inflation

Food group, particularly the non-perishable category, had around one-third contribution in inflation during FY22 (**Table 3.7**). Persistent increase in global food prices, alongside the supply-demand gaps in some commodities (in particular, milk and meat), fanned inflationary pressures in this group from Q3-FY22 onwards.[19]

Composition of CPI Inflation **Figure 3.18**



*Inclusive of alcohol beverages and readymade food
Source: Pakistan Bureau of Statistics & SBP calculations

[18] CCS was conducted in July 2021, September 2021, November 2021, January 2022, March 2022 and May 2022, whereas BCS was conducted in October 2021, December 2021, February 2022, April and June 2022.
[19] In Q3-FY22 and Q4-FY22, urban segment food inflation rose to 14.0 and 18.3 percent compared to 10.1 and 11.0 percent in Q1-FY22 and Q2-FY22, respectively.

Average CPI Inflation and Contribution **Table 3.7**

percent

Items	Urban						Rural					
	Wt.*	FY22		FY			Wt.*	FY22		FY		
		H1	H2	FY21	FY22	Cont.*		H1	H2	FY21	FY22	Cont.*
CPI	100.	10.1	13.5	8.1	11.8		100.0	9.4	15.8	10.0	12.6	
Food & non-alcoh. bev.	30.4	10.7	16.6	13.1	13.7	4.3	40.9	8.4	17.9	13.4	13.2	5.6
Perishable food items	4.5	-6.1	24.4	0.1	7.5	0.3	5.8	-7.2	30.6	-1.2	9.0	0.5
Non-perishable food	26.0	14.0	15.4	15.7	14.7	4.0	35.1	11.4	16.2	16.1	13.9	5.1
Wheat	0.6	7.4	14.3	31.2	10.9	0.1	3.5	5.0	13.3	31.6	9.2	0.4
Wheat flour	3.0	15.8	16.1	17.5	16	0.5	3.4	14.3	17.4	20.6	15.9	0.5
Cooking oil	1.1	42.9	55.9	15.0	49.9	0.6	0.6	46.3	62.9	19.3	55.4	0.4
Meat	2.0	16.8	23.9	11.7	20.7	0.5	1.7	17.3	23.8	11.5	21.0	0.4
Milk fresh	7.1	11.6	13.5	13.9	12.5	0.9	10.4	8.9	12.6	8.6	11.0	1.1
Veg. ghee	1.0	44.5	55.3	18.9	50.4	0.6	2.4	43.6	60.1	20.2	52.6	1.5
Pulse masoor	0.2	16.6	47.2	9.3	32.1	0.0	0.2	14.4	47.6	14.3	31.1	0.1
Tea	0.8	4.7	11.7	1.7	8.2	0.1	1.3	4.0	11.5	2.0	7.7	0.1
Clothing and ft.wear	8.0	10.4	11.2	9.9	10.8	0.9	9.5	8.9	11.0	10.3	9.9	1.0
Housing, Elec., Gas	27.0	10.8	8.4	5.7	9.6	2.5	18.5	13.8	13.1	7.5	13.5	2.3
Electricity charges	4.6	32.1	14.6	10.8	22.6	0.9	3.4	32.1	14.6	10.8	22.6	0.7
Furnish. & H.H equip.	4.1	9.8	13.9	7.2	11.9	0.5	4.1	10.6	16.7	10.2	13.7	0.5
Health	2.3	9.2	10.3	8.0	9.7	0.2	3.5	7.8	10.2	8.9	9.0	0.3
Transport	6.1	15.9	32.5	1.2	24.4	1.5	5.6	13.7	32.8	1.2	23.4	1.3
Motor fuel	2.9	26.3	48.0	-0.7	37.5	1.2	2.5	25.1	48.5	-0.9	37.1	1.0
Communication	2.4	3.6	2.8	0.9	3.2	0.1	2.0	0.9	1.0	0.4	1.0	0.0
Recreation & culture	1.7	6.7	9.8	3.3	8.3	0.1	1.4	7.5	11.1	6.5	9.3	0.1
Education	4.9	2.2	7.5	1.1	4.9	0.2	2.1	3.8	5.2	2.0	4.5	0.1
Restaurants and hotels	7.4	9.8	15.5	8.6	12.7	0.2	6.2	8.3	16.2	8.4	12.3	0.8
Misc. goods & services	4.8	8.9	11.9	10.7	10.4	0.5	5.0	8.3	13.4	12.8	10.9	0.6
NFNE	53.7	7.0	9.2	6.0	8.1	4.3	42.6	7.2	10.8	7.6	9.0	3.7

*wt. = weight and Cont.= Contribution for FY22

Source: Pakistan Bureau of Statistics and SBP calculations

Spike in international commodity prices was the key driver of inflationary pressures

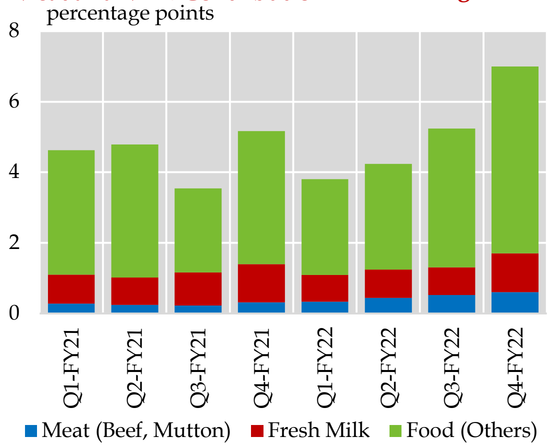
Around one-tenth of the CPI inflation in urban areas resulted from the direct impact of rising global food prices because of escalating transportation cost and an increase in cooking oil, ghee and tea prices and also PKR depreciation contributing to it. Emulating the uptrend in global commodity prices, food inflation increased more sharply in the second half of FY22, compared to the first half.

Particularly, edible oil together with vegetable ghee had the largest share in food inflation during the year. Palm oil and soybean prices have been on a steep rising trajectory since June 2020 due to unsupportive weather patterns in major crop growing areas, along with labor supply shortages amid Covid pandemic.[20] During FY22, price pressures reflected concerns over reduction in exports from Indonesia, the world's top palm oil exporter. March 2022 onwards, palm, soy and rapeseed oil prices rose further as sunflower seed oil export supplies went down amid the Russia-Ukraine conflict. Hence edible oil (cooking oil and vegetable ghee combined), lifted the urban CPI by 1.2 percentage points during the year.[21]

Prices of tea, having 2.3 percent share in urban food basket, also remained elevated from Q2-FY22 onwards amid international commodity price pressures. Since Kenya is the largest supplier of tea in the world, the introduction of government-backed minimum reserve price

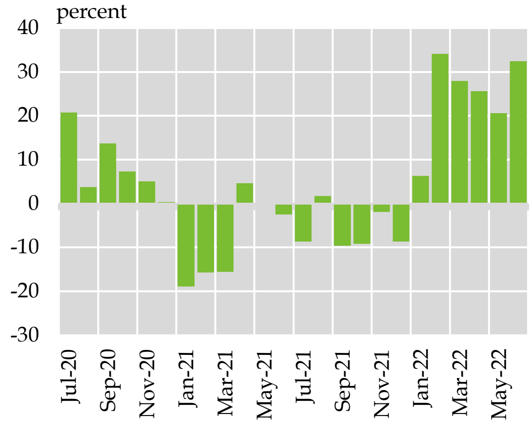
[20] FAO Food Price Index-December 2021
[21] FAO Food Price Index-March 2022

Meat and Milk Contribution **Figure 3.19**



Source: Pakistan Bureau of Statistics & SBP calculations

Perishable Food Group **Figure 3.20**



Source: Pakistan Bureau of Statistics

to safeguard small farmers in Kenya[22], further increased the global price pressures for this commodity during the year (**Table 3.7**). Increase in freight cost also fed into price buildup in various pulses. [23] Particularly, pulse masoor, pulse gram and gram whole registered double-digit inflation.

Role of supply-demand gaps and indirect cost in food inflation

Livestock (beef, mutton and milk) with around 27 percent contribution dominated in both urban and rural food inflation during the year **(Table 3.7).** Specifically, inflation in meat group is on a consistent rise and has been exceeding overall NCPI inflation for the past three years. This rising trend in prices mirrors supply-demand gaps in this category, because of both a weak domestic supply chain as well as a sizeable increase in export volume of meat over the years at the cost of domestic supplies.[24] In addition to these issues, lumpy skin diseases in animals, and a surge in direct and indirect energy cost (fuel and electricity tariffs), further pushed the food price index upward during FY22 (**Figure 3.19**).

Inflation in perishable food group remained quite volatile during the year (**Figure 3.20**). In the first half of the year, sufficient domestic supplies and adequate imports eased inflationary pressures. However, Q3-FY22 onwards, price pressures began to emerge in fresh fruits, tomatoes and vegetables. Supply constraints on account of relatively lower imports of some fruits and normalization of prices compared to low base of last year (such as onions and fresh vegetables) pulled up inflation in this group.[25] Aside from that, reliance on relatively expensive Iranian tomatoes to plug seasonal shortages further lifted prices in this group.[26]

Inflation in ready-made food group swelled to double-digits during FY22. Hike in the prices of inputs, such as wheat, edible oil, chicken, electricity and transportation cost was mainly responsible for this increase.

Inflation in wheat flour remained elevated during FY22, because of rise in the minimum

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[22] Source: Kenya Tea Development Agency, available at: www.ktdateas.com/wp-content/uploads/2021/08/STATEMENT-ON-INCREASE-IN-FARMERS-PAYMENT-23RD-AUGUST-2021.pdf

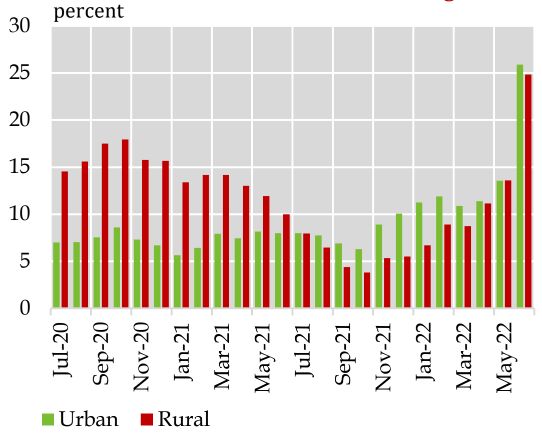
[23] Production of pulse mash declined by 11.6 percent in FY22 compared to previous year while production of pulse masoor remained same over last year. Furthermore, the average unit value of import of pulses has increased by 21.5 percent in FY22 on top of 10.5 percent in FY21.

[24] S. K. Jafri, S. Z. Hussain, A. Abbasi, (2022), "Analyzing Meat Export Potential in Pakistan", SBP Staff note 3/22.

[25] Sufficient local production of various perishable crops along with imports had flushed the market with vegetables during Q3-FY21.

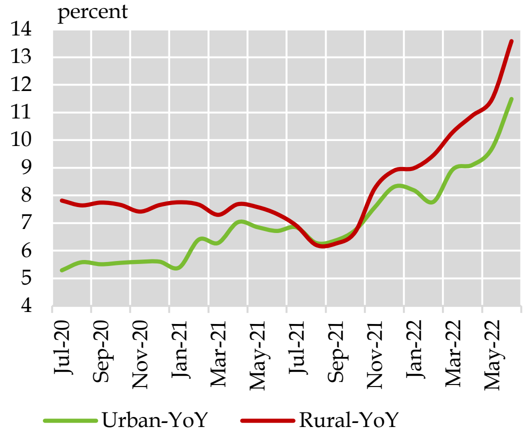
[26] Crop shortage was created by the gap amid ending of Baluchistan crop and arrival of Sindh crop.

Rice-Inflation **Figure 3.21**



Source: Pakistan Bureau of Statistics

NFNE-YoY Trends **Figure 3.22**



Source: Pakistan Bureau of Statistics

support price (MSP)[27] and increase in wheat issue price by procuring agencies.[28] On the other hand, relatively better supply situation compared to last year, muted wheat inflation during FY22. Wheat production rose by 8.9 percent during FY21, whereas the country also imported 2.2 million tons during FY22, to meet domestic supply requirements. However, prices started to increase from April 2022 onwards, because of expectation of wheat shortages during the upcoming year. [29] In addition, the increase in wheat support price for the new crop also contributed to price rise.[30]

After registering single digit inflation consecutively for the last 3 years, rice group posted double-digit inflation in FY22. The upswing in rice prices started from December 2021, whereas the prices for different rice varieties witnessed an unusual jump from May 2022 onwards, (**Figure 3.21**). Rice production witnessed a sizeable 10.7 percent increase during FY22. However, substantial expansion in export volume of the commodity created supply shortages in the domestic market.[31] The prospects for Pakistan's rice exports improved because of higher prices of Indian rice and depreciation of PKR, making exports more competitive. In this background, hoarding practices by various suppliers, as suggested by the anecdotal evidence, also contributed to rising local prices in the last quarter.

NFNE inflation intensified

The inflationary pressures in the non-food-non-energy (NFNE) group increased during FY22. Specifically, NFNE inflation began to intensify from the start of H2-FY22 compared to H1-FY22 as well as the same period last year, for both urban and rural areas, with double-digit expansion in Q4-FY22 (**Figure 3.22).** In terms of dispersion, for the year under review, the increase was broad-based **(Figure 3.23**). Meanwhile, area wise information reveals that rural NFNE remained higher than urban NFNE inflation almost throughout FY22.

Heightened NFNE inflation encompassed both demand and cost-push pressures (**Figure 3.24**). The impact of expansionary fiscal policy in FY22 supported the momentum of real economic activity and hence domestic demand

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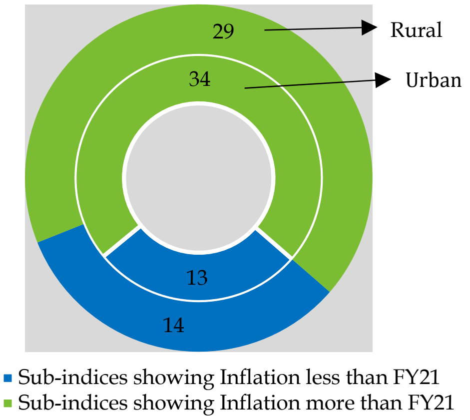
[27] The Economic Coordination Committee increased the MSP of wheat crop FY21 to Rs 1,800 per 40 Kg from 1400 per 40 kg previously. Sindh unilaterally increased it to Rs 2,000 per 40 Kg.
[28] Minimum release price was raised from Rs 1,475 to Rs 1,950, to withdraw subsidies as per decision made in ECC's meeting held in September 2021.
[29]According to provisional estimates, wheat production during FY22 stood at 26.4 million tons, against 27.5 million tons last year and a target of 28.9 million tons. Source: Economic Survey 2021-22
[30] The ECC increased the wheat support price at Rs2, 200 per 40 kg for procuring 6.9 million metric tons of wheat in May 2022.
[31] The growth in volume of rice exports was 35 percent during FY22 as compared to 11.2 percent decline in FY21.

NFNE Inflation Dispersion-FY22 **Figure 3.23**



Source: Pakistan Bureau of Statistics

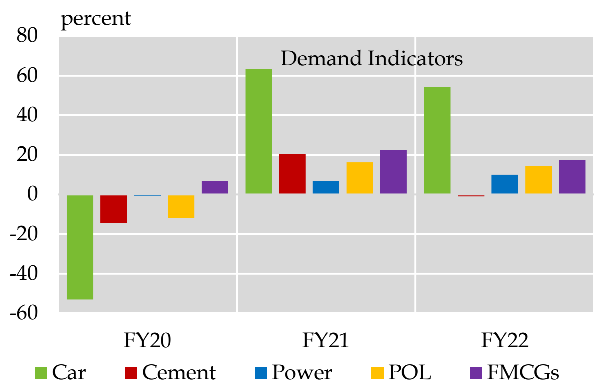
during the year. Similarly, export sector also benefitted from policy support and sustained increase in external demand. The real GDP witnessed a broad based expansion of 6 percent in FY22. The notable growth in industry was also visible in improvement in corporate profitability (**Figure 3.25**). Rural incomes also strengthened during FY22 amid improvement in kharif crop performance. Hence, the sustained increase in economic activity boosted income levels in the economy. In addition, strong inflows of remittances in FY22 also spurred incomes of various households in the economy (**Figure 3.25**). [32] On the other hand, a multitude of factors propelled cost of production during the year.

These included rising global commodity prices of palm oil, fuels and raw materials, (**Figure 3.25**) uptick in labor wages, depreciation of PKR, and low domestic cotton production amid elevated international prices of the commodity. In addition to cost-driven factors, NFNE inflation also carried the effect of a low base (revision in some service charges in Budget FY2021-22 for instance school fees and transport fares, after providing Covid-related relief, relatively low demand in services amid Covid pandemic last year) during the period under review.

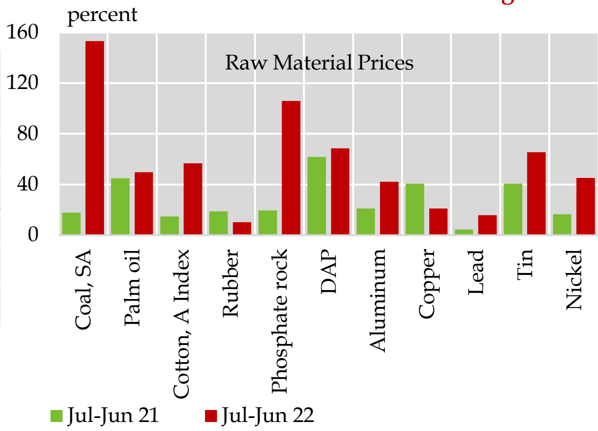
Within the urban and rural NFNE group, both the services and goods indices moved up in FY22; however, the impact of the latter was more pronounced **(Figure 3.26).** Housing rent index significantly increased during FY22 mainly on account of low base (Covid-related low activity), however, the contribution slightly declined from Q3-FY22 onwards.

Around one-third of NFNE inflation came from the categories of clothing and footwear, plastic products, household equipment, medicines, motor vehicles and textbooks, reflecting rising cost of imported inputs as well as improved demand.[33] For instance, in the case of clothing, cotton being an essential input for textile industry, played an important

Demand & Cost Pressures **Figure 3.24**



Sources: PAMA, APCMA, OCAC, NEPRA,Corporate reports (various issues)

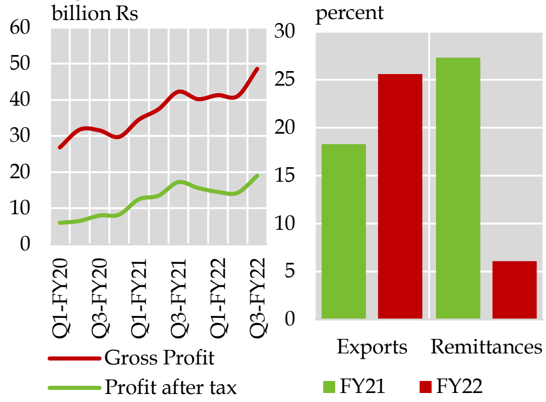


Source: World Bank

[32] The government increased the MSP of wheat crop in FY21 to Rs 1,800 per 40 Kg from 1,400 per 40 kg previously. Sindh unilaterally increased it to Rs 2,000 per 40 Kg. Similarly, the Punjab and Sindh government set the sugarcane support price at Rs 225 and Rs 250 per maund for the FY22 season, compared to Rs 200 and Rs 202 last year respectively.

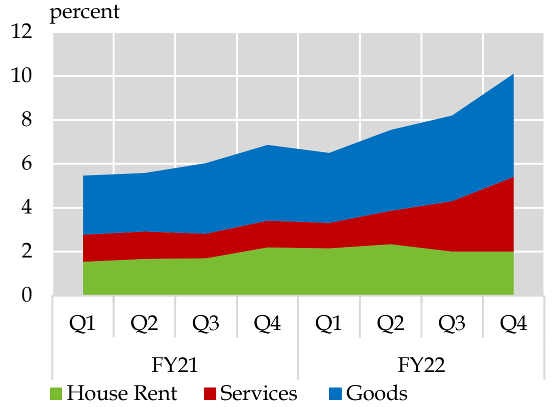
[33] International cotton, plastic and paper prices are on rising trajectory amid disruption in the global supply chains.

Rising Income Levels **Figure 3.25**



Source: 25 listed companies and State Bank of Pakistan

NFNE Inflation-Contribution (Urban) **Figure 3.26**



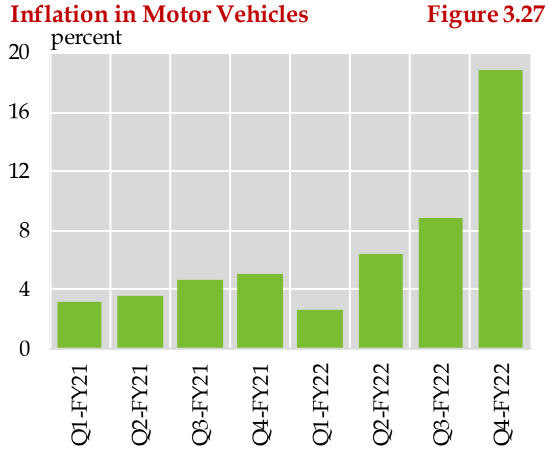
Source: Pakistan Bureau of Statistics

role in determining the price trend during the year. Price of cotton observed persistent increase during FY22 as lower than target local production gave rise to demand-supply gap. In order to meet the requirements of local textile industry, the country had to rely on imports at a time when international prices of cotton were also peaking. In the same vein, strong demand as gauged from 13 percent YoY increase in sales of textile made-ups during Jul-Mar FY22, further accentuated price pressures.

Similarly, reflecting the impact of both rising demand and global prices, construction input index contributed around 10 percent to urban core inflation during FY22. On the demand side, various tax incentives for the construction sector under *Mera Pakistan Mera Ghar* (MPMG), increase in development spending on infrastructure projects, alongside the sustained inflow of remittance and release of pent up demand stoked up price pressures in construction material. The rise in iron bar prices added further impetus to increase in construction input index. [34]

In the motor vehicles group, reduction in FED announced in budget FY2021-22 eased inflation in Q1-FY22 (**Figure 3.27**). [35] However, automobile manufactures considerably increased prices from Q2-FY22 onwards to pass on the impact of rising cost of production to consumers. Exchange rate depreciation and surging freight charges inflated the cost of raw materials for the industry. In addition, the government also increased FED rates on cars in January 2022 via Finance Supplementary Bill.[36] Despite the increase in prices, the sales of cars edged up by around 54 percent during FY22 indicating persistent demand pressures. Drugs and medicines also saw double digit inflation in FY22 compared to FY21. The index started inching up from Q3-FY22 onwards on account of rising cost of production including

Inflation in Motor Vehicles **Figure 3.27**



Source: Pakistan Bureau of Statistics

[34] IMF index of base metals rose by 14.8 percent in FY22 over and above 40.3 percent growth observed in FY21.
[35] FED was eliminated on up to 1000cc cars, whereas sales tax was reduced from 17 percent to 12.5 percent for up to 1000cc cars.
[36] In Finance Supplementary Bill (2022) passed in January 2022, application of reduced rate of sales tax of 12.5 percent on locally manufactured and assembled cars of cylinder capacity was applicable up to 850cc. FED was increased from 2.5 percent to 5.0 percent from 1000cc above car variants.

Heat Map-Urban Services **Figure 3.28**

	Wt.	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22
Services	**16.3**	**4.5**	**3.6**	**3.4**	**3.3**	**5.6**	**6.3**	**6.3**	**6.8**	**9.7**	**10.0**	**10.9**	**13.5**
Tailoring	1.1	8.3	8.2	7.9	7.8	8.4	9.0	9.1	8.9	9.1	11.0	11.9	13.2
Cleaning & laundrin	0.1	12.9	8.0	4.6	4.5	21.2	20.4	22.0	22.9	23.6	23.6	27.4	30.3
Const. wage rates	0.2	5.5	4.1	3.6	7.4	8.0	7.9	8.0	7.8	7.8	9.3	10.1	11.7
Water supply	0.5	10.5	6.6	4.1	4.0	3.9	3.3	3.6	3.6	4.1	4.3	5.2	5.0
Garbage collection	0.1	4.4	3.8	4.7	4.7	5.1	4.9	4.8	5.4	5.2	5.3	12.9	13.8
Household servant	0.8	2.2	2.4	2.5	2.3	3.0	3.0	4.0	9.4	9.4	9.8	11.8	12.3
Doc. clinic fee	0.4	11.9	11.3	8.9	6.3	7.7	8.7	8.9	8.8	9.1	10.2	10.2	11.0
Dental services	0.0	8.5	7.1	6.3	6.1	6.4	7.2	4.9	6.6	5.7	5.7	6.3	7.0
Medical tests	0.2	6.4	5.1	3.5	3.8	4.1	5.0	5.0	7.5	7.2	9.1	8.9	11.0
Hospitals services	0.6	8.2	7.9	9.0	8.2	8.1	8.8	9.1	10.1	8.8	8.5	8.5	7.5
Mechanical services	0.4	5.3	5.6	5.1	4.9	9.8	8.8	9.9	12.6	13.2	14.1	15.0	16.2
Motor vehicle tax	0.0	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6
Transport services	1.7	8.5	-0.8	-0.3	0.8	12.2	12.7	11.6	9.3	19.1	20.3	22.4	34.8
Postal services	0.0	11.1	11.1	11.1	10.9	10.9	10.9	8.4	2.1	2.1	1.4	1.4	13.6
Comm. Services	1.9	2.5	2.5	2.5	2.5	2.0	2.0	2.0	2.0	2.0	0.3	0.3	0.3
Recreation & culture	0.6	3.7	3.5	3.2	3.3	3.4	4.7	4.6	4.2	4.2	4.2	5.0	8.3
Education	4.9	1.5	2.5	2.2	1.9	2.2	2.6	3.0	3.2	9.0	9.2	10.4	10.4
Marriage Hall	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
Accommodation	0.1	0.8	0.5	4.4	4.0	4.4	4.9	4.9	4.9	8.4	8.4	8.5	8.4
Personal Grooming	0.8	7.8	6.4	6.4	6.5	7.1	7.7	6.0	10.7	10.6	10.7	10.9	14.2

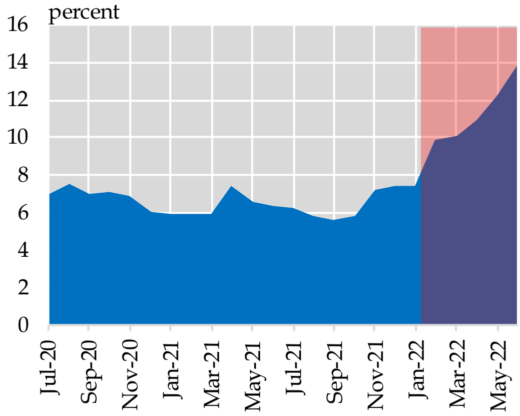
Red: Highest; Yellow: Lowest

Source: Pakistan Bureau of Statistics

labor, electricity, raw material and PKR depreciation. Particularly, in February 2022, Drug Regulatory Authority of Pakistan (DRAP) increased the maximum retail price (MRP) of paracetamol used in various medicines due to growing cost of raw material from China.[37] Disaggregated health CPI data reveals that price spikes were observed across both nutraceuticals as well as lifesaving drugs following the rise in the price of basic salt.

In the services group, surge in inflation is partly reflected by the base effect, as prices are higher compared to the levels prevailing last year, amid Covid-related relief provided by the government in the FY21 budget (**Figure 3.28).**[38] In transport services, inflation increased amid higher fuel prices during FY22. Similarly, communication services such as courier charges also depicted rise in transportation costs. The impact of the strengthening economic activities, and rising fuel prices, on YoY basis, was also visible in recreation and cultural services, as inflation increased in the group. Also, low-end wage pressures (construction wage rates, tailoring, cleaning and laundering, personal grooming, garbage collection, household servant and mechanical services), having 3.5 weight in the urban CPI basket, remained elevated on YoY basis from Q2-FY22 onwards, owing to lower base effect. This also partially reflects the effect of overall inflationary pressures in the economy, which have started to appear in the incomes of the low-income households (**Figure 3.29**).

Low-end Wage Rates (Urban) **Figure 3.29**

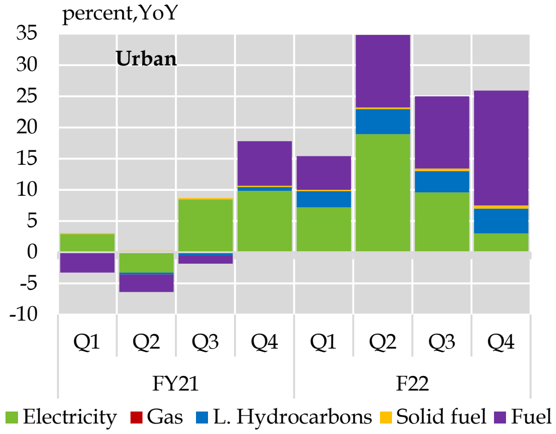


Source: Pakistan Bureau of Statistics

[37] Press release of Standing Committee on National Health Services, Regulations and Coordination, February 09, 2022. (www.na.gov.pk/en/pressrelease_detail.php?id=4732)

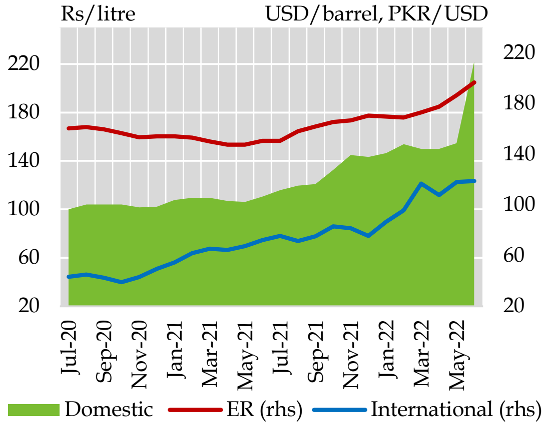
[38] For instance, tax on motor vehicles and charges of postal services were raised in FY22 budget.

Composition of Energy Inflation **Figure 3.30**



Source: Pakistan Bureau of Statistics

Fuel Prices **Figure 3.31**



Source: PBS, SBP and Bloomberg

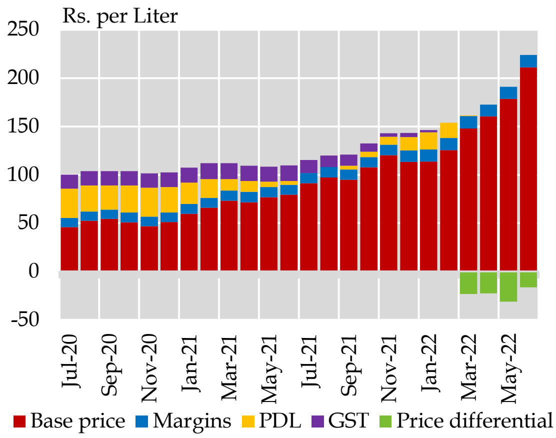
Energy inflation surged significantly

Unabated increase in international commodity prices and hike in electricity tariffs under the CDMP were the primary drivers of energy inflation during FY22 (**Figure 3.30**). A large 23.1 percent depreciation of PKR further fueled inflationary pressures during the year. In overall terms, energy inflation index jumped by 25.3 percent and 24.8 percent in urban and rural areas, respectively, in FY22 against an increase of 4.1 percent and 6.6 percent last year.

The motor fuel index inflated by around 37 percent during FY22 both in urban and rural areas, lifting headline inflation over 1.0 percentage points during the year. To provide relief to domestic consumers against the uptrend in global commodity prices (**Figure 3.31),**[39] the government had reduced GST and PDL on fuel for most part of the year (**Figure 3.32**). In March 2022, the government reduced the prices of petroleum products and electricity to save consumers from the fallout of Ukraine crisis. Despite these relief measures, the urban fuel price index rose by 30.2 percent during Jul-Mar FY22. Particularly, fuel prices came under pressure from Q3-FY22 onwards with the highest direct impact of 1.0 percentage points to total inflation in Q3-FY22 (on YoY basis). However, the government had to gradually roll back the relief package from May 27, 2022 in the face of rising vulnerabilities in external account and financing difficulties. With the phase out of subsidy, fuel inflation index further rose by 58.5 percent, contributing 1.8 percentage points to the headline inflation (14.8 percent) during Q4-FY22.

Similarly, elevated commodity prices, necessitated revision in Fuel Cost Adjustment (FCA) in the electricity charges under the CDMP. With this revision, electricity tariffs index edged up by 22.6 percent in FY22, both

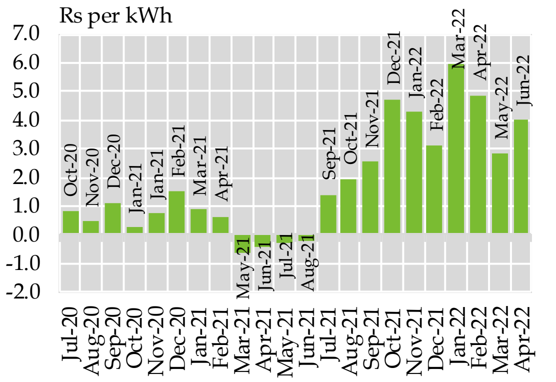
Composition of Petrol Price **Figure 3.32**



Source: Oil & Gas Regulatory Authority

[39] International fuel prices have been on rising trajectory amid post Covid demand revival and production constraints by US on account of hurricane related supply disruptions. Oil production and refining activity in the US was impacted by Hurricane Ida which made landfall near Port Fourchon, Louisiana by end-August 2021. According to the estimates by the U.S. Department of Interior's Bureau of Safety and Environmental Enforcement, around 96 percent of crude oil production in the U.S. federally administered areas of the Gulf of Mexico was disturbed.

Fuel Charge Adjustment **Figure 3.33**



Note: x-axis indicate months for which fuel charge adjustment was charged
Source: National Electric Power Regulatory Authority

in urban and rural segments, which translated into 1 percentage point contribution to headline inflation for the year. With major revision in FCA, inflation in this group rose significantly in Q2-FY22 amid low base effect (**Figure 3.33**). However, the impact remained slightly limited in Q4-FY22 on account of government's incentive package where the base tariff was reduced by Rs 5. Commercial consumers having sanctioned load less than 5 kW and domestic non-Time of Use (TOU) consumers having monthly consumption up-to 700 units (except lifeline consumes) were eligible for PM Relief Package announced in February 2022.[40] The impact of this respite persisted till June 2022, before the relief was withdrawn.

In addition, the category of Liquefied Hydrocarbons (LPG) was another major contributor to energy inflation. LPG index rose by 67.1 percent and 54.1 percent in urban and rural areas, respectively, during FY22, compared to 1.8 percent and 2.9 percent decline in FY21. Following the rising trend in international prices, domestic LPG prices are under pressure since July 2021. The post pandemic recovery in global demand that was not matched by a corresponding increase in supplies as well as the Ukraine-Russia conflict drove the international LPG prices to record high levels in FY22.

[40] Source: www.nepra.org.pk