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# INDIA DEVELOPMENT UPDATE

*Navigating the storm*

*November 2022*

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## Preface

The India Development Update (IDU) reports on recent developments in India's economy and places these in a longer-term and global context. Based on these developments and on policy changes over the period, the IDU updates the outlook for India's economy.

The report is prepared by a team from the Macroeconomics, Trade and Investment (MTI) Global Practice, under the guidance of Auguste Tano Kouame (Country Director), Mathew Verghis (Regional Director), and Hoon Sahib Soh (Practice Manager). The team is led by Dhruv Sharma (Senior Economist) and comprises Kanika Bhatnagar, Tanvir Malik, Emilia Skrok, Mohini Gupta, Franz Ulrich Ruch, Nayantara Sarma, Venkat Bhargav Sreedhara, Dhruv Jain, Rishabh Choudhary and Kavya Singh. The report benefited from in-depth feedback and inputs from Pedro Olinto, Nora Carina Dihel and Tushar Arora.

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# 1. Executive Summary

**Economic activity increased through the first half of FY22/23 amid increasingly challenging global conditions**

India faced a challenging external environment following the Russia-Ukraine war with elevated crude oil and commodity prices, persistent global supply disruptions (caused by the global shortage of shipping containers and supply bottlenecks) and tighter financing conditions. This created domestic inflationary pressures. Notwithstanding these challenges, real GDP grew by 6.3 percent year-on-year (y-o-y) in Q2 FY22/23 (July-September), driven by strong private consumption and investment. The government's focus on bolstering capital expenditure also supported domestic demand in the first half of FY 22/23. In addition, India overtook the UK to become the fifth largest economy in the world. High frequency indicators indicate continued robust growth of domestic demand at the start of Q3 FY22/23.

**Elevated inflation triggered a policy response from the**

Headline CPI inflation averaged 7.2 percent y-o-y in the first half of FY22/23, remaining above the upper bound of the RBI's tolerance range (2-6 percent). Inflation accelerated significantly during February-April 2022 due to higher prices of fuel and food, which constitute about half of the inflation basket, and elevated core inflation. Inflation peaked at 7.8 percent in April. Although inflation has decelerated since April, it has remained elevated, above 6 percent. Domestic fuel prices have declined by more than 8 percent since May as the government cut excise duties on fuel. Food prices have been elevated as well but they are on a downward trajectory. The government has taken supply-side measures to push down food inflation via easing disruptions in supply of fertilizers to farmers, export restrictions on wheat and rice products, and reduction in import duties on edible oils.

**The central bank hiked policy interest rates rapidly**

Starting with an out-of-cycle announcement in May 2022, the Monetary Policy Committee (MPC) hiked the repo rate by 190 basis points in four successive meetings in response to persistently high inflation. The nominal rate increased from 4 percent to 5.9 percent in September, but the real interest rate remains negative at around -1 percent. The RBI also undertook monetary and liquidity measures to rein in inflation while continuing to support economic growth.

**Higher commodity prices caused the trade deficit to balloon in Q1 FY22/23**

The Ukraine-Russia conflict and associated sanctions caused global oil prices to increase to over USD 112.4 per barrel in March 2022. As a result, crude oil imports increased by over 90 percent in nominal terms y-o-y in Q1 FY22/23 and the merchandise trade deficit widened to 8.2 percent of GDP. Over the same period, export growth was lower and non-oil exports contracted marginally, compared to the preceding quarter.

**Policy interventions and stable FDI inflows have sheltered India from volatility in foreign portfolio flows**

A narrowing interest rate differential with advanced economies and financial market uncertainty caused net portfolio outflows to reach USD 35.7 billion in the nine months since September 2021. However, the outflows were reversed partially during July-August 2022, due to swift policy intervention and India's stronger macroeconomic fundamentals compared with other emerging market economies (EMEs) and resilience in the face of global headwinds. The RBI's successful foreign exchange interventions, increased interest rates, and increased inflows of foreign investment provided support to the rupee. While it depreciated by almost 10 percent against the US dollar in year-to-date terms by October, on average, it performed relatively better than other EMEs.

**Despite a widening current-account deficit, India is well positioned to meet its growing external financing needs**

Overall, the current account balance had turned into a deficit of 1.1 percent of GDP in FY21/22 from a surplus in the previous year, and the deficit widened further in FY22/23 due to surging imports. Thus far, India's current account balance remains adequately financed by robust net capital inflows. Foreign Direct Investment (FDI) inflows—the main source of financing for the current account deficit—were stable around 1.6 percent of GDP in Q1 FY22/23, up from an average of 1.2 percent in the previous fiscal year.

This has partially offset the initial net outflows of foreign portfolio investment, which was 1.7 percent of GDP. The slowdown in AEs could also position India as a more attractive alternative investment destination. The government is also expected to introduce new production-linked investment incentives and fiscal measures to encourage foreign investment in various sectors of the economy. With the RBI raising policy rates, the widening interest-rate differential with the US Federal Reserve could also help prevent capital outflows.

**The strength of the economic rebound combined with higher inflation have driven a large increase in tax receipts, creating fiscal space to mitigate the external shock**

High nominal GDP growth in Q1 supported strong growth in revenue collection, especially Goods and Services Tax (GST), despite tax cuts on fuel. Spending increased more than planned due to expanded fertilizer subsidies and food subsidies for vulnerable households in response to the commodity price shock. The central government's revenues increased by 9.5 percent and spending by 12.2 percent. As a result, the fiscal deficit touched 37.3 percent of the annual target in H1 FY22/23, above the 35 percent of the same half last year. This masked strong growth in gross tax revenues, which increased by 17.6 percent y-o-y and resulted in larger transfers to the state governments. Budget execution has also improved with capital spending increasing by 35 percent. The central government is on track to meet its FY22/23 fiscal deficit target of 6.4 percent of GDP and the general government deficit is projected to decline to 9.6 percent from 10.3 percent in FY21/22 and 13.3 percent in FY20/21. Public debt is also projected to decline to 84.3 percent of GDP in FY22/23, from a peak of 87.6 percent in FY20/21.

**Real GDP growth is expected to slow in FY22/23 amid a deteriorating external environment**

The global outlook has become increasingly uncertain and a rapid deterioration in growth prospects since the start of 2022, coupled with high inflation and tightening financial conditions, has increased fears of an impending global recession. Although the Indian economy has been remarkably resilient to the deteriorating external environment, the persistent headwinds from the global economy are expected to weigh on growth forecasts. Growth in first half of FY22/23 was supported by solid domestic demand and despite a challenging external environment the exports performed better than expected. Real GDP growth is expected to decline to 6.9 percent in FY22/23 (compared to 8.7 percent in FY21/22) due to the impact of a tightening global monetary policy cycle, slowing global growth and elevated commodity prices but India is still projected to be one of the fastest growing major economies. High inflation and increased interest rates will weigh on households' real disposable income and dampen outlook for business investment. In addition, the deterioration of the global demand outlook is also set to weigh on companies' investment decisions and may delay the realization of investment plans. On the external front, the income elasticity of India's exports is high and thus exports are susceptible to the global growth slowdown. India is also a net importer of crude oil and elevated global commodity prices will continue to weigh on domestic inflation, constraining domestic activity. However, the recent decline in commodity prices may dampen inflationary pressures.

**Global conditions are challenging and growing more acute**

Like most emerging market economies, India has been affected by challenging global developments such as higher global commodity prices, monetary policy tightening and a growth slowdown in major economies. The direct impact has been visible in growing external imbalances, particularly the widening merchandise trade deficit and current-account deficit, depreciation pressures on the Indian Rupee and the depletion of foreign exchange reserves. On the domestic front, the global spillovers have led to higher inflation and tighter financing conditions. All of these have combined to depress domestic demand from both consumption and investment.

**US monetary policy and the deteriorating global outlook have important implications for India's economy**

Unexpected changes in US monetary policy affect India's economy through four main channels - exchange rate adjustment, financing costs, changing risk perceptions and trade impacts. Models based on historical data indicate that an unexpected hike in US monetary policy rate leads to a significant increase in bond yields, depreciation of the exchange rate, a rising risk premium, and equity price losses over the course of the following quarter. However, the effects on economic activity and prices are less significant and short lived. A modelling exercise for the impact of a growth slowdown in the US, China and the euro area shows that a 1 percentage point decline in the US GDP growth rate is associated with a 0.4 percentage point decline in India's GDP growth. India's growth also declines by 0.4 percentage points in response to a 1 percentage point decline in the euro area's GDP growth and 0.2 percentage points for a 1 percentage point decline in China's GDP growth. However, for other EMEs, impacts from the US, euro area, and China are at least 1.5 times larger than for India.

**However, India is better placed than most emerging market economies to deal with global headwinds**

India's economy is relatively more insulated from global spillovers than other emerging markets. India is less exposed to international trade flows and relies on its large domestic market. India's external position has also improved considerably over the last decade. The current account is adequately financed by stable foreign direct investment inflows and a solid cushion of foreign exchange reserves. At over USD 500 billion, India has one of the largest holdings of international reserves in the world. While the reserves have declined by about 13 percent this year, they still provide close to eight months of import cover, based on total imports over the last four quarters (from Q3 FY21/22 to Q2 FY22/23). As a result, pressure on the Indian rupee has been muted compared to other EMEs. India's financial sector has also deepened considerably over the years but is still recovering from a long period of stress and thus lags relative to other EMEs in terms of capital adequacy and NPL ratios. Corporate and household debt has declined and remains benign but public debt has increased sharply, as a share of GDP — driven by the pandemic. However, increased market borrowing has improved the transparency and credibility of fiscal policy. The government has also diversified the investor base for government securities. In addition, inflation targeting by the RBI has helped to anchor inflation expectations and price stability has improved.

## 2. Recent Economic Developments

### a. Real sector and inflation

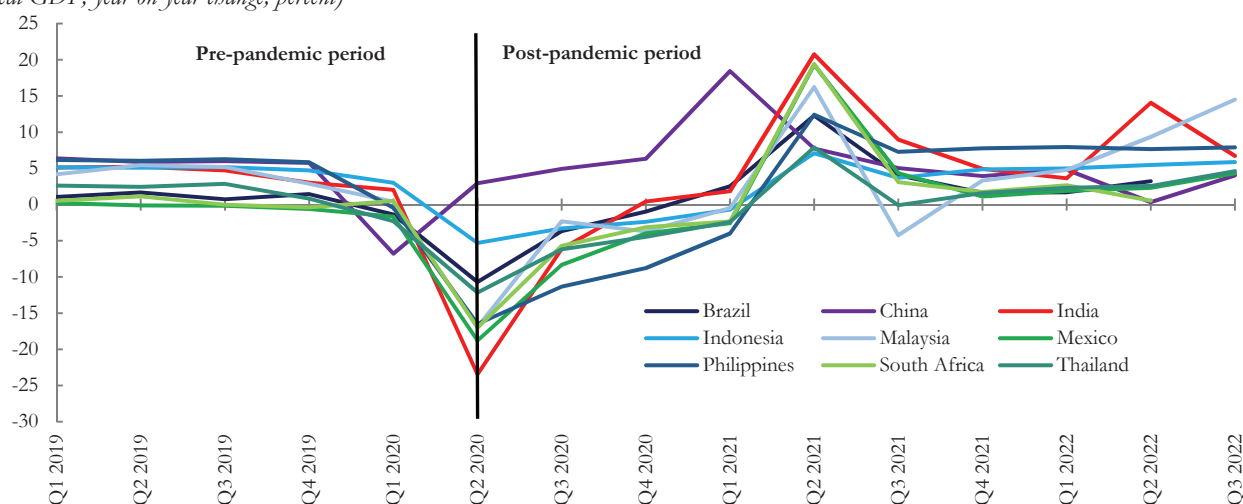
#### Growth & labor market

##### Economic activity has been strong despite challenging global and domestic conditions

The Indian economy has proved remarkably resilient to the ongoing impacts of the deteriorating external environment, growing faster than most major EMEs (Figure 2.1). Economic activity strengthened in the first half of FY22/23 (April 2022- March 2023) despite challenging global growth conditions caused by slowing growth in major trade partners (such as the US, UK and China), the Russia-Ukraine war and persistent global supply disruptions (caused by the global shortage of shipping containers and supply bottlenecks). In contrast to the Indian economy, which continued to grow rapidly in July-September 2022, the emerging market economies of China, Mexico and Brazil decelerated. As has been the case throughout the pandemic, the Indian economy benefited from effective Government support that helped to sustain household incomes.

**Figure 2.1: India's economy grew faster than most major emerging market economies in Q2 2022\***

(Real GDP, year-on-year change, percent)



Source: CEIC and World Bank staff calculations.

Note: \*The graph refers to quarters in calendar year terms.

##### Real GDP grew robustly in Q2 FY22/22 (July-September) bolstered by private consumption and investment

Real GDP grew 6.3 percent year-on-year (y-o-y) in Q2 FY22/23, boosted by solid domestic demand. Private consumption and investment grew strongly, despite high inflation (caused by the Russia-Ukraine war and high global commodity prices) and rising borrowing costs. In fact, a sharp rise in private consumption (bolstered by festive-season spending in September) offset a contraction in government consumption caused by fiscal consolidation and the gradual withdrawal of pandemic-related stimulus. Investment growth remained robust on the back of the government's capex push, despite global uncertainty and rising costs amid monetary policy normalization<sup>1</sup>. However, unfavorable global conditions weighed on India's external sector with import growth outpacing export growth significantly (Figure 2.2).

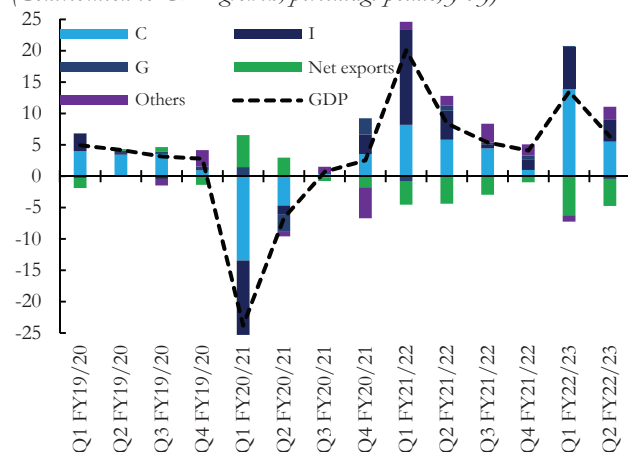
<sup>1</sup> The full impact of monetary policy normalization on investment will come through with a lag.

**GDP grew at a robust pace relative to the pre-pandemic period**

A comparison of India's economy prior to the pandemic shows that most components of GDP grew firmly in Q2 FY22/23. Real GDP grew by 7.6 percent compared to the pre-pandemic level in Q2 FY19/20 (Figure 2.3), bolstered by strong growth in private consumption and investment. Net exports dragged growth, with exports growth reaching nearly 26 percent while imports surged by 45.1 percent. As a result, net exports weighed negatively on overall growth.

**Figure 2.2: Growth was supported by domestic demand in Q2 FY22/23**

(Contribution to GDP growth, percentage points, y-o-y)



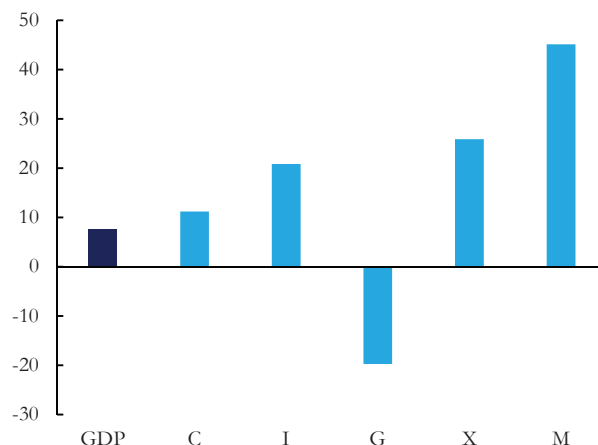
Source: NSO, CEIC and World Bank staff calculations.

Note: Imports grew more than exports which resulted in net exports contributing negatively to overall GDP (Figure 2.3).

C stands for private consumption, I for investment, G for government consumption, X for total exports and M for total imports.

**Figure 2.3: Net exports dragged growth relative to pre-pandemic levels in Q2 FY21/22**

(percentage change compared to Q2 FY19/20)



**On the supply side, growth was driven by a sharp increase in services output...**

The services sector expanded 9.3 percent y-o-y (compared to 10.5 percent in Q2 FY22/23) on the back of solid growth in business services, contact-intensive segments of retail trade, transport, hotels and restaurants, and public administration. This boosted Gross Value Added (GVA, which excludes subsidies and taxes on commodities), which grew 5.6 percent in Q2 FY22/23 (Figure 2.4). Growth in the agriculture sector accelerated to 4.6 percent, from 3.2 percent y-o-y in Q2 FY 21/22, despite the erratic monsoon season and export restrictions on wheat and rice products. However, industrial output contracted by 0.8 percent on the back of sharp contractions in manufacturing and mining output. The manufacturing sector continued to be adversely impacted by slowing external demand, global supply chain disruptions and higher input costs. High input costs hurt margins in most sub-sectors of manufacturing, resulting in a 4.3 percent y-o-y contraction in output. Meanwhile, the levy of export duties on iron and steel products amid weak global demand led to a contraction in mining output by nearly 3 percent. However, the decline in manufacturing and mining sectors were partially offset by growth in construction sector (up 6.6 percent), which benefitted from public investment in infrastructure, and electricity (up 5.6 percent), amid strengthening household consumption.

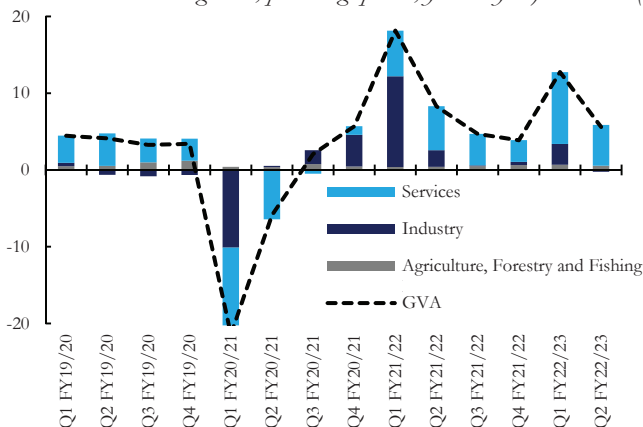
**...but high-contact services activity remains muted relative to pre-pandemic levels**

Although there was an uptick in services in y-o-y terms, the figures mask persistent weaknesses within certain segments of the sector. For instance, although business services and public administration have bounced back from pre-pandemic lows, high-contact services, such as hospitality, trade and recreation, grew by only 2.1 percent compared to the pre-pandemic period of Q2 FY19/20 (Figure 2.5). However, the logistics and hospitality sectors continued to recover.



**Figure 2.4: Growth in services in Q2 FY22/23 reflects a low base of comparison...**

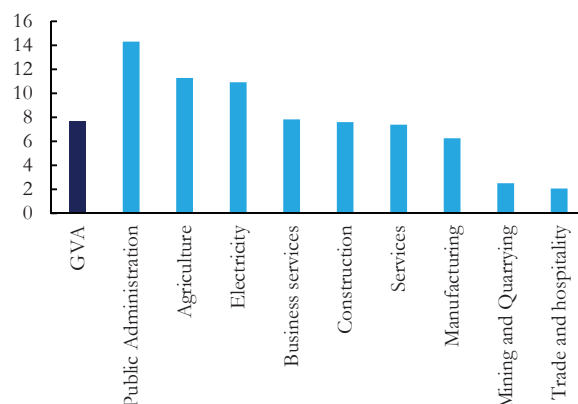
(Contribution to GDP growth, percentage points, year-on-year)



Source: NSO, CEIC and World Bank staff calculations.

**Figure 2.5: ...but growth in the trade and hospitality sector remains muted**

(Percent change compared to Q2 FY19/20)

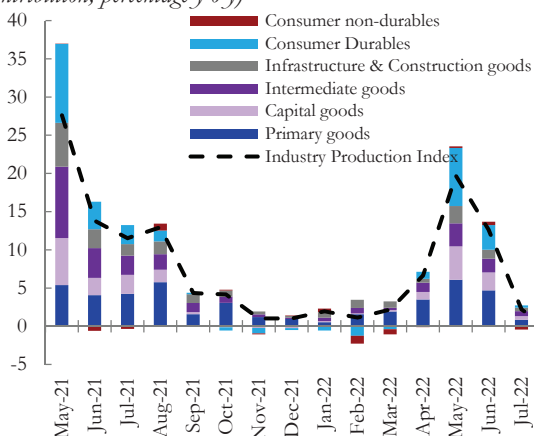


**Economic activity continued to grow strongly at the start of Q3 FY22/23**

High frequency indicators show that private consumption and investment continued to grow strongly in October. Electricity generation and freight traffic remained firmly above pre-pandemic levels. Similarly, passenger vehicle sales and air passenger traffic grew sharply (albeit still below pre-pandemic levels). This trend in consumption was mirrored in the sustained rise in GST E-way bills—which record the inter and intra-state movement of goods worth more than INR 50,000—by 5 percent y-o-y. Although industrial activity continued to expand, growth in the sector decelerated since the first quarter, influenced by supply-chain disruptions, and slowing global growth (particularly in the US, euro area and China). The Index of Industrial Production (IIP, a proxy for industrial activity, Figure 2.6) grew 3.1 percent y-o-y in September, at a slower rate than in the same period last year (when industrial production expanded by 4.2 percent). Nevertheless, bank credit to the private sector continued to grow firmly, with double-digit growth in credit to the non-food industrial sector and services firms. Total outstanding credit grew 16 percent, despite rising financing costs, signaling strengthening economic activity.

**Figure 2.6: Industrial production has picked up from the moderation in H2 FY21/22**

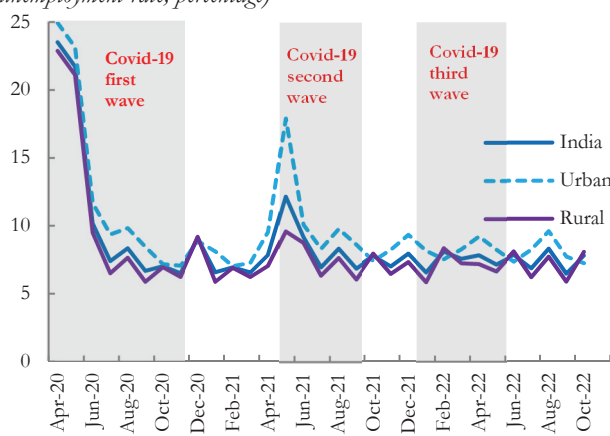
(contribution, percentage y-o-y)



Source: NSO and World Bank staff calculations.

**Figure 2.7: The unemployment rate hovers slightly above the pre-pandemic average**

(unemployment rate, percentage)



Source: CMIE and World Bank staff calculations.

### Box 2.1: Improving health and accelerating credit growth in lending institutions

**Asset quality and capital adequacy have improved over the last few quarters, even after the withdrawal of Covid-19 relief measures.** Non-performing loans (NPLs) were 5.9 percent of total commercial bank assets in March 2022, compared to 7.4 percent in March 2021. Capital adequacy (the capital to risk-weighted assets ratio) improved to 16.7 percent in March 2022, compared to 16.0 percent in March 2021. However, any fresh deterioration in asset quality in the MSME and retails sectors, where 2.4 percent of the total portfolio had been restructured under the Covid-19 restructuring framework, could lead to increased stress. Public sector banks (PSBs) have a higher share of restructured MSME accounts (3.2 percent), as compared to private banks (1.8 percent).

**Credit growth for banks and NBFCs has revived in the past few months, on the back of economic recovery.** Credit growth for banks accelerated to 16.9 percent y-o-y in September 2022, compared to 6.8 percent in September 2021. Large non-banking financial companies (NBFCs) have also reported an increase in their assets under management (AUM) between 28-31 percent for Q1 FY22/23. While a large part of this increase can be explained by a low base effect from the previous year, other reasons include a possible shift to bank borrowings from capital markets due to rising interest rates, strong demand for retail loans, and higher working capital requirements owing to elevated inflation. While retail loans continue to report high growth at 19.6 percent y-o-y, loans to large firms also grew by 7.9 percent, compared to a decline of 2.1 percent in September 2021. Following four policy rate increases by the RBI, for a total of 190 basis points, over the past four months, lending rates for banks have started increasing for both PSBs and private banks, which could impact credit growth going forward. Simultaneously, the RBI has been working on reducing the liquidity surplus in the banking system which has gone down to around INR 500 billion, as compared to INR 7 trillion at the beginning of 2022.

**While bank credit growth has accelerated, debt market issuances have declined.** Corporate bond issuances between April-October 2022 fell 2.3 percent to INR 3.08 trillion, from INR 3.14 trillion in April-October 2021. Issuances of commercial papers (CPs) have also declined significantly. Firms are relying on bank lending as borrowing costs in debt markets have increased at a much faster pace compared to bank lending rates.

**The RBI has addressed regulatory gaps related to areas such as digital lending and climate finance.** The RBI issued guidelines on setting up of digital banking units (DBUs) by commercial banks. The DBUs will facilitate easier access to digital financial services for consumers in a cost-effective manner. Also, the RBI has strengthened the regulatory framework for digital lending by introducing fresh guidelines and reiterating some of the extant instructions in September 2022. The guidelines lay down norms for direct disbursement and repayment of loans without any passthrough /pool account of any third party, consumer protection, and data privacy, among others. These guidelines may increase operational costs of fintech firms in the short term, as they rework their business models to comply with the stricter guidelines, but they are expected to lead to more transparent fintech products and services in the future. The central bank has also issued a discussion paper on climate risks and sustainable finance which highlights the best practices for integrating climate risk into regulated entities' business, risk management and governance.

**The NBFC sector will begin complying with a revised scale based regulatory framework from October 2022, which addresses regulatory arbitrage between NBFCs and banks, leading to a more stable financial sector.** The stricter capital and asset classification norms could impact profitability and require large NBFCs to raise capital in the short term. Market reports suggest that NPLs of the NBFCs could increase by around 80-100 bps due to the revised guidelines, as asset classification norms for NBFCs are now aligned with those for banks.

## **The labor market has recovered unevenly**

On the labor market front, improvements have been uneven. Enrollments to the employment provident fund—a proxy for formal employment—continued to increase in Q2 FY22/23 (following a slight dip in Q1), driven by firms in the services sector. Subscribers to the employee provident fund reached 1.7 million in September—an all-time high. Higher enrollments were seen primarily in the services sector, including human resources agencies, private security agencies, small contractors, trading-commercial establishment and schools as well as in construction. In addition, the unemployment rate dipped from the year’s peak of 8.3 percent in August to 7.8 percent in October driven by a sustained fall in urban unemployment (Figure 2.7). However, there has been slight rise in unemployment in rural areas; demand for work under the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) still remained above pre-pandemic levels (although it has steadily declined since the beginning of the year).

### **Box 2.2: Uneven recovery in the labor market**

#### **Labor market conditions recovered in 2021 from a sharp pandemic-driven rise in unemployment in 2020.**

After spiking to 20.8 percent in April-June 2020 as a result of the nationwide lockdown, the urban unemployment rate moderated to 8.7 percent in the last quarter of CY 2021 (October-December 2021)<sup>2</sup>. Rural unemployment<sup>3</sup>, which is traditionally lower than in urban areas, declined from an average of 7.8 percent to 6.5 percent in July 2020-June 2021 (Figure 2.8, left). In addition, women’s labor force participation improved slightly from 26.3 percent to 27.5 percent in 2021 (Figure 2.8, right).

**Employment outcomes benefited from the widespread administration of Covid-19 vaccines, which facilitated increased mobility and consequently, economic activity.** The Consumer Pyramids Household Survey (CPHS) shows that the increase in vaccinations led to a rise in employment<sup>4</sup>. This likely reflects a combination of both labor supply and demand factors. However, the administration of vaccines was uneven—within households, male members, employed or prime working-age adults were more likely to get priority for vaccination. Anecdotal evidence suggests that employers preferred new recruits to be vaccinated and enterprises displayed signs stating that all staff were vaccinated. This suggests that ‘prime working’ adults received greater returns from vaccination.

**However, improvements in employment outcomes mask underlying scarring and changing employment conditions.** Analysis shows that fresh entrants to the labor force (15-24 years) were most vulnerable to longer-term job loss<sup>5</sup> and women were more likely than men to experience prolonged unemployment. Such a long-term effect of labor market shocks is known as ‘scarring’. In addition, workers in both rural and urban areas transitioned into self-employment, which resulted in an increase in the share of self-employment in total employment by 3.7 and 1.9 percentage points, respectively. At the same time the share of more secure, salaried workers in total employment declined by 2.8 percentage points between 2018-19 and 2020-21 (Figure 2.9).

**Real wage growth has been sluggish.** PLFS does not allow for wage-monitoring at the monthly level, hence daily rural agricultural and non-agricultural wages for men from the Labour Bureau are used. Average daily wages dropped in rural areas after the lockdowns in 2020 and after some volatility, recovered to pre-pandemic levels in the first quarter of CY 2021. Nonetheless, when annualized the growth in real earnings has been sluggish, averaging around 4, -2 and -1 percent for casual-wage, self-employed and salaried workers, respectively.

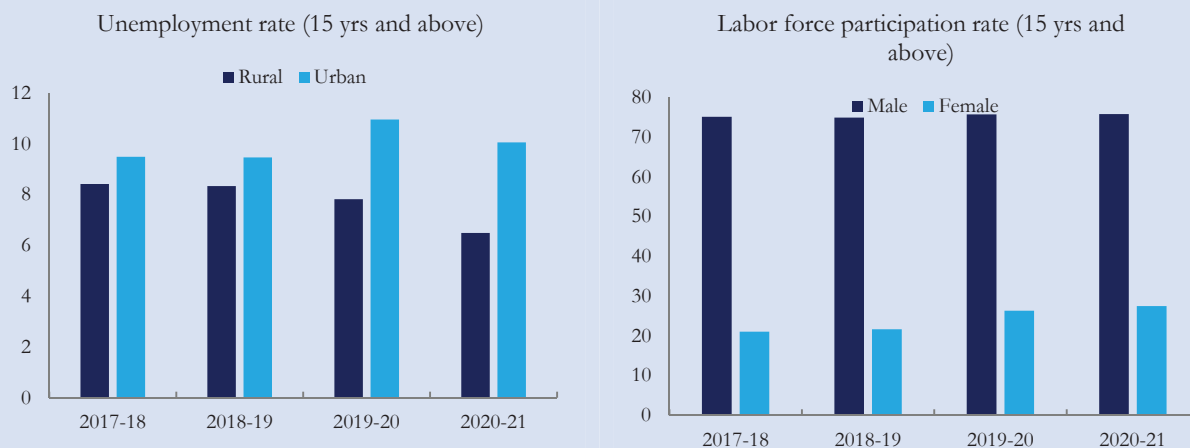
<sup>2</sup> Data on urban unemployment is available on a quarterly basis.

<sup>3</sup> Data on rural unemployment is available on an annual basis for the period July-June.

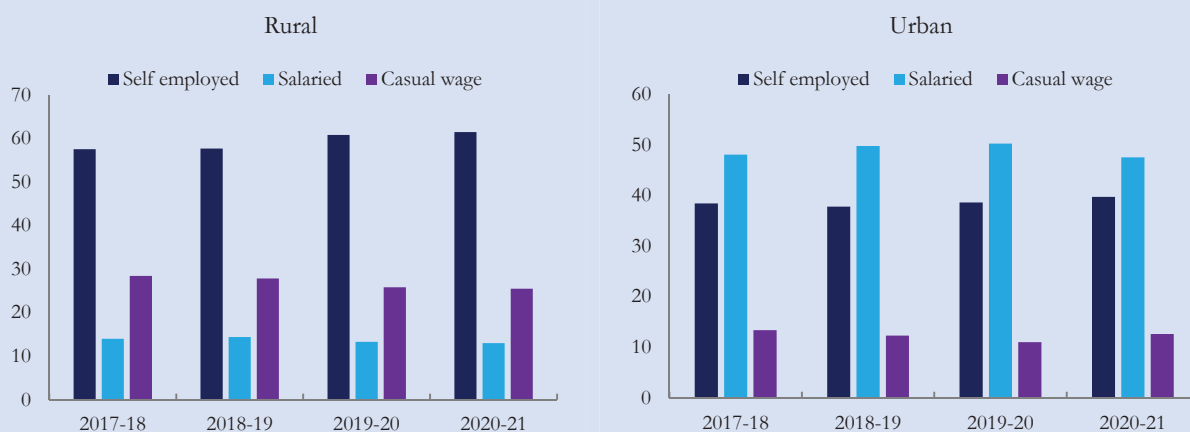
<sup>4</sup> Vaccinations had a positive and statistically significant correlation with individual employment status.

<sup>5</sup> Analysis using data from Consumer Pyramids Household Survey conducted by the Centre for Monitoring the Indian Economy. This type of analysis follows the same individuals over time and controls for individual characteristics to address the concern of having different sample compositions when comparing only cross-sections of data. Analysis of “COVID” and “pre-COVID” youth cohorts (16-24 years) using a continuous panel dataset shows that the COVID-cohort is significantly more likely to stay out of the labor force, conditional on not being employed at the start of the sample period. This abstention from the labor market is persistent up to 16 months post-COVID relative to the pre-pandemic cohort used as a counterfactual.

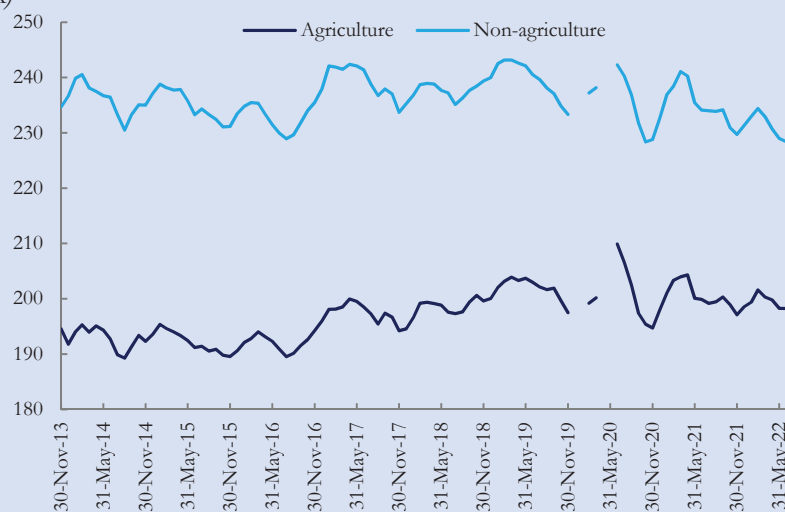
**Figure 2.8: Headline labor market indicators improved**  
(percent)



**Figure 2.9: Share of workers by different employment status**  
(share of employment, 15 years and above)



**Figure 2.10: Volatility in wages among rural, male daily-wage workers**  
(Real wages per day, INR)



Source: World Bank analysis using Periodic Labour Force Survey data and Current Weekly Status (multiple years).

Note on Figure 3: Graph shows real daily wages for rural, male workers based on Labour Bureau data, deflated by rural state CPIs (2012=100).

## Inflation

**Headline inflation averaged 7 percent over first half of FY22/23**

Headline CPI inflation averaged 7.2 percent y-o-y in the first half of FY 22/23 (Figure 2.11). It peaked at 7.8 percent y-o-y in April and since then has gradually eased. Nonetheless, it has remained above the upper limit (6 percent) of the Reserve Bank of India's (RBI) target range (2–6 percent). Inflation accelerated significantly during February–April 2022 due to higher prices of fuel and food, elevated core inflation and low base. Fuel inflation was pushed up by multiple hikes in domestic fuel prices by India's oil distribution companies, amid surging global oil prices. At the same time, food inflation spiked as prices of cereals, edible oils, vegetables, and prepared meals jumped up due to adverse domestic weather conditions, rising global food prices and global shortage of fertilizers. However, since May this year, inflation has decelerated. While domestic fuel prices remain elevated, they have declined by more than 8 percent since then as the government reduced the tax rates on fuel. Food inflation has moderated on the back of a high base, declining global prices of edible oils, and lower transportation costs as domestic prices of fuel have fallen. Furthermore, the government has taken various supply-side measures to control food inflation – banning exports of rice products, extending the concessional import duties on edible oils until March next year and managing the fertilizer allocation across the country at lower prices than in the market.

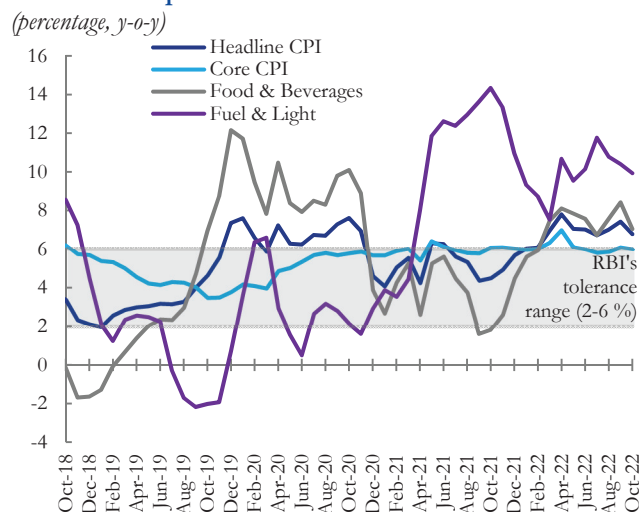
**Core inflation increased due to pandemic induced disruptions and rising input costs**

Core inflation, which excludes food and fuel prices, has been above 5 percent y-o-y since May 2020. It averaged 6.1 percent y-o-y over the first half of FY22/23 and peaked at 7.0 percent in April. Broadly, core inflation has remained sticky and elevated due to: (i) supply disruptions attributable to frequent COVID-19 waves in the last two years, (ii) higher fuel prices feeding into transportation costs and, (iii) greater transmission of higher input costs to final consumer prices. However, core inflation has moderated since May as transport costs have eased and the COVID-19 related domestic supply disruptions have largely subsided (Figure 2.13). Notwithstanding these moderating price pressures, inflation in the education and recreation components has picked-up. Although the primary driver has been the cost-push price pressures, demand-pull pressures have firmed-up as well. As the contact-intensive sectors like education and hospitality services became fully operational post-Omicron wave earlier this year, demand-supply mismatch and recovery of lost revenue due to the pandemic have pushed up the prices.

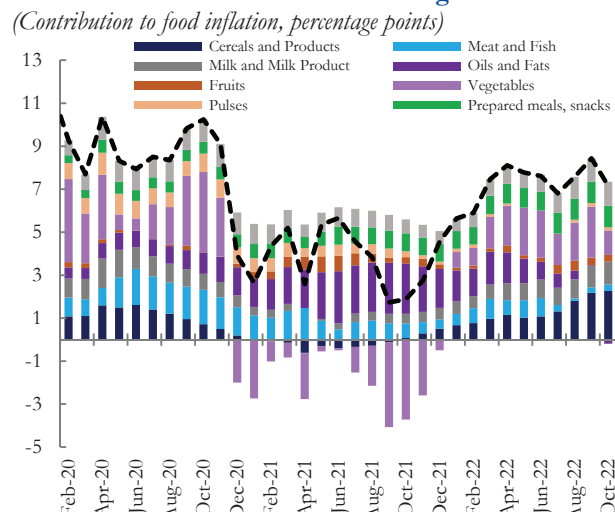
**Wholesale price inflation is in double-digits but on a downward trajectory**

Despite the cost-push price pressures driving consumer inflation, the transmission from higher input prices to final consumer inflation has been limited. This is best reflected in diverging wholesale price index (WPI) inflation and CPI inflation. WPI inflation, which tracks prices at which businesses sell to each other, has been in double-digits since April 2021, averaging 14.2 percent y-o-y in the first half of FY22/23. WPI inflation peaked at 16.6 percent y-o-y in May 2022. Price pressures have been broad-based across fuel and power, manufactured goods, and primary articles (Figure 2.13). Rising commodity prices, initially due to demand-supply mismatch and later driven by the Russia-Ukraine war, have kept WPI inflation elevated. However, moderating commodity prices and favourable base effect has brought down WPI inflation since June.

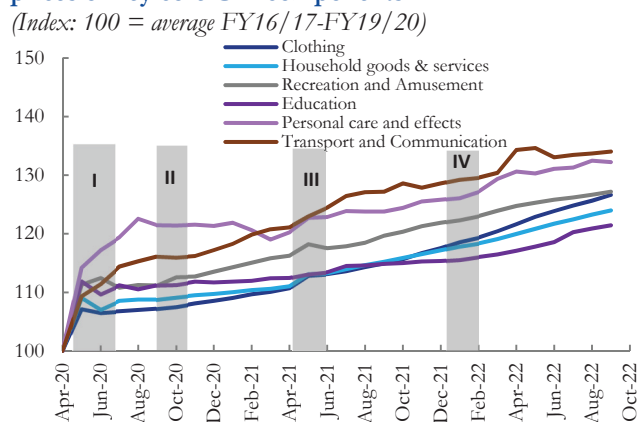
**Figure 2.11: Headline inflation is elevated but easing as food and fuel prices moderate**



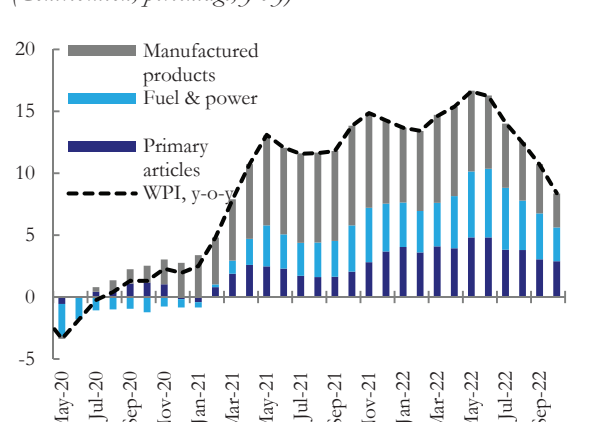
**Figure 2.12: Food inflation has been dampened by low base and lower inflation in oils and vegetables**



**Figure 2.12: COVID-19 related disruptions pushed up the prices of key core CPI components**



**Figure 2.13: Wholesale price pressures have moderated**



Source: NSO, Ministry of Commerce, CEIC and World Bank staff calculations.

Note on Figure 2: Period I covers the national lockdown; Period II - First COVID-19 wave; Period III - Second (Delta) COVID-19 wave; Period IV - Third (Omicron) COVID-19 wave.

The index is an average over FY16/17 and FY19/20 to cover the beginning of the inflation targeting mandate adopted by the RBI.

## b. Monetary and financial sector

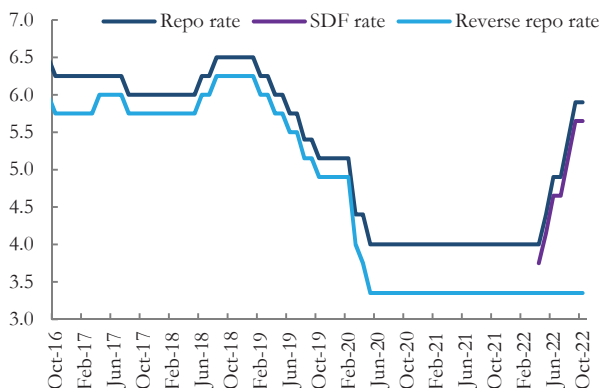
**The RBI withdrew accommodative monetary policy measures and hiked interest rates above the pre-pandemic level in May-August 2022...**

As global oil prices increased and inflation accelerated well past the upper threshold of the RBI's inflation target, the central bank's Monetary Policy Committee (MPC) rapidly hiked the policy interest rate (repo rate). Starting with an out-of-cycle announcement in May 2022, the MPC has hiked the repo rate by 190 basis points in four successive meetings from 4 percent to 5.9 percent. In April, the RBI also introduced the Standing Deposit Facility (SDF) for overnight deposits of commercial banks with the RBI, as an additional tool for liquidity adjustment. The SDF effectively replaced the fixed rate reverse repo rate as the floor of the liquidity adjustment facility and was set 25 basis points below the repo rate (Figure 2.14). The RBI has highlighted the need to bring inflation back to its target range to prevent inflation expectations from getting unanchored. Inflation expectations increased after the pandemic and peaked at over 12 percent in November 2021 but have moderated since then and remain well below their average level in 2010-14.

**... but real interest rates remain negative**

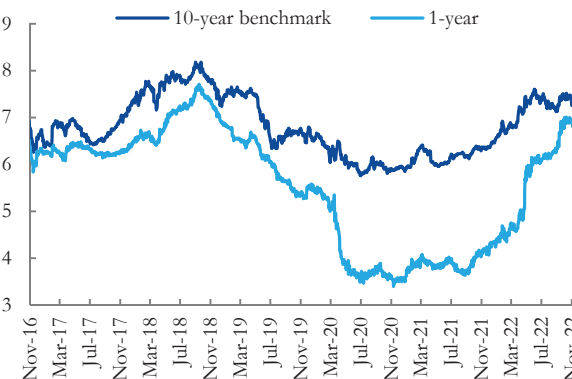
Despite the sizeable increase in the nominal interest rate, the real interest rate remains negative around -1 percent. Central banks in advanced economies have also rapidly increased rates in response to inflationary pressures in recent months. However, the RBI started hiking policy rates much later than some of the EMEs as it balanced the need to rein in inflationary pressures against supporting growth in economic activity.

**Figure 2.14: After four successive rate hikes, the repo rate has increased past its pre-pandemic level**  
(percent)



Source: CEIC and RBI.

**Figure 2.15: Both the benchmark yield and short-term interest rates have trended upwards since October 2021**  
(percent)

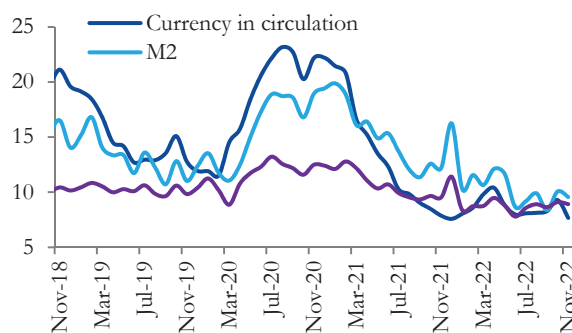


Source: CEIC and RBI.

**As the recovery has been strengthening, the RBI has withdrawn post-pandemic regulatory relaxations**

Along with the policy rate hikes, the RBI has used several other measures to reduce liquidity in the system, leading to a moderation in money supply growth (Figure 2.16). These measures included: (i) narrowing the interest rate corridor under the liquidity adjustment facility; (ii) increasing the cash reserve ratio by 50 basis point to 4.5 percent in May; (iii) offering liquidity facilities amounting to INR 17.2 trillion during the pandemic, (iii) using the variable-rate repo (VRR) and variable-rate reverse repo operations (VRRR) of 14-day maturity as the main liquidity management tools.

**Figure 2.16: Money supply growth has moderated as the RBI has taken steps to reduce excess liquidity**  
(percent, y-o-y)



Source: CEIC, RBI and World Bank staff calculations.

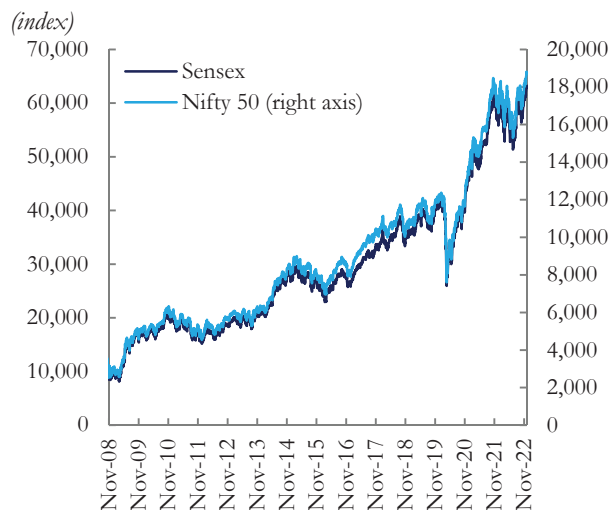
**The 10-year benchmark yield increased by nearly 50 basis points in FY21/22**

The full extent of the rate hikes has not passed through to the government's borrowing costs. Even though the benchmark yield on 10-year sovereign bonds started to increase from May, on the back of the rate hike announced by the MPC, the yield has peaked at around 7.6 percent in June. Despite successive rate hikes in June and August, the yield has continued to decline gradually (Figure 2.15). Since the start of the fiscal year, bond yields have only gone up by 42 basis points, although it has increased by over 140 basis points compared to its lowest mark in October 2020. The moderation in bond yields over the last two months has been driven by the moderation in domestic inflation and anticipation of fewer rate hikes by the RBI than previously expected.

**India's financial markets recovered rapidly from COVID-19 induced losses and reached new highs**

Since June 2022, stock markets have bounced back, driven by better-than-expected corporate earnings in the first quarter of FY22/23, moderation in domestic inflation and global commodity prices, and a reversal in foreign portfolio flows back into India. Markets hit new highs over the first half of FY21/22 but had shown a declining trend through the rest of the fiscal year as market sentiment was dampened by policy normalization in advanced economies and geopolitical risks arising from the Ukraine-Russia conflict (Figure 2.17).

**Figure 2.17: Financial markets reached new highs in November**



Source: CEIC and World Bank staff calculations.

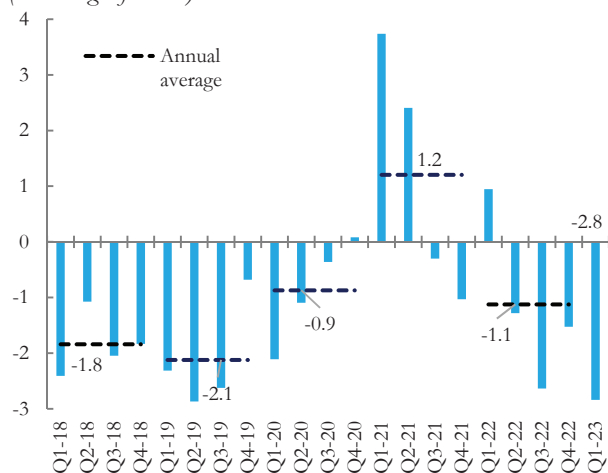
**c. External sector**

**The current account balance returned to a deficit in FY21/22, widening in Q1 FY22/23**

The current account deficit widened to 2.8 percent of GDP in Q1 FY22/23 from a deficit of 1.2 percent of GDP in FY 21/22 and a surplus of 0.9 percent in FY 20/21 (Figure 2.18), mainly because of a widening trade deficit as imports normalised. Merchandise imports outgrew exports through April 2022-June 2022 due to recovering domestic demand (Figure 2.19). Robust demand for information technology and financial services (among trade partners) kept the services trade surplus high at around 3.7 percent of GDP. Solid inflows of workers' remittances from abroad boosted income<sup>6</sup> receipts and offset net outflows of investment income payments.

**Figure 2.18: The current account balance returned to a deficit in FY21/22...**

(Percentage of GDP)

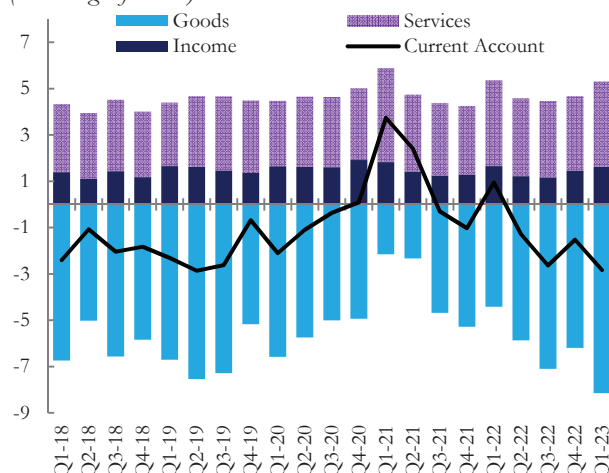


Note: Dashed lines represent averages for the full fiscal years; FY21/22 average for the first two quarters.

Source: CEIC, RBI and World Bank staff calculations.

**Figure 2.19: ...primarily due to a widening merchandise trade deficit**

(Percentage of GDP)



Source: CEIC, RBI and World Bank staff calculations.

<sup>6</sup> Net income account includes both primary and secondary income.

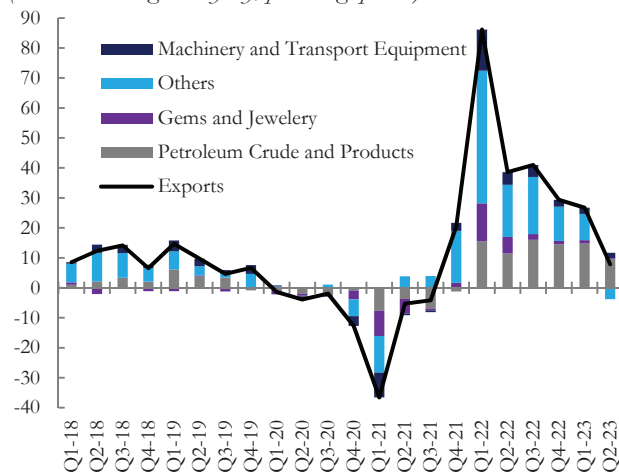


**Higher commodity prices caused the trade deficit to balloon in Q1 FY22/23**

The trade deficit had been widening primarily due to an increase in merchandise imports, driven by the sharp increase in oil prices and recovering economic activity. Both exports and imports had already increased beyond pre-pandemic levels in FY21/22. However, the Ukraine-Russia conflict and associated sanctions caused global oil prices to increase to over USD 116 per barrel in March. As a result, crude oil imports increased by over 90 percent in nominal terms in Q1 FY22/23 (April-June 2022). Even though oil prices have declined since then, they remained elevated in Q2 FY22/23, contributing to a ballooning import bill. Additionally, “non-oil non-gold” imports grew by over 34 percent y-o-y in the first half of FY22/23, reflecting both increased volumes after the reopening of the economy and higher inflation across the world (Figure 2.21). Over the same period, overall exports grew by over 17 percent but “non-oil exports”<sup>7</sup> only grew by about 6 percent y-o-y (Figure 2.20).

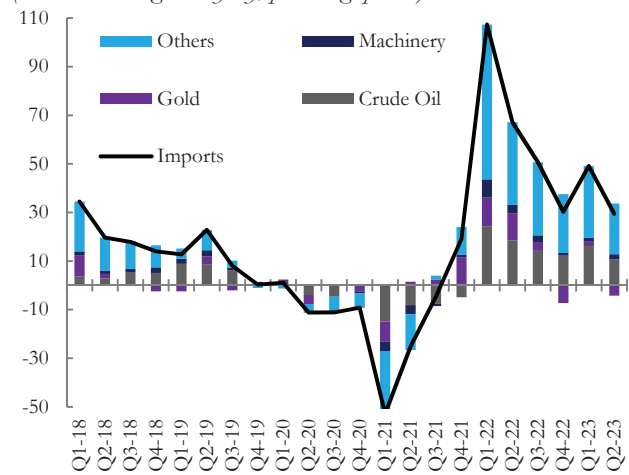
**Figure 2.20: Merchandise exports growth slowed as base effects waned...**

(contribution to growth y-o-y, percentage points)



**Figure 2.21: ...but merchandise imports growth was boosted by higher commodity prices**

(contribution to growth y-o-y, percentage points)



Note: Years represent the end of the fiscal years like Q1-18 represents Q1 FY17/18.  
Source: CEIC, Ministry of Commerce and Industry and World Bank staff calculations.

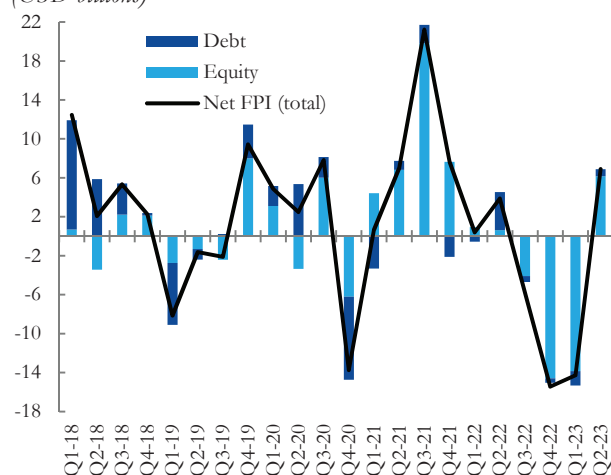
**Foreign portfolio flows have been volatile but foreign direct investment inflows remained robust**

There was a reversal in net portfolio investment flows from both debt and equity markets the second half of FY21/22 as monetary policy tightening in advanced economies caused interest-rate differentials to narrow (Figure 2.22). This was exacerbated by the increasing uncertainty caused by the Russia-Ukraine conflict (Box 2.2). However, net FPI flows turned positive in Q2 FY22/23 (July-September). Net FDI inflows remained stable at around 1.2 percent of GDP in FY21/22 and increased to 1.6 percent in the first quarter of FY22/23 (Figure 2.23). Investments in the ‘Computer Software and Hardware’, ‘Services’ and ‘Trading’ subsectors contributed to a major share of total FDI equity inflows.

<sup>7</sup>India is a net importer of crude oil but some of these oil imports are re-exported as refined petroleum products. Oil exports amounted to 22 percent of total merchandise exports in Q1 FY22/23, up from around 16 percent in FY21/22.

**Figure 2.22: FPI inflows turned positive in Q2 FY21/22**

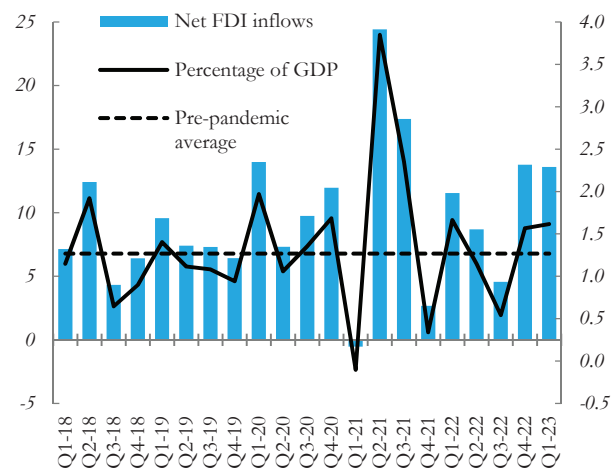
(USD billions)



Source: CEIC, RBI and World Bank staff calculations.

**Figure 2.23: FDI inflows remained strong**

(USD billions, left axis); (Percentage of GDP, right axis)



Source: CEIC, RBI and World Bank staff calculations.

**The rupee has depreciated by 9.4 percent since January but performed relatively better than other currencies**

The rupee has depreciated by 11 percent in year-to-date terms, by end-October. The depreciation was partially driven by the widening of the merchandise trade deficit. However, the Indian rupee outperformed most EME currencies (except for large commodity producers) (Figure 2.24). The relatively measured pace of depreciation was in part due to the RBI’s intervention in the foreign exchange market, which were aimed at mitigating volatility (rather than preventing wholesale depreciation).

**Foreign investment flows and policy interest rate hikes have also mitigated depreciation pressures**

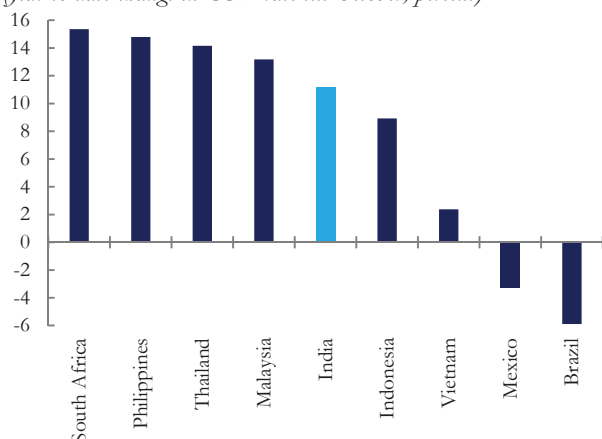
FDI and other investment inflows remained stable and mitigated the impact of volatility in portfolio investment flows. After almost five months of persistent outflows, foreign portfolio flows started returning to India’s financial markets as the interest rate differential between the US and India started to widen again in May when the RBI hiked the key policy rate in a mid-cycle policy review. Nonetheless, in the near-term the portfolio capital flows will likely be volatile due to relatively narrower interest rate differentials, compared to the long-term average, and overpriced Indian stocks.

**Depreciation pressure on the rupee likely to remain in the near term**

With a relatively narrow interest rate differential, the India rupee is likely to continue facing depreciation pressure. The real effective exchange rate (REER), which compares a currency’s value against a weighted average of major trading partners’ currencies, has appreciated slightly in year-to-date terms. This was largely driven by higher inflation than its major trade partners (such as the US and UK). Thus, the rupee would need to depreciate more in nominal terms for the currency to reach its equilibrium level based on India’s equilibrium current account position (IIF, 2022). The RBI’s interventions have also partly contributed to a decline in the economy’s foreign exchange reserves; foreign exchange reserves declined from a peak of nearly USD 640 billion in 2021 to around 530 billion in October 2022 (Figure 2.26) but remained adequate at around eight months of import cover. Although the decline was largely driven by valuation effects as advanced economy currencies such as the euro, pound sterling and yen also depreciated against the US dollar and US treasury yields increased.

**Figure 2.24: The Indian rupee outperformed most EME currencies except commodity producers**

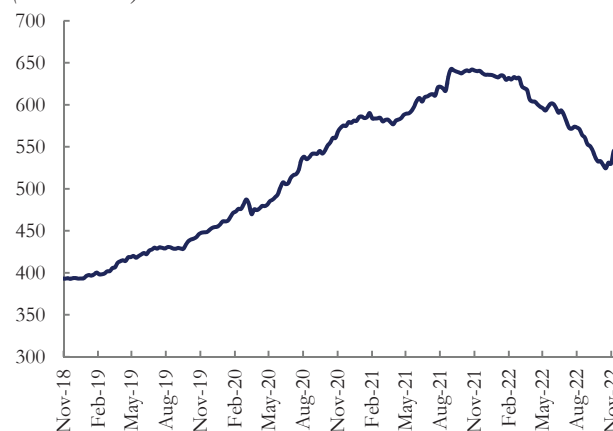
(year-to-date change in USD rate till October, percent)



Source: Haver, IMF and World Bank staff calculations.

**Figure 2.25: Foreign exchange reserves have declined from their peak in 2021**

(USD billion)



Source: CEIC and RBI.

**Box 2.3: Net portfolio capital outflows from India stemmed from unfavorable domestic and external factors**

**Net portfolio capital outflows from India were large compared to other EMEs.** Between October 2021-April 2022, net portfolio equity and debt outflows reached almost 1 percent of India’s FY20/21 GDP—making India the worst performer among EMEs, followed by Vietnam and Indonesia (Figure 2.26). This resulted in the continued depreciation of the Indian Rupee vis-à-vis the US dollar (by almost 2 percent since October 2021), despite FX intervention of the RBI. The net sales of foreign exchange by the RBI in March 2022 reached USD 20 billion, exceeding the last peak of USD 18.7 billion recorded in October 2008 during the onset of the global financial crisis (Figure 2.27). These interventions along with a relatively lower inflow of foreign portfolio capital and a higher import bill dented India’s foreign exchange reserves. Reserves fell by 13.5 percent between October 2021-September 2022; from USD 637.5 billion to USD 550 billion in September. By June, however, the size of net foreign portfolio investment (FPI) outflows had declined and by end-July the foreign portfolio investors turned net buyers of Indian stocks.

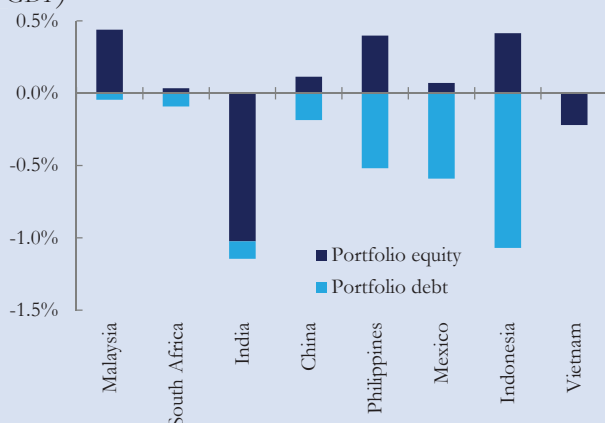
**Narrowed growth and interest rate differentials coupled with a search for higher yields and elevated global uncertainty contributed to FPI outflows from India.** Historically, narrowed interest rate and growth differentials vis-à-vis the US have resulted in portfolio capital outflows as investors rushed towards the safety of US assets. The India-US growth differential narrowed in the last two quarters of 2021 (July-December 2021). This coincided with narrowed interest rate gap (Figure 2.28), supported by rising US sovereign bond yields following the Federal Reserve’s announcement of monetary policy tightening in October last year. Another factor driving net FPI out of India may have been the search for higher yields as the EMEs, beginning 2022, increased the policy rates to manage inflationary pressures (Figure 2.29). However, the RBI did not hike the policy rate until May this year, in support of growth recovery. As a result, India lagged other EMEs with regards to monetary policy tightening. Historically, the RBI has largely been in sync with the global monetary policy cycle, except for a brief episode in 2008, which was also accompanied by net portfolio outflows from India. In comparison, countries like Brazil, Chile, and Czech Republic, that started hiking rates in late 2021, fared relatively well with net capital inflows through October 2021 - February 2022. Furthermore, elevated uncertainty and volatility in global financial markets caused by the Russia-Ukraine war since late-March has prompted foreign investors to move to safe-haven assets in advanced economies.

**Capital outflows also reflected the correction in domestic stock market over headwinds to India’s growth outlook.** Historically, Indian equities have always been overvalued relative to other EMEs, attested by the higher price-to-earnings (P/E) ratio of Indian stocks. However, the divergence between the P/E ratios widened steadily last year, peaking in October 2021 (Figure 2.30). This was followed by a correction in valuation of Indian equities, beginning December 2021, as FPI exited the domestic market over concerns related to uncertain growth and higher inflation. Meanwhile, several downside risks to India’s growth outlook had emerged - softening global growth, elevated global commodity price pressure (a particular challenge for India which is a net commodity importer) and domestic price pressures - which may have contributed to investors moving to the safety of assets in developed economies despite lower yields.

**India's underlying economic fundamentals and policy framework are strong and therefore large and long-term FPI outflows are not expected despite the short-term turbulence.** The RBI's multiple policy rate hikes since May have pushed up the bond yields and have resulted in a widening interest rate gap. Additionally, the growth differential between India and the US will likely widen as the US economy is slowing down and India's growth will be supported by government's capex push and a strong recovery in the services sector. These widening differentials most likely contributed to portfolio capital inflows since July (Figure 2.31). The stock market has also remained resilient due to abundant liquidity in the domestic financial market, but this also reflects the scope for additional correction. Furthermore, in the last decade the GDP share of portfolio investment liabilities has fallen from 11.7 percent (Q4 FY14/15) to 8.4 percent (Q4 FY21/22). At the same time, the share of more productive and less volatile foreign direct investment (liabilities to India) has increased from 13.4 percent to 16.7 percent. This improved capital-mix makes India less vulnerable to external shocks stemming from the exit of FPI. Additionally, the RBI has solid reserves of foreign exchange, more than USD 540 billion, which is equivalent to about eight months of import cover. These large reserves mitigate the risks from rising import bill and provide strong buffer to the RBI to manage volatility in exchange rate.

**Figure 2.26: Net portfolio capital flows for India and other EMEs**

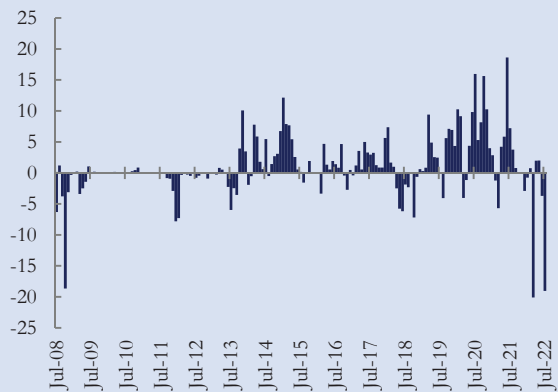
(Cumulative October 2021-July 2022, percentage of nominal 2021 GDP)



Note: Negative value reflects capital outflow. For India, the nominal GDP is for FY21.

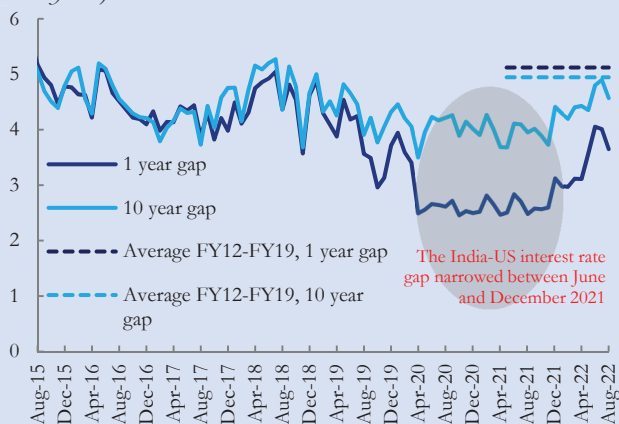
**Figure 2.27: The RBI's net monthly sales of foreign exchange in March exceeded the previous peak reached in 2008**

(USD billion)



**Figure 2.28: The interest rate gap has been widening but remains at a multi-year low**

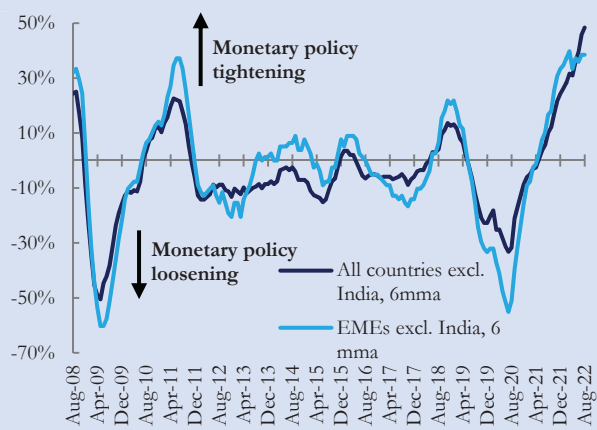
(Percentage points, difference between India and the US sovereign bond yields)



Note: The government bond yields for India and Auction yield levels for the US have been used.

**Figure 2.29: Global monetary policy tightening began in the second half of 2021**

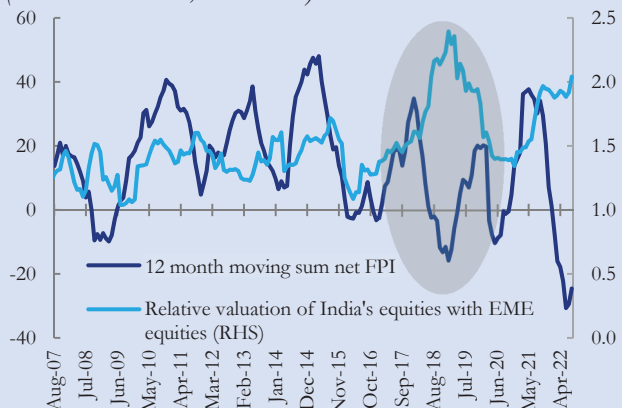
(Diffusion Index)



Note: Diffusion index is calculated as sum of all responses divided by the number of countries. The responses can be 0 (rate remains the same as last month), 1 (rate has increased) or -1 (rate has decreased) in a month.

**Figure 2.30: Overvalued Indian equities may have contributed to capital outflows**

(LHS: USD billion; RHS: ratio)



Note: Relative valuation = (India's Sensex Index P/E) / (MSCI EME Index P/E).

Source: BIS, Haver, CEIC, IIF, RBI and World Bank Staff calculations.

**Figure 2.31: Net FPI outflows bottomed out between June-August 2022**

(7 day rolling sum, USD million)



## d. Fiscal sector and debt sustainability

**The government is projecting a fiscal deficit target of 6.4 percent of GDP in FY22/23**

For the central government, the consolidation from the 6.7 percent deficit in FY21/22<sup>8</sup> is mainly expected to be driven by strong growth in tax collection, on the back of the economic recovery. The underlying nominal GDP growth estimates are relatively conservative at 11.1 percent. Overall, gross tax revenues are projected to increase by about 10 percent in budget estimates (compared with revised estimates for the previous year), with the expectation that the buoyant growth in corporate and personal income taxes as well as GST would continue as the economy recovers. However, revenues from excise duties are projected to fall.

**Since then, several fiscal measures have been announced including a fuel tax cut and extension of the food subsidy program...**

The central government cut excise duties on fuel in May 2022 to keep retail fuel prices under control even as global crude oil prices were rising. According to government estimates, the tax cuts would cost over INR 1 trillion in foregone revenues. This was only partly mitigated by an increase in goods and services tax (GST) rates on some commodities and the application of a windfall tax on oil exporters. On the expenditure side, the Pradhan Mantri Garib Kalyan Anna Yojana (PMGKAY), a food subsidy program for vulnerable households, was extended until December 2022 to shield them from the impact of rising food prices. Higher commodity prices, particularly global crude oil prices, will also cause the fuel and fertilizer subsidy to exceed the budgeted amount as crude oil byproducts are used as inputs for fertilizers.

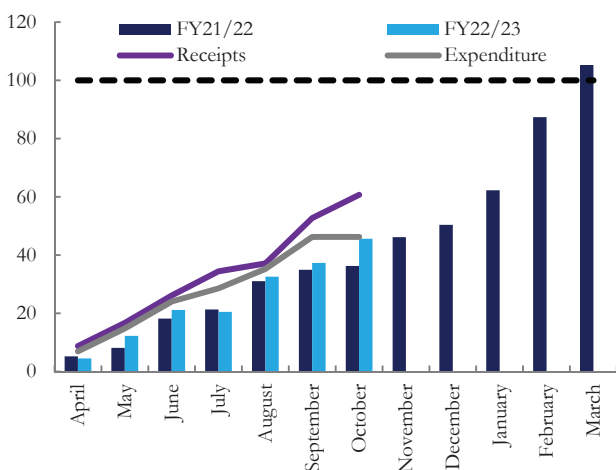
**...but strong revenue growth will keep the deficit target within reach**

In the first half of FY22/23 (April-September), for which data are available, the central government's gross tax revenues have increased by nearly 18 percent y-o-y and this has been driven by nearly 26 percent y-o-y growth in income tax collections and over 28 percent growth in GST collections (Figure 2.34). The government has already achieved over 52 percent of its budgeted estimate for tax revenues compared with 46 percent of the budget estimates on the expenditure side, although both current and capital spending are likely to scale up as the year progresses. As a result, even after half the year has passed, the fiscal deficit has only reached 37 percent of the budget estimate or 2.4 percent of GDP (Figure 2.32).

<sup>8</sup> Fiscal data for the central government for FY21/22 is based on provisional monthly accounts data released by the Controller General of Accounts.

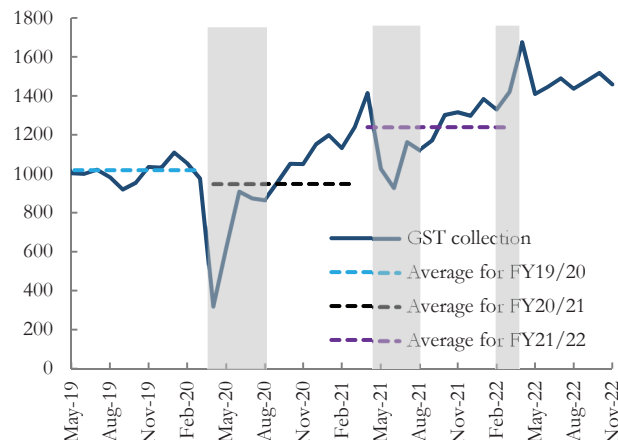
**Figure 2.32: Robust revenue growth has kept the fiscal deficit in check**

(fiscal deficit, percent of FY22/23 budget estimates)



**Figure 2.33: GST collection has increased sharply compared with the past three years**

(GST collection, INR billion)



Source: CEIC, Ministry of Finance, and World Bank staff calculations.

**State governments have budgeted for a consolidation in the fiscal deficit to 3.4 percent in FY22/23 from 3.7 percent in FY21/22**

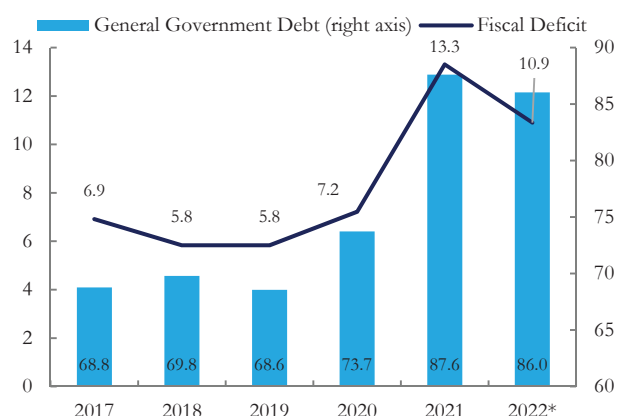
According to budget estimates, the combined fiscal deficit for the states is projected to be 3.4 percent of GDP, below the 3.5 percent of GSDP borrowing limit proposed by the central government (not including the additional 0.5 percent borrowing that is conditional on adoption of power sector reforms). Although many states are expected to be affected by the end of the GST compensation period in June 2022<sup>9</sup>, the states have projected healthy revenue growth of around 14 percent y-o-y due to the robust growth in GST collections and the taxes that contribute to the divisible pool of funds. Expenditure growth is projected to be slower at around 12 percent, driven by a moderation in spending on pandemic-related health and welfare programs, while capital spending is projected to increase by 18 percent. As part of the stimulus package, the government announced in 2021 that states can avail 50-year interest-free loans from the central government for capital spending. The allocation for these loans was increased to INR 1 trillion in the budget for FY22/23.

**Fiscal space has been improving with both deficit and the public debt declining**

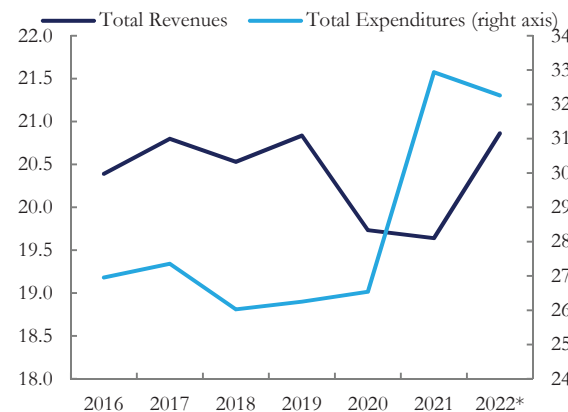
The general government fiscal deficit – the combined deficit of the Center and States – declined from 13.3 percent of GDP in FY20/21 (of which the central government deficit was 9.2 percent and the states’ combined deficit was 4.1 percent) to 10.2 percent in FY21/22 (of which the central government deficit was 6.7 percent and the states’ deficit was 3.5 percent) (Figure 2.34) as economic activity recovered, both tax and non-tax revenues increased and some stimulus measures were withdrawn (Figure 2.35). Public debt also declined from 87.6 percent of GDP in FY20/21 to 86.0 percent in FY21/22 as the primary deficit narrowed and the growth-interest rate dynamics turned favorable again with the revival in economic activity.

<sup>9</sup> When the Goods and Services Tax was adopted in 2017, the states were promised compensation for a period of 5 years if revenue growth was below 14 percent. After the COVID-19 pandemic, the compensation was reduced and a part of it was given to the states in the form of back-to-back loans. While the loans will be serviced by the GST compensation cess, compensation will not be given to the states after June 2022.

**Figure 2.34: The general government fiscal deficit declined in FY21/22 and so did the debt/GDP ratio (percent of GDP)**



**Figure 2.35: Revenues recovered to more than their pre-pandemic level and expenditures declined (percent of GDP)**



Note: \*Based on provisional accounts for the central government and revised estimates for the states.  
Source: CEIC, RBI, NSO and World Bank staff calculations.

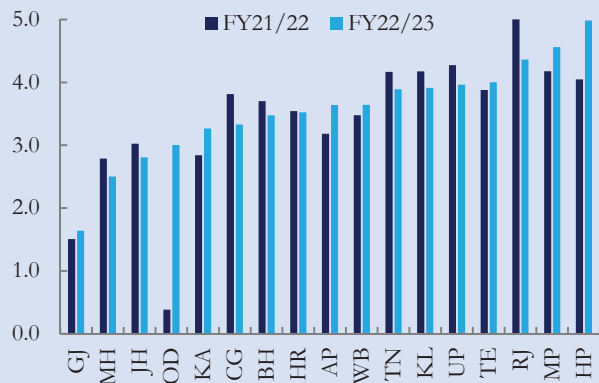
#### Box 2.4: An overview of state budgets for FY22/23

**Fiscal consolidation:** Of the 26 states (out of 27), for which budget data was available, only Himachal Pradesh, Madhya Pradesh, Meghalaya and Rajasthan are projected to have a fiscal deficit higher than the 4 percent borrowing limit announced by the central government (states are also eligible for additional borrowing of 0.5 percent conditional on the implementation of structural reforms in the power sector). Most states are projecting a decline in the fiscal deficit compared with FY22/23 (Figure 2.36). The consolidation is largely expected to be driven by an over 17 percent increase in the states' own tax revenues and a 27 percent increase in taxes devolved by the central government. Both current and capital spending are also projected to increase by 11 and 18 percent, respectively but the increase in receipts is expected to outpace the increase in spending.

**GST compensation grants:** When the GST was first adopted, the central government assured the states that any shortfalls in tax collection compared with a pre-decided growth trajectory would be compensated using funds collected from a GST compensation cess (levied over and above the amount of GST charged on a particular good or services). The period of compensation came to an end in June 2022 and several states that were highly dependent on these grants as a source of receipts are facing a fiscal cliff situation that may require expenditure consolidation. The states that received the largest GST compensation grants (and back-to-back loans) as a share of total receipts in FY21/22 were Karnataka, Gujarat, and Haryana. That said, the discontinuation of the compensation grants will be offset to some extent by strong revenue growth in GST collections.

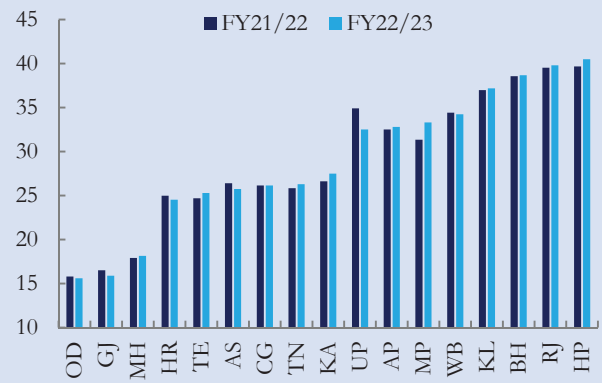
**Debt sustainability:** The debt/GSDP ratio is projected to either stabilize or decline for most states in FY22/23 (Figure 2.37). This is based on relatively conservative assumptions for growth – most states are projecting nominal GSDP growth of around 9-10 percent compared with our national-level nominal GDP growth projection of over 14 percent. As a weighted average, the debt-to-GSDP ratio is projected to fall from 28.0 percent to 27.3 percent.

**Figure 2.36: Most states that were above the 4 percent limit in FY21/22 are budgeting a consolidation in the fiscal deficit in FY22/23**  
(percent share of GSDP)



Source: CAG, CEIC, State budget documents and World Bank Staff calculations.

**Figure 2.37: After a sharp increase in FY20/21, debt/GSDP ratios have stabilized in FY21/22 and are projected to decline in FY22/23**  
(year-to-date, percent share of budget estimates)



Source: CAG, CEIC, State budget documents and World Bank Staff calculations.



### 3. Outlook

**Real GDP growth is expected to be robust in FY22/23 despite a deteriorating external environment**

Real GDP is expected to grow at a robust 6.9 percent in FY22/23, which is 0.4 percentage points higher than the previous forecast (Macro Poverty Outlook, October 2022), supported by solid domestic demand in the first half of FY22/23. In addition, despite a challenging external environment the export performed better than expected. The global outlook is subject to various downside risks, including intensifying geopolitical tensions, growing stagflationary headwinds, rising financial instability, continuing supply strains, and worsening food insecurity (Global Economic Prospects, June 2022). For India, these headwinds will likely constrain private consumption and investment activity in the second half of FY22/23, and FY23/24 (Table 3.1). India's exports are susceptible to a global growth slowdown - the income elasticity of exports is high, which implies that the global demand for India's goods and services is cyclical. Moreover, since India is a net importer of critical commodities such as oil, elevated global prices will continue to weigh on domestic inflation, which is likely to constrain domestic activity. However, the risks from these adverse global spillovers will be somewhat balanced by India's lower integration with the global economy – trade openness of India in terms of share of total trade as a percentage of GDP (close to 45 percent of GDP) and integration in global financial markets remain lower than its peers.

**Solid domestic demand, even amid elevated inflation and heightened uncertainty, will support overall growth**

Domestic demand is expected to remain on a moderate recovery path, although it will be dampened by higher interest rates and elevated growth uncertainty in 2023 (Figure 3.1). Overall conditions have been conducive for a turnaround in private investment – improved balance sheets of banks and the corporate sector, increased capacity utilization in manufacturing, and the government's measures to facilitate business activity – through production linked incentives (PLI) schemes, masterplans for logistics development and simplifying business regulations. But private investment activity will be tempered by heightened global uncertainty, elevated input prices and rising borrowing costs. The government's strong capex program – earmarked for roads, railways, power sector, housing, and urban infrastructure development - will support investment. Private consumption will continue to firm-up, driven by increased spending by consumers in high- and middle-income groups. However, consumer spending will be somewhat constrained by high inflation and persisting weakness in the low-income households. Government consumption will continue to expand, although at a slower pace given the central government's commitment, outlined in the FY22/23 budget, to lower the share of current spending.

**Headline inflation will be elevated but on a downward trajectory**

Headline inflation is expected to average 7.1 percent in FY22/23 but will ease below the upper bound of the RBI's tolerance range (2-6 percent) by end of the fiscal year. In addition to favorable base effects, elevated fuel and food prices are likely to gradually decline. Moderating global oil prices and declining input costs will contain inflationary pressure. However, rising prices of cereals (primarily rice), due to adverse climate condition, will weigh on food inflation. Core inflation is also expected to remain elevated, albeit on a downward trajectory. Easing global oil prices will push transportation costs down. The prices of services, which had risen on the back of easing mobility restrictions post-Omicron wave in January, are expected to normalize. These effects will be partially offset by greater transmission of elevated input costs to consumer prices, amid recovering domestic demand, which are expected to keep core CPI inflation higher than the pre-pandemic level. Monetary policy normalization will continue, with the RBI relying on policy rate hikes to manage inflation expectations and, a gradual withdrawal of surplus liquidity that had been put into place to support the growth recovery.

**The CAD will widen as the merchandise trade deficit deteriorates**

The current account deficit (CAD) is projected to widen (3.2 percent of GDP) in FY22/23, with the merchandise trade deficit climbing to historically high levels (Figure 3.2). The merchandise import bill will stay high on the back of recovering domestic demand – particularly for petroleum and capital goods- and elevated commodity prices. In contrast, merchandise exports growth is expected to soften further due to slower global growth. The pressure from a widening merchandise trade deficit is likely to be tempered by a resilient services trade surplus. India’s exports of IT and Professional services are expected to remain robust. Furthermore, tourism exports should continue to increase as domestic COVID-19 related mobility restrictions have been lifted.

**Fiscal consolidation is on track with spending pivoting towards capital spending**

The general government deficit is expected to decline to 9.6 percent of GDP in FY22/23 from the peak of 13.3 percent in FY20/21. This fiscal consolidation is likely to be led by strong revenue growth, driven primarily by high indirect tax collections, and the withdrawal of most pandemic-related stimulus measures. This will offset an increased subsidy bill in the second half of FY22/23, which is expected to rise on the back of higher prices of fertilizers and food. The pivot from current to capital spending by the government will remain on track – already 45.7 percent of the budgeted amount for capex has been spent in the first six months of FY22/23. Despite some headwinds – a higher subsidy bill and lower fuel tax collection due to a tax cut and easing global fuel prices – the government is on track to meet its fiscal deficit target this year.

**While debt to GDP remains elevated, the level of debt is sustainable with low rollover risk**

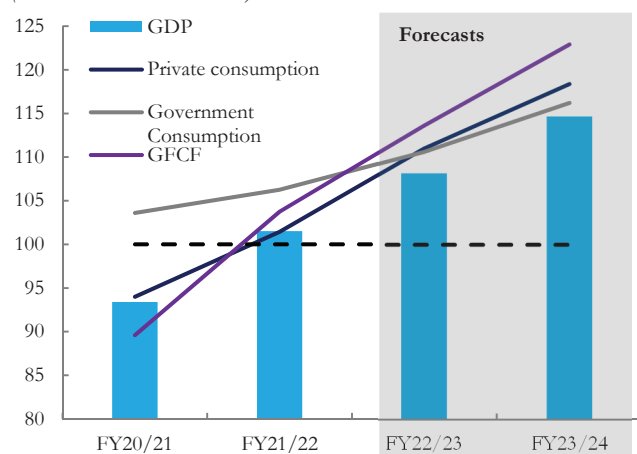
Public debt will also decline as a share of GDP, from 86 percent in FY21/22, but remain above 83 percent till FY24/25. Nonetheless, debt remains sustainable with gradual fiscal consolidation and double-digit nominal GDP growth supporting a negative interest-rate growth differential. Most of the debt is held by domestic investors and the rollover risk is low. The weighted average maturity of market borrowings of the central and state governments is over 11 years and 8 years respectively and has increased in recent years. The ownership base has also become more diversified; while the bulk of securities is owned by commercial banks and insurance companies, the RBI has created a window for retail investors to directly buy government securities.

**India is well positioned to manage external shocks**

Amid intensifying global headwinds, India is better placed than it has been in the past and compared to its peers to manage external macro-financial shocks. Macro-fiscal fundamentals are better than they were during the taper tantrum episode in 2013. The current account is adequately financed by stable foreign portfolio investment (FPI) inflows and stable FDI. Net FPI inflows will be ‘pulled in’ by India’s strong macroeconomic fundamentals vis-à-vis its peers, and a favorable interest rate differential with the US. FDI inflows are also expected to be robust, underpinned by the government’s strong capex program, various measures to facilitate businesses, and structural reforms like the impending new labor codes. India also maintains large foreign exchange reserves, which have declined by 13 percent since the beginning of 2022 but still provide at least eight months of import cover and were about 17 percent of GDP as of end-November 2022. The next section (Section 4) looks at the main channels through which global spillovers affect the Indian economy and what the deteriorating global outlook means for India’s growth and macroeconomic fundamentals.

**Figure 3.1: Domestic demand, although constrained by inflation and external challenges, will drive real GDP growth in FY22/23**

(Index: FY19/20 = 100)

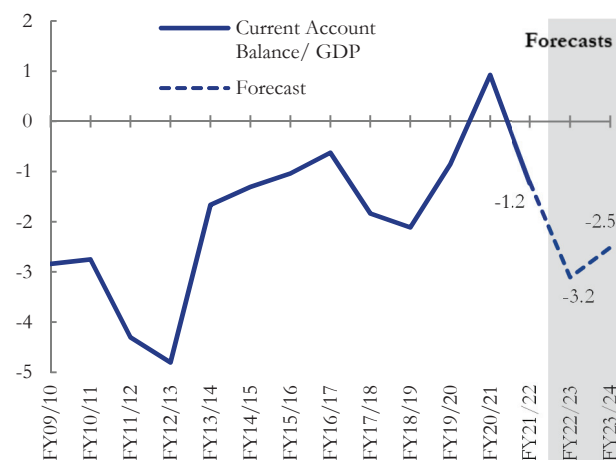


Source: CEIC and World Bank Staff calculations.

Note: The shaded portion reflects the World Bank projections.

**Figure 3.2: Current account balance will widen on the back of rising merchandise trade deficit**

(percentage share of GDP)



**Table 3.1: Macroeconomic outlook indicators**

Indicator (percent y-o-y, unless otherwise indicated)	FY19/20	FY20/21	FY21/22	FY22/23	FY23/24
<b>Real GDP Growth, at constant market prices</b>	3.7	-6.6	8.7	6.9	6.6
Private Consumption	5.2	-6	7.9	9.4	6.7
Government Consumption	3.4	3.6	2.6	4.1	5.1
Gross Fixed Capital Formation	1.6	-10.4	15.8	9.5	8.2
Exports, Goods and Services	-3.4	-9.2	24.3	10.4	9
Imports, Goods and Services	-0.8	-13.8	35.5	15.4	10.2
<b>Real GDP Growth, at constant factor prices</b>	3.8	-4.8	8.1	6.6	6.4
Agriculture	5.5	3.3	3	3.4	3.6
Industry	-1.4	-3.3	10.3	5	5.8
Services	6.3	-7.8	8.4	8.4	7.6
<b>Inflation (Consumer Price Index)</b>	4.8	6.2	5.5	7.1	5.2
<b>Current Account Balance (percent of GDP)</b>	-0.9	0.9	-1.2	-3.2	-2.5
<b>Fiscal Balance (percent of GDP)</b>	-7.2	-13.3	-10.2	-9.6	-8.5
<b>Debt (percent of GDP)</b>	73.7	87.6	86	84.3	84.1
<b>Primary Balance (percent of GDP)</b>	-2.5	-7.8	-5	-4.2	-3

Source: CEIC and World Bank Staff calculations.

Note: (i) Shaded columns are WB forecasts.

## 4. Navigating the storm: Global spillovers and India's economy

### A. The global environment has deteriorated following the war in Ukraine

**The war in Ukraine has caused rapid deterioration in global economic conditions**

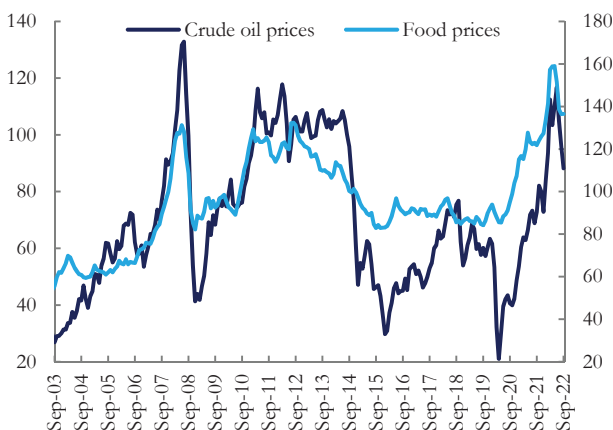
The nascent global economic recovery has been hit by the war in Ukraine. The conflict has led to renewed supply disruptions, and heightened uncertainty. Prices of food, fertilizer, and energy have soared due to constrained supply from Russia and Ukraine. In response to rising inflationary pressures, central banks all over the world have been tightening monetary policy, which has contributed to a growth deceleration in advanced economies (AEs). At the same time, portfolio capital has exited from emerging market economies (EMEs) amid a spike in uncertainty in global financial markets. These adverse spillovers have resulted in deteriorating current account balances, falling FX reserves, higher inflation, and slower domestic activity in most EMEs.

**Food and energy prices surged as an immediate impact of the war...**

The immediate impact of the war in Ukraine was a sharp increase in global energy prices. Crude oil prices spiked from an average of around USD 90/bbl in February 2022 to a peak of nearly USD 120/bbl in March (Figure 4.1), then staying put at over USD 100/bbl for over five months. While prices have moderated since end-August due to softening global demand, they remain higher than the pre-pandemic average of USD 60/bbl. Similarly, there was a sharp increase in global food prices, with the World Bank's Food Price Index increasing by 36 percent y-o-y in March 2022. This was driven by a sharp increase in cereal prices as Ukraine and Russia are large exporters of wheat. Since then, food prices have moderated, falling by 13 percent between April-September but remain higher than they were before the invasion of Ukraine.

**Figure 4.1: Oil prices spiked in March and remain elevated**

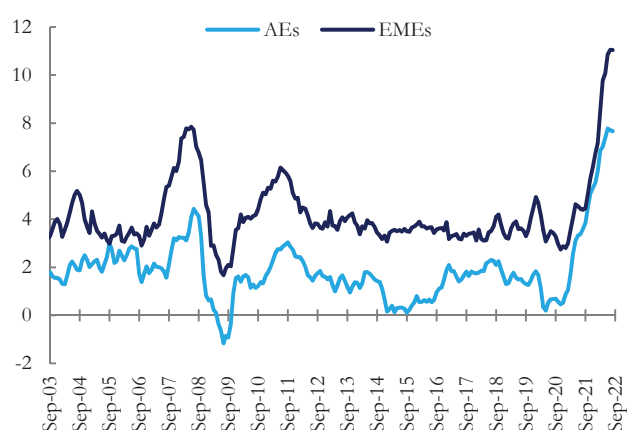
(LHS: Crude oil, average spot price, USD/Bbl; RHS: World Bank Food Price Index, 2010=100)



Source: Haver, World Bank and World Bank staff calculations.  
Note: Average of Brent, Dubai and WTI.

**Figure 4.2: Inflation has accelerated to a multi-decadal high in both AEs and EMEs**

(Composite consumer price index, percent change y-o-y)



Source: Haver and World Bank staff calculations.  
Note: The figure plots the group median inflation for 22 advanced economies and 51 EMEs.

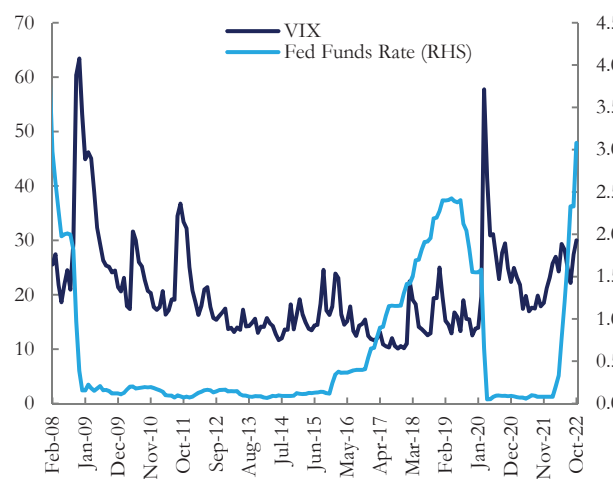
**...exacerbating inflationary pressures in both AEs and EMEs**

The increase in food and energy prices added to already high inflation in AEs. Median inflation for 22 AEs increased from a 2018-19 average of 1.7 percent y-o-y to 6 percent in February 2022, driven by a solid rebound in economic activity, rising oil prices, supply side bottlenecks and wage pressures. Consumer prices increased by 7.7 percent y-o-y in August, the fastest pace of increase since 1983. Inflation in EMEs has accelerated as well, to a multi-decadal high of 11 percent y-o-y in August (Figure 4.2).

**Central banks responded by rapidly tightening monetary policy**

In response to mounting inflationary pressures, central banks all over the world have tightened monetary policy much more aggressively than before (Figure 4.3). By end-2021, the US Federal Reserve (the Fed) and the European Central Bank (ECB) had already started tapering asset purchases. The Fed raised the Federal Funds Target Rate by 25 basis points in March but the subsequent rate hikes in May (50 basis points), June, July and September (75 basis points each) were much faster and steeper. The target range now stands at 3.75-4 percent, a level last seen in 2007-08. The ECB also hiked interest rates twice by an unprecedented 75 basis points in September and October to 1.5 percent. Market expectations for policy rates have also changed significantly with the US and euro area policy rates expected to increase to 4.9 percent and 2.9 percent by May 2023, respectively, compared with pre-pandemic rates of 1.5-1.75 percent in the US and zero in the euro area, respectively.<sup>10</sup>

**Figure 4.3: Heightened global risk aversion and increase in the FFR pose risks to capital outflows from EMEs**  
(units)

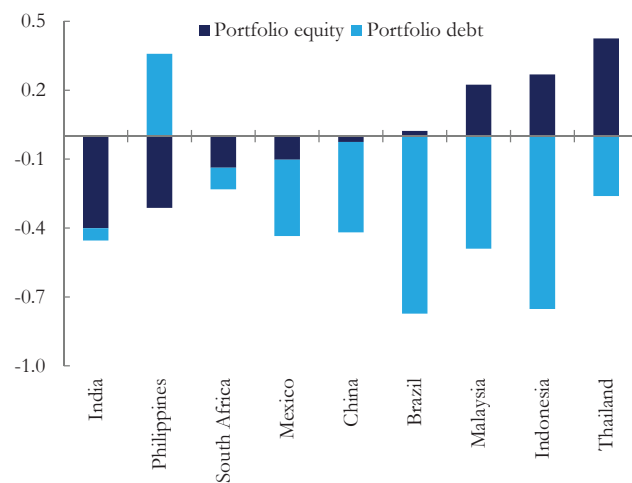


Source: CEIC and World Bank staff calculations.  
Note: VIX stands for the Chicago Board Options Exchange's volatility measure. It reflects the stock market's expectation of volatility in S&P 500 index options.

**Governments all over the world, have restricted**

In addition to monetary policy tightening, governments have increasingly resorted to export restrictions to dampen the rising inflationary pressures. As many as 38 export-restricting measures have been announced by countries across the world since the invasion of Ukraine and these trade measures have contributed to the increase in global food prices

**Figure 4.4: Portfolio capital investors have been net sellers in EMEs**  
(March-September 2022, percentage share of 2021 nominal GDP)



Source: IIF, WDI, Haver and World Bank staff calculations.

<sup>10</sup> Implied policy rates after March 2023 monetary policy meetings derived from interest rate futures markets. Data from October 14, 2022. September expectations from September 22, 2022.

**critical exports to manage surging food prices**

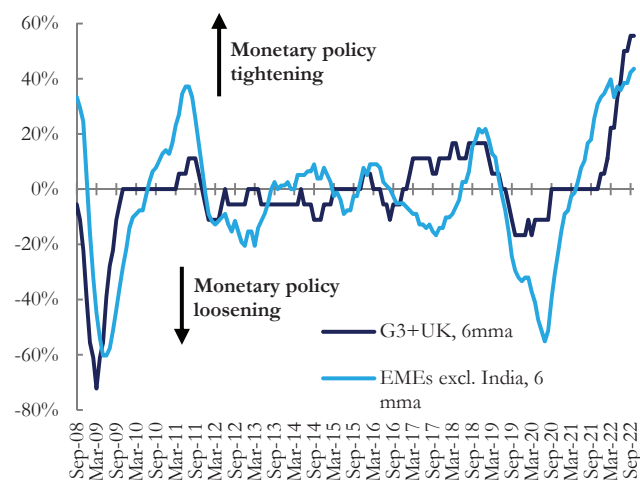
(Espitia, Rocha and Ruta, 2022). The number of export restrictions on food and fertilizers was 148 in June 2022 compared to less than 20 just before the war (WB, 2022)<sup>11</sup>. In May 2022 India placed restrictions on exports of wheat products, with a heatwave threatening output. Restrictions on sugar exports were placed from June, while exports of wheat flour, refined flour, semolina, and whole meal flour were also banned in August. In September, the export of 100 percent broken rice was restricted, and a 20 percent export duty imposed on other grades of rice. These measures may have contributed to pushing global food prices even higher.

**Heightened risk aversion and monetary policy tightening caused capital outflows from EMEs**

Global financing conditions have tightened on the back of slowing growth, heightened uncertainty and most importantly, tightening monetary policy. Volatility in financial markets has increased and risk assets have been sold off sharply on fears that central banks would have to further step up the pace of policy rate hikes to manage rising inflation (Figure 4.9). Emerging market assets have suffered large losses, and sovereign spreads of high-yield emerging markets rose nearly to levels last seen in March 2020 (IMF Global Financial Stability Report, October 2022). Amid this heightened uncertainty, portfolio investors turned net sellers in most major EMEs (Figure 4.4).

**Figure 4.5: Monetary policy tightening in AEs and EMEs has been swift**

(diffusion index, 6 month moving average or 6mma, percent)



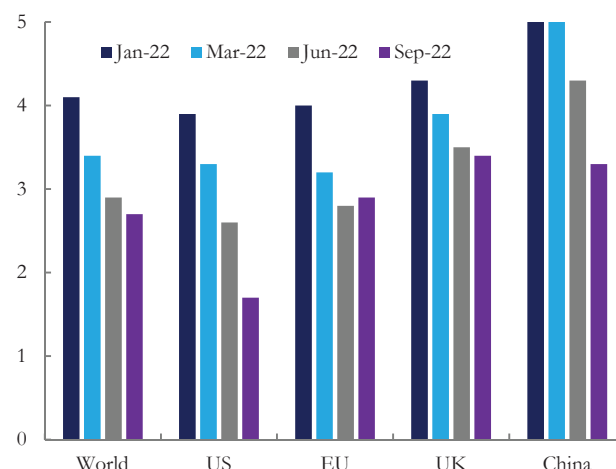
Source: Haver and World Bank staff calculations.

Note: The diffusion index is calculated as sum of all responses divided by the number of countries. The responses can be 0 (rate remains the same as last month), 1 (rate has increased) or -1 (rate has decreased) in a month.

G3 countries are the US, euro area and Japan.

**Figure 4.6: Growth forecasts for major economies have been downgraded significantly**

(2022 Real GDP growth consensus forecast, percent y-o-y)



Source: Consensus Economics.

**Global growth is projected to slow down**

Amid intensifying inflationary pressures and aggressive monetary policy tightening (Figure 4.5), global growth has decelerated, primarily led by softening growth momentum in AEs. The World Bank’s global growth forecast for 2022 was downgraded from 4.1 percent in January 2022 to 2.9 percent in June. Likewise, market consensus forecasts underscore the darkening prospects in the major economies (Figure 4.6). The steepest revision has been for the US; the forecast was slashed by 2.2 percentage points to 2.5 percent. China is a close second, with a downward revision by 1.7 percentage points to 4.3 percent.

<sup>11</sup> <https://blogs.worldbank.org/voices/trade-restrictions-are-inflaming-worst-food-crisis-decade>

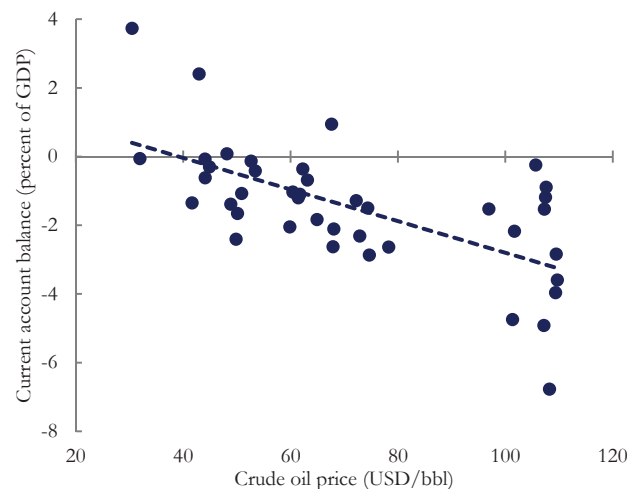
## B. India is not *completely* insulated amid rising external risks

**Elevated fuel prices and recovering domestic demand have driven the sharp rise in the import bill**

India is not completely insulated from the deteriorating external economic environment. The merchandise trade deficit has widened as the import bill has surged, in tandem with rising commodity prices, and recovering domestic demand. Oil prices were above USD 100/bbl for over five months and are still over USD 80/bbl. India imports a sizeable amount of oil, accounting for 21 percent of total merchandise imports. Furthermore, consumption of oil recovered to pre-pandemic average earlier this year amid a robust recovery of domestic demand. For every USD 10 per barrel increase in oil prices, the current account deficit increases by almost 0.4 percentage points of GDP (Figure 4.7). Besides oil, demand for capital goods picked up on the back of robust public capital spending. Consumer demand for items such as electronics has been solid, contributing to substantially high non-oil and non-gold imports (Figure 4.8).

**Figure 4.7: High oil prices cause a deterioration in the current account balance**

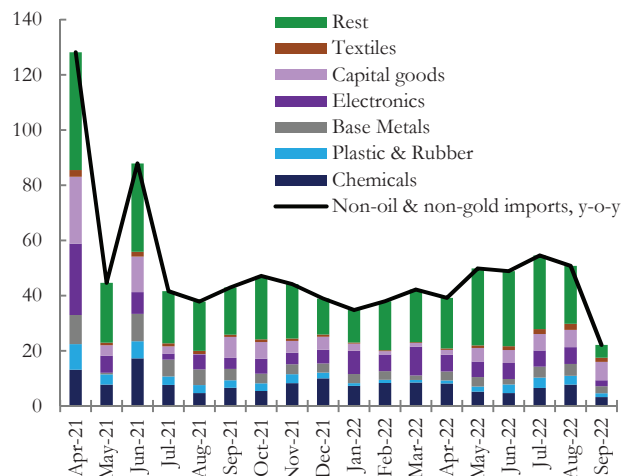
(Y-axis: Current account balance, percent of GDP; X-axis: India basket Oil price, USD/ barrel)



Source: CEIC and World Bank Staff Calculations.

**Figure 4.8: Higher demand for consumer and capital goods has also pushed up imports**

(contribution to merchandise import growth, y-o-y percentage)



Source: CEIC and World Bank Staff Calculations.

**Merchandise exports have been susceptible to cyclical growth slowdowns**

India's merchandise exports to major economies - the US, China, and several European economies (Belgium, France, Germany, Netherlands, and the UK)- account for almost 40 percent of the total. Moreover, merchandise exports are very sensitive to global income growth (Figure 4.10); that is, they have high-income elasticities. A 1 percentage point decline in global growth will cause India's merchandise export growth to slow by 1.5-2.5 percentage points<sup>12</sup>. During past episodes of growth slowdown in major economies, demand for Indian goods declined significantly in these economies (Figure 4.9).

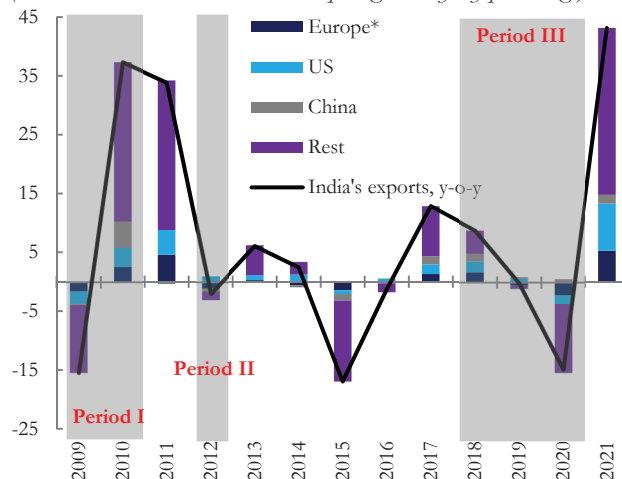
<sup>12</sup> World Bank staff calculations

**Figure 4.9: Demand for India's goods depends on global growth**  
(percentage, y-o-y)



Source: CEIC, Haver and World Bank Staff calculations.

**Figure 4.10: Major economies account for a substantial share of India's merchandise exports**  
(contribution to total merchandise export growth, y-o-y percentage)

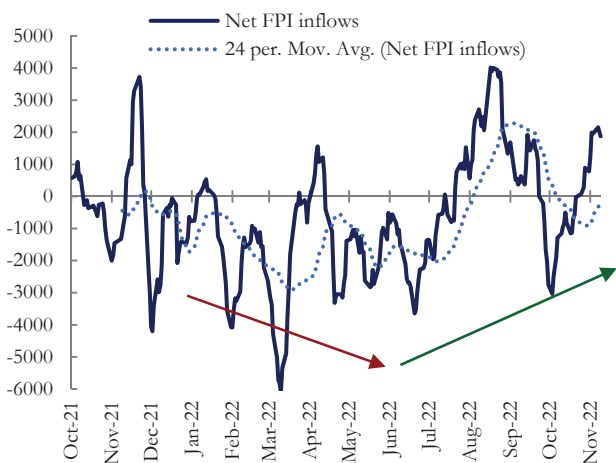


Source: IMFDOT and World Bank Staff Calculations.  
Note: Period I covers the Global Financial Crisis; Period II covers the peak of the European sovereign debt crisis; Period III covers the US and China trade war and the onset of the COVID-19 pandemic.

**Tightening global financial conditions led to portfolio outflows in India, similar to other EMEs**

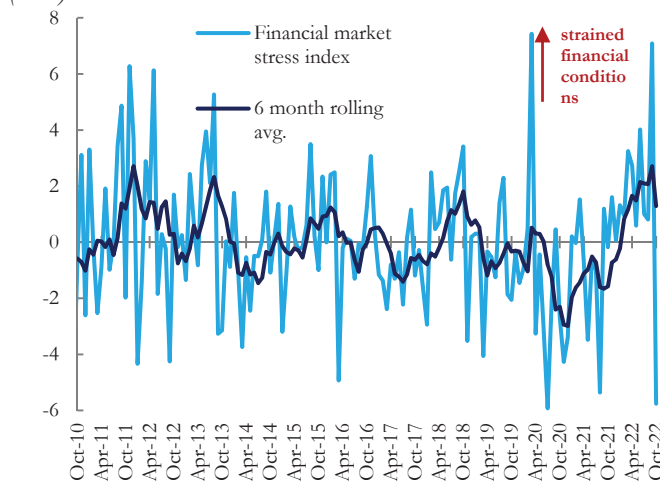
A total of USD 22.2 billion (4 percent of current foreign exchange reserves) exited India's financial markets in H1 2022, compared to USD 12.5 billion in 2013 (4.5 percent of reserves) and USD 16.3 billion in 2018 (3.8 percent of reserves). India, like other EMEs during the first half of 2022, also experienced a sharp reversal of both equity and debt FPI (Figure 4.11). The outflows surpassed the levels during 2013 taper tantrum and the EME sell-off in 2018. Combined with the slowdown on merchandise exports, the portfolio outflows put pressure on India's external financing needs (Figure 4.12).

**Figure 4.11: Portfolio flows have been volatile but inflows have returned since June**  
(USD million)



Source: CEIC and World Bank staff calculations.

**Figure 4.12: Even though financial conditions continue to be strained**  
(units)



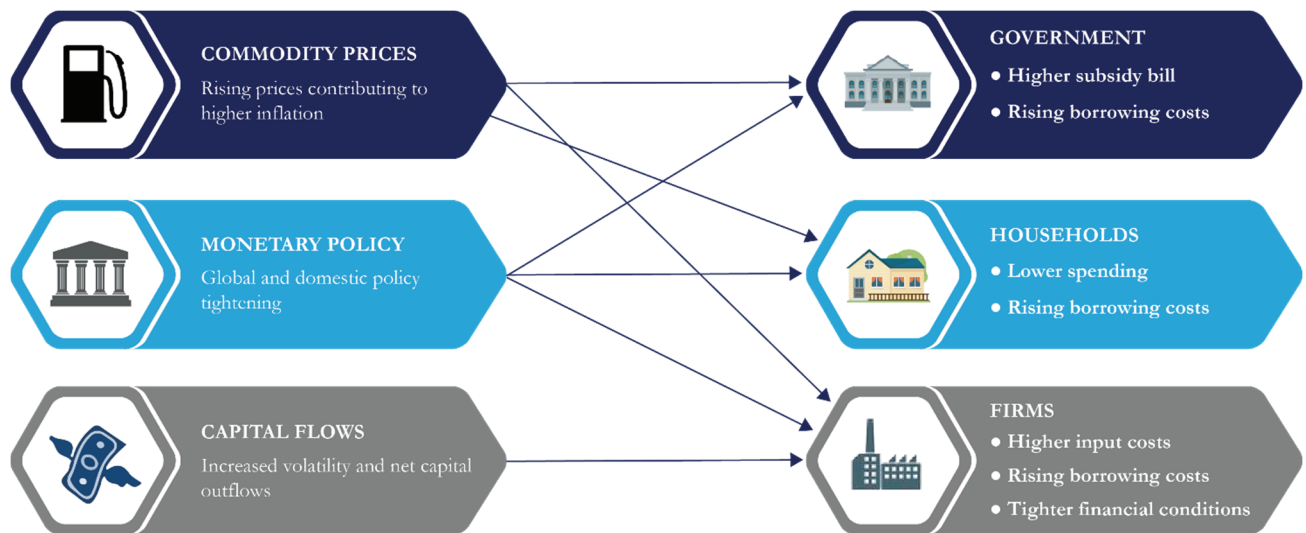
Source: Based on Eichengreen and Gupta (2016), CEIC and World Bank staff calculations.  
Note: The Financial Market Stress Index is calculated as an equal-variance weighted average of exchange rate depreciation, change in equity index and decline in forex reserves, using monthly data.



**A challenging external environment will affect India's economic outlook through different channels**

The near-term growth outlook for India will be affected by the deteriorating global economic environment. As a net importer of crude oil, India's current-account balance is sensitive to elevated global crude oil prices and the impact has been exacerbated by the growth slowdown in major export destinations like the US, the UK, and euro area. Amid global monetary policy tightening and heightened uncertainty, portfolio capital inflows have been volatile and weak. These external factors have resulted in the Indian rupee depreciating by almost 10 percent this year. A weak currency combined with rising prices of critical commodities - oil, food, and fertilizers - has pushed up domestic inflation, which has warranted the extension of fiscal support to vulnerable households and farmers. The following sections examine and quantify the impact of the channels of trade, capital flows and monetary policy, through which the deteriorating external environment will affect India's economy (Figure 4.13). This is followed by a discussion of India's macroeconomic fundamentals, resilience and buffers compared with other emerging market peers and India's historical performance.

**Figure 4.13: India will be affected through multiple channels by the global environment**



**C. The sharp tightening in US monetary policy and deteriorating global outlook has important implications for India's economy though it withstands the shocks better than others EMEs**

**The Federal Reserve's monetary policy stance has reversed at an unprecedented pace**

The global financial backdrop shifted significantly late last year as the US Federal Reserve acknowledged that monetary policy would need to respond to surging inflation and rising inflation expectations. The shift led to a repricing of assets globally as expectations of the FFR in two years' time—measured by the two-year ahead overnight interest swap—increased from 0.2 percent in August 2021 to 1.2 percent in January 2022. As of October, this rate was 4.5 percent. The build-up of market expectations of policy rate hikes over the next two years was rapid, reaching levels last observed at the turn of the century. Rapid and unexpected shifts in US monetary policy have, in the past, been associated with significant spillovers for EMEs including India.

**US interest rates impact EMEs through four main channels**

US interest rates have a substantial impact on financial and economic outcomes in emerging markets (EMEs), through exchange rates, more expensive financing, changing risk perceptions and trade impacts. First, an increase in the FFR can lead to a strengthening of the US dollar, thus, depreciating the local currency. The dollar strength comes from portfolio rebalancing (bond and equity outflows) as an increase in the FFR changes the relative attractiveness of US dollar assets. Second, increases in the FFR increases the cost of foreign currency borrowing by EME governments and firms. This can also lead to a repricing of existing foreign-currency debt through local currency depreciation. Third, a higher FFR can change risk perceptions leading to higher risk premia in EMEs which drives portfolio investment flows out of EME assets and into US assets, which are perceived to be safer. Finally, good news about economic activity in the United States, and advanced economies more generally, are associated with better growth outcomes in EMEs, due to increased export demand.

**US monetary policy has significant impact on India's economy...**

Empirical evidence indicates the presence of these spillover channels for India (Hoek, Kamin, and Yoldas 2020; Sahoo, Shankar, Anthony 2020). A change in US monetary policy affects India's economy via higher bond yields and volatility, depreciating exchange rates, rising risk premium, and equity price losses. The 2013 taper tantrum provides stark evidence of this impact, although this reflected a particularly vulnerable moment for India's economy (Mishra et al. 2014). To assess the impact of US monetary policy on India's economy, monetary policy shocks (unanticipated changes in the FFR) and, shocks caused by central bank communication (the market's interpretation of changes in the US Fed's growth and inflation forecasts) are regressed against several financial and economic variables from India (following Jarocinski and Karadi, 2020) and the results are presented below.

**...through changes in short-term rates, exchange rates, financial markets...**

Financial conditions in India are affected by both, unanticipated changes in US monetary policy rates (surprises) and communication to the market during the Federal Open Market Committee (FOMC, responsible for the US Federal Reserve's open market operations) meetings. Monetary policy surprises in the US tend to increase both short (3-month) and long (10-year)- term yields in India, with the former reflecting a shift in the RBI's policy rates (Figure 4.14 A). The long-term rate, however, does not respond strongly to the US monetary policy and may reflect the relatively low sovereign risk the Indian economy enjoys and the low level of foreign-currency-denominated debt. India's EMBI+ (Emerging Market Bond Index)<sup>13</sup> spread, representative of sovereign risk, was 2.0 percent in October 2022, which is less than half the average spread for EMEs. Countries with higher sovereign risk tend to face stronger spillovers from the US monetary policy (IMF 2021). US monetary policy surprises also lead to a depreciation of the rupee against the US dollar; a 25-basis point surprise increase in the FFR is followed by a 2.7 percent depreciation of the Indian Rupee vis-à-vis the US dollar after a month. An increase in the FFR also leads to a decline of 9 percent in India's stock markets (Figure 4.14 B). At the same time, foreign exchange reserves decrease by 3.4 percent and there are foreign portfolio outflows from equities – a 25-basis point increase leads to about outflows of about USD 6 billion in the first month. A negative central bank information shock, such as the Fed communicating a view about a deteriorating economic outlook that the market did not expect, causes the 10-year government bond yields to decline but results in only a limited shift in short rates. The information shock also weakens the rupee, decreases Indian stock prices and is associated with foreign portfolio outflows from equity markets.

<sup>13</sup> The J.P. Morgan Emerging Markets Bond Index Plus (EMBI+) tracks liquid, US dollar emerging market fixed and floating-rate debt instruments issued by sovereign entities only.

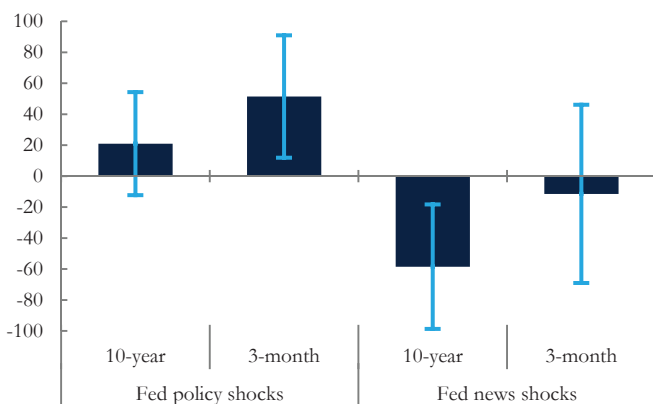
**... and domestic activity**

In addition to financial conditions, a US monetary policy surprise also affects domestic activity. A US monetary policy shock leads to a significant increase in consumer inflation in India, partly due to the depreciation of the exchange rate, but the impact is short lived (Figure 4.14 C). A 25 basis-point increase in the FFR leads to a 0.6 percent increase in consumer inflation. In addition, industrial production in India falls 1 percent after two months (Figure 4.14 D). US central bank communication shocks causes similar effect, but it is (statistically) insignificant.

**Figure 4.14: Impact of US monetary policy on domestic activity and financial markets in India**

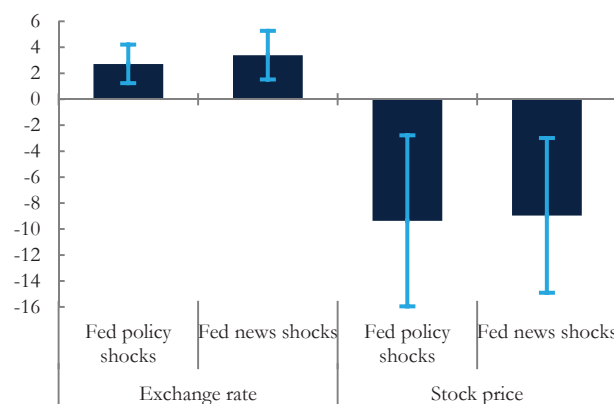
**A. Bond yields**

*(Cumulative one-month impact, basis points)*



**B. Financial markets**

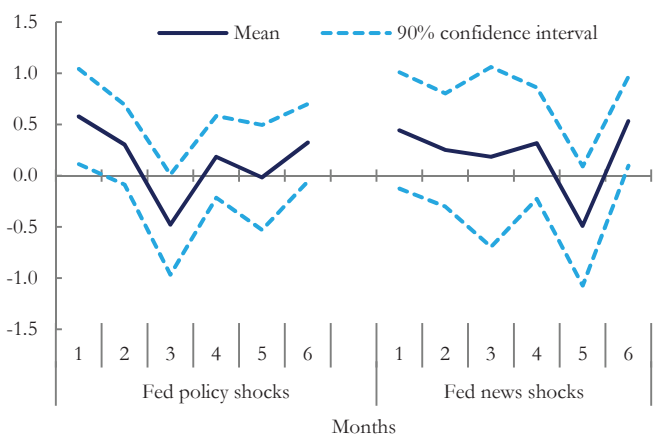
*(Cumulative one-month impact, percentage)*



\*whiskers represent the mean +/- twice the standard deviation.

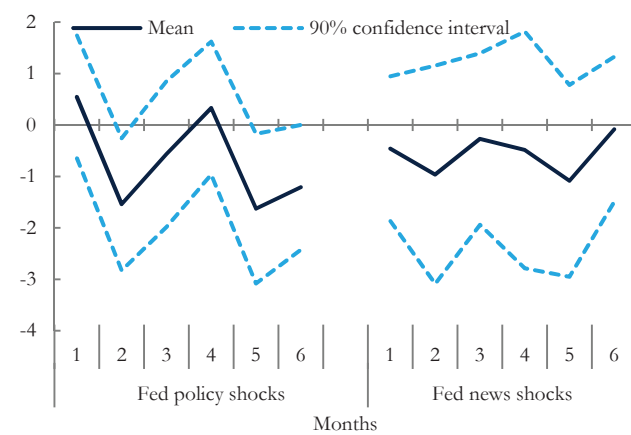
**C. Consumer inflation**

*(percentage)*



**D. Industrial production**

*(percentage)*



Sources: Bloomberg, Haver, Jarocinski and Karadi (2020) and World Bank staff estimates.

Note: Responses reflect a 25-basis-point increase in U.S. interest rates. Based on a local projection model estimated on 10-year and 3-month bond yields, USDINR exchange rate, equity prices, industrial production, consumer inflation, and foreign exchange reserves from February 1990 to December 2016. Model includes 4 lags. All variables except yields are in log first differences. “Fed policy shocks” refer to US monetary policy surprises and are called “monetary policy shocks” in Jarocinski and Karadi (2020). “Fed news shocks” refer to “central bank information shocks” in Jarocinski and Karadi (2020) and reflect negative news outcomes.

**The growth outlook for the euro area, the US and China has deteriorated...**

There are signs of substantial weakness in major economies as global activity is being affected by rapid tightening in financial conditions and high inflation. Economic activity in the euro area has been hit by natural gas supply disruptions and high energy costs while in the US, the impact of rapid monetary policy tightening is already becoming evident in some sectors such as housing, financial and labor markets. In China, pandemic-related restrictions, slowing external demand and extreme weather events have all contributed to a slower pace of activity.

**A deteriorating growth outlook has significant adverse implications for EMEs**

A deteriorating growth outlook for the euro area, the US and China will have significant implications for most EMEs, including India. A 1 percentage point decline in the GDP growth rate in these three economies is associated with a 0.7-0.5 percentage point decline in GDP growth for other EMEs<sup>14</sup> (see Box 4.1 for details of the modelling exercise). Together, these three economies are major drivers of demand for exports in developing countries and important sources of investment, financing, and remittances.

**But India remains more resilient than others EMEs to a slowdown in the US, euro area, and China**

In comparison to other EMEs, India is less affected by growth slowdowns in the US, China and the euro area. A 1 percentage point decrease (increase) in the US GDP growth rate is associated with a 0.4 percentage point decrease (increase) in India's GDP growth. Likewise, India's growth changes by 0.4 percentage points in response to a 1 percentage point change in the euro area's GDP growth and 0.2 percentage points for a 1 percentage point change in China's GDP growth. For other EMEs, impacts from the US, euro area, and China are at least 1.5 times larger than for India (Figure 4.15). India's relative resilience comes from its solid economic fundamentals, significant foreign exchange reserves, available policy space and prudent macroeconomic management.

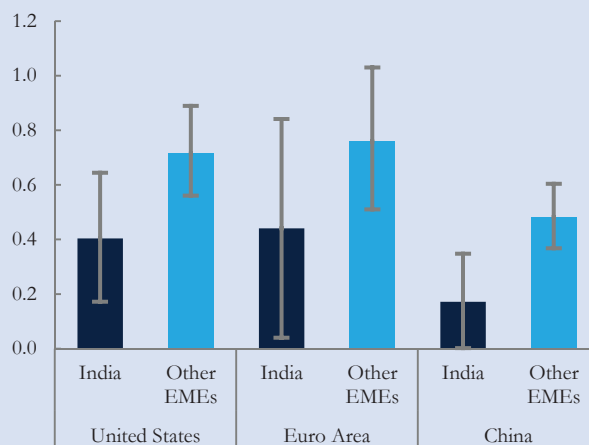
#### **Box 4.5: Growth spillovers from the US, euro area and China**

Shocks to economic growth can be transmitted across borders through various channels that include – (i) trade linkages, (ii) portfolio investment and foreign direct investment flows, (iii) cross-border exposure to banks, (iv) remittances and (v) a deterioration in consumer and business sentiments that reduces confidence. However, identifying the individual effect of each of these channels is empirically challenging and the analysis in this section focuses on aggregate effects of growth spillovers instead of fundamental drivers.

To identify growth spillovers from the US, euro area and China, a Bayesian vector autoregressive model is estimated on quarterly data from 1999 to 2019. The model includes the following variables: real GDP for the US, euro area and China, US 10-year treasury yield, a proxy for global financial conditions, other emerging markets' real GDP, India's export price index, India real GDP, and India's real effective exchange rate. The other emerging markets included in the comparator group are Argentina, Bulgaria, Bolivia, Brazil, Botswana, Chile, Costa Rica, Ecuador, Hungary, Indonesia, Jordan, Morocco, Mexico, Philippines, Poland, Paraguay, Romania, Russia, Serbia, Slovenia, South Africa, Thailand, Turkey, and Uruguay.

<sup>14</sup> Other emerging market's real GDP is based on 24 economies weighted using constant GDP in 2010 prices and market exchange rates. The 24 EMEs are Argentina, Bulgaria, Bolivia, Brazil, Botswana, Chile, Costa Rica, Ecuador, Hungary, Indonesia, Jordan, Morocco, Mexico, Philippines, Poland, Paraguay, Romania, Russia, Serbia, Slovenia, South Africa, Thailand, Turkey, and Uruguay.

**Figure 4.15: Growth spillovers are significant but lower for India than other EMEs**  
(cumulative annual impact, percentage points)



Source: CEIC, Haver and World Bank staff estimates.

Note: Based on World Bank (2016). Bars reflect the cumulative impact after one year scaled by the cumulative shock to the source country. All variables in the model, except US treasury yields are transformed to log first difference and annualized. Block exogeneity is imposed to ensure that domestic variables do not affect global variables.

**E. India is more resilient relative to other EMEs: with strong growth, low private sector indebtedness, and high foreign exchange reserves but with high public debt and a recovering banking sector**

**Adequate buffers and policy space are likely to safeguard against external macro-financial risks**


India’s capacity to safeguard against external macro-financial risks depends on its domestic resilience, external investment position, external buffers, and policy space to mitigate risks. The economy is well placed to weather the difficult external environment compared to other major EMEs – accounting for 84 percent of the total EME nominal GDP – especially when compared to India’s economic situation in immediate run-up to the 2013 taper tantrum (Figure 4.16). During the 2013 sell-off of EME assets, India was classified as one of the ‘fragile five’ economies due to weak macroeconomic fundamentals (in the lead up to significant portfolio outflows) relative to other major EMEs.

**Pressure on the Indian rupee has been muted compared to other EMEs**

The Indian rupee has been one of the best performing EME currencies, in terms of volatility and the size of exchange rate movement. The nominal effective exchange rate (NEER) of commodity exporters – Brazil and Indonesia<sup>15</sup> - appreciated significantly due to substantial gains from rising commodity prices. In case of Mexico as well as Brazil, the NEER has appreciated in lockstep with rapid monetary policy tightening, which has made the currencies an attractive option for carry-trade. Meanwhile, India’s NEER has depreciated by 0.3 percent, in year-to-date terms (as of August) even as its trade deficit has ballooned in the same period. This muted depreciation pressure on Indian rupee is underpinned by the RBI’s intervention in the FX market to mitigate the volatility and widening interest rate differentials vis-à-vis the US which has attracted more portfolio flows in the recent months. Likewise for real effective exchange rate (REER), the movement has been less than what other countries have experienced this year. However, amid RBI’s interventions in the FX market and elevated domestic inflation (averaging at 6.9 percent y-o-y this year, above the upper threshold of the RBI’s target range), the REER has appreciated by 0.4 percent.

<sup>15</sup> Commodity exports as a share of total exports is greater than 40 percent.

**Figure 4.16: India is better positioned this time to manage external shocks, compared to its peers and in the run-up to the taper tantrum in 2013**



	Run-up to taper tantrum in May 2013				Current			
	Minimum	Median	Maximum	India	Minimum	Median	Maximum	India
<b>External environment</b>								
NEER	-3.9	1.1	6.0	1.2	-21.2	-0.3	16.8	-0.3
REER	-3.1	1.1	5.8	1.9	-8.0	0.4	13.5	0.4
<b>Reserve Adequacy</b>								
- External debt/Reserves	0.7	2.2	4.4	1.4	0.8	2.9	7.5	1.1
- Short-term external debt/Reserves	0.1	0.4	1.0	0.3	0.1	0.4	1.2	0.2
<b>Macroeconomic &amp; Financial stability</b>								
Inflation	1.2	2.8	10.1	10.1	2.6	8.3	79.5	6.9
Budget balance/GDP	-7.6	-2.3	0.7	-7.6	-10.0	-6.0	-1.9	-10.0
Primary balance/GDP	-3.5	-0.9	3.0	-2.6	-7.9	-2.7	1.1	-4.6
Public debt/GDP	11.5	38.8	80.0	66.6	36.0	63.0	89.8	84.6
Non-resident holding of public debt/Public debt	6.7	29.6	67.7	6.7	3.9	26.8	42.7	4.9
Current Account Deficit/GDP	-6.8	-2.8	5.4	-3.6	-10.2	-2.8	1.8	-2.8
Corporate debt/GDP	15.7	43.1	132.7	75.4	17.3	51.1	156.7	54.2
Household & NPISH debt/GDP	10.3	30.8	72.1	34.8	14.9	34.1	90.1	36.8
Bank leverage: Capital to risk-weighted assets	13.6	16.1	19.6	13.6	15.0	18.3	27.0	15.3
Bank profitability: Return on Equity	9.9	14.0	24.9	13.9	2.7	11.2	28.2	10.6
<b>Market perception of country risk</b>								
Difference between 10 year domestic and the US treasury bond yields	1.2	3.4	7.5	6.1	-0.8	3.7	9.1	3.7

Note: (i) The nine EMEs are India, Brazil, China, Indonesia, Malaysia, Mexico, the Philippines, Thailand, and South Africa.

(ii) Depending on data availability, the 'Current' period covers March-September 2022 and the 'Run-up to Taper Tantrum 2013' covers Dec 2012-March 2013.

(iii) RWA stands for risk weighted assets.

Source: Haver, CEIC, WDI, IMF, BIS, and World Bank staff calculations.

### Large FX reserves provide a crucial buffer for India

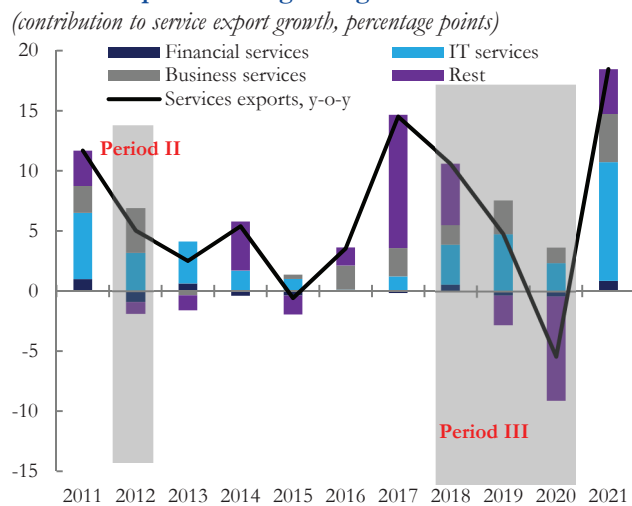
India's forex reserves, above USD 500 billion, are among the largest holdings of international reserves in the world and together with net forward assets, provide adequate buffer against global spillovers. While the reserves have declined by more than 10 percent this year, they still provide at least eight months of import cover. In addition to import coverage, reserve adequacy can be assessed through coverage of external debt, particularly the short-term debt. Total external debt has declined over the years – from 22.4 percent of GDP in FY12/13 to 20 percent in FY21/22. More importantly, short-term external debt was 4 percent of GDP in FY21/22, a decline of 1.4 percentage points since FY12/13. Since the taper tantrum in 2013, India's FX reserves have almost doubled and provide better coverage of external debt than other EMEs.

### A widening merchandise trade deficit will be somewhat offset by resilient services trade surplus

India's current account deficit widened to 2.8 percent of GDP in Q2 this year from 1.5 percent in the first quarter. On this metric of macroeconomic stability, India scores better than only the Philippines (-7.7 percent of GDP) and Thailand (-6.6 percent). The primary driver of the increasing current account deficit is the widening merchandise trade deficit. While elevated oil prices and recovering domestic demand have pushed up imports, merchandise exports have softened with global growth slowing down. Nonetheless, India's services exports will continue to mitigate the pressures from a widening merchandise

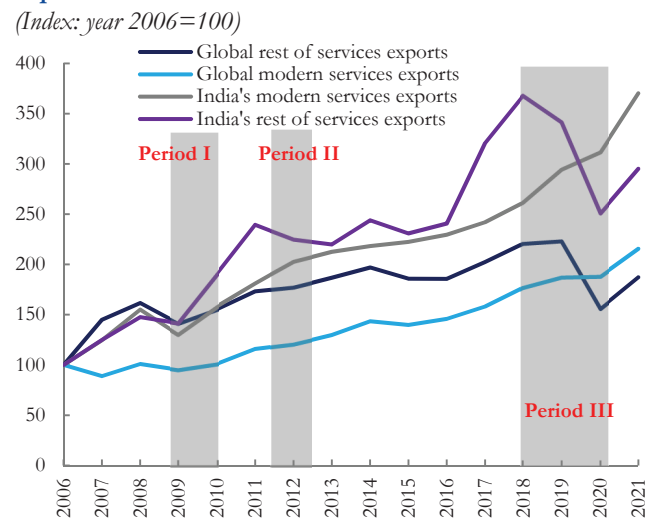
trade deficit. Services exports account for over a third of total exports and their resilience to adverse global developments has translated into the maintenance of a stable services trade surplus. About 22 percent of India's services exports are imported by major economies (excluding China) and in the past, that held-up reasonably well (Figure 4.18) when growth in major economies slowed down. This resilience is attributable to a substantial increase in outsourcing of critical business and IT activities by the US and European economies over the past decade. Even globally, exports of modern services – comprising IT and business services – have increased steadily through periods of slow growth. In fact, India's exports of modern services have grown at a much faster rate compared to the global trend and have been less volatile than India's rest of the services exports (Figure 4.17). The share of these critical modern services in India's total services exports was 73 percent in FY20/21, a jump of 11 percentage points over a decade.

**Figure 4.17: India's exports of IT and Business services have held-up well amid global growth slow-down...**



Source: UNCTAD and World Bank Staff calculations.  
 Note: Period I covers the Global Financial Crisis; Period II covers the peak of the European sovereign debt crisis; Period III covers the US and China trade war and the onset of the COVID-19 pandemic.

**Figure 4.18: ...and have grown faster than the global exports**

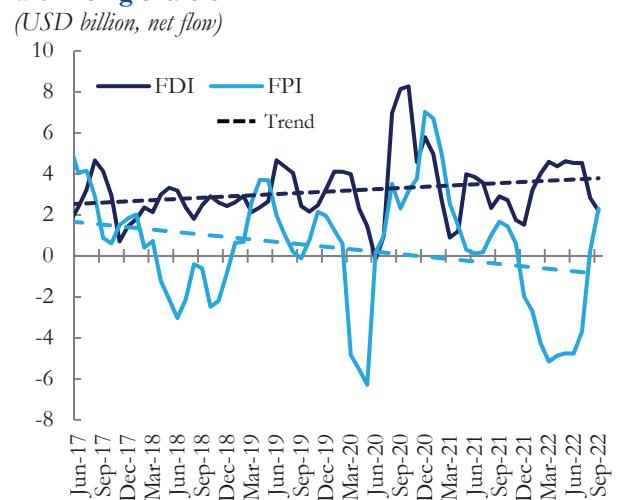


Source: CEIC and World Bank staff calculations.

**India's stable capital mix will mitigate some of the pressure on the current account deficit**

Portfolio capital, accounting for almost 4 percent of FX reserves, exited India's financial market in year-to-date terms. A multitude of factors drove these outflows – a narrowing interest rate differential vis-à-vis the US, deteriorating current account deficit and a flight to safe assets. Despite the decline in the financial account surplus, the overall balance of payments deficit remains small at 0.1 percent of GDP (Q1 FY22/23). That is because foreign capital flows to India are dominated by foreign direct investment (FDI)

**Figure 4.19: The capital-mix for India has improved with rising share of FDI**



Source: CEIC and World Bank staff calculations.

which are more stable and driven by domestic factors, such as macroeconomic stability and investment climate, as opposed to portfolio flows which are driven by global push factors. Net FDI inflows have continued to remain stable and together with ‘other’ flows (such as loans, trade credit etc.) have more than offset the net outflow of FPIs (Figure 4.19).

**The financial sector has deepened considerably over the years even as India lags other EMEs**

India’s performance on financial sector measures – the ratio of risk weighted assets (RWA) to capital and bank profitability – lags other EMEs (Figure 4.16). However, relative to the 2012-13 period, bank leverage, measured by RWA to capital, has improved significantly. Based on the latest available data, commercial banks, including state owned banks, reported an improvement in profitability indicators including return on assets (RoA) and return on equity (RoE) compared with 2016, although profitability also remains below 2012 levels. While the NPL ratio – a measure of asset quality – appears to have worsened since 2012-13, this partly reflects the delayed recognition of stressed assets in the period after the Global Financial Crisis<sup>16</sup>. The true scale of NPLs only became apparent after the RBI undertook an asset quality review (AQR) in FY15/16. The gross NPL ratio after peaking at 11.6 percent in 2018, declined to 5.9 percent in March 2022. Thus, even though the NPL ratio is higher than it was in the 2012-13 period, it reflects a more stringent and transparent regulatory framework for the recognition of NPLs.

**Policy reforms and regulatory measures have strengthened the financial sector**

The improvement in financial sector metrics has been facilitated by the adoption of several regulatory and policy measures. A new Insolvency and Bankruptcy Code was adopted in 2016, leading to faster resolution of corporate insolvency. Given the increasing significance of Non-Banking Financial Companies in the financial sector, a revised regulatory framework will be implemented from October 2022, requiring large NBFCs to strengthen capital, and align NPL recognition norms with those for banks. The expected sale of the first tranche of legacy NPLs to the newly established National Asset Reconstruction Company Limited (NARCL) in the next few months is expected to further support improving NPL levels for banks.

**Price stability has improved since 2013 despite significantly elevated inflation in recent months**

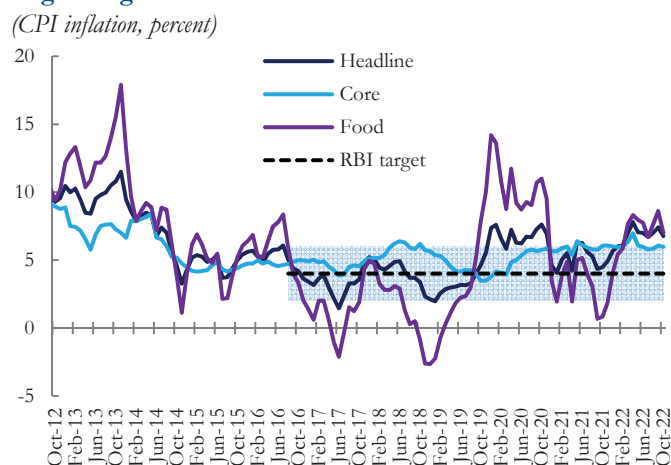
The adoption of the inflation targeting framework in 2016 not only improved monetary policy credibility but also helped keep inflation low between 2016-20. In the lead-up to the taper tantrum in 2013, inflation expectations had spiked and consumer inflation in India averaged 10.1 y-o-y (January-April 2013) compared to the median 3.9 percent across the comparator EMEs (Figures 4.20 and Figure 4.21). With the RBI adopting the 4-percent inflation target, inflation expectations declined and through most of the last six years, inflation moved within the 2-6 percent target range. In the aftermath of the war in Ukraine, surging oil and food prices along with domestic supply bottlenecks pushed up inflation in India. Consumer inflation has remained above the target range of the RBI for 9 consecutive months, averaging 6.9 percent y-o-y in the recent months (June-August 2022). Inflation expectations also rose to levels last seen in 2014. Despite elevated inflationary pressures, India is close to the median value of inflation across other EMEs, underscoring improved price stability since the taper-tantrum episode and across comparator economies.

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<sup>16</sup> NPL ratios are not compared across countries for two reasons: the definition of NPLs is not uniform comparable across countries and March 2022 figures might not reflect the true picture of NPLs in some EMEs due to the impact of Covid-19 relief measures such as moratoriums and restructuring of stressed assets.

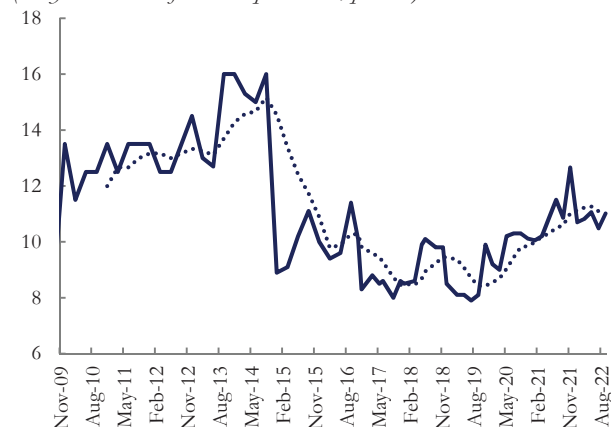


**Figure 4.20: Inflation has largely remained within the target range since 2016**  
(CPI inflation, percent)



Source: CEIC, World Bank staff calculations.

**Figure 4.21: Inflation expectations are much lower than a decade ago but higher than 2016-19 average**  
(one-year ahead inflation expectations, percent)



Source: CEIC and World Bank staff calculations.

**Corporate and household debt has declined and remains benign**

The RBI has hiked its key policy rate by 190 bps this year (as of October) resulting in higher borrowing costs for the corporate sector and households – a key risk to their balance sheets. Nonetheless, India is in a much better position this time, as the stock of debt has declined since 2013 and the level is very close to the median EME levels of debt. India’s corporate sector has deleveraged substantially since 2013; corporate debt as a percentage of GDP has declined by 20 percentage points to 54.2 percent in Q2 2022. Much of this deleveraging came on the back of rising NPLs in the banking sector and collapse of a few key NBFCs.

**Public debt is high, but it is domestically held with low rollover risk**

The government, however, is constrained by a high level of debt as a share of GDP - at 86 percent of GDP in FY21/22. India’s public debt is the highest amongst its peers, except Brazil (89.8 percent of GDP) and it has increased by more than 23 percentage points since 2013. However, public debt is mostly long-term and domestic, with a low rollover risk. Non-resident holding of public debt is just 4.8 percent of the total, which is not only an improvement over 2013 when the share was close to 7 percent, but this is also lower than the share for EME comparators. The rollover risk is low. The weighted average maturity of market borrowings of the central and state governments is over 11 years and 8 years respectively and has increased in recent years. The ownership base has also become more diversified: while the bulk of securities is owned by commercial banks and insurance companies, the RBI has created a window for retail investors to directly buy government securities. Although yields on government bonds have increased to 7.4 percent from a low of around 5.8 percent in July 2020, due to the policy rate hikes by the RBI, floating-rate debt only accounts for about 6 percent of total public debt so higher borrowing costs will only impact total debt servicing costs on the margin.

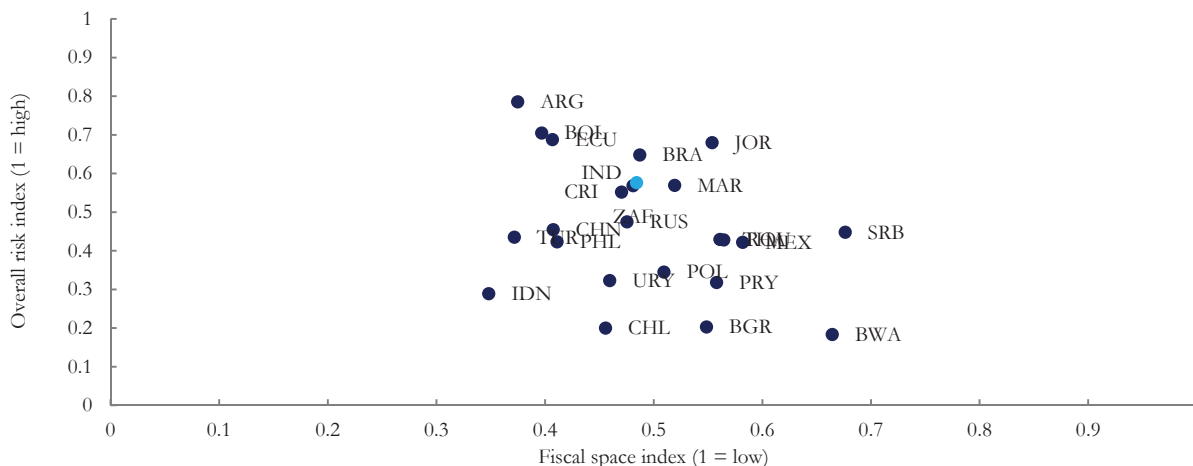
**Fiscal consolidation is underway on the back of buoyant revenue growth**

India’s fiscal deficit, at 10 percent of GDP by end-FY21/22, is the highest amongst EME comparators (Figure 4.16). It has however, declined from its peak of 13.3 percent in FY20/21 and is likely to decline further to below 10 percent in FY22/23. In the first five months of FY22/23, expenditure has grown modestly as many pandemic-related stimulus measures have been withdrawn and revenue growth has been particularly strong during the same period. Even though the growth outlook for India has been downgraded over the last few months amid global headwinds, India is still expected to grow at a steady pace. Moreover, the recovery in economic activity, strong corporate earnings and rising prices have led to strong and buoyant growth in government revenues in nominal terms. Increased digitalization and compliance have also led to a marked improvement in goods and services tax revenues.

**India has a moderate amount of fiscal space vis-à-vis other MICs**

India’s primary deficit for FY22/23 is projected to be around 4.1 percent, which puts India’s debt/GDP trajectory on a declining path. Thus, India has some leeway for the fiscal deficit to increase while still maintaining a sustainable debt level. Similarly, an assessment based on India’s creditworthiness (as measured by its credit rating) and debt levels also indicates a moderate level of fiscal space compared with other middle-income countries (MICs) (Figure 4.22).

**Figure 4.22: India has a moderate level of risk and fiscal space relative to other middle-income countries (index)**



Source: World Bank (2022); Haver and World Bank staff calculations.

Note: The overall risk index gives equal weight to five sources of fiscal risk: debt and exposure to advanced economy monetary policy tightening, fiscal pressures associated with rising food prices, fiscal pressures associated with rising energy prices, revenue impacts associated with a growth slowdown, and general exposure to global spillovers from a global growth slowdown or recession. The fiscal space index is based on the country’s relative ranking on credit rating and the debt/GDP ratio.

**There are several sources of fiscal risks arising from global spillovers including higher spending on food and fertilizer subsidies, and lower taxes on fuel**

The sharp increase in global food and fertilizer prices has significant expenditure implications for India since the government provides subsidies for both food and fertilizers. The government has already had to more than double the allocation for fertilizer subsidies compared with the budgeted amount to around 1 percent of GDP. The government has also extended the Pradhan Mantri Gareeb Kalyan Anna Yojana (PMGKAY), a program that was first put in place after the pandemic to provide free food grains to the most vulnerable households. This was not anticipated in the budget for FY22/23 and will increase spending on food subsidies by around 0.4 percent of GDP. Lastly, the government also responded to the sharp increase in global crude oil prices by cutting excise duties on fuel which would lower revenues from fuel by around 0.4 percent of GDP. Despite these headwinds to fiscal consolidation, the fiscal deficit is projected at 9.6 percent this fiscal year, supported by robust revenue collection and more targeted current spending.

**India’s macroeconomic policy response to global spillovers has been well crafted...**

The RBI responded actively to the sharp increase in inflation and accelerated monetary policy tightening by advanced economies following the invasion of Ukraine by raising the policy interest rate in an emergency meeting and has continued to hike rates since then. The government supported the central bank’s actions by cutting excise duty and other taxes on fuel to moderate the impact of higher global oil prices on inflation. To cushion the blow of higher food and fertilizer prices, allocations for food and fertilizer subsidies were increased. The PMGKAY program was extended by nine months till the end of 2022.

**... and recognizes trade-offs between limiting the impact of adverse global spillovers on India's growth and available policy space**

The government's policy response to the external shock, aimed at maintaining macroeconomic stability and protecting vulnerable households, has been carefully designed and well targeted, given increasingly limited fiscal space. Like the COVID-19 response, it combined demand- and supply-side policies. The RBI's gradual withdrawal of liquidity and policy rate hikes have been aimed at anchoring inflation expectations. However, this has increased borrowing costs, which along with elevated input prices have potentially constrained private investment. The central bank's management of short-term volatility in exchange rates has contributed to a decline in reserves, though they are still at a relatively high level. On the fiscal front, even though the cost of the higher subsidy bill and lower taxes on fuel will largely be offset by strong revenue growth, these measures have slowed the pace of fiscal consolidation. The government's fiscal response to COVID-19 was relatively conservative and the government has adopted a similar approach in response to the current challenges while continuing to focus on supply side measures. They include an increase in public spending on infrastructure, development of the logistics sector, production-linked incentive scheme and steps towards increasing the share of renewable energy and reducing dependence on fossil fuels. The confluence of multiple challenges on the external front poses a challenge to India's growth trajectory, but balanced policymaking, which factors in these trade-offs, will help India navigate global headwinds.

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