

ENTER

Economy Watch

Monitoring India's
macro-fiscal performance

April 2022

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Highlights

1. In March 2022, PMI indicated an easing expansion in manufacturing while accelerating growth in services with their respective levels at 54.0 and 53.6. This was accompanied by a sharp increase in input price inflation.
2. IIP growth increased marginally to 1.7% in February 2022 from 1.5% in January 2022.
3. CPI inflation surged to a 17-month high of 7.0% in March 2022, breaching the RBI's 6% upper tolerance limit for the second successive month. On an annual basis, CPI inflation was at 5.5% in FY22 as compared to 6.2% in FY21.
4. WPI inflation surged to a four-month high of 14.5% in March 2022, led by inflationary pressures stemming from higher global crude and primary commodity prices. On an annual basis, WPI inflation accelerated to 13.0% in FY22 from 1.3% in FY21.
5. According to the CGA, Center's gross tax revenues grew by 36.6% during April-February FY22 with growth in direct and indirect taxes at 53.3% and 23.3% respectively.
6. During April-February FY22, Center's total expenditure grew by 11.5% with a growth of 10.2% in revenue expenditure and 19.7% in capital expenditure.
7. During April-February FY22, Center's fiscal and revenue deficits stood at 82.7% and 79.7% of their respective FY22 RE.
8. Merchandise exports and imports growth remained high at 19.8% and 24.2% respectively in March 2022 as compared to 25.1% and 36.1% respectively in February 2022.
9. Merchandise exports at US\$419.7 billion in FY22 surpassed the target of US\$400 billion, growing at an unprecedented pace of 43.8% over its FY21 level. Imports grew by 55.1% in FY22, reaching a level of US\$611.9 billion.
10. Current account deficit widened to a 13-quarter high of (-)2.7% of GDP in 3QFY22 due to worsening merchandise trade deficit relative to GDP.
11. FPIs registered outflows for the fifth consecutive months at US\$(-)5.5 billion while net FDI inflows remained buoyant at US\$4.3 billion in February 2022.
12. Global crude price at US\$112.4/bbl. in March 2022 was at its highest level since April 2014. Global coal price increased to a historic high of US\$294.4/mt. during the month.
13. The IMF has revised down its global growth forecast by 0.8% points to 3.6% in 2022 owing to the ongoing geopolitical tensions with India's FY23 growth projected at 8.2%.



Foreword

Inflation under pressure: India's policy dilemmas

The RBI, in its first monetary policy review of FY23 held on 8 April 2022, retained the policy rate at 4%. With this, the repo rate remained unchanged from this level since May 2020. The RBI has instituted a new facility called Standing Deposit Facility (SDF) with its rate to be placed 25 basis points below the policy rate, at 3.75%. The Liquidity Adjustment Facility corridor has been restored to 50 basis points, ranging from 3.75% to 4.25%. The former is the SDF rate, and the latter is the Marginal Standing Facility rate. The RBI's policy stance continues to be accommodative. However, recognizing that there is a liquidity overhang amounting to INR8.5 lakh crore in the system, the RBI indicated that there would be a calibrated withdrawal of liquidity over a multi-year timeframe to ensure that inflation remains within the target going forward, while supporting growth.

In view of the current geopolitical situation, the RBI has revised India's FY23 growth forecast downwards to 7.2% from its February 2022 forecast of 7.8%. Alongside, the CPI inflation forecast for FY23 has been revised upwards to 5.7% from 4.5% estimated earlier. These projections are based on a revised global crude price benchmark at US\$100/bbl. as compared to US\$75/bbl. considered earlier. The quarterly growth projections are 16.2% in 1Q, 6.2% in 2Q, 4.1% in 3Q, and 4% in 4Q of FY23. This implies that after the base effect is largely exhausted in 1Q, the average growth for the remaining three quarters would be only 4.8%. In the context of inflation, 1Q inflation is projected at 6.3%. It is then expected to fall to 5.8% in 2Q, 5.4% in 3Q, and 5.1% in 4Q of FY23. The average CPI inflation for the last three quarters is thus expected to be 5.4%. These projections critically depend on the assumptions regarding global crude prices and other supply-side bottlenecks along with normal monsoons.

The opposite movements in growth and inflation are likely to imply minimal changes in the nominal growth prospects. The FY23 nominal growth may be marginally revised upwards because the magnitude of increase in inflation by a margin of 1.2% points is higher than the reduction in the real growth forecast by a margin of 0.6% points. We expect that the implicit price deflator (IPD)-based inflation may be higher than the CPI inflation as the WPI inflation which has a higher weight in determining the IPD inflation, continues to be higher than the CPI inflation. During 4QFY22, CPI inflation averaged 6.3% while the WPI inflation averaged 13.8% implying an excess of 7.5% points over the CPI inflation. The expectation of a higher IPD-based inflation is also confirmed by the implied 4Q IPD-based inflation at 8.7%. In this quarter, the implied nominal GDP growth stood at 13.9%. Thus, there is a strong likelihood that nominal GDP growth may be close to 14% in FY23, which is well above the budget assumption of 11.1%. This in turn implies that there is scope for a higher than budgeted growth in Center's gross tax revenues (GTR). Considering a tax buoyancy of 1.1, growth in Center's GTR may be estimated to be slightly higher than 15%, which is higher than the budgeted growth at 9.6% that implied a buoyancy of less than 1. This would imply an improved fiscal space for supporting demand in the system. The RBI has also indicated an improvement in the manufacturing capacity utilization ratio to 72.4% in 3Q of FY22 from 68.3% in the previous quarter. If this trend continues and the government is able to support demand in the system through both, private and government final consumption expenditures, we may expect a revival of the investment cycle.

CPI inflation in the US increased to 8.5% in March 2022, its highest since December 1981, led by an increase in prices of gas, shelter and food¹. According to available information², the US Fed has signaled more aggressive rate hikes in the upcoming months. The pressure on US interest rate would eventually call for RBI also to revise domestic interest rates upwards.

¹ <https://www.bls.gov/news.release/pdf/cpi.pdf>

² <https://www.washingtonpost.com/business/2022/04/12/inflation-march-cpi/>



High frequency indicators (HFIs) point to recovering economic activity towards the end of FY22. In March 2022, PMI manufacturing remained high at 54.0 as compared to 54.9 in February 2022. PMI services increased to 53.6 in March 2022 from 51.8 in February 2022. Alongside, the PMI indices pointed to a marked increase in input price inflation. In March 2022, the contraction in total vehicle retail sales eased sharply to (-)2.9% as compared to (-)9.2% in February 2022. Growth in power consumption (y-o-y) increased to a seven-month high of 7.8% in March 2022 as compared to 4.0% in February 2022. Overall IIP growth improved to 1.7% in February 2022 from 1.5% in January 2022. Merchandise exports and imports growth remained high at 19.8% and 24.2% respectively in March 2022 as compared to 25.1% and 36.1% respectively in February 2022. Gross GST collections were at a historically high level of INR1.4 lakh crore in March 2022. On an annual basis, gross GST collections at INR14.9 lakh crore in FY22 posted a growth of 30.8% over FY21. Outstanding bank credit growth improved to 10.1% in the week ended 8 April 2022, its highest level since week ended 27 September 2019.

The WTO projected that the ongoing global turmoil may lower global GDP growth by 0.7-1.3% points to range between 3.1% and 3.7% in 2022. It also projected that global trade growth in 2022 could be cut almost in half, from 4.7% as forecasted earlier in October 2021 to 2.4% to 3%³. The UNCTAD, in its Trade and Development Report Update released in March 2022 reduced its global growth projection to an even lower level of 2.6% for 2022⁴. The World Bank in its 'Europe and Central Asia Economic Update', released on 10 April 2022, has assessed that in view of the ongoing global uncertainty, GDP in the Europe and Central Asia region is expected to contract by (-)4.1% in 2022. The IMF, in its April 2022 issue of the World Economic Outlook has projected global growth to decline from an estimated 6.1% in 2021 to 3.6% in both 2022 and 2023, indicating downward revisions of 0.8 and 0.2% points from their corresponding forecasts in January 2022 owing to the ongoing geopolitical tensions. Maximum downward revisions in growth prospects have been made for the Euro area followed by the UK, apart from Russia and Ukraine. India's FY23 growth projection has been lowered by 0.8% points to 8.2% reflecting weaker domestic demand as higher oil price is expected to weigh on private consumption and investment, and a drag from lower net exports. The FY24 growth forecast has also been marginally revised down to 6.9%. Despite these revisions, India is projected to lead global growth throughout IMF's forecast period from FY23 to FY28.

In the context of the ongoing geopolitical tensions, this month's In-focus section entitled 'India's vulnerability to global crude prices: how should the burden of price upsurges be shared?' discusses in detail, the challenges arising from the current elevated crude price levels for the Indian economy and the related policy options that the government may have for coping with these in the short, medium, and long term.

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³ https://www.wto.org/english/res_e/booksp_e/impactukraine422_e.pdf

⁴ https://unctad.org/system/files/official-document/tdr2021-update1_en.pdf

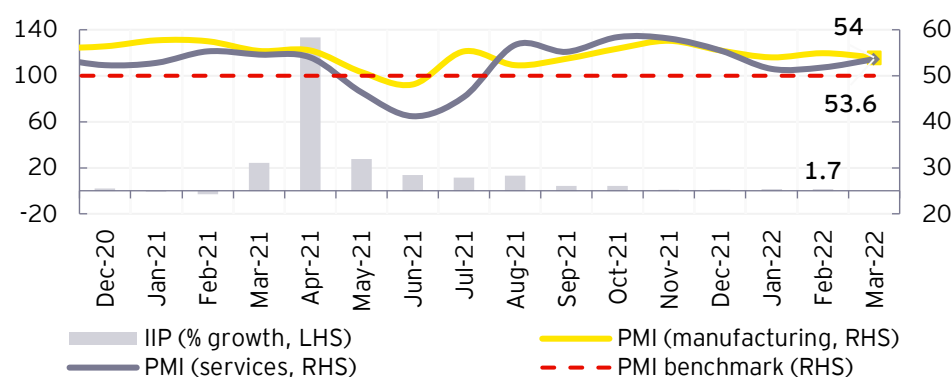


1. Growth: PMI signaled expansion in manufacturing and services in March 2022

A. PMI: signaled an easing pace of expansion in manufacturing and accelerating growth in services accompanied by increasing input price inflation in March 2022

- ▶ Headline manufacturing PMI (seasonally adjusted (sa)) was at 54.0 in March 2022 as compared to 54.9 in February 2022 indicating a slower expansion in new orders and production (**Chart 1**). March 2022 marked the joint-weakest rate of growth since September 2021. This was accompanied by an intensification of inflationary pressures as reflected in a faster increase in input costs and output charges. On an annual basis, PMI manufacturing averaged 54.0 in FY22, increasing from 50.2 in FY21.
- ▶ PMI services increased to 53.6 in March 2022 from 51.8 in February 2022. The input price sub-index at 59.7 was at an 11-year high indicating a sharp upsurge in input costs. On an annual basis, PMI services averaged 52.3 in FY22 as compared to 41.7 in FY21.
- ▶ The composite PMI Output Index (sa) increased to 54.3 in March 2022 from 53.5 in February 2022. While manufacturing PMI was higher than the services PMI, the pace of expansion slowed in the former and accelerated in the latter. The composite PMI Output Index averaged 53.5 in FY22, up from 44.7 in FY21.

Chart 1: PMI and IIP growth



In March 2022, PMI indicated an easing expansion in manufacturing while accelerating growth in services with their respective levels at 54.0 and 53.6. This was accompanied by a sharp increase in input price inflation.

Source: MoSPI and IHS Markit

B. IIP: grew by 1.7% in February 2022

- ▶ The quick estimates of IIP released by the MoSPI on 12 April 2022 showed that IIP grew by 1.7% in February 2022 as compared to 1.5% (revised) in January 2022 (**Chart 2**). This was largely attributable to a higher growth in the output of electricity and mining sectors.
- ▶ Output of electricity and mining sectors showed a growth of 4.5% each in February 2022, improving from 0.9% and 2.8% respectively in January 2022.
- ▶ Manufacturing output continued to show a subdued growth at 0.8% in February 2022, falling from 1.3% in January 2022.
- ▶ As per the use-based classification of industries, output of infrastructure/construction goods and primary goods showed an improved growth of 9.4% and 4.6% respectively in February 2022 as compared to 6.1% and 1.5% respectively in January 2022. Growth in the output of capital goods at 1.1% in February 2022 was marginally lower than 1.4% in January 2022. On the contrary, output of both consumer durables and non-durables contracted by (-)8.2% and (-)5.5% respectively in February 2022.
- ▶ According to provisional estimates, growth in the output of eight core infrastructure industries (core IIP) increased to a four-month high of 5.8% in February 2022 from 4.0% (revised) in January 2022. This pick up may partly be attributed to a favorable base effect. Six out of eight sub-industries continued to show a positive y-o-y growth during the month. Among these, growth in the output of natural gas (12.5%), petroleum refinery products (8.8%), steel (5.7%) and electricity (4.0%) improved in February 2022 as compared to the previous month. However, growth in the output of coal (6.6%) and cement (5.0%) moderated in February 2022.

IIP growth increased marginally to 1.7% in February 2022 from 1.5% in January 2022.

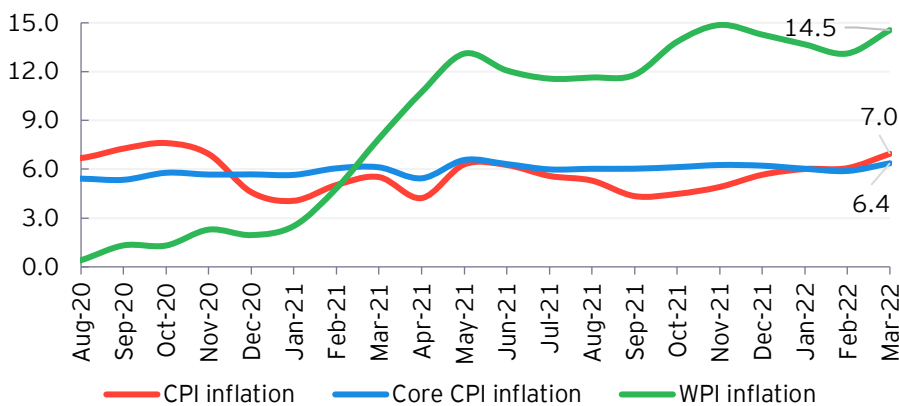


2. Inflation: CPI inflation surged to a 17-month high of 7.0% in March 2022

CPI inflation increased for the sixth successive month to 7.0% in March 2022 from 6.1% in February 2022 led by higher inflation in food items (Chart 2). On an annual basis, CPI inflation was at 5.5% in FY22 as compared to 6.2% in FY21

- ▶ Consumer food inflation increased to a 16-month high of 7.7% in March 2022 from 5.9% in February 2022 due to higher inflation in vegetables, meat and fish, oils and fats, spices and cereals and cereal products. This increase was partly due to unfavorable base effect.
- ▶ Core CPI inflation⁵ surged to 6.4% in March 2022 from 5.9% in February 2022 driven by a sharp increase in inflation in personal care and effects to a 14-month high of 8.7%, household goods and services to a nearly 8-year high of 7.7%, and clothing and footwear to a nearly 9-year high of 9.4% in March 2022.
- ▶ Inflation in transportation and communication services was at a 22-month low of 8.0% in March 2022 reflecting favorable base effect and limited passthrough of rising global crude prices to retail fuel prices. On 22 March 2022, petrol and diesel prices were raised for the first time since December 2021, with the cumulative increase till 31 March 2022 being INR6.4/liter each.
- ▶ Fuel and light-based inflation moderated for the fifth successive month to 7.5% in March 2022 from 8.7% in February 2022 due to easing inflation in electricity and steady LPG prices.

Chart 2: Inflation (y-o-y, in %)



CPI inflation surged to 7.0% in March 2022, breaching the RBI's 6% upper tolerance limit for the second successive month. WPI inflation also surged to a four-month high of 14.5% in March 2022.

Source: MoSPI, Office of the Economic Adviser, Government of India (GoI)

WPI inflation surged to a four-month high of 14.5% in March 2022, led by inflationary pressures stemming from higher global crude and primary commodity prices. On an annual basis, WPI inflation accelerated to 13.0% in FY22 from 1.3% in FY21.

- ▶ Inflation in manufactured basic metals increased to 26.0% in March 2022 from 19.8% in February 2022.
- ▶ Inflation in crude surged to 83.6% in March 2022 from 55.2% in February 2022 reflecting higher global crude prices on account of geopolitical developments.
- ▶ Fuel and power inflation increased to 34.5% in March 2022 from 31.5% in February 2022 as inflation in mineral oils (including petrol and diesel) increased to 50.1% from 49.5% over the same period. Inflation in electricity was at an all-time high of 21.8% in March 2022.
- ▶ Inflation in non-food articles increased to a six-month high of 25.4% in March 2022 led by higher inflation in fibres which reached an all-time high (2011-12 series) of 51.0% in March 2022.
- ▶ WPI food index-based inflation increased to 8.7% in March 2022 from 8.5% in February 2022 as inflation in food grains including cereals increased to a 26-month high of 7.0% in March 2022. Inflation in vegetables also remained elevated at 19.9% in March 2022.
- ▶ Core WPI inflation rose to 10.9% in March 2022 from 10.0% in February 2022 led by higher inflation in global commodity prices.

⁵ Core CPI inflation is measured in different ways by different organizations/agencies. Here, it has been calculated by excluding food, and fuel and light from the overall index.

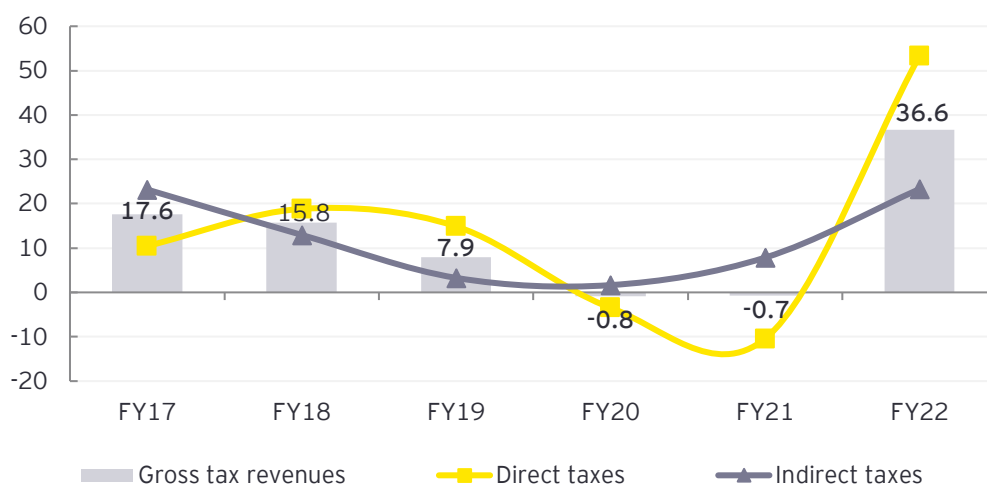


3. Fiscal performance: Center's fiscal deficit during Apr-Feb stood at 83% of the FY22 RE

A. Tax and non-tax revenues

- ▶ As per the Comptroller General of Accounts (CGA), Center's gross tax revenues (GTR)^(b) grew by 36.6% during April-February FY22 as compared to a contraction of (-)0.7% during the corresponding period of FY21 (**Chart 3**). As a proportion of the FY22 RE, Center's GTR during the first eleven months of FY22 stood at 90.4%, higher than the corresponding average ratio of 80.1% during the five-year period from FY17 to FY21.
- ▶ During April-February FY22, while Center's net tax revenues stood at 83.9% of the RE, assignment to states was at 105.8% of the corresponding RE.
- ▶ Direct and indirect tax revenues grew by 53.3% and 23.3% respectively during April-February FY22 as compared to (-)10.4% and 7.8% during April-February FY21.
- ▶ Among direct taxes, corporate income tax (CIT) showed a growth of 61.3% during April-February FY22 as compared to a contraction of (-)16.2% in the corresponding period of FY21.
- ▶ Personal income tax (PIT) grew by 45.7% during April-February FY22 as compared to a contraction of (-)4.2% in the corresponding period of FY21.
- ▶ Among indirect taxes, Center's GST revenues^{(a), (c)} grew by 29.5% during April-February FY22 as compared to a contraction of (-)9.9% during the corresponding period of FY21.
- ▶ Union excise duties (UED) showed a growth of 5.4% during April-February FY22 as compared to a high growth of 59.6% during the corresponding period of FY21.
- ▶ Center's customs duty revenues showed a strong growth of 46.6% during April-February FY22 as compared to 7.4% during April-February FY21.

Chart 3: Growth in central gross tax revenues during April-February (% , y-o-y)



Center's GTR grew by 36.6% during April-February FY22 with growth in direct and indirect taxes at 53.3% and 23.3% respectively.

Source: Monthly Accounts, CGA, Government of India

Notes: (a) Direct taxes include personal income tax and corporation tax, and indirect taxes include union excise duties, arrears of service tax, customs duty, and GST (comprising CGST, UTGST, IGST and GST compensation cess) (b) Other taxes (securities transaction tax, wealth tax, fringe benefit tax, banking cash transaction tax, etc.) are included in the center's GTR along with direct and indirect taxes, (c) IGST revenues are subject to final settlement.

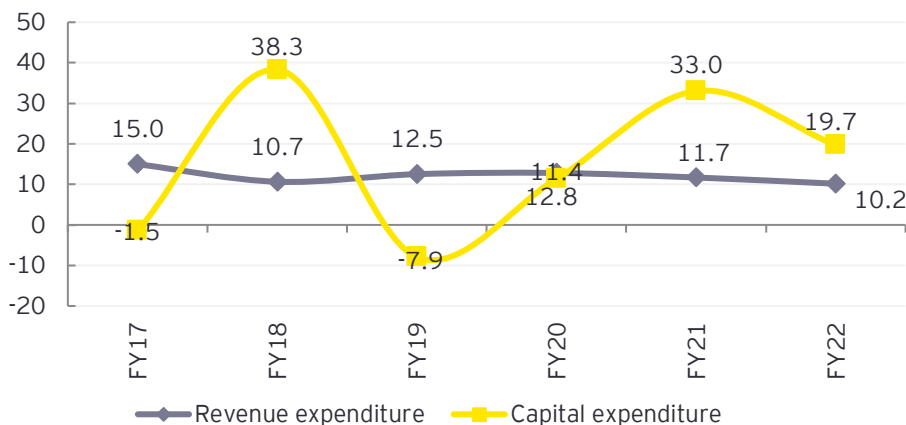
- ▶ Center's non-tax revenues grew by 101.1% during April-February FY22 as compared to a contraction of (-)41.4% during the corresponding period of FY21. Non-tax revenues during this period stood at 98.9% of the annual RE as compared to the corresponding ratio of 73.2% in FY21.
- ▶ Non-debt capital receipts showed a contraction of (-)15.3% during April-February FY22 as compared to (-)16.2% during the corresponding period of FY21. Non-debt capital receipts during April-February FY22 stood at 36.3% of the FY22 RE which had been lowered to INR99,975 crores from the BE of INR1.88 lakh crore.
- ▶ According to the Department of Investment and Public Asset Management⁶, disinvestment receipts for FY22 stood at INR13,530.67 crores, that is 17.3% of the RE at INR78,000 crore indicating a significant shortfall of INR64,469.3 crore.

⁶ <https://dipam.gov.in/>

B. Expenditures: revenue and capital

- ▶ Center’s total expenditure grew by 11.5% during April-February FY22 as compared to 14.3% during the corresponding period of FY21. Total expenditure during the first eleven months of FY22 stood at 83.4% of the FY22 RE as compared to the corresponding ratio of 81.7% during FY21.
- ▶ Revenue expenditure showed a growth of 10.2% during April-February FY22 as compared to 11.7% during the corresponding period of FY21 (Chart 4). Revenue expenditure during April-February FY22 stood at 83.9% of the FY22 RE as compared to the corresponding ratio of 80.1% during FY21.
- ▶ Growth in Center’s capital expenditure was at 19.7% during April-February FY22 as compared to 33.0% during the corresponding period of FY21. Capital expenditure during the first eleven months of FY22 stood at 80.5% of the RE as compared to the corresponding ratio of 92.3% in FY21.

Chart 4: Growth in central expenditures during April-February (% , y-o-y)



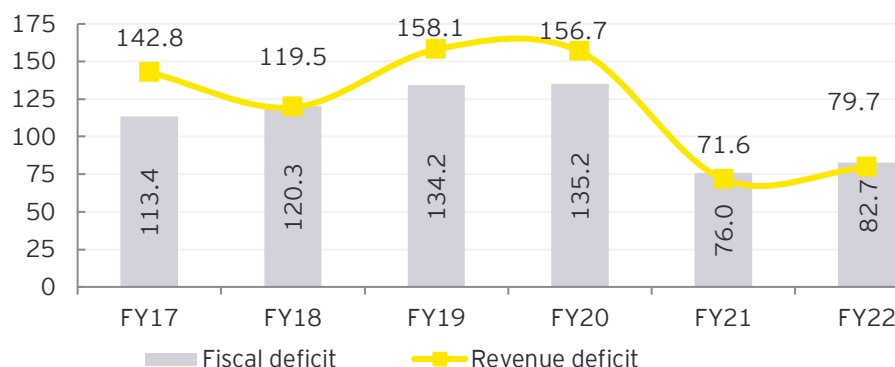
During April-February FY22, Center’s total expenditure grew by 11.5% with a growth of 10.2% in revenue expenditure and 19.7% in capital expenditure.

Source (basic data): Monthly Accounts, Controller General of Accounts (CGA), Government of India

C. Fiscal imbalance

- ▶ Center’s fiscal deficit during April-February FY22 stood at 82.7% of the RE as compared to the corresponding average ratio of 122.0% during the period FY16 to FY20 (Chart 5).
- ▶ Center’s revenue deficit during April-February FY22 as a proportion of the RE stood at 79.7% as compared to the corresponding average level of 138.3% during FY16 to FY20.

Chart 5: Fiscal and revenue deficit during April-February as percentage of annual RE



During April-February FY22, Center’s fiscal and revenue deficits stood at 82.7% and 79.7% of their respective FY22 RE.

Source: Monthly Accounts, Controller General of Accounts (CGA), Government of India.



4. Comparative global perspective: India to lead global growth during 2022 to 2027

Real GDP growth

- ▶ Global growth is projected to decline from an estimated 6.1% in 2021 to 3.6% in 2022, and remain at that level in 2023, due to the impact of the ongoing geopolitical tensions.
- ▶ Growth in advanced economies (AEs) has been revised down to 3.3% in 2022 and to 2.4% in 2023. In emerging market and developing economies (EMDEs), growth is revised down by 1% point to 3.8% in 2022 and by 0.3% points to 4.4% in 2023.
- ▶ As per the IMF, output in EMDEs is expected to remain below the pre-pandemic trend throughout the forecast period reflecting limited policy support and slower vaccination as compared to AEs.
- ▶ Among AEs, the maximum adverse impact of the geopolitical conflict is expected to be for the Euro area followed by the UK. Growth forecasts for 2022 in these two regions have been significantly revised down. Growth in these two regions is projected to fall to 1.3% and 1.5% respectively by 2027.
- ▶ Growth in the US has been revised down to 3.7% in 2022 reflecting faster withdrawal of monetary support. Growth is projected to ease to 1.4% by 2024, recovering marginally to 1.7% thereafter.
- ▶ Among EMDEs, Russia is expected to witness a contraction of (-)8.5% in 2022 and (-)2.3% in 2023. Growth is expected to rise to 1.5% in 2024, and gradually taper to 0.7% by 2027.
- ▶ China's growth is projected at 4.4% in 2022 due to the adverse impact of its zero-COVID strategy on private consumption and subdued real estate investment.
- ▶ Although India's 2022 (FY23) growth has been revised downwards to 8.2% reflecting the adverse impact of higher crude oil prices, it is expected to lead global growth throughout the forecast period.

Table 1: Real GDP growth (% , y-o-y) selected countries

| Country | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 |
|--------------|------------|------------|------------|------------|------------|------------|------------|
| AEs | 5.2 | 3.3 | 2.4 | 1.7 | 1.7 | 1.6 | 1.6 |
| US | 5.7 | 3.7 | 2.3 | 1.4 | 1.7 | 1.7 | 1.7 |
| UK | 7.4 | 3.7 | 1.2 | 1.5 | 2.2 | 1.8 | 1.5 |
| Euro area | 5.3 | 2.8 | 2.3 | 1.8 | 1.6 | 1.5 | 1.3 |
| Japan | 1.6 | 2.4 | 2.3 | 0.8 | 0.7 | 0.5 | 0.4 |
| EMDEs | 6.8 | 3.8 | 4.4 | 4.6 | 4.5 | 4.4 | 4.3 |
| Brazil | 4.6 | 0.8 | 1.4 | 2.2 | 2.0 | 2.0 | 2.0 |
| Russia | 4.7 | -8.5 | -2.3 | 1.5 | 1.0 | 0.8 | 0.7 |
| India* | 8.9 | 8.2 | 6.9 | 7.0 | 7.0 | 6.5 | 6.2 |
| China | 8.1 | 4.4 | 5.1 | 5.1 | 5.0 | 4.9 | 4.8 |
| World | 6.1 | 3.6 | 3.6 | 3.4 | 3.4 | 3.3 | 3.3 |

Source: IMF World Economic Outlook, April 2022; *pertains to fiscal year
Note: estimates for 2021 and forecasts from 2022 onwards

CPI Inflation

- ▶ CPI inflation is projected to increase sharply in both AEs and EMDEs in 2022 and remain elevated longer than expected due to an increase in the prices of energy, metals and food owing to the geopolitical conflict.
- ▶ For 2022, inflation is projected at 5.7% in AEs and 8.7% in EMDEs, 1.8% and 2.8% points higher than the January 2022 forecasts.
- ▶ CPI inflation in the US, UK and the Euro area in 2022 is projected at unprecedented high levels owing to a spike in commodity prices and tightening of labor markets.
- ▶ Among EMDEs, inflation in Russia is projected to increase to 21.3% in 2022 and remain high until 2024. Inflation in Brazil which was already high at 8.3% in 2021 is expected to remain elevated in 2022 due to a spike in energy prices and global supply chain bottlenecks.
- ▶ In India, CPI inflation at 6.1% in 2022 (FY23) is expected to breach the RBI's upper tolerance limit of 6% largely on account of higher global crude prices. Inflation is projected to ease gradually to 4% by 2026 (FY27).

Table 2: CPI inflation (%): selected countries

| Country | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 |
|--------------|------------|------------|------------|------------|------------|------------|------------|
| AEs | 3.1 | 5.7 | 2.5 | 2.0 | 1.8 | 1.8 | 1.9 |
| US | 4.7 | 7.7 | 2.9 | 2.3 | 2.0 | 2.0 | 2.0 |
| UK | 2.6 | 7.4 | 5.3 | 2.6 | 1.9 | 2.0 | 2.0 |
| Euro area | 2.6 | 5.3 | 2.3 | 1.8 | 1.8 | 1.8 | 1.9 |
| Japan | -0.3 | 1.0 | 0.8 | 0.9 | 1.0 | 1.0 | 1.0 |
| EMDEs | 5.9 | 8.7 | 6.5 | 5.0 | 4.5 | 4.2 | 4.1 |
| Brazil | 8.3 | 8.2 | 5.1 | 3.3 | 3.3 | 2.8 | 3.0 |
| Russia | 6.7 | 21.3 | 14.3 | 9.0 | 6.0 | 4.0 | 4.0 |
| India* | 5.5 | 6.1 | 4.8 | 4.3 | 4.1 | 4.0 | 4.0 |
| China | 0.9 | 2.1 | 1.8 | 2.0 | 2.0 | 2.0 | 2.0 |
| World | 4.7 | 7.4 | 4.8 | 3.8 | 3.4 | 3.3 | 3.2 |

Source: IMF World Economic Outlook, April 2022; *data pertains to fiscal year
Note: estimates for 2021 and forecasts from 2022 onwards

5. In focus: India's vulnerability to global crude prices: how should the burden of price upsurges be shared?

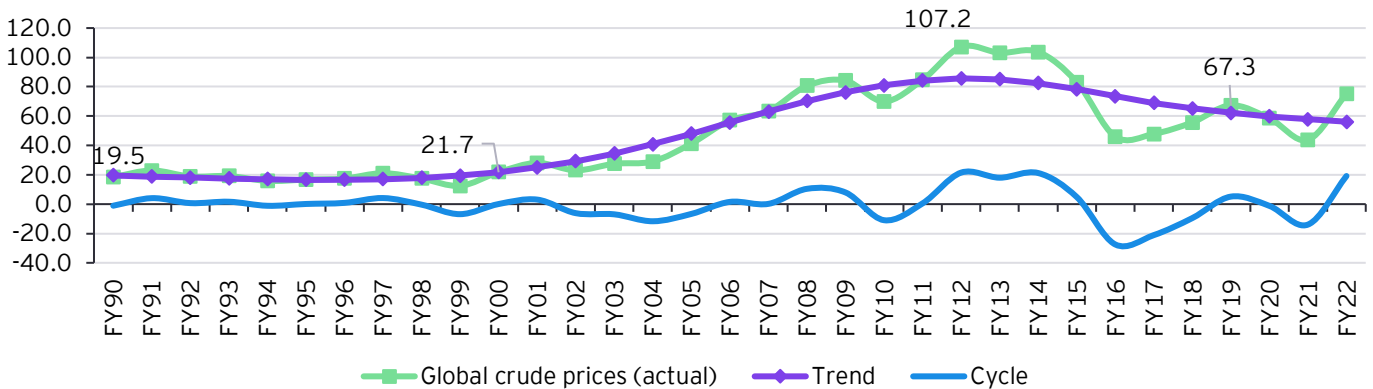
1. Introduction

India's long-term vulnerability to crude price shocks emanates from three sources. First, there is a marked increase in global crude prices on trend basis over the last three decades. Second, India's exchange rate has been depreciating on a persistent basis over this period. Third, India's dependence on imported oil has steadily increased. Global crude prices averaged US\$18/bbl. in the 1990s, increasing to US\$45.6/bbl. in the 2000s and further to US\$76.9/bbl. during 2010s. India's exchange rate depreciated on average, at a rate of 5.3% during the 1990s, 1.1% in the 2000s, and 4.4% during 2010s (Chart 7). India's dependence on imported oil⁷ increased from 38.5% in FY91 to 64.4% in FY2000 and further to 82.7% by FY10. It continuously increased, reaching another peak of 88% by FY20. On top of these long-term determinants of India's vulnerability, there are also added layers of short-term cyclical shocks in all these three parameters. In order to assess and formulate India's policy framework that translates global crude prices to retail sales prices for the consumers and the industrial users, it is important to distinguish between long-term trends and short-term cyclical shocks. Although evolving, a robust policy framework is yet to be put in place. As a result, the economy keeps getting adversely impacted from time to time, both in terms of growth and inflation as well as inducing suboptimal responses from key stakeholders such as consumers, industrial users and the central and state governments.

2. Trends and cyclical shocks

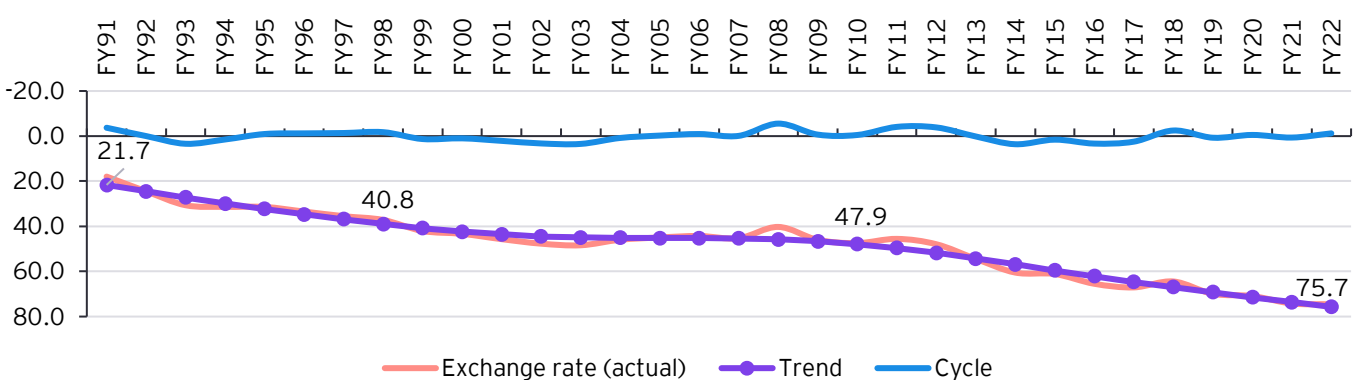
The first step in this analysis is to decompose global crude prices between a trend component and a cyclical component. This is depicted in Chart 6. In recent experience, India's GDP growth fell noticeably in periods when the actual global crude price moved above the trend line. Thus, growth rate fell from 7.9% in FY10 to 5.2% in FY12. Also, growth fell from 8.3% in FY17 to 3.7% in FY20⁸.

Chart 6: Global crude prices (US\$/bbl.): actual and trend



Source (basic data): World Bank, Pink sheets

Chart 7: Exchange rate (INR/USD): actual and trend



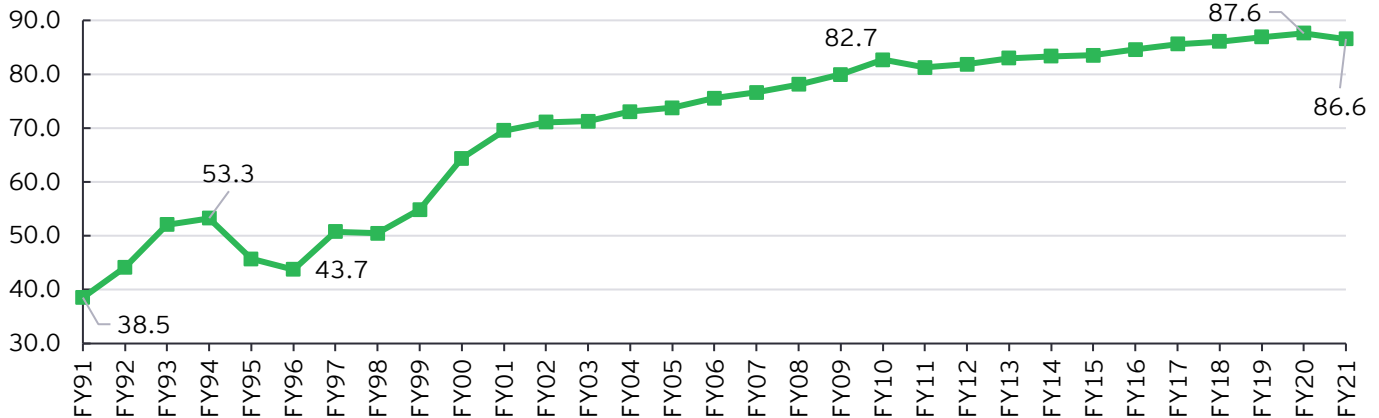
Source (basic data): RBI

⁷ Computed as the share of volume of imported crude in the sum of imports and domestically produced crude including condensate

⁸ For a detailed discussion on this please refer to the March 2022 issue of EY Economy Watch [<https://go.ey.com/37v3184>]

In spite of various initiatives to reduce dependence on imported crude⁹ by exploring non-conventional energy sources, India's dependence on imported crude has continued to increase. It was 38.5% in FY91. It increased to 82.7% in FY10, and further to 86.6% in FY21 (Chart 8).

Chart 8: Share of imported crude oil in total crude oil usage (%)



Source (basic data): PPAC

All the three determinants of India's vulnerability to oil price shocks have moved persistently against India's economic welfare on trend basis. In terms of cyclicity, the largest magnitudes of deviations from corresponding trends are noted in the case of global crude prices followed by exchange rate movements. Dependence on imported crude has been persistent without any noticeable volatility. Suitable policy responses need to be developed in order to address these challenges if India's growth framework has to be made robust.

3. Evolution of India's fuel production, supply and pricing

Policymakers in India have struggled to cope with the challenges of fuel production, fuel supply and fuel pricing with limited success over the last five decades. In terms of pricing, we can distinguish between three main phases: Phase 1 of import parity pricing, Phase 2 of administered price mechanism (APM) and augmented APM and Phase 3 of deregulation with partial exceptions and periodic interventions. We may even call Phase 3 as 'directed deregulation'. These phases are briefly discussed below.

Phase 1: import parity pricing (until 1975)

Import parity pricing represents the price that importers would pay in case of actual import of product at the respective Indian ports and includes the elements of Free on Board (FOB) price + Ocean Freight + Insurance + Custom Duties + Port Dues, etc.

Phase 2: APM and augmented APM

The APM itself went through several sub-phases.

a) APM (1975 to 2002)¹⁰

Under APM, various oil pool accounts were maintained. The idea was that prices can be held constant and any market variations in imported oil prices could be absorbed through oil pool accounts which may be allowed to go into surpluses and deficits. The specific objectives of these oil pool accounts were: i) ensuring stability in selling price, ii) insulating consumers against international price fluctuations, and iii) subsidization of consumer price of certain products like kerosene for public distribution and domestic LPG by cross subsidization from other products like petrol, Aviation Turbine Fuel (ATF) and indigenous crude oil¹¹.

The domestic price was determined on a price build-up formula known as export parity pricing (EPP). EPP represents the price which oil companies would realize on export of petroleum products. This includes FOB price + Advance License benefit (ALB) for duty free import of crude oil pursuant to export of refined products. Consequent to abolition of Customs Duty of Crude oil effective 25 June 2011, the ALB is currently zero.

⁹ Computed as the share of volume of imported crude in the sum of imports and domestically produced crude including condensate

¹⁰ Report of the Committee on Pricing and Taxation of Petroleum Products, February 2006

¹¹ https://mopng.gov.in/files/TableManagements/2020-12-08-115045-xyd7b-AR_2019-20E.pdf

b) Price band mechanism (April 2002 to October 2008)¹²

Under this system, the government gave limited freedom to oil marketing companies (OMCs) to revise retail prices within a band of +/-10% of the mean of rolling average of previous 12 months and previous 3 months of international Cost and Freight (C&F) prices.

c) Trade parity pricing-TPP (October 2008 to 2010)

It was based on a weighted average of import parity and export parity prices, in which the percentage share of import/export of these products provided the weights in the ratio of 80:20. TPP consisted of 80% of IPP and 20% of EPP. However, TPP was implemented only at the refinery level. The retail prices of petrol, diesel, domestic LPG and PDS kerosene were fixed by the government below their TPP levels. Hence, despite switching to TPP and rationalizing taxes on crude oil, petrol and diesel, subsidies could not be rationalized.

Phase 3: directed deregulation (2010 Onwards)

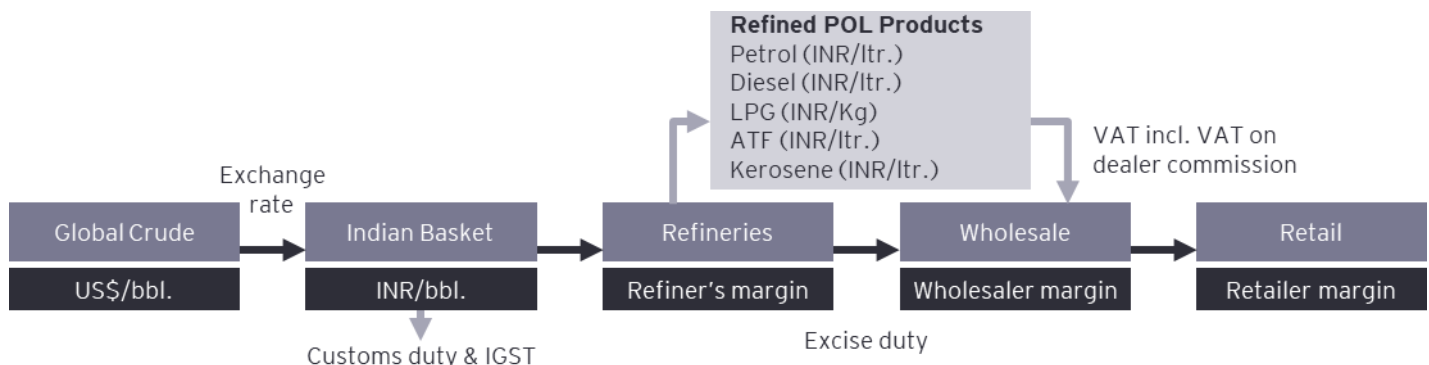
In June 2010¹³ the government deregulated the price of petrol and gave liberty to OMCs to fix the price of petrol based on the calculation of their cost and profit¹⁴. A similar policy of deregulation for the pricing of diesel was implemented with effect from 19 October 2014. Despite these deregulations, the consumers of sensitive petroleum products have been somewhat insulated from the impact of high international oil prices by the government/OMCs. Currently Refinery Gate Pricing (RGP) mechanism is used to determine the prices of major petroleum products.

RGP is the price at which product is transferred/sold from refinery to marketing division of OMCs. The RGP of diesel is based on TPP. The RGP of Domestic LPG and kerosene sold in the public distribution system is based on IPP as per the Kerosene and Domestic LPG Subsidy Scheme, 2002. Beginning 2016, the government has attempted to reduce the subsidy bill on kerosene and LPG by raising their price, aligning them with global prices¹⁵. Further, effective 16 June 2017, daily pricing of petrol and diesel has been implemented in the entire country, resulting in closer alignment with international crude prices¹⁶.

4. Major petroleum products: current price build-up mechanism

Indian basket of crude oil represents the average of crude oil processed by Indian refineries in the ratio of actual processing of Sweet Crude (Brent) and Sour Crude (Dubai), in the immediately preceding year. For Sweet crude oil price, the daily Platts assessments for benchmark crude oil 'Brent' is considered. For Sour Crude Oil, the average of Platts assessments for benchmark crude oil 'Dubai' and 'Oman' is considered. During FY18, Indian refineries processed 74.77% Sour Crude and 25.23% Sweet Crude¹⁷.

The current price challenges have arisen from a sharp upsurge in global crude prices due to ongoing geopolitical tensions. The daily pricing mechanism had been suspended for about four and a half months while global crude prices continued to increase. Thus, a large gap developed between the retail price that would have been determined on the basis of the earlier framework which was temporarily suspended, and global crude prices. **Chart 9** brings out the relative role of different components of the price build-up.

Chart 9: Process of transition from global crude to retail selling price of selected PoL products

Source: Srivastava, D. K., Bharadwaj, M., Kapur, T., & Trehan, R. (2021). Taxing Petroleum Products. Economic & Political Weekly, 56(9), 75.

¹² Petroleum Prices (Lok Sabha Reference Note: No.7/RN/Ref./2013)

¹³ <https://pib.gov.in/newsite/PrintRelease.aspx?relid=74918>

¹⁴ <https://www.deccanherald.com/business/mechanics-of-fuel-price-in-a-deregulated-regime-978701.html>

¹⁵ <http://www.cogitasia.com/deregulate-kerosene-pricing-in-india/#:~:text=The%20Modi%20government%20in%202016,subsidized%20kerosene%20to%20the%20states.>

¹⁶ http://164.100.47.193/Refinput/New_Reference_Notes/English/26112019_111748_102120474.pdf

¹⁷ https://mopng.gov.in/files/TableManagements/2020-12-08-115045-xyd7b-AR_2019-20E.pdf

Once the daily pricing mechanism was resumed on 22 March 2022, fourteen instances of upward price revisions have happened until 12 April 2022. **Table 3** gives the price build-up of petrol and diesel in Delhi as on 11 April 2022. The share of central and state taxes in the RSP of diesel and petrol was at 39% and 43.6% respectively.

Table 3: Price build-up of petrol and diesel in Delhi on 11 April 2022

| Sr. No. | Elements | Unit | Price | | Share in final price (%) | |
|-----------|--|---------|-------------|--------------|--------------------------|--------------|
| | | | Diesel | Petrol | Diesel | Petrol |
| 1 | Base Price/Ex-refinery price | INR/ltr | 54.9 | 53.3 | 59.0 | 52.4 |
| 2 | Freight | INR/ltr | 0.2 | 0.2 | 0.2 | 0.2 |
| 3=1+2 | Price charged to dealers (excluding Excise duty and VAT) | INR/ltr | 55.1 | 53.5 | 59.2 | 52.6 |
| 4 | Central taxes (excise duty) | INR/ltr | 21.8 | 27.9 | 23.4 | 27.4 |
| 5 | Dealer commission (Average) | INR/ltr | 2.6 | 3.8 | 2.8 | 3.8 |
| 6 | State taxes (VAT including VAT on dealer commission) | INR/ltr | 13.6 | 16.5 | 14.6 | 16.2 |
| 7=3+4+5+6 | Retail selling price at Delhi | INR/ltr | 93.1 | 101.8 | 100.0 | 100.0 |

Source: PPAC, Indian Oil (<https://www.iocl.com/Products/PetrolDieselPrices.aspx>)

5. From crude oil to retail prices: role of central and state taxation

Table 4 highlights the role of central excise duty on petrol as also state VAT on petrol (in Delhi) in the context of the price build-up relating to petroleum products indicating how from global crude, the Indian crude basket price in rupee terms is constructed and translated to retail prices. The monthly data for February and March 2022 explains that in the context of the current price surge of the retail prices of petroleum products, there is still some under-recovery which may lead OMCs to continue to hike the retail prices for some more time. By 11 April 2022, petrol and diesel prices had been hiked 14 times in 21 days and some under recovery might still exist.

Table 4: Price build-up of petrol (in Delhi): role of central and state taxes

| Selected Months | Indian crude basket | Exchange rate | Indian crude basket | Base Price + Freight | Excise Duty on Petrol | Dealer's comm | VAT on Petrol | Petrol RSP | Estimated under-recovery* |
|-----------------|---------------------|---------------|---------------------|----------------------|-----------------------|---------------|---------------|------------|---------------------------|
| | \$/bbl. | INR/USD | INR/ltr. | INR/ltr. | INR/ltr. | INR/ltr. | INR/ltr. | INR/ltr. | INR/ltr. |
| | 1 | 2 | 3* | 4=8-(5+6+7) | 5 | 6 | 7 | 8 | 9=3-4 |
| Dec-20 | 49.8 | 73.6 | 23.1 | 27.6 | 33.0 | 3.7 | 19.3 | 83.5 | -4.5 |
| Mar-21 | 64.7 | 72.8 | 29.6 | 33.4 | 32.9 | 3.8 | 21.0 | 91.1 | -3.8 |
| Jun-21 | 77.1 | 73.6 | 35.7 | 37.5 | 32.9 | 3.8 | 22.3 | 96.5 | -1.9 |
| Sep-21 | 80.8 | 73.6 | 37.4 | 41.1 | 32.9 | 3.8 | 23.4 | 101.2 | -3.8 |
| Dec-21 | 83.5 | 75.4 | 39.6 | 48.4 | 27.9 | 3.8 | 15.5 | 95.7 | -8.9 |
| Jan-22 | 97.1 | 74.4 | 45.5 | 48.2 | 27.9 | 3.8 | 15.5 | 95.4 | -2.8 |
| Feb-22 | 108.7 | 75.0 | 51.3 | 48.2 | 27.9 | 3.8 | 15.5 | 95.4 | 3.1 |
| Mar-22 | 112.9 | 76.2 | 54.1 | 48.3 | 27.9 | 3.8 | 15.6 | 95.9 | 5.5 |

Source (basic data): PPAC

*calculated as price of Indian crude basket minus (base price + freight)

Table 5 shows that the central and state governments together accounted for 45.5% of retail price of petrol since December 2021. Both tiers of government had last reduced their tax share in November/December 2021. However, the policy option is still available for both central and state governments to give some more relief to the retail consumers and users by absorbing some of the global price pressures.

Table 5: Share of central and state taxes in the RSP of petrol in Delhi

| Selected Months | Share of excise duty in RSP (%) | Share of VAT in RSP (%) | Share of taxes in RSP (%) |
|-----------------|---------------------------------|-------------------------|---------------------------|
| Dec-20 | 39.5 | 23.1 | 62.6 |
| Mar-21 | 36.1 | 23.1 | 59.2 |
| Jun-21 | 34.1 | 23.1 | 57.2 |
| Sep-21 | 32.5 | 23.1 | 55.6 |
| Dec-21 | 29.2 | 16.2 | 45.4 |
| Jan-22 | 29.2 | 16.2 | 45.5 |
| Feb-22 | 29.2 | 16.2 | 45.5 |
| Mar-22 | 29.2 | 16.2 | 45.5 |

Source (basic data): PPAC, EY estimates

It is further notable that the center may have somewhat larger fiscal space for this purpose since the main channel of successive increases in central taxes on PoL products was through the route of non-sharable excise duty components. This is explained in Table 6.

Table 6: Share of sharable and non-sharable taxes in total excise duties (ED) leviable on petrol and diesel

| Date of change in duty | Excise duty on Unbranded Petrol (INR/Ltr) | | | Excise duty on Unbranded Diesel (INR/Ltr) | | | Share of non-sharable ED on unbranded petrol in total ED (%) | Share of non-sharable ED on unbranded diesel in total ED (%) |
|------------------------|---|---------------------------|----------|---|---------------------------|----------|--|--|
| | Basic ED* | Other duties [§] | Total ED | Basic ED* | Other duties [§] | Total ED | | |
| 01-Apr-11 | 6.35 | 8.43 | 14.78 | 2.60 | 2.14 | 4.74 | 57.0 | 45.1 |
| 25-Jun-11 | 6.35 | 8.43 | 14.78 | 2.00 | 2.12 | 4.12 | 57.0 | 51.5 |
| 17-Mar-12 | 6.35 | 8.43 | 14.78 | 2.00 | 2.12 | 4.12 | 57.0 | 51.5 |
| 14-Sep-12 | 1.20 | 8.28 | 9.48 | 1.46 | 2.10 | 3.56 | 87.3 | 59.0 |
| 11-Jul-14 | 1.20 | 8.28 | 9.48 | 1.46 | 2.10 | 3.56 | 87.3 | 59.0 |
| 12-Nov-14 | 2.70 | 8.32 | 11.02 | 2.96 | 2.15 | 5.11 | 75.5 | 42.1 |
| 02-Dec-14 | 4.95 | 8.39 | 13.34 | 3.96 | 2.18 | 6.14 | 62.9 | 35.5 |
| 02-Jan-15 | 6.95 | 8.45 | 15.40 | 5.96 | 2.24 | 8.20 | 54.9 | 27.3 |
| 16-Jan-15 | 8.95 | 8.51 | 17.46 | 7.96 | 2.30 | 10.26 | 48.7 | 22.4 |
| 01-Mar-15 | 5.46 | 12.00 | 17.46 | 4.26 | 6.00 | 10.26 | 68.7 | 58.5 |
| 07-Nov-15 | 7.06 | 12.00 | 19.06 | 4.66 | 6.00 | 10.66 | 63.0 | 56.3 |
| 17-Dec-15 | 7.36 | 12.00 | 19.36 | 5.83 | 6.00 | 11.83 | 62.0 | 50.7 |
| 01-Jan-16 | 7.73 | 12.00 | 19.73 | 7.83 | 6.00 | 13.83 | 60.8 | 43.4 |
| 31-Jan-16 | 9.48 | 12.00 | 21.48 | 11.33 | 6.00 | 17.33 | 55.9 | 34.6 |
| 30-Jun-17 | 8.48 | 12.00 | 20.48 | 10.33 | 6.00 | 16.33 | 58.6 | 36.7 |
| 03-Oct-17 | 6.48 | 13.00 | 19.48 | 8.33 | 7.00 | 15.33 | 66.7 | 45.7 |
| 02-Feb-18 | 4.48 | 15.00 | 19.48 | 6.33 | 9.00 | 15.33 | 77.0 | 58.7 |
| 05-Oct-18 | 2.98 | 15.00 | 17.98 | 4.83 | 9.00 | 13.83 | 83.4 | 65.1 |
| 06-Jul-19 | 2.98 | 17.00 | 19.98 | 4.83 | 11.00 | 15.83 | 85.1 | 69.5 |
| 13-Mar-20 | 2.98 | 20.00 | 22.98 | 4.83 | 14.00 | 18.83 | 87.0 | 74.3 |
| 05-May-20 | 2.98 | 30.00 | 32.98 | 4.83 | 27.00 | 31.83 | 91.0 | 84.8 |
| 02-Feb-21 | 1.40 | 31.50 | 32.90 | 1.80 | 30.00 | 31.80 | 95.7 | 94.3 |
| 03-Nov-21 | 1.40 | 26.50 | 27.90 | 1.80 | 20.00 | 21.80 | 95.0 | 91.7 |

Source: Various excise duty notifications from CBIC
*Sharable excise duty; [§]Other non-sharable duties

It is also notable that over time, the dependence of central tax revenues on taxation of PoL products has significantly increased. In comparison, the dependence of state governments on tax on PoL products in their own tax revenues (OTR) has remained relatively stable in the range of 16.8% to 18.2% (Table 7).

Table 7: Revenues from PoL products to the Centre and states (INR Cr)

| Years | Center's GTR | PoL revenues [#] (center) | Share in GTR | States' Own tax revenues (OTR) | PoL revenues [§] (states) | Share in OTR | Combined Share of central and states PoL revenues** (%) |
|-------|--------------|------------------------------------|--------------|--------------------------------|------------------------------------|--------------|---|
| | INR Crore | | % | INR Crore | | % | |
| FY12 | 8,89,177 | 77,957 | 8.8 | 4,60,709 | 1,00,415 | 18.0 | 12.3 |
| FY13 | 10,36,235 | 89,595 | 8.6 | 5,57,396 | 1,15,036 | 17.6 | 12.1 |
| FY14 | 11,38,734 | 92,682 | 8.1 | 6,54,551 | 1,29,045 | 18.1 | 12.0 |
| FY15 | 12,44,885 | 1,13,724 | 9.1 | 7,12,419 | 1,37,157 | 17.6 | 12.4 |
| FY16 | 14,55,648 | 1,92,788 | 13.2 | 7,79,278 | 1,42,807 | 16.9 | 14.6 |
| FY17 | 17,15,822 | 2,55,309 | 14.9 | 8,47,145 | 1,66,414 | 18.2 | 16.0 |
| FY18 | 19,19,009 | 2,43,295 | 12.7 | 9,12,912 | 1,90,824 | 16.9 | 14.2 |
| FY19 | 20,80,465 | 2,32,110 | 11.2 | 11,30,460 | 2,09,226 | 17.2 | 13.4 |
| FY20 | 20,10,059 | 2,37,846 | 11.8 | 12,14,845 | 2,07,838 | 17.0 | 13.8 |
| FY21 | 20,27,104 | 3,83,646 | 18.9 | 12,23,993* | 2,09,058 | 16.8 | 18.1 |

Source (Basic data): Union Budget documents, RBI, PPAC

[#]Total central revenues from PoL products = ED + cess + GST; [§]Total state revenues from PoL products = VAT + CST + SGST/UTGST. *data pertains to Revised estimates; ** Combined Share of central and states PoL revenues = (Total central and state revenues from PoL products)/(Center's GTR + States' OTR)

It is useful to consider the share of taxes on petrol and diesel in the retail selling prices in selected major economies. This share is the lowest for the US (Table 8). India was the second lowest for petrol and the third lowest for diesel (as on 11 April 2022). India's position is far more comparable to the European countries. Such high shares are often defended since taxation of petroleum products serve the twin purpose of revenue productivity and disincentivizing the use of polluting products.

Table 8: Share of taxes in retail selling price of petrol and diesel: selected countries

| Countries | Petrol (%) | Diesel (%) |
|---------------------------------------|------------|------------|
| US (February 2022) ¹⁸ | 14.00 | 14.00 |
| India (11 April 2022) ¹⁹ | 43.60 | 39.00 |
| Germany | 46.49 | 37.61 |
| EU27 (weighted average) ²⁰ | 47.42 | 40.60 |
| Denmark | 50.70 | 42.25 |
| Portugal | 51.46 | 44.63 |
| France | 51.69 | 47.50 |
| Sweden | 51.70 | 38.40 |
| Italy | 52.11 | 47.09 |
| Finland | 53.27 | 42.40 |
| Netherlands | 53.71 | 42.28 |
| Greece | 54.42 | 41.61 |
| UK ²¹ (January 2022) | 56.70 | 55.60 |

Source (Basic data): European commission, Department for Business, Energy & Industrial Strategy - Govt. of UK, and US Energy Information Administration (EIA);

Note: (1) countries are sorted according to the ascending order of the share of taxes in petrol prices. (2) prices and taxes data for the listed European countries was as on 21 March 2022

6. Progress of oil linked subsidy reforms

A number of subsidies related to petroleum products such as kerosene and domestic cooking gas and fertilizers are linked to oil prices. These have been reformed over time. However, subsidies on these accounts still claim a significant share of the Center's discretionary expenditures (Table 9).

Table 9: share of petroleum and fertilizer subsidy in primary expenditure

| Years | Primary expenditure | Fertilizer subsidy | Petroleum subsidy | Fertilizer subsidy | Petroleum subsidy |
|-----------|---------------------|--------------------|-------------------|--------------------------------|-------------------|
| | INR crore | | | % share in Primary expenditure | |
| FY09 | 6,91,752 | 76,602 | 2,852 | 11.1 | 0.4 |
| FY10 | 8,11,394 | 61,264 | 14,951 | 7.6 | 1.8 |
| FY11 | 9,63,306 | 62,301 | 38,371 | 6.5 | 4.0 |
| FY12 | 10,31,216 | 70,013 | 68,484 | 6.8 | 6.6 |
| FY13 | 10,97,198 | 65,613 | 96,880 | 6.0 | 8.8 |
| FY14 | 11,85,193 | 67,339 | 85,378 | 5.7 | 7.2 |
| FY15 | 12,61,229 | 71,076 | 60,269 | 5.6 | 4.8 |
| FY16 | 13,49,124 | 72,415 | 29,999 | 5.4 | 2.2 |
| FY17 | 14,94,480 | 66,313 | 27,539 | 4.4 | 1.8 |
| FY18 | 16,13,021 | 66,468 | 24,460 | 4.1 | 1.5 |
| FY19 | 17,32,465 | 70,605 | 24,837 | 4.1 | 1.4 |
| FY20 | 20,74,260 | 81,124 | 38,529 | 3.9 | 1.9 |
| FY21 | 28,29,967 | 1,27,922 | 38,455 | 4.5 | 1.4 |
| FY22 (RE) | 29,56,209 | 1,55,122 | 6,517 | 5.3 | 0.2 |
| FY23 (BE) | 30,04,258 | 1,05,222 | 5,813 | 3.5 | 0.2 |

Source (basic data): Union budget documents

Fertilizer subsidies account for relatively larger amount as compared to the petroleum subsidies. Petroleum subsidy relative to primary expenditure²² fell from a peak of 8.8% in FY13 to 1.4% in FY21 reflecting the impact of deregulation of prices of PoL products along with a fall in global crude prices in the latter part of this period. With respect to fertilizer subsidy, there was a noticeable fall in FY10 as compared to FY09, largely attributable to a reduction in the import prices of fertilizers specifically urea and diammonium phosphate (DAP). During the period from FY10 to FY20, there was a significant reduction in the share of fertilizer subsidy in total primary expenditure.

¹⁸ <https://www.eia.gov/petroleum/gasdiesel/>

¹⁹ For India total share of taxes has been arrived by considering the retail prices of petrol and diesel in Delhi.

²⁰ https://energy.ec.europa.eu/data-and-analysis/weekly-oil-bulletin_en#taxes

²¹ <https://www.gov.uk/government/statistical-data-sets/comparisons-of-industrial-and-domestic-energy-prices-monthly-figures>

²² Primary expenditure = Revenue expenditure + capital expenditure - interest payment

This was the result of pursuing reforms in the structure of these subsidies over time. Some notable steps are summarized below:

- ▶ The government adopted Nutrient-Based Subsidy (NBS) scheme in 2010 replacing the New Pricing Scheme which was in effect since 2003²³. Prior to this, the Retention Price Scheme (RPS) was in effect since 1977²⁴. The objective of NBS was to deregulate subsidy on non-urea fertilizers and reduce the subsidy burden. Unlike the earlier product-based subsidy system, the government fixed the subsidy on the nutrient content per kilogram of fertilizers. The NBS scheme covered 22 grades of different phosphatic and potassic (P&K) fertilizers including DAP, MOP and other NPK complex fertilizers. Urea, however, was kept outside the coverage of the NBS scheme²⁵.
- ▶ With respect to urea, the neem coating of indigenously produced urea was initially encouraged and later mandated to prevent illegal diversion for industrial use. In 2008, the indigenous manufacturers of urea were allowed to produce coated fertilizers up to a maximum of 20% of their total production of respective subsidized fertilizers²⁶. This ceiling was increased to 35% in 2011. In March 2015, it was made mandatory for all the indigenous producers to produce 75% of their total production of subsidized urea as neem coated urea. This was increased to 100% in May 2015. In addition, the pooling of gas prices adopted in July 2015 helped reduce the domestic production cost of urea-based fertilizers, leading to reduction in imports and consequently in the subsidy burden.
- ▶ In October 2016, the Direct Benefit Transfer (DBT) system in fertilizers was introduced and its pan-India roll out was completed by March 2018²⁷. Under this system, 100% subsidy on various fertilizer grades is released to the fertilizer companies on the basis of actual sales made by the retailers to the beneficiaries. Sale of all subsidized fertilizers is made through Point-of-Sale devices installed at each retailer shop and the beneficiaries are identified through Aadhaar Card, etc. In March 2020, the Standing Committee on Chemicals and Fertilizers, had recommended switching to a system where farmers directly get the subsidy and the manufacturing and importing of fertilizers is set free to the market forces. This is expected to minimize additional costs due to the inefficiencies of the current system.

7. Coping with crude challenges: strategizing short, medium and long term responses

Coping with India's multidimensional vulnerability to global crude supply and price shocks requires a reconsideration of our strategy in terms of its long, medium and short term perspectives. In the long run, as far as crude supply is concerned, there is a need to reduce India's dependence on imported oil by accelerating the pace at which the pursuit of non-conventional energy sources is being carried on²⁸. There is also a need to accelerate unexploited domestic oil and gas reserves, both offshore and on land. As far as global crude prices are concerned, there is a need to diversify sources from which crude oil is being imported into India. In the medium term, the capacity for storage of oil needs to be expanded so that more options are available for absorbing external price shocks. In the short run, consumers and industrial users need to be exposed to long term trend in global crude prices while they should also be protected against excessive volatility around this trend. Releases from strategic reserves can reduce the volatility in supply and therefore prices. A supplementary option is reverting to the mechanism of oil pool accounts with extensive revisions. Instead of many such accounts, there is a need to have only one such account. It may now be called as '**Oil Price Stabilization Account**'. Many countries have taken recourse to such an account²⁹. Significant fiscal discipline needs to be exercised to ensure that such an account does not go into accumulated deficit. It may be ideal that the account is replenished with a steady flow every year from the central budget and periodic withdrawal from this account may be made when global prices are excessively high. This would enable the government to expose the consumers and industrial users of oil to a predetermined trend of moderate price increases while protecting them from undue volatility. This will also lead to reduction in fertilizer and petroleum subsidies which are to be provided from the budget. The released resources can be used to finance the fund. The accumulated balance in the fund, which is carried forward from year to year, may be invested in global and domestic oil related assets including oil bonds, oil exploration companies etc.

²³ https://cag.gov.in/uploads/download_audit_report/2011/Union_Performance_Civil_Fertilizer_Subsidy_Ministry_of_Chemicals_and_Fertilizers_8_2011_Chapter_2.pdf

²⁴ Gulati, Ashok and Pritha Banarjee. (2015). Rationalizing Fertilizer Subsidy in India: Key Issues and Policy Options, retrieved from http://icrier.org/pdf/Working_Paper_307.pdf <http://www.moneycontrol.com>

²⁵ Nayak, C. (2018). Fertilizer subsidy in India: Issues for reforms. Research Journal Social Science and Management, 7(11), 293-298.

²⁶ <https://pib.gov.in/PressReleaseDetail.aspx?PRID=1485625>

²⁷ <https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1782747>

²⁸ https://www.business-standard.com/article/economy-policy/can-india-cut-down-its-oil-import-dependence-by-a-half-by-2030-115040800227_1.html

²⁹ "Several countries including Argentina (for LPG and natural gas), Chile, Colombia, Ethiopia, Peru and Thailand have Price Stabilization Funds". The Expert Group on A Viable and Sustainable System of Pricing of Petroleum Products (2010, para no. 3.7)



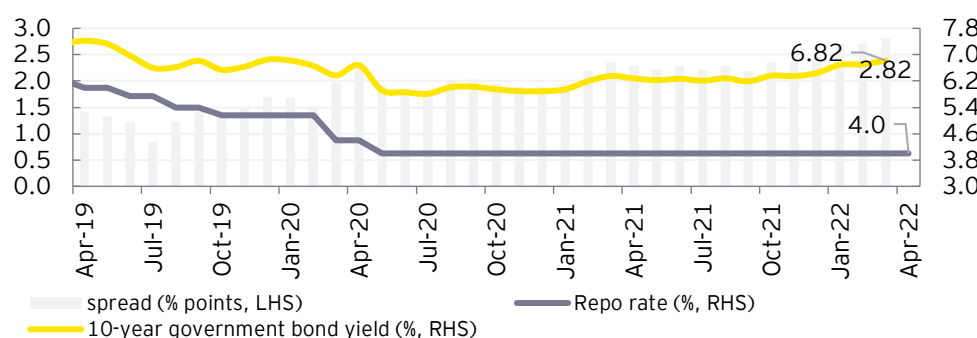
6. Money and finance: RBI retained the repo rate at 4.0% in April 2022

A. Monetary sector

Monetary policy

- ▶ The Monetary Policy Committee (MPC) retained the policy repo rate at 4.0% in its April 2022 monetary policy review (**Chart 10**). Further, while maintaining the policy stance as accommodative, the MPC noted that the policy focus would shift towards a gradual withdrawal of surplus liquidity from the system without adversely affecting the growth recovery.
- ▶ In RBI's assessment, CPI inflation outlook is expected to be considerably uncertain due to the evolving geopolitical situation and its impact on global commodity prices and logistics. Upside pressures on inflation may emanate from (a) elevated global prices of key food items including edible oils, (b) higher global crude prices, (c) a broad-based increase in the prices of industrial inputs, and (d) continued supply chain disruptions.

Chart 10: Movements in the repo rate and 10-year government bond yield



Growth in bank credit slowed to 7.9% in February 2022 from 8.2% in January 2022.

Source: Database on Indian Economy, RBI

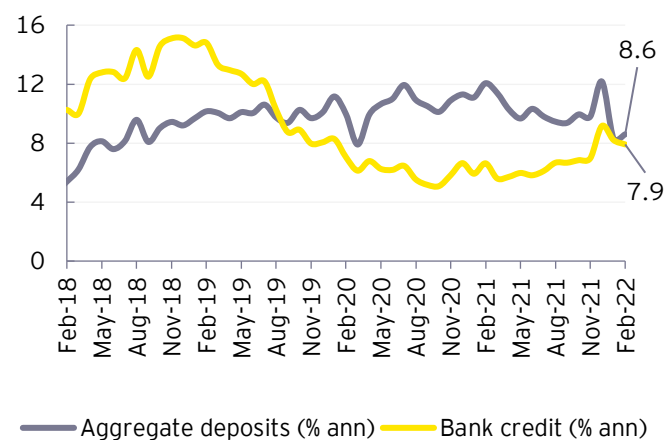
Money stock

- ▶ Broad money stock (M3) grew by 8.7% in March 2022, similar to the level seen in February 2022.
- ▶ Growth in M1 fell to 10.6% in March 2022 from 11.6% in February 2022 due to a slowdown in the growth of demand deposits. Growth in demand deposits fell to 10.9% in March 2022 from 15.3% in February 2022. However, growth in currency with the public increased to 10.4% in March 2022 from 9.0% in February 2022.
- ▶ Time deposits, accounting for about 76% of M3 on average (last three years), showed a marginally higher growth of 8.1% in March 2022 as compared to 7.8% in February 2022.

Aggregate credit and deposits

- ▶ Outstanding bank credit by scheduled commercial banks (SCBs) moderated further to 7.9% in February 2022 from 8.2% in January 2022 (**Chart 11**).
- ▶ Growth in non-food credit was lower at 8.0% in February 2022 as compared to 8.3% in January 2022 led by a moderation in credit to services.
- ▶ Credit to services sector, accounting for about 27% of total non-food credit on average during the last four years, grew at a slower pace of 5.6% in February 2022 as compared to 7.3% in January 2022.
- ▶ Growth in outstanding credit to industries was at 6.5% in February 2022, close to its level of 6.4% in January 2022.
- ▶ Within the industrial sector, growth in credit to infrastructure sector and drugs and pharmaceuticals accelerated to 19.1% and 18.3% respectively in February 2022 from 12.0% and 9.0% respectively in January 2022, largely due to favorable base effects. Similarly, there was a strong growth in credit to chemical products and textiles at 11.9% and 10.9% respectively in February 2022 as compared to 4.1% and 1.9% respectively in January 2022.

Chart 11: Growth in credit and deposits



Source: Database on Indian Economy, RBI

- ▶ Personal loans, accounting for about 30% of total non-food credit, grew at a faster pace of 12.3% in February 2022 as compared to 11.6% in January 2022.
- ▶ Growth in credit to agricultural sector grew by 10.4% in February 2022, similar to its level in January 2022.
- ▶ Growth in aggregate bank deposits increased marginally to 8.6% in February 2022 from 8.3% in January 2022.

B. Financial sector

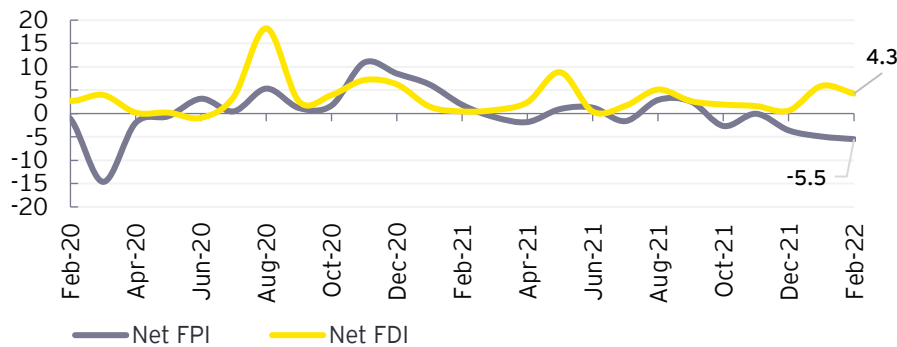
Interest rates

- ▶ As per the data released by the RBI on 4 March 2022, the average interest rate on term deposits with a maturity of more than one year was maintained at 5.30% in March 2022, with the actual rate ranging from 5.00% to 5.60%.
- ▶ The MCLR remained stable at 6.73% for the third successive month in March 2022 with the actual rate ranging between 6.45% and 7.00%.
- ▶ The average yield on 10-year government bonds increased by about 11.6 basis points to 6.82% in March 2022, its joint-highest level since January 2020 (**Chart 10**). Consequently, the spread between benchmark bond yield and repo rate widened further to 2.82% points in March 2022 from 2.70% points in February 2022. Bond yields were influenced largely by surging international crude oil and commodity prices and its implications on India's inflation, growth and fiscal outlook.
- ▶ WALR on fresh rupee loans by SCBs remained at 7.82% for the second consecutive month in February 2022. In December 2021, it was at 7.72%.

FDI and FPI

- ▶ As per the provisional data released by the RBI on 18 April 2022, overall foreign investment³⁰ (FIs) outflows amounted to US\$(-)1.2 billion in February 2022 as compared to inflows of US\$0.9 billion (revised) in January 2022. This was due to higher net FPI outflows.

Chart 12: Net FDI and FPI inflows (US\$ billion)



Source: Database on Indian Economy, RBI

FPIs registered outflows for the fifth consecutive months at US\$(-)5.5 billion while net FDI inflows remained buoyant at US\$4.3 billion in February 2022.

- ▶ FPIs registered outflows for the fifth consecutive month at US\$(-)5.5 billion in February 2022, increasing from US\$(-)4.9 billion in January 2022.
- ▶ Net FDI inflows were lower at US\$4.3 billion in February 2022 as compared to US\$5.8 billion (revised) in January 2022 (**Chart 12**). Gross FDI inflows were also lower at US\$6.4 billion in February 2022 as compared to US\$8.9 billion in January 2022.

³⁰ Foreign Investment (FI) = net FDI plus net FPI



7. Trade and CAB: current account deficit widened to (-)2.7% of GDP in 3QFY22

A. CAB: current account deficit widened to a 13-quarter high of (-)2.7% of GDP in 3QFY22

Current account posted a deficit at (-)2.7% of GDP in 3QFY22 as compared to (-)1.3% of GDP in 2QFY22 (**Chart 13, Table 10**). This deterioration was largely due to worsening net merchandise trade deficit relative to GDP which widened to a 12-quarter high of (-)7.2% in 3QFY22 from (-)5.9% in 2QFY22. Merchandise imports were at a 25-quarter high of 20.1% of GDP in 3QFY22 largely reflecting rising global crude and commodity prices. Merchandise exports relative to GDP were lower at 13.0% in 3QFY22 as compared to 13.8% in 2QFY22. Net service receipts, transfer receipts and income receipts at 3.3%, 2.5% and (-)1.3% of GDP respectively in 3QFY22 were relatively stable at close to their 2QFY22 levels.

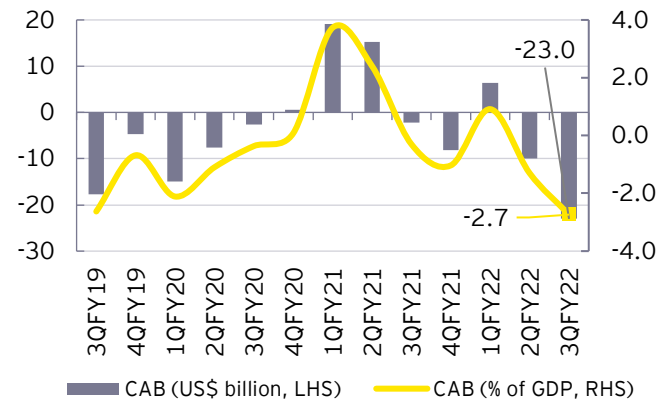
Table 10: Components of CAB in US\$ billion

| Fiscal year | CAB as % of nominal GDP | CAB | Goods account net | Invisibles* net |
|-------------|-------------------------|-------|-------------------|-----------------|
| FY18 | -1.8 | -48.7 | -160.0 | 111.3 |
| FY19 | -2.1 | -57.3 | -180.3 | 123.0 |
| FY20 | -0.9 | -24.7 | -157.5 | 132.8 |
| FY21 | 0.9 | 32.1 | -60.4 | 92.5 |
| 4QFY21 | -1.0 | -8.2 | -41.7 | 33.6 |
| 1QFY22 | 0.9 | 6.4 | -30.7 | 37.1 |
| 2QFY22 | -1.3 | -9.9 | -44.5 | 34.6 |
| 3QFY22 | -2.7 | -23.0 | -60.4 | 37.4 |

Source: Database on Indian Economy, RBI

Note: (-) deficit; (+) surplus; *invisibles include services, current transfers and income components

Chart 13: CAB



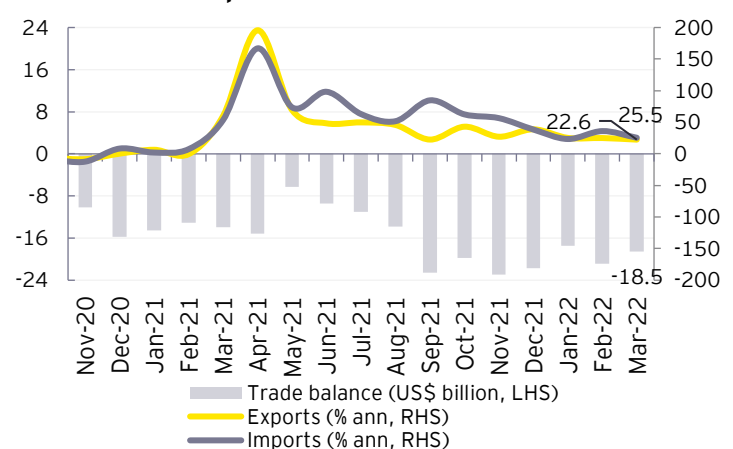
Source: Database on Indian Economy, RBI

B. Merchandise trade and exchange rate

Merchandise exports at US\$419.7 billion in FY22 surpassed the target of US\$400 billion, growing at an unprecedented pace of 43.8% over its FY21 level.

- ▶ Merchandise exports growth decelerated but remained high at 19.8% in March 2022 as compared to 25.1% in February 2022 largely driven by exports of oil, engineering goods and organic and inorganic chemicals.
- ▶ Merchandise imports growth was lower at 24.2% in March 2022 as compared to 36.1% in February 2022. Growth in imports of oil, electronic goods, fertilizers and pearls and precious stones however increased during the month. On an annual basis, imports grew by 55.1% in FY22, reaching a level of US\$611.9 billion.
- ▶ Y-o-y growth in exports excluding oil, gold and jewelry fell to a 13-month low of 9.4% in March 2022 whereas growth in imports of this segment was at a four-month high of 35.8%.
- ▶ Merchandise trade deficit was high at US\$18.5 billion in March 2022 although lower as compared to US\$(-)20.9 billion in February 2022 (**Chart 14**). For the full year of FY22, trade deficit widened to a historic high of US\$(-)192.2 billion.
- ▶ Services trade surplus remained stable at US\$8.6 billion in February 2022, the same level as in January 2022.
- ▶ The rupee depreciated to an all-time low of INR76.2 per US\$ (average) in March 2022 mainly due to pressures stemming from global uncertainties.

Chart 14: Developments in merchandise trade



Source: Ministry of Commerce and Industry, GoI



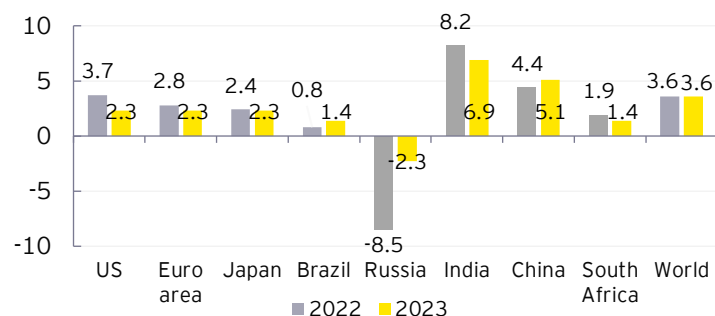
8. Global growth: IMF projected global growth to fall to 3.6% in 2022 and 2023

A. Global growth

- As per the IMF (World Economic Outlook, April 2022), due to the ongoing geopolitical tensions, global growth is projected to decline from an estimated 6.1% in 2021 to 3.6% in 2022 and remain at the same level in 2023, downward revisions of 0.8% and 0.2% points from their corresponding forecasts in January 2022 (Chart 15).
- AEs are expected to grow by 3.3% in 2022 and 2.4% in 2023 while the corresponding growth rates for EMDEs are 3.8% and 4.4%.
- Among AEs, the maximum impact of the geopolitical conflict is expected to be on the Euro area with its 2022 growth forecast revised downward by 1.1% points to 2.8%. The main channel through which the Euro area has been affected is rising global energy prices and energy security. Growth is projected to slow further to 2.3% in 2023.
- Growth in the US is revised down by 0.3% points to 3.7% in 2022 and to 2.3% in 2023. The downward revision reflects a faster withdrawal of monetary support than earlier expected, to rein in inflation, and the impact of lower growth in trading partners because of disruptions resulting from global uncertainty.
- Among EMDEs, China's growth has been revised down by 0.4% points to 4.4% in 2022 due to the adverse impact of mobility restrictions and localized lockdowns on private consumption. Further, real estate investment growth as also external demand is expected to remain weak.
- India's growth forecast has been revised down by 0.8% points to 8.2% in 2022 (FY23) reflecting a) weaker domestic demand as higher oil prices are expected to weigh on private consumption and investment and b) a drag from lower net exports. The 2023 (FY24) growth forecast has also been marginally revised down to 6.9%.
- Russia is expected to contract sharply by (-)8.5% in 2022 and (-)2.3% in 2023 owing to tight trade and financial sanctions and the oil and gas embargo by some large economies. The withdrawal of foreign firms from many industries, financial disintermediation, and a loss of investor confidence is expected to lead to a sharp drop in private consumption and investment.

The IMF has revised down its global growth forecast by 0.8% points to 3.6% in 2022 owing to the ongoing geopolitical tensions with India's FY23 growth projected at 8.2%.

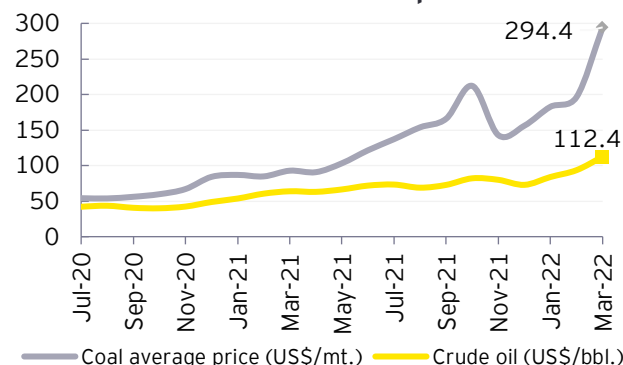
Chart 15: Global growth projections (%)



Source: IMF World Economic Outlook (April 2022)

*Data pertains to fiscal year.

Chart 16: Global crude and coal prices



Source (basic data): World Bank, Pink Sheet, April 2022

B. Global energy prices: global crude price at US\$112.4/bbl. in March 2022 was at its highest level since April 2014

- Average global crude price³¹ at US\$112.4/bbl. in March 2022 was at its highest level since April 2014 (Chart 16). This was driven by supply disruptions caused by the ongoing geopolitical developments. On an annual basis, global crude price averaged US\$78.4/bbl. in FY22, increasing from US\$43.8/bbl. in FY21.
- Average global coal price³² increased to a historic high of US\$294.4/mt. in March 2022 from US\$196.4/mt. in February 2022 due to supply disruptions resulting from the geopolitical uncertainty. Global coal price averaged US\$163/mt. in FY22, its highest level since the inception of the price series in 1980s.

³¹ Simple average of three spot prices, namely, Dated Brent, West Texas Intermediate and Dubai Fateh

³² Simple average of Australian and South African coal prices

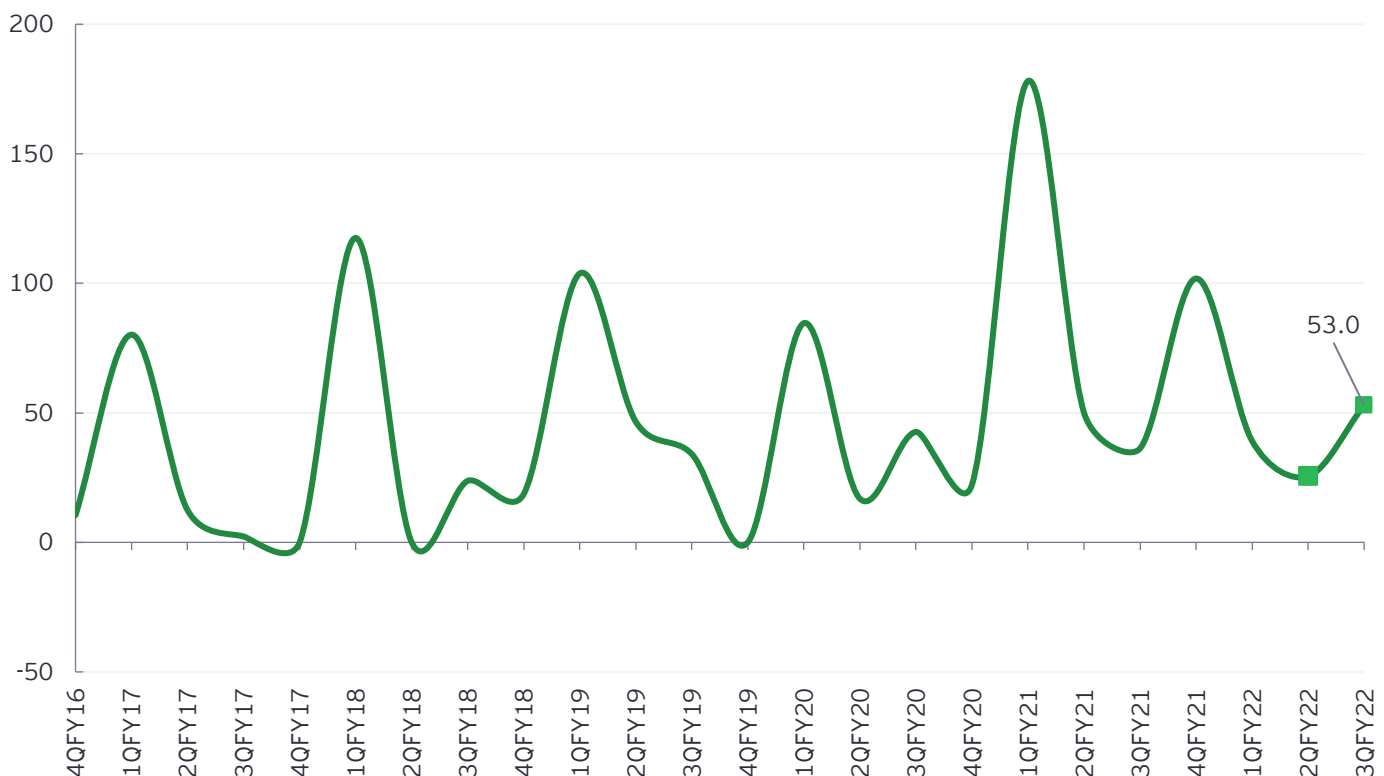


9. Index of Macro Imbalance (IMI): pointed to an increase in macro imbalance in 3QFY22

IMI increased to 53.0 in 3QFY22 from 25.5 in 2QFY22

- ▶ The IMI is obtained by adding the percentage deviation of inflation rate (based on new CPI 2012 = 100), fiscal deficit (as a percentage of GDP) and current account deficit (as a percentage of GDP) from their respective benchmarks of 4%, 3% of GDP and (-)1.3%³³ of GDP. All three components of IMI have been given equal weightage (33.33%). The state of balance is judged by a value of 0.
- ▶ An index value greater than zero indicates the presence of an imbalance in the economy. While considering the percentage deviation of each of the indicators from its selected norm, only the positive deviations are taken. Negative deviations are equated to zero to ensure that the negative and positive deviations across indices are not canceled out.
- ▶ IMI pointed to a deterioration in macro balance in 3QFY22 with the index value increasing to 53.0 from 25.5 in 2QFY22 (Chart 17) largely owing to a widening of the current account deficit. Current account deficit widened to a 13-quarter high of (-)2.7% of GDP in 3QFY22 and was 1.4% points higher than its benchmark value of (-)1.3% of GDP.
- ▶ Meanwhile, in 3QFY22, the contribution of CPI inflation and center's fiscal deficit (CFD) to the IMI was relatively lower as compared to the previous quarter. CPI inflation averaged 5.0% in 3QFY22, close to its level of 5.1% in 2QFY22 but was higher than its benchmark value of 4%. CFD at 3.7% of GDP in 3QFY22 was lower than its level of 4.5% of GDP in 2QFY22 but was higher than its benchmark value of 3% of GDP.

Chart 17: IMI (quarterly)



Source (Basic data): RBI, MoSPI and EY estimates

³³ Rangarajan, C (2016): "Can India grow at 8 to 9 per cent?" The Hindu, <http://www.thehindu.com/opinion/lead/can-india-grow-at-8-to-9-per-cent/article8596824.ece>, Accessed on 17 May 2016.

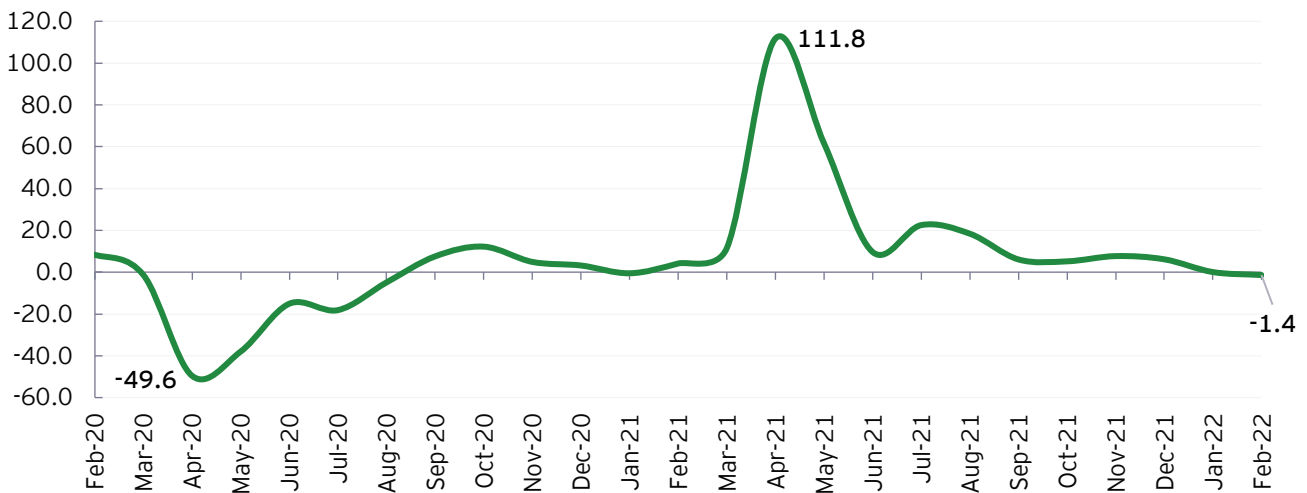


10. Index of Aggregate Demand (IAD): pointed to a contraction in domestic demand in February 2022

IAD contracted by (-)1.4% in February 2022

- EY has developed an IAD to reflect the monthly combined demand conditions in the agriculture, manufacturing and services sectors. It considers the movements in PMI for manufacturing and services, both measured in non-seasonally adjusted terms, tracing the demand conditions in these sectors. Demand conditions in the agricultural sector have been captured by movements in monthly agricultural credit off-take.
- After showing a muted growth of 0.04% in January 2022, IAD contracted by (-)1.4% in February 2022 pointing to further weakening of demand conditions (Chart 18 and Table 11).
- This may largely be attributable to weak demand conditions in industrial and services sectors in February 2022 as compared to their performance in February 2021. However, on a m-o-m basis, demand conditions in these two sectors showed an improvement in February 2022.
- Demand conditions in the agricultural sector, as indicated by growth in credit offtake, showed an improvement in February 2022 on a y-o-y basis.

Chart 18: Growth in IAD (y-o-y)



Source (Basic data): IHS Markit PMI, RBI and EY estimates

Table 11: IAD

| Month | Jun-21 | Jul-21 | Aug-21 | Sep-21 | Oct-21 | Nov-21 | Dec-21 | Jan-22 | Feb-22 |
|-----------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| IAD | 118.3 | 130.2 | 140.5 | 141.8 | 149.1 | 146.7 | 144.3 | 139.0 | 143.7 |
| Growth (% y-o-y) | 9.6 | 22.5 | 18.4 | 6.1 | 5.2 | 7.7 | 6.1 | 0.04 | -1.4 |
| Growth in agr. credit | 11.4 | 12.4 | 11.3 | 9.9 | 10.2 | 10.4 | 14.5 | 10.4 | 10.4 |
| Mfg. PMI** | -3.5 | 5.5 | 2.3 | 6.0 | 7.4 | 7.6 | 5.1 | 3.3 | 6.1 |
| Ser. PMI** | -10.7 | -5.9 | 7.4 | 5.5 | 11.2 | 8.6 | 4.9 | 0.1 | 2.4 |

**Values here indicate deviation from the benchmark value of 50. A positive value indicates expansion in demand while a negative value implies contraction in demand; PMI for Mfg. and Serv. are non-seasonally adjusted.

Source (basic data): IHS Markit PMI, RBI and EY estimates



11. Capturing macro-fiscal trends: data appendix

Table A1: Industrial growth indicators (annual, quarterly and monthly growth rates, y-o-y)

| Fiscal year/ quarter/ month | IIP | Mining | Manufacturing | Electricity | Core IIP | Fiscal year/ quarter/ month | PMI mfg. | PMI ser. |
|-----------------------------------|----------------|--------|---------------|-------------|----------|-----------------------------------|----------|----------|
| | % change y-o-y | | | | | | | |
| FY18 | 4.4 | 2.3 | 4.7 | 5.3 | 4.3 | FY19 | 52.8 | 52.2 |
| FY19 | 3.8 | 2.8 | 3.8 | 5.2 | 4.4 | FY20 | 52.3 | 51.9 |
| FY20 | -0.8 | 1.6 | -1.4 | 0.9 | 0.4 | FY21 | 50.2 | 41.7 |
| FY21 | -8.5 | -7.8 | -9.6 | -0.5 | -6.4 | FY22 | 54.0 | 52.3 |
| 4QFY21 | 6.0 | -0.1 | 6.8 | 9.2 | 3.5 | 1QFY22 | 51.5 | 47.2 |
| 1QFY22 | 44.4 | 27.5 | 53.0 | 16.8 | 26.0 | 2QFY22 | 53.8 | 52.4 |
| 2QFY22 | 9.5 | 17.1 | 8.6 | 9.3 | 9.2 | 3QFY22 | 56.3 | 57.3 |
| 3QFY22 | 2.0 | 6.0 | 1.3 | 2.7 | 5.3 | 4QFY22 | 54.3 | 52.3 |
| Nov-21 | 1.0 | 4.9 | 0.3 | 2.1 | 3.2 | Dec-21 | 55.5 | 55.5 |
| Dec-21 | 0.7 | 2.6 | 0.2 | 2.8 | 4.1 | Jan-22 | 54.0 | 51.5 |
| Jan-22 | 1.5 | 2.8 | 1.3 | 0.9 | 4.0 | Feb-22 | 54.9 | 51.8 |
| Feb-22 | 1.7 | 4.5 | 0.8 | 4.5 | 5.8 | Mar-22 | 54.0 | 53.6 |

Source: MoSPI, Office of the Economic Adviser, Ministry of Commerce and Industry and IHS Markit Economics

| Fiscal year/ quarter/ month | CPI | Food Price Index | Fuel and light | Core CPI | WPI | Food Price Index | Mfg. products | Fuel and power | Core WPI |
|-----------------------------------|----------------|------------------------|-------------------|----------|----------------|------------------------|------------------|-------------------|----------|
| | % change y-o-y | | | | % change y-o-y | | | | |
| FY19 | 3.4 | 0.1 | 5.7 | 5.5 | 4.3 | 0.6 | 3.7 | 11.5 | 4.2 |
| FY20 | 4.8 | 6.7 | 1.3 | 3.8 | 1.7 | 6.9 | 0.3 | -1.8 | -0.4 |
| FY21 | 6.2 | 7.7 | 2.7 | 5.5 | 1.3 | 4.0 | 2.8 | -8.0 | 2.2 |
| FY22 | 5.5 | 3.8 | 11.3 | 6.1 | 13.0 | 6.7 | 11.0 | 32.9 | 10.9 |
| 1QFY22 | 5.6 | 4.0 | 10.8 | 6.1 | 12.0 | 7.5 | 10.5 | 28.8 | 9.9 |
| 2QFY22 | 5.1 | 2.6 | 13.0 | 6.0 | 11.7 | 3.6 | 11.5 | 28.2 | 11.3 |
| 3QFY22 | 5.0 | 2.2 | 12.9 | 6.2 | 14.3 | 6.8 | 12.0 | 40.4 | 12.2 |
| 4QFY22 | 6.3 | 6.3 | 8.5 | 6.1 | 13.8 | 8.9 | 10.0 | 33.5 | 10.2 |
| Dec-21 | 5.7 | 4.0 | 11.0 | 6.2 | 14.3 | 9.4 | 10.7 | 38.1 | 11.1 |
| Jan-22 | 6.0 | 5.4 | 9.3 | 6.0 | 13.7 | 9.6 | 9.5 | 34.4 | 9.8 |
| Feb-22 | 6.1 | 5.9 | 8.7 | 5.9 | 13.1 | 8.5 | 9.8 | 31.5 | 10.0 |
| Mar-22 | 7.0 | 7.7 | 7.5 | 6.4 | 14.5 | 8.7 | 10.7 | 34.5 | 10.9 |

Source: Office of the Economic Adviser, Ministry of Commerce and Industry and MoSPI

* The CPI for April and May 2020 has been imputed

Table A3: Fiscal indicators (annual growth rates, cumulated monthly growth rates, y-o-y)

| Fiscal year/month | Gross tax revenue | Corporate tax | Income tax | Direct taxes* | Indirect taxes** | Fiscal deficit % of GDP | Revenue deficit % of GDP |
|-------------------------------|-------------------|---------------|------------|---------------|------------------|-------------------------|--------------------------|
| FY 19 (CGA) | 8.4 | 16.2 | 13.1 | 14.9 | 3.0 | 3.4 | 2.4 |
| FY20 (CGA) | -3.4 | -16.1 | 4.0 | -7.8 | 1.7 | 4.7 | 3.3 |
| FY21 (CGA) | 0.7 | -17.9 | -2.3 | -10.7 | 12.7 | 9.2 | 7.3 |
| FY22 (RE over budget actuals) | 24.1 | 38.7 | 26.2 | 32.3 | 17.0 | 6.9 | 4.7 |
| FY 23 (BE over FY 22 RE) | 9.6 | 13.4 | 13.8 | 13.6 | 5.7 | 6.4 | 3.8 |
| Cumulated growth (% , y-o-y) | | | | | | % of budgeted target | |
| Jul-21 | 83.1 | 171.5 | 76.7 | 111.8 | 64.8 | 21.3 | 18.1 |
| Aug-21 | 70.5 | 159.7 | 69.3 | 101.4 | 52.1 | 31.1 | 27.3 |
| Sep-21 | 64.2 | 105.1 | 64.7 | 83.9 | 48.1 | 35.0 | 27.7 |
| Oct-21 | 55.8 | 91.6 | 53.3 | 70.9 | 44.0 | 36.3 | 27.5 |
| Nov-21 | 50.3 | 90.4 | 47.2 | 66.3 | 38.6 | 46.2 | 38.8 |
| Dec-21 | 44.2 | 66.5 | 50.5 | 58.7 | 31.5 | 47.7 | 36.4 [§] |
| Jan-22 | 38.5 | 63.8 | 48.3 | 56.1 | 24.1 | 58.9 | 48.6 [§] |
| Feb-22 | 36.6 | 61.3 | 45.7 | 53.3 | 23.3 | 82.7 | 79.7 [§] |

Source: Monthly Accounts, Controller General of Accounts, Government of India, Union Budget documents

* Includes corporation tax and income tax

** Includes customs duty, excise duty, service tax, CGST, UTGST, IGST and GST compensation cess.

§ as a proportion of revised estimate

| Fiscal year/month | CGST | UTGST | IGST | GST compensation cess | Total GST (Center) |
|------------------------------------|----------|-------|---------|-----------------------|--------------------|
| INR crore | | | | | |
| FY 2022 (RE) | 5,70,000 | - | - | 1,05,000 | 6,75,000 |
| FY 2023 (BE) | 6,60,000 | - | - | 1,20,000 | 7,80,000 |
| Monthly tax collection (INR crore) | | | | | |
| Jul-21 | 47,901 | 254 | -3,733 | 7,530 | 51,952 |
| Aug-21 | 53,326 | 289 | -16,195 | 8,474 | 45,894 |
| Sep-21 | 47,379 | 222 | -634 | 8,489 | 55,456 |
| Oct-21 | 48,546 | 140 | 8,970 | 8,221 | 65,877 |
| Nov-21 | 49,238 | 118 | 7,238 | 9,442 | 66,036 |
| Dec-21 | 46,227 | 254 | 14,635 | 9,141 | 70,257 |
| Jan-22 | 69,662 | 432 | -27,918 | 9,456 | 51,632 |
| Feb-22 | 48,169 | 159 | 7,903 | 10,100 | 66,331 |

Source: Monthly Accounts, Controller General of Accounts, Government of India, Union Budget documents

Note: IGST revenues are subject to final settlement.

Table A4: Monetary and financial indicators (annual, quarterly and monthly growth rates, y-o-y)

| Fiscal year/ month | Repo rate (end of period) | Fiscal year/ quarter/ month | Bank credit | Agg. deposits | Net FDI | Net FPI | Fiscal year/ quarter/ month | M1 | M3 | 10-year govt. bond yield | FX reserves |
|-----------------------|------------------------------------|--------------------------------------|----------------|------------------|--------------|------------|--------------------------------------|----------------|------|-----------------------------------|-----------------|
| | % | | % change y-o-y | | US\$ billion | | | % change y-o-y | | % | US\$ billion |
| May-21 | 4.00 | FY18 | 7.5 | 7.5 | 30.3 | 22.1 | FY19 | 13.6 | 10.5 | 7.69 | 411.9 |
| Jun-21 | 4.00 | FY19 | 13.7 | 8.9 | 30.7 | -0.6 | FY20 | 11.2 | 8.9 | 6.83 | 475.6 |
| Jul-21 | 4.00 | FY20 | 9.5 | 9.9 | 43.0 | 1.4 | FY21 | 16.2 | 12.2 | 6.05 | 579.3 |
| Aug-21 | 4.00 | FY21 | 6.0 | 11.0 | 44.0 | 36.1 | FY22 | 10.6 | 8.7 | 6.40 | 617.6 |
| Sep-21 | 4.00 | 4QFY21 | 6.0 | 11.5 | 2.7 | 7.3 | 1QFY22 | 15.4 | 10.7 | 6.26 | 579.3 |
| Oct-21 | 4.00 | 1QFY22 | 5.8 | 10.1 | 11.7 | 0.4 | 2QFY22 | 11.4 | 9.3 | 6.23 | 609.0 |
| Nov-21 | 4.00 | 2QFY22 | 6.5 | 9.5 | 9.5 | 3.9 | 3QFY22 | 11.5 | 9.3 | 6.38 | 638.6 |
| Dec-21 | 4.00 | 3QFY22 | 7.7 | 10.6 | 4.4 | -6.3 | 4QFY22 | 10.6 | 8.7 | 6.74 | 617.6 |
| Jan-22 | 4.00 | Nov-21 | 7.0 | 9.8 | 1.6 | -0.04 | Dec-21 | 11.5 | 9.3 | 6.44 | 633.6 |
| Feb-22 | 4.00 | Dec-21 | 9.2 | 12.2 | 0.9 | -3.61 | Jan-22 | 10.1 | 8.4 | 6.69 | 629.8 |
| Mar-22 | 4.00 | Jan-22 | 8.2 | 8.3 | 5.8 | -4.92 | Feb-22 | 11.6 | 8.7 | 6.71 | 631.5 |
| Apr-22 | 4.00 | Feb-22 | 7.9 | 8.6 | 4.3 | -5.49 | Mar-22 | 10.6 | 8.7 | 6.82 | 617.6 |

Source: Database on Indian Economy - RBI

| External trade indicators (annual, quarterly and monthly growth rates) | | | | | | | Global growth (annual) | | | |
|--|----------------|---------|------------------|--------------------|---------------------------|--------------------------|------------------------|----------------|---------------|----------------|
| Fiscal year/ quarter/ month | Exports | Imports | Trade balance | Ex. rate (avg.) | Crude prices (avg.) | Coal prices (avg.) | Calendar year | World GDP | Adv. econ. | Emer. econ. |
| | % change y-o-y | | US\$ billion | INR/US\$ | US\$/bbl. | US\$/mt | | % change y-o-y | | |
| FY19 | 8.7 | 10.4 | -182.3 | 69.9 | 67.3 | 100.4 | 2012 | 3.5 | 1.2 | 5.4 |
| FY20 | -5.1 | -7.7 | -161.4 | 70.9 | 58.5 | 70.4 | 2013 | 3.5 | 1.4 | 5.1 |
| FY21 | -6.9 | -16.9 | -102.6 | 74.2 | 43.8 | 67.2 | 2014 | 3.5 | 2.1 | 4.7 |
| FY22 | 43.8 | 55.1 | -192.2 | 74.5 | 78.4 | 163.0 | 2015 | 3.4 | 2.4 | 4.3 |
| 1QFY22 | 85.9 | 108.7 | -30.8 | 73.8 | 67.1 | 105.1 | 2016 | 3.3 | 1.8 | 4.5 |
| 2QFY22 | 38.5 | 66.5 | -47.4 | 74.1 | 71.7 | 152.3 | 2017 | 3.8 | 2.5 | 4.8 |
| 3QFY22 | 36.6 | 51.4 | -64.3 | 74.9 | 78.3 | 170.3 | 2018 | 3.5 | 2.2 | 4.5 |
| 4QFY22 | 23.1 | 27.7 | -56.8 | 75.2 | 96.6 | 224.5 | 2019 | 2.8 | 1.6 | 3.7 |
| Dec-21 | 38.9 | 38.5 | -21.7 | 75.4 | 72.9 | 156.1 | 2020 | -3.1 | -4.5 | -2.0 |
| Jan-22 | 25.3 | 23.5 | -17.4 | 74.4 | 83.9 | 182.7 | 2021 | 6.1 | 5.2 | 6.8 |
| Feb-22 | 25.1 | 36.1 | -20.9 | 75.0 | 93.5 | 196.4 | 2022 | 3.6 | 3.3 | 3.8 |
| Mar-22 | 19.8 | 24.2 | -18.5 | 76.2 | 112.4 | 294.4 | 2023 | 3.6 | 2.4 | 4.4 |

Source: Database on Indian Economy - RBI, Pink Sheet - World Bank and IMF World Economic Outlook April 2022.

Table A6: Macroeconomic aggregates (annual and quarterly real growth rates, % change y-o-y)

| Fiscal year/quarter | Output: major sectors | | | | | | | | | IPD inflation |
|----------------------------|-----------------------|------|-------|-------|-------|-------|--------|------|-------|---------------|
| | GVA | Agr. | Ming. | Mfg. | Elec. | Cons. | Trans. | Fin. | Publ. | GVA |
| FY19 (3rd RE) | 5.8 | 2.1 | -0.8 | 5.4 | 7.9 | 6.5 | 7.2 | 7.0 | 7.5 | 4.7 |
| FY20 (2nd RE) [§] | 3.8 | 5.5 | -1.5 | -2.9 | 2.2 | 1.2 | 5.9 | 6.7 | 6.3 | 2.9 |
| FY21(1st RE) [§] | -4.8 | 3.3 | -8.6 | -0.6 | -3.6 | -7.3 | -20.2 | 2.2 | -5.5 | 3.3 |
| FY22(SAE)* | 8.3 | 3.3 | 12.6 | 10.5 | 7.8 | 10.0 | 11.6 | 4.3 | 12.5 | 9.2 |
| 3QFY20 | 3.2 | 4.9 | -3.5 | -3.3 | -3.1 | -1.1 | 6.6 | 4.8 | 6.9 | 3.0 |
| 4QFY20 | 3.3 | 7.5 | -1.3 | -4.6 | 2.7 | 1.8 | 5.1 | 4.2 | 7.6 | 3.0 |
| 1QFY21 | -21.4 | 3.0 | -17.8 | -31.5 | -14.8 | -49.4 | -49.9 | -1.1 | -11.4 | 2.3 |
| 2QFY21 | -5.9 | 3.2 | -7.9 | 5.2 | -3.2 | -6.6 | -18.8 | -5.2 | -10.2 | 1.7 |
| 3QFY21 | 2.1 | 4.1 | -5.3 | 8.4 | 1.5 | 6.6 | -10.1 | 10.3 | -2.9 | 3.4 |
| 4QFY21 | 5.7 | 2.8 | -3.9 | 15.2 | 3.2 | 18.3 | -3.4 | 8.8 | 1.7 | 5.2 |
| 1QFY22 | 18.4 | 3.5 | 17.6 | 49.0 | 13.8 | 71.4 | 34.3 | 2.3 | 6.3 | 7.3 |
| 2QFY22 | 8.4 | 3.7 | 14.2 | 5.6 | 8.5 | 8.2 | 9.5 | 6.2 | 19.5 | 9.1 |
| 3QFY22 | 4.7 | 2.6 | 8.8 | 0.2 | 3.7 | -2.8 | 6.1 | 4.6 | 16.8 | 10.4 |

Source: National Accounts Statistics, MoSPI

[§] Growth numbers for FY21 are based on the first revised estimates (RE) of NAS released by the MoSPI on 31 January 2022 over the second RE of NAS for FY20, *FY22 growth numbers are based on the SAE released on 28 February 2022 over the first revised estimates for 2021 released on 31 January 2022.

| Fiscal year/quarter | Expenditure components | | | | | | IPD inflation |
|----------------------------|------------------------|-------|-------|-------|-------|-------|---------------|
| | GDP | PFCE | GFCE | GFCF | EX | IM | GDP |
| FY19 (3rd RE) | 6.5 | 7.1 | 6.7 | 11.2 | 11.9 | 8.8 | 3.9 |
| FY20 (2nd RE) [§] | 3.7 | 5.2 | 3.4 | 1.6 | -3.4 | -0.8 | 2.4 |
| FY21(1st RE) [§] | -6.6 | -6.0 | 3.6 | -10.4 | -9.2 | -13.8 | 5.6 |
| FY22(FAE)* | 8.8 | 4.1 | 11.0 | 17.4 | 23.0 | 29.5 | 7.7 |
| 3QFY20 | 3.1 | 5.6 | 4.8 | -0.1 | -5.5 | -7.0 | 2.3 |
| 4QFY20 | 2.7 | 1.2 | 8.0 | 0.6 | -9.1 | -2.4 | 4.3 |
| 1QFY21 | -23.8 | -23.7 | 13.6 | -45.3 | -25.5 | -41.1 | 2.9 |
| 2QFY21 | -6.6 | -8.3 | -22.9 | -4.5 | -6.4 | -17.9 | 4.0 |
| 3QFY21 | 0.7 | 0.6 | -0.3 | -0.6 | -8.6 | -5.2 | 5.4 |
| 4QFY21 | 2.5 | 6.5 | 29.0 | 10.1 | 3.7 | 11.7 | 9.2 |
| 1QFY22 | 20.3 | 14.2 | -4.4 | 62.5 | 40.4 | 60.7 | 10.5 |
| 2QFY22 | 8.5 | 10.2 | 9.3 | 14.6 | 20.5 | 40.7 | 10.0 |
| 3QFY22 | 5.4 | 7.0 | 3.4 | 2.0 | 20.9 | 32.6 | 9.8 |

Source: National Accounts Statistics, MoSPI

[§] Growth numbers for FY21 are based on the first revised estimates (RE) of NAS released by the MoSPI on 31 January 2022 over the second RE of NAS for FY20, *FY22 growth numbers are based on the SAE released on 28 February 2022 over the first revised estimates for 2021 released on 31 January 2022.



List of abbreviations

| Sr. no. | Abbreviations | Description |
|---------|---------------|---|
| 1 | AD | aggregate demand |
| 2 | AEs | advanced economies |
| 3 | Agr. | agriculture, forestry and fishing |
| 4 | AY | assessment year |
| 5 | Bcm | billion cubic meters |
| 6 | bbl. | barrel |
| 7 | BE | budget estimate |
| 8 | CAB | current account balance |
| 9 | CGA | Comptroller General of Accounts |
| 10 | CGST | Central Goods and Services Tax |
| 11 | CIT | corporate income tax |
| 12 | Cons. | construction |
| 13 | CPI | Consumer Price Index |
| 14 | COVID-19 | Coronavirus disease 2019 |
| 15 | CPSE | central public-sector enterprise |
| 16 | CRAR | Credit to Risk- weighted Assets Ratio |
| 17 | CSO | Central Statistical Organization |
| 18 | Disc. | discrepancies |
| 19 | ECBs | external commercial borrowings |
| 20 | EIA | US Energy Information Administration |
| 21 | Elec. | electricity, gas, water supply and other utility services |
| 22 | EMDEs | Emerging Market and Developing Economies |
| 23 | EXP | exports |
| 24 | FAE | first advance estimates |
| 25 | FC | Finance Commission |
| 26 | FII | foreign investment inflows |
| 27 | Fin. | financial, real estate and professional services |
| 28 | FPI | foreign portfolio investment |
| 29 | FRBMA | Fiscal Responsibility and Budget Management Act |
| 30 | FRL | Fiscal Responsibility Legislation |
| 31 | FY | fiscal year (April–March) |
| 32 | GDP | Gross Domestic Product |
| 33 | GFCE | government final consumption expenditure |
| 34 | GFCF | gross fixed capital formation |
| 35 | GoI | Government of India |
| 36 | G-secs | government securities |
| 37 | GST | Goods and Services Tax |
| 38 | GVA | gross value added |
| 39 | IAD | Index of Aggregate Demand |



| Sr. no. | Abbreviations | Description |
|---------|---------------|--|
| 40 | IBE | interim budget estimates |
| 41 | ICRIER | Indian Council for Research on International Economic Relations |
| 42 | IEA | International Energy Agency |
| 43 | IGST | Integrated Goods and Services Tax |
| 44 | IIP | Index of Industrial Production |
| 45 | IMF | International Monetary Fund |
| 46 | IMI | Index of Macro Imbalance |
| 47 | IMP | imports |
| 48 | INR | Indian Rupee |
| 49 | IPD | implicit price deflator |
| 50 | MCLR | marginal cost of funds-based lending rate |
| 51 | Ming. | mining and quarrying |
| 52 | Mfg. | manufacturing |
| 53 | m-o-m | month-on-month |
| 54 | Mt | metric ton |
| 55 | MoSPI | Ministry of Statistics and Programme Implementation |
| 56 | MPC | Monetary Policy Committee |
| 57 | NEXP | net exports (exports minus imports of goods and services) |
| 58 | NPA | non-performing assets |
| 59 | NCLT | National Company Law Tribunal |
| 60 | OECD | Organization for Economic Co-operation and Development |
| 61 | OPEC | Organization of the Petroleum Exporting Countries |
| 62 | PFCE | private final consumption expenditure |
| 63 | PIT | personal income tax |
| 64 | PMI | Purchasing Managers' Index (reference value = 50) |
| 65 | PoL | petroleum oil and lubricants |
| 66 | PSBR | public sector borrowing requirement |
| 67 | RE | revised estimates |
| 68 | PSU/PSE | public sector undertaking/public sector enterprises |
| 69 | RBI | Reserve Bank of India |
| 70 | SLR | Statutory Liquidity Ratio |
| 71 | Trans. | trade, hotels, transport, communication and services related to broadcasting |
| 72 | US\$ | US Dollar |
| 73 | UTGST | Union Territory Goods and Services Tax |
| 74 | WALR | weighted average lending rate |
| 75 | WHO | World Health Organization |
| 76 | WPI | Wholesale Price Index |
| 77 | y-o-y | year-on-year |
| 78 | 1HFY20 | first half of fiscal year 2019-20, i.e., April 2019-September 2019 |

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