IMF Country Report No. 22/386

INDIA

December 2022

2022 ARTICLE IV CONSULTATION—PRESS RELEASE; STAFF REPORT; AND STATEMENT BY THE EXECUTIVE DIRECTOR FOR INDIA

Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. In the context of the 2022 Article IV consultation with India, the following documents have been released and are included in this package:

- A **Press Release** summarizing the views of the Executive Board as expressed during its November 28, 2022 consideration of the staff report that concluded the Article IV consultation with India.
- The **Staff Report** prepared by a staff team of the IMF for the Executive Board's consideration on November 28, 2022, following discussions that ended on September 27, 2022, with the officials of India on economic developments and policies. Based on information available at the time of these discussions, the staff report was completed on November 7, 2022.
- An **Informational Annex** prepared by the IMF staff.
- A **Statement by the Executive Director** for India.

The IMF's transparency policy allows for the deletion of market-sensitive information and premature disclosure of the authorities' policy intentions in published staff reports and other documents.

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International Monetary Fund
Washington, D.C.

IMF Executive Board Concludes 2022 Article IV Consultation with India

FOR IMMEDIATE RELEASE

Washington, DC – December 22, 2022: On November 28, The Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation[1] with India.

The economy has rebounded from the deep pandemic-related downturn. Real GDP grew by 8.7 percent in FY2021/22, bringing total output above pre-pandemic levels. Growth has continued this fiscal year, supported by a recovery in the labor market and increasing credit to the private sector. New COVID cases have fallen to low levels, supported by high vaccination rates. The free administration of booster shots and broader booster eligibility criteria should help improve vaccine coverage.

Policies are addressing new economic headwinds. These include inflation pressures, tighter global financial conditions, the fallout from the war in Ukraine and associated sanctions on Russia, and significantly slower growth in China and advanced economies. The authorities have responded with fiscal policy measures to support vulnerable groups and to mitigate the impact of high commodity prices on inflation. Monetary policy accommodation has been gradually withdrawn and the main policy rate has been increased by 190 basis points so far in 2022.

Growth is expected to moderate reflecting the less favorable outlook and tighter financial conditions. Real GDP is projected to grow at 6.8 percent and 6.1 percent in FY2022/23 and FY2023/24 respectively. Reflecting broad-based price pressures, inflation is projected at 6.9 percent in FY2022/2023 and is expected to moderate only gradually over the next year. The current account deficit is expected to increase to 3.5 percent of GDP in FY2022/23 as a result of both higher commodity prices and strengthening import demand.

Uncertainty around the outlook is high, with risks tilted to the downside. A sharp global growth slowdown in the near term would affect India through trade and financial channels. Intensifying spillovers from the war in Ukraine can cause disruptions in the global food and energy markets, with significant impact on India. Over the medium term, reduced international cooperation can further disrupt trade and increase financial markets volatility. Domestically, rising inflation can further dampen domestic demand and impact vulnerable groups. On the upside, however, successful implementation of wide-ranging reforms or greater than expected dividends from the remarkable advances in digitalization could increase India's medium-term growth potential.

[1] Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. A staff team visits the country, collects economic and financial information, and discusses with officials the country's economic developments and policies. On return to headquarters, the staff prepares a report, which forms the basis for discussion by the Executive Board.

Executive Board Assessment[2]

Executive Directors concurred that the authorities have appropriately responded to post-pandemic economic shocks with fiscal policy measures to support vulnerable groups and with front-loaded monetary policy tightening to address elevated inflation. They generally noted that while public debt sustainability risks have increased, these risks are mitigated given the debt characteristics. Directors encouraged a more ambitious and well-communicated medium-term fiscal consolidation, anchored on stronger revenue mobilization and further improvement in expenditure efficiency, while high-quality spending on infrastructure, education and health is protected. They also observed that further improvements in public financial management, fiscal institutions and transparency would support consolidation efforts.

Directors noted that additional monetary policy tightening should be carefully calibrated and clearly communicated to balance inflationary objectives and impact on economic activity. Noting that India's external position was broadly in equilibrium, Directors observed that the exchange rate should continue to act as a shock absorber with foreign exchange intervention limited to addressing disorderly market conditions. Directors welcomed the authorities' plans to introduce a central bank digital currency.

While noting the improvement in corporate and financial sector balance sheets, Directors encouraged additional measures to counter risks stemming from tightening financial conditions. They observed that banks should be encouraged to build additional capital buffers and recognize problem loans and noted that targeted prudential tools could strengthen the banking system's resilience to rising interest rate risks. Directors encouraged the authorities to make further progress on financial sector reforms.

Directors commended the authorities for the remarkable achievements in digitalization. Digital public infrastructure has enabled the rapid deployment of support during the pandemic, and digital advances have facilitated efficient payments and increased financial inclusion. Narrowing the digital divide through improved access and literacy would further support productivity gains.

Directors encouraged the authorities to make additional progress on the structural reform agenda. Increasing female labor force participation, reducing youth unemployment and reducing informality remain critical to sustaining strong and inclusive growth. Strengthening governance and the regulatory framework would foster transparency and safeguard public accountability. Directors welcomed new trade agreements and observed that additional tariff reduction could help deepen India's integration in global value chains and support growth.

Directors noted India's important progress in implementing its climate agenda, including through increasing the share of renewables in energy production and improving energy efficiency. Directors observed that additional efforts would be needed to meet the authorities' net zero objective.

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[2] At the conclusion of the discussion, the Managing Director, as Chairman of the Board, summarizes the views of Executive Directors, and this summary is transmitted to the country's authorities. An explanation of any qualifiers used in summings up can be found here: http://www.IMF.org/external/np/sec/misc/qualifiers.htm.

India: Selected Economic and Financial Indicators, 2018/19-2023/24 1/

	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24
				Est.	Projections	
Growth (in percent)						
Real GDP (at market prices)	6.5	3.7	-6.6	8.7	6.8	6.1
Prices (percent change, period average)						
Consumer prices - Combined	3.4	4.8	6.2	5.5	6.9	5.1
Saving and investment (percent of GDP)						
Gross saving 2/	30.2	29.4	28.8	30.0	29.4	30.1
Gross investment 2/	32.3	30.2	27.9	31.2	32.8	33.0
Fiscal position (percent of GDP) 3/						
Central government overall balance	-3.9	-4.8	-8.6	-6.7	-6.5	-6.2
General government overall balance	-6.4	-7.5	-12.8	-10.0	-9.9	-9.0
General government debt 4/	70.4	75.1	89.2	84.2	83.5	83.9
Cyclically adjusted balance (% of potential GDP)	-6.8	-7.4	-8.7	-8.3	-8.5	-8.3
Cyclically adjusted primary balance (% of potential GDP)	-2.0	-2.6	-3.8	-3.3	-3.2	-2.7
Money and credit (y/y percent change, end-period)						
Broad money	10.5	8.9	12.2	8.8	8.9	9.0
Domestic Credit	11.8	8.3	9.5	9.0	13.6	11.4
Financial indicators (percent, end-period)						
91-day treasury bill yield (end-period)	6.1	4.4	3.3	3.8	...	...
10-year government bond yield (end-period)	7.4	6.1	6.2	6.8	...	...
Stock market (y/y percent change, end-period)	17.3	-23.8	68.0	18.3	...	...
External trade (on balance of payments basis)						
Merchandise exports (in billions of U.S. dollars)	337.2	320.4	296.3	429.2	450.3	462.8
(Annual percent change)	9.1	-5.0	-7.5	44.8	4.9	2.8
Merchandise imports (in billions of U.S. dollars)	517.5	477.9	398.5	618.6	737.7	769.6
(Annual percent change)	10.3	-7.6	-16.6	55.3	19.2	4.3
Terms of trade (G&S, annual percent change)	-1.8	1.5	1.6	-8.1	-2.8	2.2
Balance of payments (in billions of U.S. dollars)						
Current account balance	-57.2	-24.5	24.0	-38.7	-118.3	-109.7
(In percent of GDP)	-2.1	-0.9	0.9	-1.2	-3.5	-2.9
Foreign direct investment, net ("-" signifies inflow)	-30.7	-43.0	-44.0	-38.6	-47.7	-52.6
Portfolio investment, net (equity and debt, "-" = inflow)	2.4	-1.4	-36.1	16.8	-8.2	-18.0
Overall balance ("+" signifies balance of payments surplus)	-3.3	59.5	87.3	47.5	-20.1	17.8
External indicators						
Gross reserves (in billions of U.S. dollars, end-period)	412.9	477.8	577.0	607.3	540.5	558.3
(In months of next year's imports (goods and services))	8.2	11.1	9.0	7.9	6.7	6.5
External debt (in billions of U.S. dollars, end-period)	543.1	558.4	573.7	619.6	669.1	742.5
External debt (percent of GDP, end-period)	20.1	19.7	21.5	19.5	19.6	19.8
Of which: Short-term debt	8.7	8.4	8.8	8.6	8.6	8.9
Ratio of gross reserves to short-term debt (end-period)	1.8	2.0	2.4	2.2	1.8	1.7
Real effective exchange rate (annual avg. percent change)	-4.7	3.0	-0.9	0.3	...	...
Exchange rate (rupee/U.S. dollar, end-period)	69.2	75.4	73.5	75.8	...	...
Memorandum item (in percent of GDP)						
Fiscal balance under authorities' definition	-3.4	-4.7	-9.2	-6.7	-6.4	-6.2

Sources: Data provided by the Indian authorities; Haver Analytics; CEIC Data Company Ltd; Bloomberg L.P.; World Bank, World Development Indicators; and IMF staff estimates and projections.
1/ Data are for April–March fiscal years.
2/ Differs from official data, calculated with gross investment and current account. Gross investment includes errors and omissions.
3/ Divestment and license auction proceeds treated as below-the-line financing.
4/ Includes combined domestic liabilities of the center and the states, and external debt at year-end exchange rates.

INDIA

STAFF REPORT FOR THE 2022 ARTICLE IV CONSULTATION

November 4, 2022

KEY ISSUES

Context. The economy has rebounded from the pandemic-related downturn but is facing new headwinds. The authorities have responded with fiscal policy measures to support vulnerable groups and to mitigate the economic impact of commodity price increases, as well as with front-loaded monetary policy tightening to address elevated inflation. A world class public digital infrastructure is facilitating innovation, productivity improvements and access to services. Further structural reforms, including to address the adverse impact of climate change, are needed to secure strong and sustainable growth.

Policy Recommendations.

- **Fiscal policy to ensure medium-term sustainability**. The additional support to vulnerable groups this year is warranted but, with fiscal space at risk, policies should focus on a credible and clearly communicated consolidation, anchored on stronger revenue mobilization and spending efficiency. Further improvements in public financial management, fiscal institutions and transparency would help. India's digitalization success can be harnessed to better target government services.

- **Monetary policy tightening**. Inflation pressures have led to an appropriate shift towards policy tightening. Additional tightening should be carefully calibrated and communicated. The exchange rate should act as the main shock absorber, with intervention limited to addressing disorderly market conditions.

- **Financial sector policies to maintain financial stability and support growth**. Financial sector policies should continue to facilitate the exit of non-viable firms and encourage banks to build capital buffers and recognize problem loans. Prudential tools could help address risks stemming from tightening in financial conditions. Reforms to strengthen governance and reduce the government's footprint are needed to support strong medium-term growth.

- **Structural reforms for resilient, green and inclusive growth**. India is making important progress in implementing its climate agenda. Additional efforts, as well as financing and technology transfer, are needed to move to a carbon-neutral economy. The pandemic has highlighted the need to strengthen health, education and social spending, and narrowing the digital divide through improved digital access and literacy. Improving productivity, strengthening governance, and furthering trade liberalization would help medium-term growth.

Approved By
Anne-Marie Gulde-Wolf (APD) and Anna Ilyina (SPR)

The Article IV mission took place September 12-27, 2022. The team comprised N. Choueiri (Head), D. Prihardini, J. Spray, J. Turunen, T. Xu (all APD), M. Casiraghi (MCM), M. Gorbanyov (SPR), S. Kotera (OAP) and L. Breuer (Senior Resident Representative). S. Mohapatra and G. Dang assisted the mission. S. Bhalla and S. Dash also participated in some mission meetings. The mission met with the Economic Affairs Secretary A. Seth, Chief Economic Advisor A. Nageswaran, Reserve Bank of India (RBI) Deputy Governors M. D. Patra and T. R. Sankar, and other senior government and RBI officials, along with representatives from the private sector. M. Conde Panesso and A. Goel (APD) assisted in the preparation of this report.

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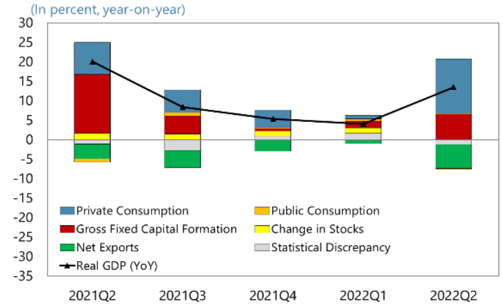
TABLES

APPENDICES

BROAD-BASED ECONOMIC RECOVERY IS UNDERWAY

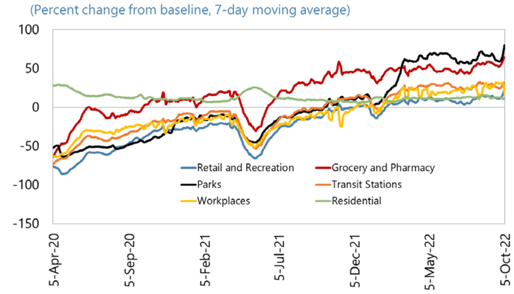
1. Growth has rebounded from the deep pandemic-related downturn. Real GDP grew by 8.7 percent in fiscal year (FY) 2021/22. All sectors recovered to pre-pandemic levels by end-FY2021/22 except for contact-intensive services, which remained 11 percent below FY2019/20 levels. Growth was 13.5 percent year-on-year in the first quarter of FY2022/23, as domestic demand picked-up but net exports weighed on growth. High frequency indicators including Purchasing Manager Indices (PMIs) and mobility suggest continued growth in the second quarter. However, the estimated output gap remains negative. As of end-September new COVID cases have fallen to low levels and about 70 percent of the population was fully vaccinated. The free administration of booster shots and broader eligibility criteria should help further improve vaccine coverage.

Contribution to Real GDP Growth
(In percent, year-on-year)



Sources: Haver Analytics, and IMF staff estimates.

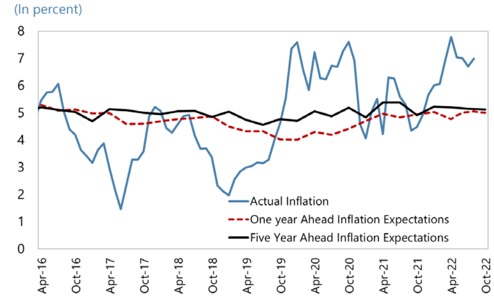
Community Mobility by Location
(Percent change from baseline, 7-day moving average)



Source: Google Global Mobility Report.
Note: The Global Mobility report charts movement trends over time by geography, across different categories of places such as retail and recreation, groceries and pharmacies, parks, transit stations, workplaces, and residential.

2. Inflation is elevated. Inflation has been at or above the Reserve Bank of India's (RBI's) tolerance band of 4±2 percent since January 2022, in the context of growing domestic demand, commodity and food price shocks and supply chain disruptions. Headline consumer price inflation rose slightly to 7.4 percent in September, led by a pickup in food inflation to 8.4 percent. Core inflation (excluding food and fuel) remained high at 6 percent. Long-term inflation expectations remain relatively well anchored. However, the risk of second-round effects from fuel and commodity price shocks remains high.

Inflation Expectations
(In percent)



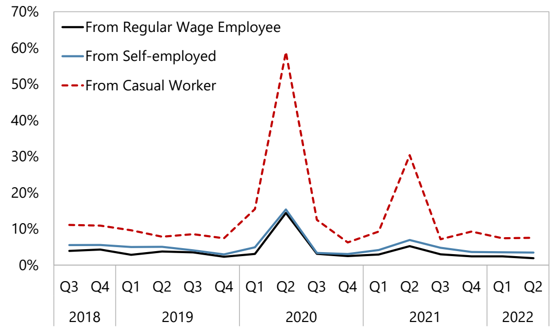
Sources: CEIC; Consensus Economics; and IMF staff calculations.
Note: Inflation Expectations are based on one year and five year ahead consensus mean forecast.

3. While employment is recovering, the impact of the pandemic on the labor market and livelihoods has been substantial. Most affected were vulnerable groups, including females, youth, those with less skills and education, and daily wage and migrant workers (Figure 1). Reduced access to education and training has adversely impacted human capital accumulation. Post-pandemic recovery in employment is broad-based across gender and age groups but is uneven across sectors. The sluggish recovery in real earnings weighs on consumption. While government policy measures have helped significantly, the pandemic has temporarily disrupted gains in human development (Appendix VII).

Figure 1. Labor Market Developments

Vulnerable workers, such as casual workers, were hardest hit by the pandemic …

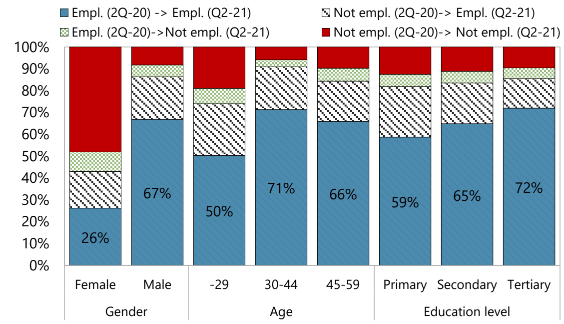
Workers who Lost the Job by Employment Status (Urban)
(Share of workers whose status changed to not employed)



Source: MOSPI.

… this includes females, youth, and those with less education.

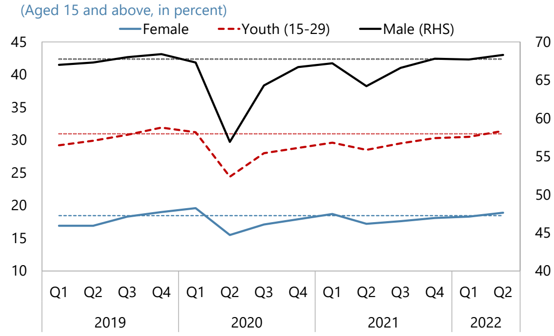
Employment Trajectories (Persons Employed as of Q2 2019)
(Employment trajectories of each 2Q of 2019, 2020, and 2021)



Sources: CMIE; and IMF staff estimates.

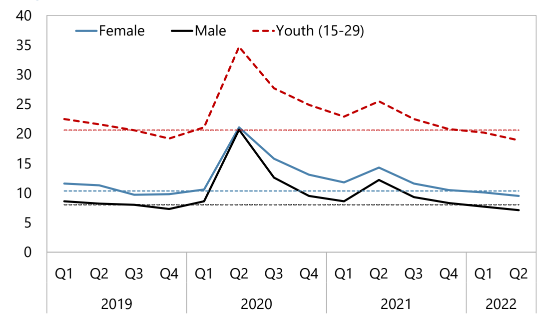
Post-pandemic employment recovery is broad based, although pre-pandemic patterns continue to prevail, as employment rates remain low and unemployment high for females and youth.

Employment to Population Ratio (Urban)
(Aged 15 and above, in percent)



Source: MOSPI.
Note: Dotted lines indicate FY2019-20 average.

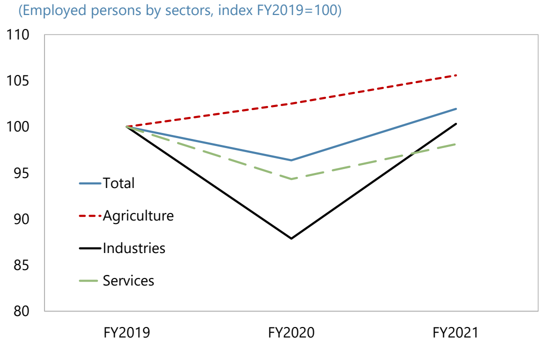
Unemployment Rate (Urban)
(Aged 15 and above, in percent)



Source: MOSPI.
Note: Dotted lines indicate FY2019-20 average.

The employment recovery is uneven across sectors with services lagging…

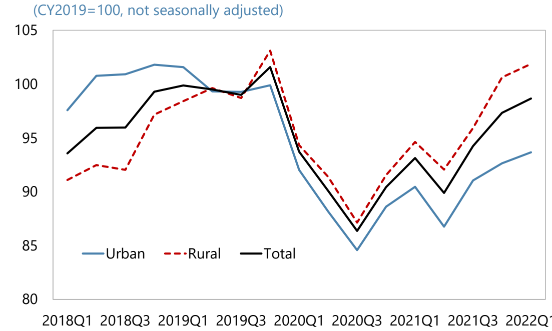
Employment by Sectors
(Employed persons by sectors, index FY2019=100)



Sources: UN; MHA; MOSPI; CMIE; and IMF staff calculations.

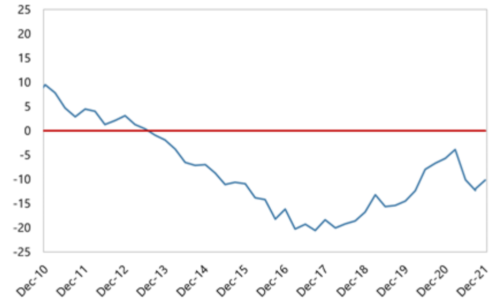
…and the sluggish recovery in real earnings weighs on consumption.

Average Real Monthly Earnings 1/
(CY2019=100, not seasonally adjusted)



1/ Deflated by CPI (headline) for combined, urban, and rural.
Sources: CMIE; MOSPI; and IMF staff calculations.

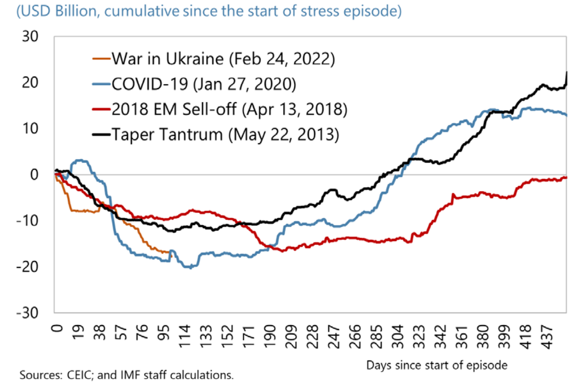
4. Credit growth has increased, thus strengthening financial sector support to economic activity. Following relatively subdued growth over the past two years, non-food bank credit growth rose to 15.1 percent in July, up from 6.2 percent a year ago, driven by stronger credit growth by private banks. The pick-up was led by credit to Micro Small and Medium-Sized Enterprises (MSMEs) in the industry sector, with credit growth to medium-sized enterprises buoyant at 37 percent and to micro and small enterprises at 28.3 percent. Credit to large enterprises recorded a smaller increase of 5.2 percent (up from -3.8 percent a year ago). Credit to the services sector grew 16.5 percent in July, and personal loans rose by 18.8 percent. The credit-to-GDP gap, however, remains negative.



Source: Bank of International Settlements.

5. The external position in FY2021/22 was broadly in line with that implied by medium-term fundamentals and desirable policies (Appendix I). Current account surpluses and large capital inflows helped the RBI replenish its international reserves during the pandemic. In FY2021/22, however, the current account returned to a deficit of about 1.2 percent of GDP, reflecting the domestic demand recovery and rising commodity prices. Based on the EBA model, staff assessed the current account gap at 1 percent of GDP, after accounting for transitory impacts of the COVID-19 shock. Capital inflows helped improve the net international investment position.

6. The widening current account deficit together with portfolio investment outflows have put pressure on the exchange rate this year, contributing to foreign exchange (FX) reserves losses. External shocks—including global financial tightening, and the war in Ukraine—along with recovering domestic demand have contributed to pressures on the exchange rate. The adverse impact of higher imported oil prices was mitigated by importing oil from Russia at a discounted price. Responding to rising food prices and domestic food security concerns, the authorities have restricted wheat, sugar, and rice exports. Notwithstanding steady FDI inflows, India experienced portfolio investment outflows in the first half of 2022 and the rupee's exchange rate has depreciated. As a result, and reflecting both valuation losses and RBI intervention, FX reserves decreased but remain at a relatively comfortable level, covering about 7 months of prospective imports and more than 150 percent of the IMF reserve adequacy metric. The RBI has further relaxed capital flow management measures by raising individual borrowing limits (for all borrowers) and cost ceiling (for investment-grade borrowers) on external commercial borrowings[1] and bank



Sources: CEIC; and IMF staff calculations.

[1] Temporary measure introduced in July, effective until end-2022.

external FX borrowing and widening the scope for foreign investment in government and corporate bonds, as well as FDI in the oil, gas, and life insurance sectors.

HEADWINDS WEIGH ON THE ECONOMIC OUTLOOK

7. **Looking forward, real GDP growth is expected to moderate amid higher oil prices, weaker external demand, and tighter financial conditions**. Staff's baseline scenario projects growth at 6.8 percent in FY2022/23 and 6.1 percent in FY2023/24, with the moderation reflecting less favorable external conditions and tighter financial conditions. The war in Ukraine and sanctions on Russia continues to impact the Indian economy through multiple channels, including elevated commodity prices, lower external demand, and uncertainty-driven adverse confidence effects. Potential growth is expected at 6 percent over the medium term under the baseline (Box 1). The current account deficit is expected to increase to 3.5 percent of GDP in FY2022/23, reflecting both higher commodity prices and strengthening import demand, before declining to around 2.5 percent over the medium term. Credit growth is expected to strengthen but further financial deepening would be needed to support medium-term economic growth (Box 2).

8. **Inflation is expected to moderate only gradually over the next two years**. Inflation is projected at 6.9 percent in FY2022/23, reflecting near-term uncertainties in food prices and input costs and relatively sticky core inflation. Inflation is expected to gradually return to within the tolerance band next year, reflecting favorable base effects (including for food inflation), the impact of monetary policy tightening, and well-anchored long-term inflation expectations.

Text Table 1: Medium Term Outlook, 2018/19-2027/28

FISCAL YEAR 1/	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28
				Est.	Projections					
Output										
Real GDP growth (%)	6.5	3.7	-6.6	8.7	6.8	6.1	6.8	6.8	6.5	6.2
Prices										
Inflation, CPI-Combined (%)	3.4	4.8	6.2	5.5	6.9	5.1	4.4	4.1	4.0	4.0
General government finances										
Revenue (% of GDP)	20.0	19.9	18.3	20.2	19.0	19.2	19.6	19.9	20.1	20.4
Expenditure (% of GDP)	26.3	27.4	31.1	30.1	28.9	28.3	28.1	27.8	27.7	27.7
Fiscal balance (% of GDP)	-6.4	-7.5	-12.8	-10.0	-9.9	-9.0	-8.5	-7.9	-7.5	-7.3
Public debt (% of GDP)	70.4	75.1	89.2	84.2	83.5	83.9	84.1	83.8	83.5	83.1
Money and credit										
Broad money (% change)	10.5	8.9	12.2	8.8	8.9	9.0	8.6	9.6	10.7	11.1
Domestic Credit (% change)	11.7	8.3	9.5	9.0	13.6	11.4	8.2	8.2	9.2	10.2
Credit to the private sector (% change)	12.7	6.3	5.7	8.1	14.5	11.8	12.1	12.6	13.2	13.8
3-month Treasury bill interest rate (%)	6.1	4.4	3.3	3.8	...	...	...	...	...	...
Balance of payments										
Current account (% of GDP)	-2.1	-0.9	0.9	-1.2	-3.5	-2.9	-2.6	-2.6	-2.6	-2.6
FDI, Net Inflow (% of GDP)	1.1	1.5	1.6	1.2	1.4	1.4	1.4	1.4	1.4	1.4
Reserves (months of imports)	8.2	11.1	9.0	7.9	6.7	6.5	6.5	6.5	6.3	6.4
External debt (% of GDP)	20.1	19.7	21.5	19.5	19.6	19.8	20.1	20.4	20.8	21.2
Exchange rate										
REER (% change)	-4.7	3.0	-0.9	0.3	...	...	...	...	...	...

Sources: Data provided by the Indian authorities; Haver Analytics; CEIC Data Company Ltd; Bloomberg L.P.; World Bank, World Development Indicators; and IMF staff estimates and projections.
1/ Fiscal Year is April to March (e.g. 2019/20 = Apr-2019 - Mar-2020).

9. **Uncertainty about the economic outlook is high and risks are tilted to the downside** (Appendix II).

- **External risks**. A sharp global growth slowdown in the near term would affect India through trade and financial channels. Intensifying spillovers from the war in Ukraine combined with supply and demand shocks can cause disruptions in the global food and energy markets. This can lead to persistently higher inflation and de-anchoring inflation expectations. Over the medium term, broadening of conflicts and reduced international cooperation can accelerate deglobalization, resulting in trade disruptions, commodity price volatility, and fragmentation of technological and payments systems.

- **Domestic risks**. Rising inflation can impact vulnerable groups. Emergence of more contagious COVID-19 variants can dent confidence and force new mobility restrictions, with impact on trade and growth. Tightening financial conditions can weaken asset quality and result in financial sector stress, limiting credit provision and negatively impacting long-term growth. Further weakening of the fiscal position can increase financing costs. Finally, climate change could induce more frequent natural disasters, heatwaves, and water stress, causing infrastructure damage, water and food shortages and reducing medium-term growth.

- **Upside risks**. A resolution of the war in Ukraine and de-escalation of geopolitical tensions can boost international cooperation, moderate commodity price volatility, and promote trade and growth. A "soft landing" in the U.S., Europe, and China can increase external demand and confidence. Successful implementation of wide-ranging structural reforms, or greater than expected dividends from ongoing digital advances, could increase India's medium-term growth potential.

10. A materialization of downside risks would worsen the outlook significantly. Should the most important downside external and domestic risks jointly materialize, growth would fall significantly in FY2022/23 and FY2023/24 compared with staff's baseline projection and inflation would increase markedly, particularly in FY2022/23. Both exports and imports would decline, particularly in FY2022/23, but the overall impact on the trade balance and current account would be relatively muted.

11. The authorities were more optimistic than staff about the economic outlook amid the uncertain external environment. They projected growth at about 7 percent in FY2022/23, as government capital spending and private demand are expected to strengthen further in the remainder of the year. They emphasized the role of reforms, such as the production linked incentives (PLI) schemes, in boosting growth to a feasible medium-term range. The authorities disagreed with the risks of de-anchoring inflation expectations and expected inflation to fall below 6 percent in the last quarter of the fiscal year. They highlighted that India's external position remains sufficiently strong to withstand external shocks in the near term. They expected a current account deficit within 3 percent of GDP this year, with steady FDI and resumption of portfolio investment inflows comfortably financing a deficit of up to 3 percent of GDP over the medium term.

FISCAL POLICY TO ENSURE MEDIUM-TERM SUSTAINABILITY

12. The fiscal deficit narrowed in FY2021/22, reflecting the recovery and phasing out of pandemic-related expenditures.

- **The central government deficit declined to 6.7 percent, due to higher revenues and lower spending**. Tax revenues were particularly buoyant, reflecting the recovery and successful administrative measures to improve compliance. Some pandemic-related expenditures were appropriately phased out, contributing to a 1 percent of GDP reduction in spending.

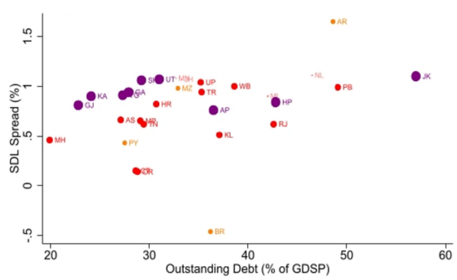
Summary Central Government Fiscal Developments
(In percent of GDP)

	FY 2020/21	FY 2021/22		FY 2022/23	
	Est.	Budget	Est.	Budget	Proj.
Total Revenues	**8.4**	**8.3**	**9.3**	**8.7**	**8.6**
Net tax revenues	7.2	7.0	7.7	7.5	7.6
Non-tax revenues	1.2	1.3	1.6	1.2	1.0
Total Expenditure	**17.0**	**15.7**	**16.0**	**15.2**	**15.1**
Revenue expenditure 1/	14.8	13.2	13.5	12.3	12.5
Capital expenditure	2.2	2.5	2.5	2.9	2.5
Central Government (CG) Fiscal Deficit	**8.6**	**7.5**	**6.7**	**6.6**	**6.5**
Memo Items					
Nominal GDP (Rs billions)	198,009	221,590	236,646	259,562	273,112
CG Fiscal Deficit (authorities' definition) 2/	9.2	6.8	6.7	6.4	6.4
IMF Extended CG Deficit 3/	8.7	...	6.7	...	6.5
General Government Fiscal Deficit	12.8	11.9	10.0	10.4	9.9
State Government Fiscal Deficit	4.2	4.4	3.3	3.9	3.4
General Government Debt (% of GDP) 4/	89.2	...	84.2	...	83.5

1/ Starting in FY2020/21, includes food subsidies covered by the Food Corporation of India (FCI).
For FY2020/21, excludes retroactive payment to FCI for previous years' food subsidy bill.
2/ Includes asset sales in receipts, and excludes certain non-tax revenue items. Includes the retroactive payment to Food corporation of India for previous years' food subsidy bill.
3/ Includes NSSF loans to central gov PSUs (Union budget, Annex 8) and fully serviced bonds (Union budget, statement 27)
4/ For FY2021/22 reflects the additional SDR allocation of about 0.6 percent of GDP.

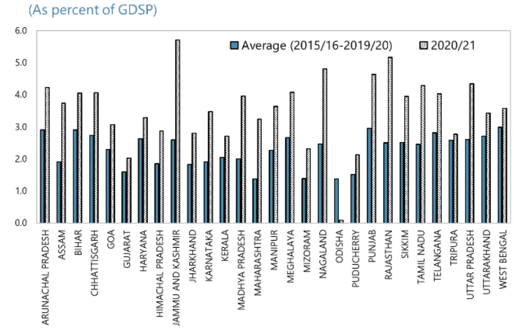
- **State governments' deficit is estimated to have declined close to the medium-term target of 3 percent**. There is considerable variation across states and some face debt burdens over 40 percent of state-level GDP. Despite variations in fiscal performance, spreads between state development loans (SDLs) and central government securities have remained within a narrow range, reflecting an implicit sovereign guarantee, though there is some evidence of a negative relationship between spreads and fiscal prudence. The importance of SDL spreads has grown as states increase their market borrowing due to greater financing needs coupled with less reliance on National Small Savings Fund borrowing.

Indian States: SDL Spread and Outstanding Debt
(In percent, 2020-21)



Sources: Reserve Bank of India; Ministry of Health; and IMF staff calculations.
Note: Light red represents less than 45% population in the respective state is vaccinated, orange represents 45-60% is vaccinated, red represents 60-75% is vaccinated and purple represents more than 75% is vaccinated.

State-wise Market Borrowings
(As percent of GDSP)



Sources: Reserve Bank of India; CEIC; and IMF staff calculations.

13. The FY2022/23 budget and additional support measures suggest a slightly contractionary fiscal stance, and the stance is projected to tighten further in FY2023/24.

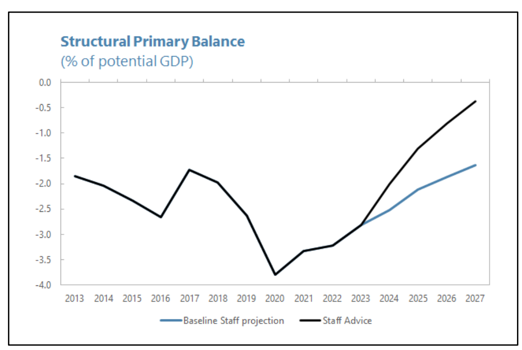
- **The central government fiscal deficit targeted in the budget is within reach**. Measures to mitigate the impact of higher commodity prices (free food rations; reduction in fuel taxes; higher fertilizer subsidies; and a fuel subsidy for low-income households) are being offset by buoyant GST and income tax revenues. The latter reflect improvements in tax administration, and additional taxes on domestic crude oil production and fuel exports. Staff's projection assumes a small under-execution of the substantial capital budget.

- **The additional support to vulnerable groups this year is warranted, but improving targeting is necessary**. The direct support to the vulnerable is welcome. The additional fertilizer subsidies will help agricultural production and incomes but there is room to better target them, given the high cost. Similarly, the reduction in fuel excise taxes may provide some temporary cushion but is not well targeted, entailing a large fiscal cost. These tax cuts should be phased out and support to vulnerable groups provided through the existing transfer system.

- **A stronger tightening in the general government fiscal stance is expected for FY2023/24**. Expenditure will decline as free food rations expire and fertilizer prices ease. Central government revenue should return to pre-pandemic levels, even if fuel excises remain unchanged.

14. Baseline projections suggest a gradual decline in the fiscal deficit and stabilization of public debt over the medium-term, but debt sustainability risks have increased. High debt levels (84 percent of GDP in FY2021/22) and substantial gross financing needs (15 percent of GDP) coupled with monetary policy tightening increase debt sustainability risks (Appendix III). These risks are mitigated as the bulk of public debt are fixed-rate instruments denominated in domestic currency and, due to regulatory requirements, predominantly held by residents.

15. India's fiscal space is at risk and well-communicated consolidation is needed to ensure medium-term fiscal sustainability. The medium-term fiscal anchor is under review as part of revisions to the Fiscal Responsibility and Budget Management (FRBM) Act. Nonetheless, the authorities have reaffirmed their commitment to a 4.5 percent of GDP central government deficit target by FY2025/26, implying a general government deficit of 7.5 percent of GDP (down from 9.9 percent in FY2022/23). A clearly communicated medium-term fiscal consolidation plan is critical to enhance policy space and facilitate private sector led growth. Announcing further deficit-reduction measures would reduce uncertainty and lower risk premia. In the short-term, fiscal consolidation would also support the RBI's efforts to maintain price stability.

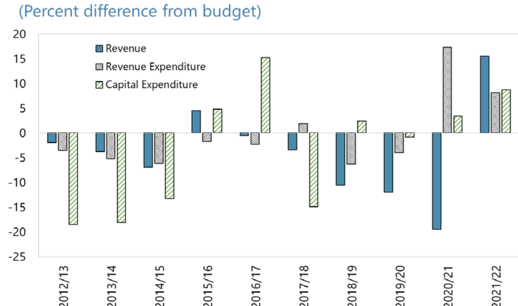


16. Policy efforts should be anchored on stronger revenue mobilization and improving expenditure efficiency. Fiscal consolidation should be more ambitious than in the baseline, feasibly targeting an additional general government primary consolidation of around 1 percent of GDP by FY2027/28, bringing debt down to 80 percent of GDP. Revenue measures can include: reversing the fuel excise tax cuts, further broadening the corporate and personal income tax bases, simplifying the goods and services tax (GST) rate structure, rationalizing the items subject to preferential GST treatment, and continued improvements in tax administration, in line with international good practice. These measures would help narrow India's tax gap, estimated at around 5 percent of GDP. Maintaining momentum in the asset monetization and privatization agenda can generate additional receipts. Improving expenditure efficiency is possible through better targeting of subsidies, greater utilization of the existing social support infrastructure (e.g., Direct Benefit Transfer) to reduce leakages, continued rationalization of central schemes, as well as reforming electricity tariffs and improving the financial viability of electricity distribution companies. The latter would also support development goals, including the clean energy transition.

Potential Consolidation Scenario (Change between FY2022/23 and FY2027/28, % of GDP)	
GST	1.0
Excise	0.4
Income tax	0.4
Subsidies	-0.9
Outcome in FY2027/28 Under Consolidation Scenario (% of GDP)	
Cyclically adjusted primary balance	-0.4
General Government Balance	-6.0
General Government Balance (Authorities' Definition)	-6.0
Source: IMF Staff estimates, de Mooij and others (2019)	

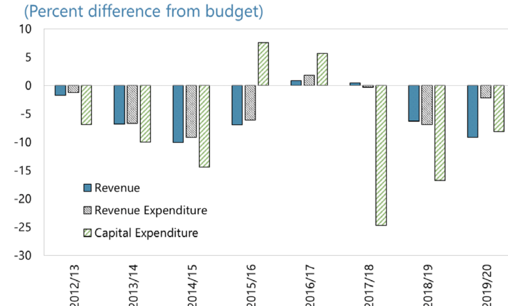
17. High-quality spending on infrastructure, education and health should be protected to support green and inclusive growth. Without a clear medium-term consolidation strategy there is a higher risk that growth-enhancing capital expenditure will be under-executed in the face of pressures to meet targeted deficits. Similarly, expenditure on education and health, important drivers of long-term growth, would need to be prioritized within the strategy. Targeted support for vulnerable groups should continue to be prioritized.

Central Budget vs Outturn
(Percent difference from budget)



Sources: Country authorities; and IMF staff calculations.

State Budget vs Outturn
(Percent difference from budget)



Sources: Country authorities; and IMF staff calculations.

18. Continuing efforts to improve public financial management (PFM), fiscal institutions and transparency are critical. As the authorities undertake consolidation, fiscal transparency becomes more important, to impart credibility and broad public support to the strategy.

Recognizing previously off-budget expenditure at the center and state level has improved transparency. Digital solutions have helped streamline PFM processes, advancing transparency and governance, including through e-procurement, faceless income tax assessments and the recent rollout of e-bills. The development of an integrated Government Financial Management System is welcome and can be complemented by a dedicated platform for central, state, and local governments to share fiscal information. This platform, along with enhanced center-state coordination, would support the timely production of consolidated fiscal reports and hence the identification of fiscal risks at the sub-national level. The IMF is supporting select states to improve important PFM areas such as the development of a medium-term fiscal framework and commitment control systems.

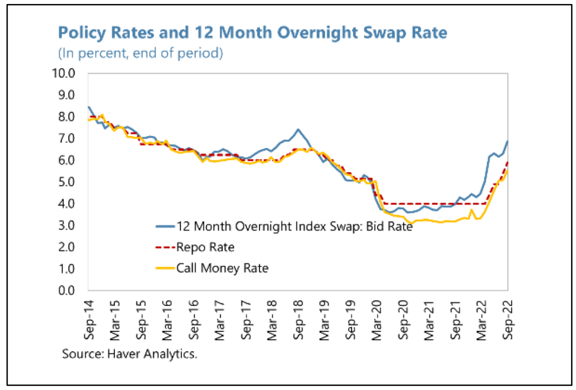
19. Digital public infrastructure (India Stack) enabled the rapid deployment of support during the pandemic and can be further harnessed to improve government service delivery. The digital infrastructure is focused on delivering citizen-centric public services (Box 3). The expansion of this infrastructure to health, education, e-commerce and logistics is ongoing. Building on this infrastructure to streamline and coordinate social support programs could be considered. A similar initiative is under development for the coordination of public sector investment projects across ministries.

20. The authorities largely agreed with the assessment of the fiscal stance and the need for medium-term consolidation. They emphasized that debt remains sustainable given favorable growth dynamics under various scenarios and, noting their strong commitment to consolidation, assessed that fiscal space is not at risk. The authorities view a central government deficit target of 4.5 percent of GDP in FY2025/26 as appropriate and achievable and expect the state government's deficit to return to 3 percent of GDP, over the same time frame. The targets will be achieved through continued prioritization of ongoing government programs, leading to slower growth in recurrent expenditure, and through further revenue-enhancing measures that increase voluntary compliance. They considered the fuel excise tax cuts as necessary to manage inflation. Their longer-term fiscal strategy will be communicated closer to FY2025/26; this, and amendments to the FRBM Act have not been proposed to maintain policy flexibility until uncertainties ease.

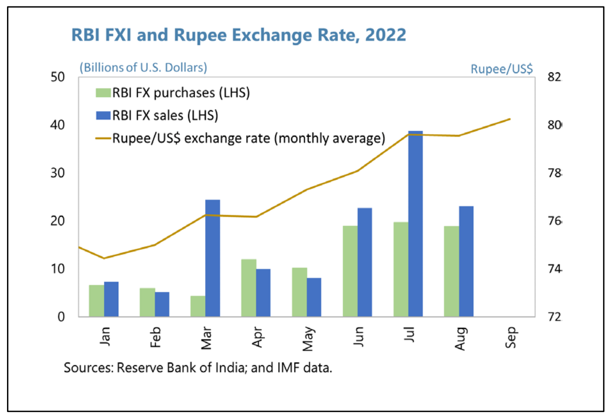
MONETARY POLICY TIGHTENING

21. Following significant and broad-based support during the pandemic, the RBI has tightened monetary policy. Accommodative monetary policy helped support financial stability and economic activity during the pandemic. However, persistent inflation pressures have prompted an appropriate and front-loaded shift towards policy tightening. To counter these pressures and to ensure that inflation expectations remain anchored, the RBI has increased the policy rate three times since May 2022, by a cumulative 190 basis points. In parallel, the RBI has absorbed liquidity using the variable rate reverse repo auctions, and through raising the cash reserve ratio by 50 bps in May 2022, having also discontinued its government securities purchase program in October 2021. Surplus liquidity also moderated due to capital outflows. The overnight call money rate has risen, approaching the policy rate. Long-term inflation expectations remain relatively well anchored at around 5 percent.

22. Additional policy rate tightening is needed and should be carefully calibrated and clearly communicated to balance inflationary pressures and economic activity. Although the output gap remains negative, elevated inflation and strengthening recovery imply the need for further rate actions.[2] Frontloading monetary policy actions shows commitment to the inflation target, which can help anchor inflation expectations, thus necessitating less aggressive policy increases in the future. At the same time, the magnitude of additional policy tightening should be data-dependent and well-timed given the significant economic costs of over-tightening. Monetary policy communication can also improve policy transmission and reinforce market confidence and has helped guide market expectations about the policy stance**.**



23. Exchange rate flexibility should remain the main shock absorber, with intervention limited to addressing disorderly market conditions. A combination of severe external shocks has led to U.S. Dollar appreciation and surges in commodity prices, exerting depreciation pressures on emerging market currencies including the Indian Rupee. The RBI used previously accumulated foreign exchange reserves to accommodate the impact of extraordinary shocks and smooth excessive market volatility, resulting in more limited rupee depreciation vis-à-vis the U.S. Dollar in 2022 compared to many other emerging market currencies and precluding emergence of disorderly market conditions. Going forward, flexible exchange rate should continue to act as the first line of defense in absorbing external shocks, with interventions limited to preventing disorderly market fluctuations. India's external position remains sufficiently strong to withstand external shocks in the near term.



24. A Central Bank Digital Currency's (CBDC) greater additional benefits may result from facilitating cross-border transactions. The authorities intend to begin the phased implementation of both retail and wholesale CBDC within the current fiscal year with the aim to complement the domestic payment system and facilitate cross-border transactions. The extent to which CBDC can deliver on these goals will depend crucially on design features (Appendix VI). A CBDC would complement the already relatively efficient domestic payment system where private providers offer low cost, real-time payments. At the same time, a CBDC could significantly contribute to addressing

[2] The real neutral rate is estimate at about 1 percent, despite high pandemic-related uncertainties.

the inefficiencies that characterize cross border transactions but would require strong international cooperation. Important risks, such as threats to cyber security, warrant caution in implementation.

25. The authorities reiterated their commitment to bringing inflation back to target and to maintaining a flexible exchange rate. The RBI re-affirmed its continued focus on withdrawal of accommodation. The authorities highlighted the challenges associated with the spillovers from advanced economies' monetary policy actions and with consistent forward guidance in a highly uncertain environment. They indicated that further monetary policy actions would be carefully calibrated to incoming data. The RBI remains committed to maintaining the rupee's flexible exchange rate regime and using FX reserves only to address excessive market volatility. The authorities confirmed their intention to gradually implement both a retail and a wholesale domestic CBDC, which would provide the public with the benefit of virtual currencies while ensuring consumer protection.

FINANCIAL SECTOR POLICIES TO MAINTAIN STABILITY

26. Financial sector policies provided important support to the corporate sector during the pandemic.

- **The pandemic-related policy response has eased the impact on corporates, but most measures have now expired**. Accommodative monetary policy and regulatory easing targeting lenders and borrowers played a key role in supporting the financial sector and avoiding a credit crunch. Initiatives included moratoria on loan repayments and credit guarantee schemes for MSMEs. Banks also benefitted from loan restructuring schemes, and the deferment in the implementation of the net stable funding ratio and the last tranche of the capital conservation buffer. However, these measures have now expired, except for the government guarantees for MSMEs that have been extended to March 2023 with additional funds allocated to firms in the hospitality sector.

- **These government guarantees can be unwound**. Government guarantees successfully sustained credit flow to viable MSMEs and only 2 percent of all guaranteed loans are currently non-performing. However, given the strong recovery in bank credit and to contain the risk of loan evergreening, a further extension of the scheme does not seem warranted.

27. Credit quality indicators have improved, reflecting stronger corporate and financial sector balance sheets, but some vulnerabilities remain. Despite the expiration of the pandemic-related support measures, banks have seen their non-performing asset (NPA) ratio decrease, in part reflecting an increase in outstanding loans, and capital ratio increase over the last fiscal year. The balance sheets of non-banking financial companies (NBFCs) have also improved. These developments largely reflect the corporate sector recovery, as confirmed by the declining leverage of listed firms and falling delinquency rates across sectors and borrower types. Stress tests conducted by the RBI suggest that the financial sector would remain resilient even under an adverse scenario; however, they also highlight that some banks and NBFCs may be vulnerable to liquidity shocks due to existing duration mismatches. Moreover, banks, especially public ones, have substantial unrealized bond portfolio losses at the beginning of a monetary policy tightening cycle.

28. Policies need to further shift to facilitating the exit of non-viable firms, encouraging banks to build capital buffers and recognize problem loans. Despite its decline, banks' aggregate NPA ratio remains relatively high from an international perspective. To structurally improve banks' asset quality, incentives to recognize and address problem loans at an early stage are crucial.

- **Recent insolvency reforms have had a limited impact to-date**. While reforms of the Insolvency and Bankruptcy Code, which introduced "pre-pack" processes for MSMEs, were expected to speed up resolutions and increase the recovery rate from bad loans, progress has been slow, suggesting, inter alia, that additional resources may be needed to speed up implementation.

- **The impact of the National Asset Reconstruction Company Limited (NARCL) critically depends on a timely implementation**. The NARCL is expected to purchase Rs. 2 trillion (about 28 percent of total bank gross NPAs) of distressed assets, but no purchases had occurred as of mid-September.[3] The initial purchases will cover fully provisioned NPA, with limited impact on banks' balance sheets. The delegation of the acquisition and management of distressed assets to separate companies requires strong coordination. Clarifying the valuation approach for fully provisioned NPAs and supporting the liquidity of NARCL-issued securities would facilitate implementation.

29. The new scale-based regulatory framework is a welcome step to strengthen oversight over NBFCs. This framework, which aims to further reduce potential regulatory arbitrage between banks and NBFCs, will become effective in October 2022. The framework is based on a four-layered classification based on NBFCs' size and estimated importance in terms of systemic risks. Capital requirements and credit concentration limits tighten with each layer, leading to a convergence in terms of regulation between banks and NBFCs.

30. Existing pockets of vulnerabilities expose the financial sector to risks stemming from tightening financial conditions. First, banks face an increase in credit risk with the rise in interest rates, which could lead to higher NPAs as about 48 percent of bank loans are based on variable interest rates. Second, banks are exposed to interest-rate risk because of the share of fixed-rate loans and their large holdings of government bonds (about 22 percent of bank assets), which contribute to a strong interconnection between the sovereign and banks. Third, some banks and NBFCs are vulnerable to liquidity shocks at the same time as they face higher funding costs. Finally, the increased exposure of banks to NBFCs (which account for about 8.5 percent of bank lending) raises the likelihood that shocks to NBFCs may spread to other financial institutions.

31. Prudential measures would help address these risks. Higher capital buffers would improve the resilience of the financial sector in the environment of rising interest rates. The

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[3] In February 2021 authorities announced the creation of the NARCL, which is 51 percent owned by public banks. The NARCL would purchase NPAs with 15 percent of the sum paid in cash and 85 percent in tradable securities. The government will guarantee Rs 306 billion against these securities, valid for 5 years.

authorities should continue to promote prudent underwriting standards at banks and NBFCs given for example the sharp increase in unsecured retail credit. The authorities could also consider calibrating loan-to-value ratios or introducing debt-service-to-income limits to taper the issuance of new variable-rate loans. Incentivizing banks to reduce their exposure to the public sector over time, for instance by further reducing the regulatory incentives for banks to hold government securities, would weaken the sovereign-bank linkages and could also support supply of credit to the private sector. The resilience of NBFCs to adverse liquidity shocks could be further improved through further strengthened supervision and regulation of exposures to liquidity risks, especially beyond the current 30-day maturity horizon. To prevent idiosyncratic shocks from spreading, the limits on bank exposure to NBFCs could be further tightened.

32. Digital advances have facilitated efficient payments and increased financial inclusion. The public digital infrastructure and mobile banking have made opening a bank account and obtaining a loan simpler and less costly, extended financial services to those in remote areas and expanded the availability of instant payments. The recent introduction of offline and feature phone-based payments will further support financial inclusion. The digital ecosystem has also facilitated underwriting procedures, favoring the expansion in credit to MSMEs. The RBI has taken important steps towards containing potential vulnerabilities stemming from digital banking. Recently issued guidelines on digital lending impose greater transparency on loan conditions and prevent regulated entities from accepting credit guarantees issued by unregulated financial technology companies.

33. Structural reforms in the financial sector are needed to further financial market development and support medium-term growth.

- **Public banks.** Public banks continue to underperform their competitors along multiple dimensions, including credit supply, profitability, and asset quality, which points to complex governance and risk management challenges. As also recommended by the 2017 FSAP, continuing to advance governance reforms and reducing the government's footprint in the financial sector through privatization remain priorities.

- **Capital markets.** Recent initiatives have contributed to capital market development and additional efforts are underway. Digitalization has fueled domestic participation in equity markets, while domestic startups are showing increasing interest in initial public offerings. Ongoing initiatives to facilitate repo transactions and create a backstop facility could spur greater participation in the bond market. Efforts to further develop domestic capital markets, especially for corporate debt and climate financing, should continue.

- **Climate risk.** To inform its approach to climate risk, the RBI has been gathering feedback through a survey among major banks and comments on a related discussion paper. The feedback should contribute to shaping the regulatory and supervisory guidelines to address climate risks in the financial sector.

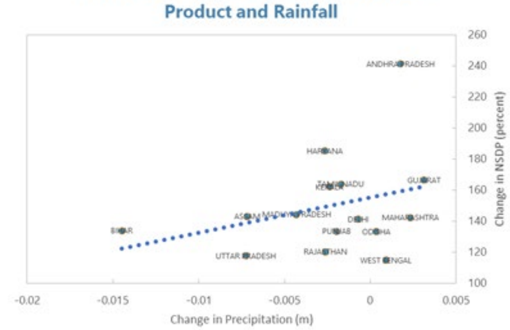
- **Other issues.** The authorities should continue implementing the recommendations of the 2017 FSAP. The effectiveness of the AML/CFT framework should be enhanced further by addressing residual gaps, including those related to domestic politically exposed persons and domestic tax evasion becoming a predicate offence to money laundering. The authorities should continue enhancing the resolution and crisis management framework through the introduction of the Financial Resolution and Deposit Insurance Bill. It is also important to further strengthen banking supervision by reviewing loan classification and provisioning rules in the context of the International Financial Reporting Standard, and amending the legal framework to provide the RBI with full supervisory powers over public banks. Completing the introduction of a risk-based solvency regime and risk-based supervision would strengthen supervision over insurance companies.

34. The authorities highlighted the recovery of credit growth and the overall resilience of the financial sector. While agreeing with the need to facilitate exit of non-viable firms, they highlighted that focus on resolution rather than liquidation was a key distinguishing feature of India's insolvency regime and noted the continued focus on system-based identification of NPAs. The authorities assessed that risks stemming from financial sector vulnerabilities are properly addressed. The authorities agreed that digitalization will improve access to financial services. However, they stressed the importance of ensuring that fintech advances are consistent with the regulatory framework. They have initiated a process to transfer equity and management to private control in one bank and expect to identify two banks that will be privatized when the necessary legislation is approved.

STRUCTURAL REFORMS FOR A GREEN AND INCLUSIVE RECOVERY

35. Climate change and air pollution are reducing productivity, damaging vulnerable regions and sectors, and contributing to serious health problems. India is witnessing long-running trends of increasing temperature, irregular precipitation. States most vulnerable to these changes have seen slower growth. With climate change set to accelerate, vulnerable regions and sectors, including agriculture, forestry and fishing, are likely to see greater damage.[4] In addition to economic costs, both the impact of climate change and pollution are causing worsening health outcomes.

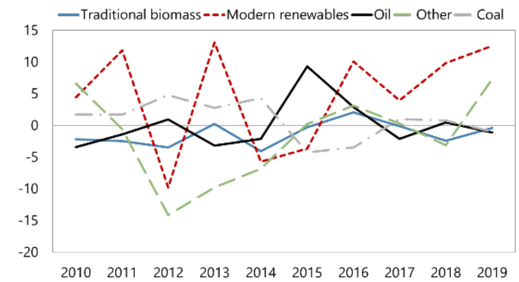
1970-2019 Change in Net State Domestic Product and Rainfall



[4] Hatton, Hasna, Mohaddes and Spray (forthcoming): "The Macroeconomic Consequences of Climate Volatility: Evidence from India".

36. India is making important progress in implementing its climate agenda, including through increasing the share of energy production from renewables and improving energy efficiency. India is targeting improved energy efficiency through the sale of LEDs, compulsory audits for energy intensive firms, and improved consumer information about appliance energy efficiency. Households are gradually replacing traditional cooking biofuels with clean fuels. Efforts are underway to clean the coal power sector through enhancing the technical efficiency of coal-fired power plants. From a low base, modern renewables are the fastest growing source of domestic primary energy production driven by state renewable purchase obligations which mandate minimum purchase levels of wind power, large hydro power, and energy storage. The National Solar Mission includes production-linked-incentives (PLI) schemes for batteries and solar panels which aims to bring down the cost of solar energy. Fiscal incentives have been used in the transport sector to encourage the production and sale of electric vehicles (EVs). India is also in the process of designing a carbon credit trading scheme which could allow effective pricing of carbon emissions.

Annual Growth of Domestic Primary Energy Production
(In percent)



Source: OECD IEA Extended World Energy Balances; and IMF staff calculations.
Note: Other includes nuclear, eletric, natural gas, heatpump, other heat, industrial and municipalwaste, and bio jet kerosene.

37. Building on this progress, additional efforts are needed to meet the authorities' objectives to prepare for a transition to a carbon-neutral economy. The updated Nationally Determined Contribution (NDC) target commits to lowering emissions intensity of GDP by 45 percent from 2005 levels and having 50 percent installed non-fossil fuel electric power capacity by 2030. At COP26, India further committed to reach Net Zero by 2070. Although on track to meet its NDC target, more ambitious policy efforts are needed to transition towards net-zero emissions (Box 4). Possible alternative approaches include:

- **Sectoral policies**. Efforts could target market failures including the scale up of electricity storage, better coordination of the flow of power between the state-owned power distribution companies, and the roll out of nationwide charging infrastructure for EVs.[5]

- **Subsidies and taxes**. Subsidies can boost renewable capacity by 2030 and the gradual move towards carbon pricing or equivalent policies can lower the path of emissions towards the net zero 2070 goal while still maintaining India's development goals. These policies are estimated to increase energy security and improve health outcomes.

- **Adaptation policies**. To address the fall-out from climate change, India can expand existing social safety nets, invest in resilient infrastructure (including in water management systems), and encourage research and development into climate resilient agriculture.

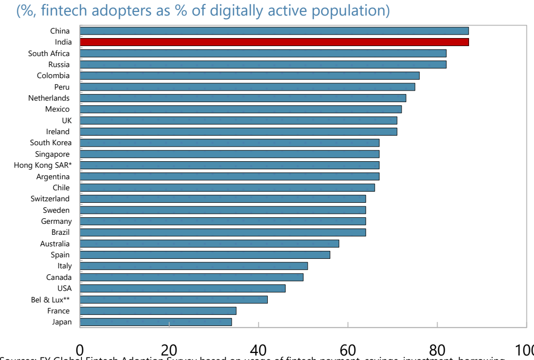
[5] Dang, MacDonald, and Spray, (forthcoming): "A Framework for Climate Change Mitigation in India" discusses policy challenges in power, manufacturing, transport, agriculture, and residential sectors.

Such efforts will inevitably impose transition costs. India can help lead the world towards ambitious climate goals while accommodating the differentiated responsibilities and capabilities among countries. India is playing a leadership role through initiatives such as the International Solar Alliance and the government's Lifestyle for Environment campaign—a global call for ideas and actions at the grassroots level to promote sustainable lifestyles. A global but differentiated minimum carbon price floor, facilitated by agreement on climate financing and technology transfers, including to cover adaptation costs, would be a possible way forward.

38. India's digital infrastructure has improved resilience to shocks, but the pandemic showed that further strengthening of health, education and social spending is also needed. During the pandemic, digital infrastructure enabled a rapid roll-out of transfers, facilitated the use of telemedicine, and supported online education. Relative to other groups, migrants and the urban poor had limited access to social protection initially. The roll out and integration of the One-Nation, One Ration Card and E-Shram National Database of Unorganized Workers aim to increase safety net portability. However, the digital divide and different state-level benefits may impact coverage. To ensure universal coverage, policy reforms should ensure portability of the safety net, improve financial and digital literacy, and increase internet and smartphone access.[6] This should be combined with strengthened consumer and data protection.

Fintech Adoption Index, 2019

(%, fintech adopters as % of digitally active population)



Sources: EY Global Fintech Adoption Survey based on usage of fintech payment, savings, investment, borrowing, insurance, budget & financial planning services. *Hong Kong SAR of China **Belgium & Luxembourg

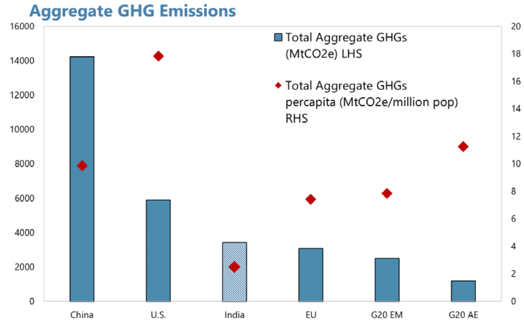
39. Further progress in the structural reform agenda is needed to address pandemic-related output losses, reduce bottlenecks and maximize medium-term growth. Education policies should support the catch up from pandemic-related learning losses, especially for lower-income households, and focus on improving education outcomes (including literacy). Investment-friendly policies, including continued infrastructure investment and easing FDI regulation, could help support capital accumulation and raise potential growth. Increasing female labor force participation, reducing youth unemployment, and reducing informality remain critical to support sustainable and inclusive growth. These objectives can be met through swift implementation of past reforms, such as the new labor codes (by states), and further reforms to ease administrative bottlenecks, support formalization, and improve targeting of social benefits. Advancing agriculture and land reforms remains important to increase efficiency and productivity and to address market distortions. However, reforms may also have transition costs which may require targeted policy support.

[6] Bhattacharya and Roy (2021). Intent to Implementation: Tracking India's Social Protection Response to COVID-19. World Bank Discussion Paper.

Figure 2. India's Green House Gas Emissions

India is the third largest GHG emitter, but has the lowest per capita emissions among the G20 countries

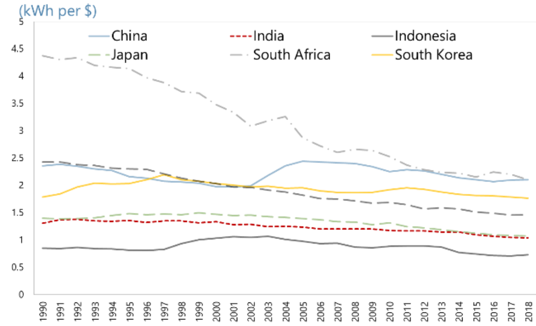
Aggregate GHG Emissions



Sources: IMF; EDGAR; UNFCCC; FAO; EU; and IMF staff estimates.
Note: Values reported in per capita millions. EU is summed over all countries, G20 EM and G20 AE are simple averages, excluding EU and including Spain.

Energy used per unit output is slowly falling and is low compared to comparators

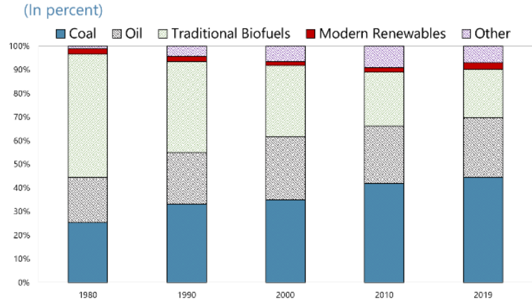
Energy per GDP
(kWh per $)



Sources: Our World in Data; and IMF staff calculations.
Note: GDP is measured in 2011$ which are PPP-adjusted.

Traditional biofuels have been replaced by expanding grid electricity produced using coal, oil and renewables

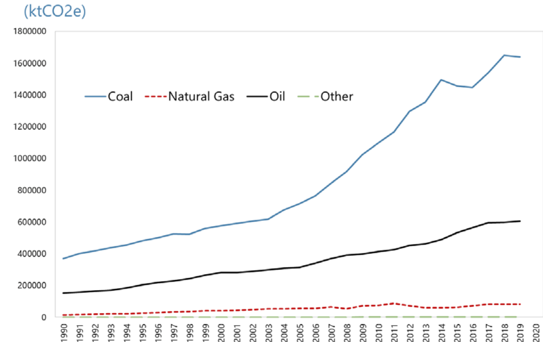
Fuel Share of Primary Energy Demand
(In percent)



Sources: OECD IEA Extended World Energy Balances; and IMF staff calculations.
Note: Mean values reported for previous 5-years. Other includes nuclear, eletric, natural gas, heatpump, other heat, industrial and municipalwaste, and bio jet kerosene.

Total GHG emissions from coal are rising and now make up around 70 percent of emissions

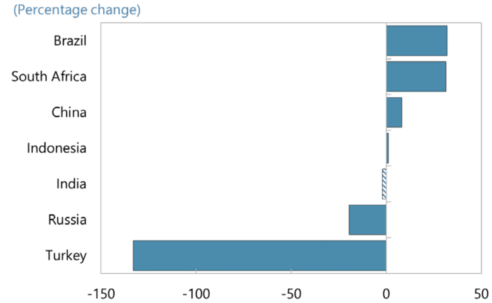
GHG Emissions by Fuel Type
(ktCO2e)



Sources: OECD IEA GHG; and IMF staff estimates.

India should meet its NDC emissions target under current policies

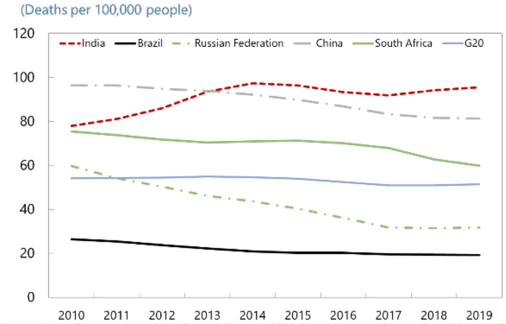
Reduction relative to baseline to achieve NDC
(Percentage change)



Sources: IMF Staff using IMF CPAT tool
Note: bars show the percentage difference between a business as usual scenario and countries implementing their NDC. A negative number means the NDC is not binding.

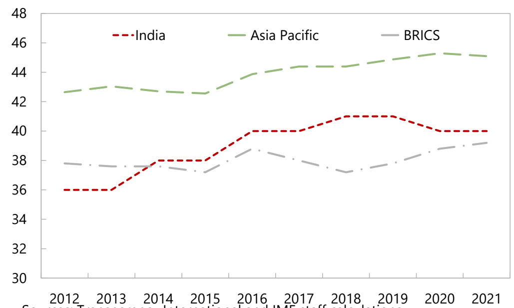
Pollution from burning fossil fuels is a major source of premature deaths, and continues to grow

Age Standardized Deaths Attributable to PM2.5
(Deaths per 100,000 people)



Sources: Health Effects Institute, 2020. State of Global Air 2020. Global Burden of Disease Study 2019. IHME, 2020.

40. Strengthening governance, the regulatory framework and the rule of law can reduce scope for corruption, foster transparency and safeguard public accountability. The authorities took welcome measures to enhance the transparency of COVID-19 related spending, including on procurement.[7] IMF capacity development in PFM to select states is supporting improved governance. Further improving PFM and public procurement can mitigate governance and corruption vulnerabilities (including publication of beneficial ownership information for awarded entities and of audits of emergency spending). Digitalization efforts in government service delivery, including in tax payments, contract enforcement and trading across borders, have helped improve transparency, efficiency and reduced the scope for fraud. Broader efforts are needed to strengthen the corporate regulatory framework and the rule of law to reduce corruption and improve revenue outcomes. Measures could include reducing overlap in the regulatory system to reduce compliance costs, improving the efficiency of the judicial system, and shortening regulatory approval timelines. Broader use of single-window clearance to start a business and to pay taxes can also help.



Sources: Transparency International and IMF staff calculations
Note: BRICS and Asia-Pacific show averages

41. New trade agreements are welcome, but further tariff reduction could help deepen integration in global value chains (GVCs). Recently signed trade agreements with the United Arab Emirates (UAE) and Australia are expected to facilitate bilateral trade and investments. Free trade agreements with other partners are being discussed. These agreements and the shift from direct export promotion to the development of export infrastructure are expected to support an increase in exports over the medium term. However, external tariff and non-tariff barriers remain elevated and above those in regional peers. Reducing these barriers, including for intermediate goods, can give a powerful boost to integration in GVCs (Appendix VIII). India has the potential to play a greater role in strengthening the multilateral trading system thereby promoting trade policy certainty that is important for investment and global growth. For example, India should continue to work actively with other nations to strengthen WTO rules, support a functioning dispute settlement system, and conclude new mutually beneficial WTO agreements, such as recent agreements on fisheries and intellectual property rights waiver for COVID vaccines. Also, the authorities could phase out recently introduced food export restrictions and further liberalize the rules for FDI and portfolio investments as conditions allow, including by further increasing limits on external borrowing and widening the scope of debt instruments available for foreign investors.

42. The authorities concurred that implementation of structural reforms will facilitate sustainable medium-term growth and stressed the balance between achieving their climate change targets and development needs. The authorities emphasized the cross-cutting role digitalization has played in furthering social objectives, improving governance, and boosting

[7] See the 2021 Article IV Staff Report.

productivity, and noted the potential for the Open Network for Digital Commerce (ONDC) initiative to transform e-commerce. They agreed with staff on the need to narrow the digital divide and highlighted several initiatives taking place. Noting important challenges in measuring social outcomes, the authorities expressed concerns about the data and methodologies, they stressed reforms in progress, including state-level implementation of labor codes, and the expansion of PLI schemes to labor intensive and green sectors. The authorities emphasized that their policies are sufficient to help India fight climate change whilst balancing other key development goals. The authorities saw the Paris Agreement as an important step forward but highlighted that implementation must be based on the principles of equity and common but differentiated responsibilities and respective capabilities, as agreed to, and be accompanied by climate financing and technology transfer. The authorities agreed that India will benefit from increasing trade openness and noted substantial progress in FTA negotiations with several countries. They stressed that they promote mutually beneficial agreements through the WTO that reinforce a rules-based trading system.

OTHER ISSUES

43. Statistics and capacity development. Although macroeconomic statistics are adequate for Fund surveillance, upgrading statistics would help policy formulation. As the post-pandemic recovery continues, timely availability of quarterly general government fiscal data and expansion of its coverage, labor market data, and updated CPI weights would help policy formulation, implementation and coordination. The Fund's capacity development activities have been scaled up in recent years, underpinned by the government's support to the South Asia Training and Technical Assistance Center (SARTTAC). For example, the IMF is working with the authorities on improving (volume and price) statistics and is providing tailored training on macro relevant topics. The IMF stands ready to provide further capacity development support, including through SARTTAC and by further integrating thematic areas that can help policy formulation.

44. The authorities reiterated their continued commitment to improving statistics and to cooperation with the IMF. They particularly welcomed cooperation through SARTTAC and expect to work closely with the Fund on priority topics such as digitalization and crypto assets during their G20 presidency.

STAFF APPRAISAL

45. The economy has rebounded from the pandemic-related downturn but is facing new headwinds. The authorities have appropriately responded with fiscal policy measures to support vulnerable groups and to mitigate the impact of commodity price increases on the economy, as well as with front-loaded monetary policy tightening to address elevated inflation. Growth is expected to moderate somewhat this year and next, reflecting a less favorable external outlook and tighter financial conditions. Reflecting broad-based price pressures, inflation is expected to decline only gradually over the next two years. At the same time, the current account deficit is expected to increase this year as a result of both higher commodity prices and strengthening import demand. Uncertainty about the economic outlook is high, with risks tilted to the downside.

46. While the additional support to vulnerable groups this year is warranted, policies should now focus on a credible and clearly communicated fiscal consolidation. The slightly contractionary fiscal stance this year, and further tightening in FY2023/24 is welcome. However, baseline projections suggest only a gradual decline in the fiscal deficit over time, and while public debt is expected to stabilize over the medium-term, debt sustainability risks have increased. A more ambitious and well-communicated fiscal consolidation is therefore needed to ensure medium-term fiscal sustainability. Policy efforts should be anchored on stronger revenue mobilization and improving expenditure efficiency, while high-quality spending on infrastructure, education and health should be protected. Further improvements in public financial management, fiscal institutions and transparency would support consolidation. Digital public infrastructure has enabled the rapid deployment of support during the pandemic and can be further harnessed to improve government service delivery.

47. Additional monetary policy tightening is needed. The RBI has appropriately used both liquidity management and interest rate tools to tighten monetary policy to address inflation pressures. Additional policy rate tightening is needed and should be carefully calibrated and clearly communicated to balance inflationary pressures and economic activity. The exchange rate should act as the main shock absorber, with intervention limited to addressing disorderly market conditions. The extent to which a phased implementation of both retail and wholesale CBDC can complement the domestic payment system and facilitate cross-border transactions will depend crucially on design features.

48. Corporate and financial sector balance sheets have improved, but risks stemming from tightening financial conditions call for additional measures. Financial sector policies provided important support during the pandemic. Credit quality indicators have improved, reflecting stronger corporate and financial sector balance sheets. Financial sector policies should build on this progress and continue to facilitate the exit of non-viable firms and encourage banks to build capital buffers and recognize problem loans. Risks stemming from tightening financial conditions, including potential for NPAs to increase with the rise in interest rates, could be mitigated through the use of targeted prudential tools. Digital advances have facilitated efficient payments and increased financial inclusion. Structural reforms, including to strengthen governance and reduce the government’s footprint in the sector, are needed to further financial market development and support medium-term growth.

49. Progress in the structural reform agenda will be needed to address pandemic-related output losses, reduce bottlenecks, and maximize medium-term growth potential. Education policies should support the catch up from pandemic-related learning losses while investment-friendly policies could help support capital accumulation and raise potential growth. Increasing female labor force participation, reducing youth unemployment, and reducing informality remain critical to support sustainable and inclusive growth. The pandemic has highlighted the need to strengthen health, education and social spending, and narrowing the digital divide through improved digital access and literacy. Strengthening governance, the regulatory framework and the rule of law can reduce scope for corruption, foster transparency and safeguard public accountability. New trade agreements are welcome, but further tariff reduction could help deepen integration in GVCs.

50. India is making important progress in implementing its climate agenda, including through increasing the share of energy production from renewables and improved energy efficiency. Building on this progress, additional efforts, including sectoral policies, prudent use of subsidies and taxes and adaptation policies, are needed to meet the authorities' objectives to prepare for a transition to a carbon-neutral economy. Such efforts will inevitably impose transition costs. India can help lead the world towards more ambitious climate goals while accommodating the differentiated responsibilities and capabilities among countries. A global but differentiated minimum carbon price floor, facilitated by agreement on climate financing and technology transfers, including to cover adaptation costs, would be a possible way forward.

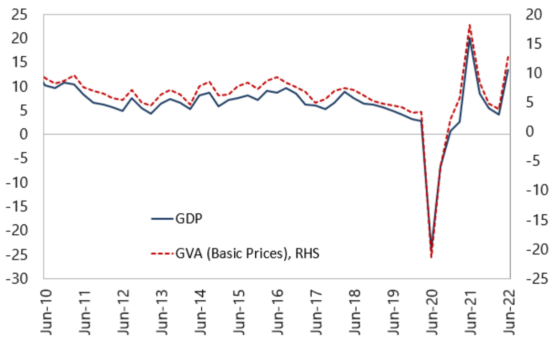
51. It is recommended that the next Article IV consultation take place on the standard 12-month cycle.

Figure 3. Recent Macroeconomic Developments

Economic activities have recovered from the severe initial impact of the pandemic.

Real GDP growth recovered...

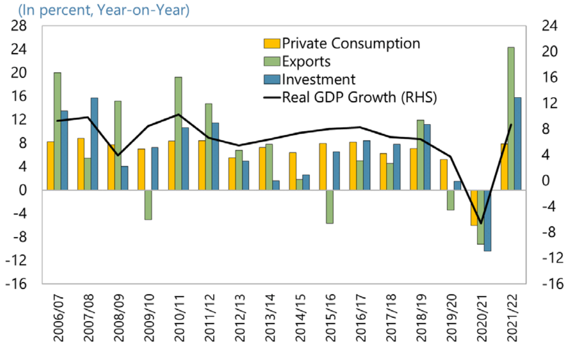
Real GDP Growth
(In percent, Year-on-Year)



Sources: CEIC; Haver Analytics; and IMF staff calculations.

...with private consumption, investment and exports rebounding in FY2021/22.

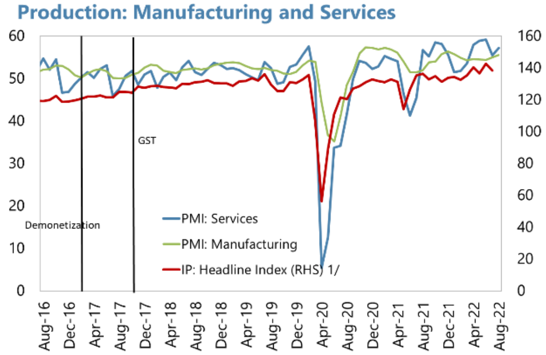
Demand Components of GDP
(In percent, Year-on-Year)



Sources: CEIC; Haver Analytics; and IMF staff calculations.

Industrial production, and manufacturing and services PMIs showed strong recovery in 2022Q....

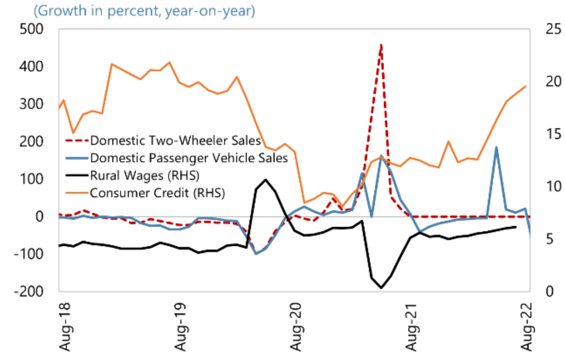
Production: Manufacturing and Services



Source: Haver Analytics.
1/ Index, April 2011-March 2012 = 100.

...and motor vehicle sales recovered gradually, but consumer credit remains below pre-pandemic.

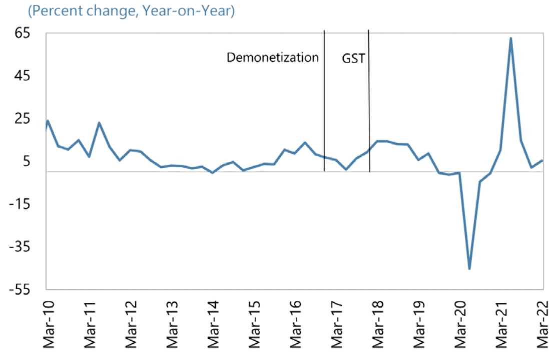
Consumption Indicators
(Growth in percent, year-on-year)



Sources: Haver Analytics; CEIC; and IMF staff calculations.

Investment growth rebounded.

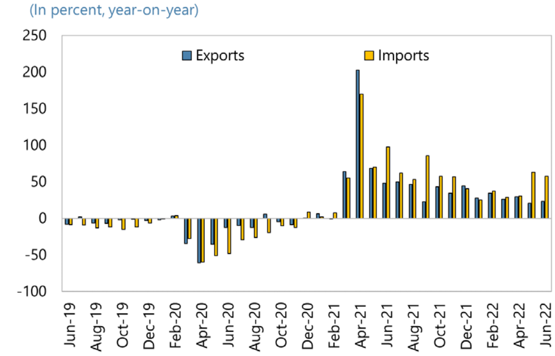
Real Gross Fixed Capital Formation
(Percent change, Year-on-Year)



Source: Haver Analytics.

and goods exports and imports also recovered.

Merchandise Export and Import Growth
(In percent, year-on-year)



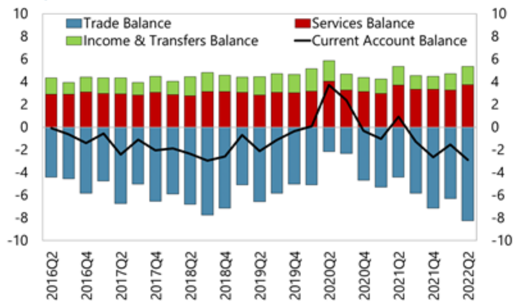
Source: CEIC.

Figure 4. External Sector Developments

Despite return to a current account deficit and portfolio investment outflows, India's external position remains sufficiently strong to withstand near-term shocks.

Current account balance returned to deficits in FY2021/22 on domestic demand recovery...

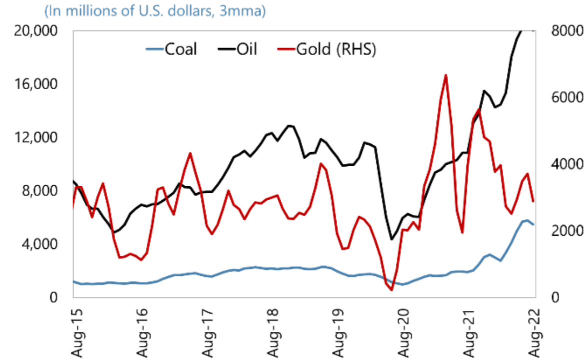
Current Account Balance 1/
(In percent of GDP)



Sources: Haver Analytics; and IMF staff calculations.
1/ Data is presented in calendar year format, where 2020Q4 = Dec-20.

... and surging oil import costs reflecting both price increase and rising domestic consumption.

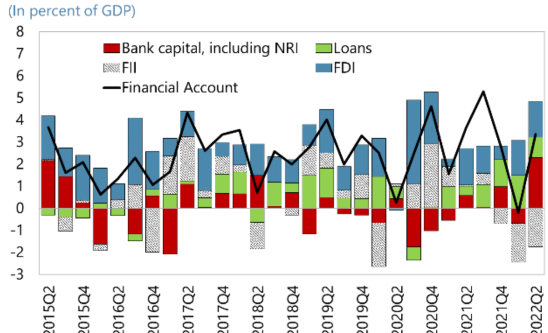
Imports: Principle Commodities
(In millions of U.S. dollars, 3mma)



Sources: Haver Analytics; and IMF staff calculations.

Steady foreign direct investment and debt inflows supported financial account surpluses in 2020-21,

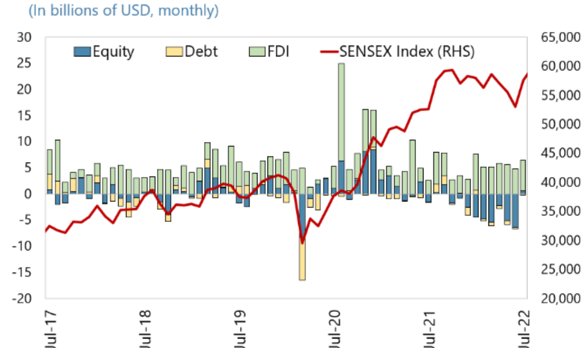
Financial Account (BPM5 Presentation) 1/
(In percent of GDP)



Sources: Haver Analytics; and IMF staff calculations.
1/ Data is presented in calendar year format, where 2020Q4 = Dec-20.

...but multiple external shocks triggered large portfolio investment outflows in 2022H1.

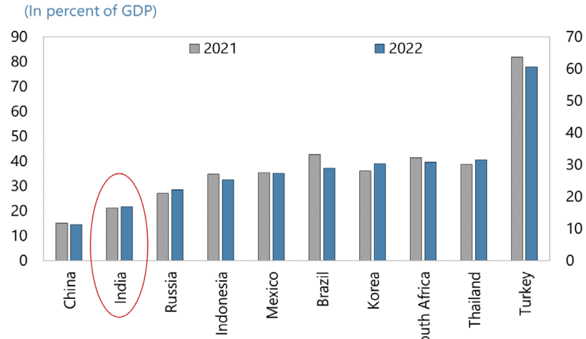
FII Flows (Equity and Debt) and FDI
(In billions of USD, monthly)



Sources: CEIC; and Haver Analytics.

Low level of external debt compared to the peer economies...

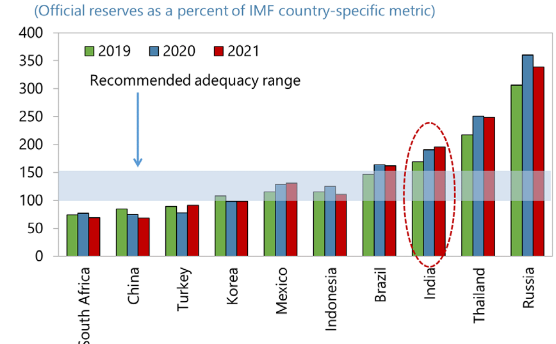
Total External Debt
(In percent of GDP)



Source: IMF, *World Economic Outlook, April 2022.*

...and adequate FX reserves mitigate external vulnerabilities.

Estimated Reserve Adequacy
(Official reserves as a percent of IMF country-specific metric)

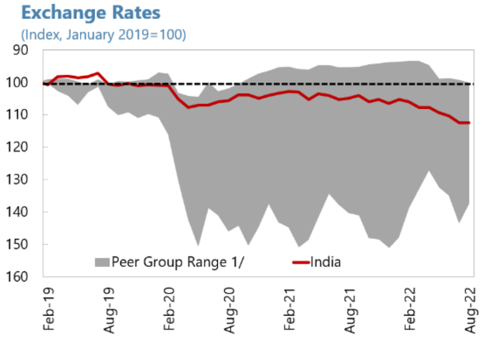


Sources: IMF, *International Financial Statistics*; and IMF staff calculations.

Figure 5. Financial Markets Developments

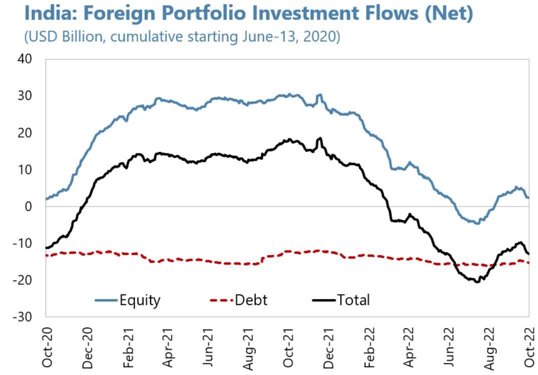
External shocks are affecting financial markets conditions and volatility.

The Indian rupee came under depreciation pressure in 2022 but performed better than some other emerging market currencies...



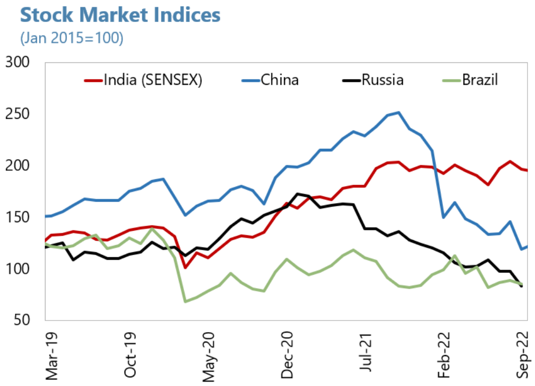
Sources: Haver Analytics; and IMF staff calculations.
1/ Peer group includes China, Malaysia, Indonesia, Brazil, and Mexico.

...amid protracted portfolio investment outflows that reversed the inflows of 2020-21.



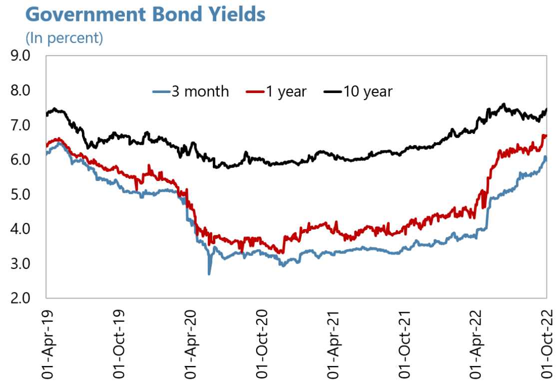
Sources: CEIC; and IMF staff calculations.

Stock market weakened in 2022H1 but was more resilient than indices in peer countries...



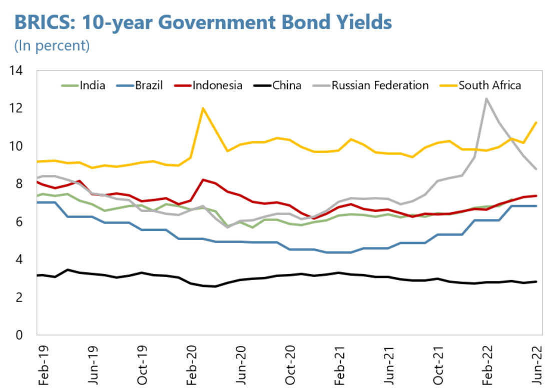
Sources: Thomson Reuters EIKON; and IMF staff calculations.

...while both short and long-term yields increased after monetary policy tightening.



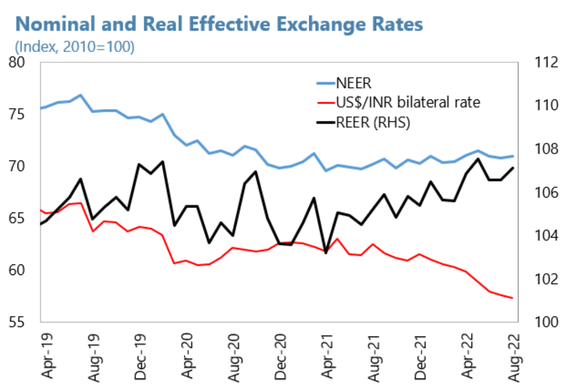
Sources: Thomson Reuters EIKON; and IMF staff calculations.

Long-term bond yields increased in all BRICS countries but China in 2022.



Source: CEIC.

The REER in 2019-22 moved in a tight range despite rupee's nominal depreciation against US$.

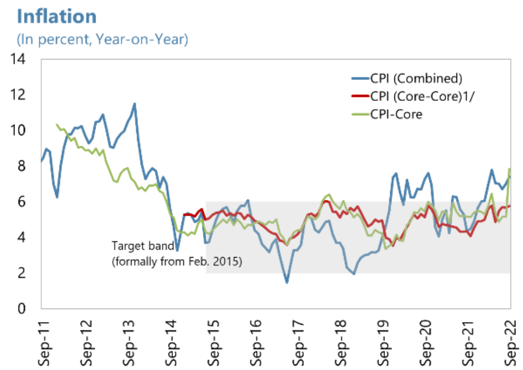


Sources: IMF, *Information Notice System*; and Haver Analytics.

Figure 6. Monetary Sector Developments

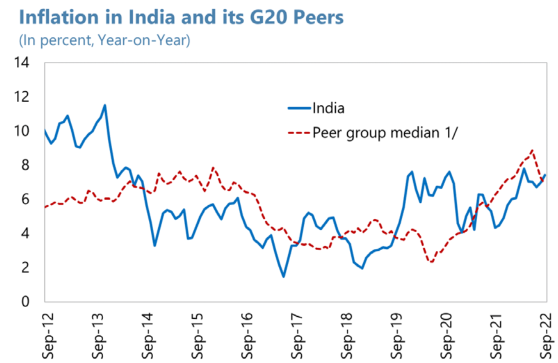
Broad-based inflation pressures from food, commodity and core persist.

Inflation has remained above the RBI's upper band, with sticky core…



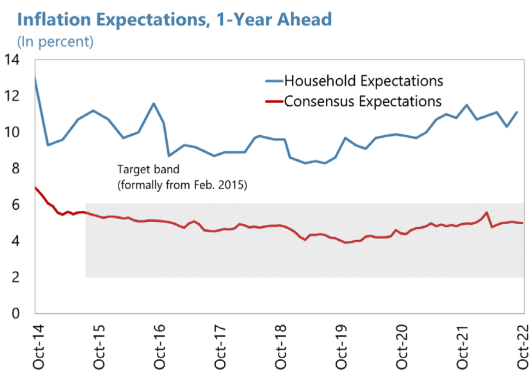
Sources: CEIC; and IMF staff calculations.
1/ Core-Core measure excludes food, energy, petrol and diesel.

…and inflation recently rose in line with the level of G-20 peers, partly reflecting global shocks.



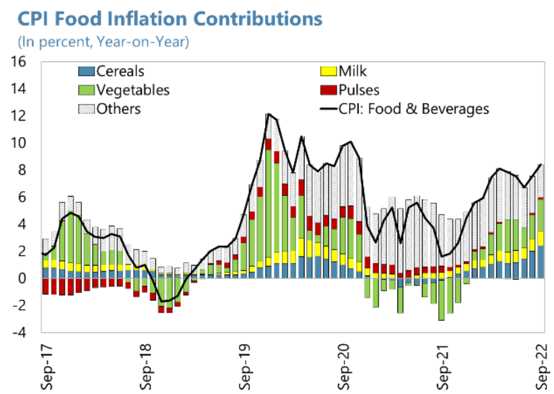
Sources: Haver Analytics; and IMF staff calculations.
1/ G20 peer group includes Brazil, Russia, China, South Africa, Indonesia, and Turkey.

Inflation expectations stabilized in recent months…



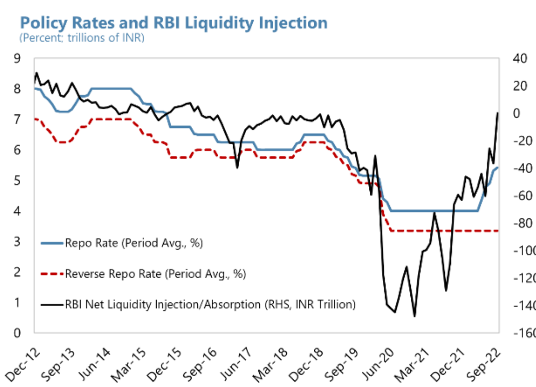
Sources: Haver Analytics; and Consensus Economics.

…while food and commodity prices remained high.



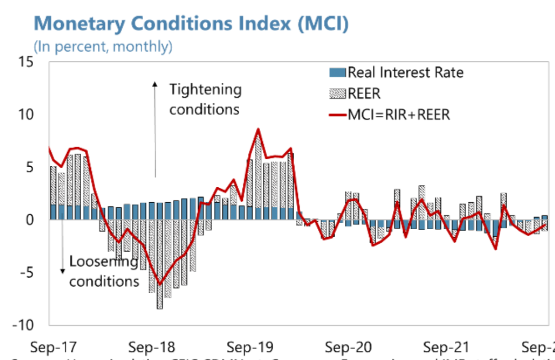
Sources: CEIC; and IMF staff calculations.

Monetary tightening cycle has commenced, aided by higher policy rates and liquidity absorption,



Sources: Haver Analytics; CEIC CDMNext; and IMF staff estimates.

…resulting in some early reversal of significant pandemic-related easing.



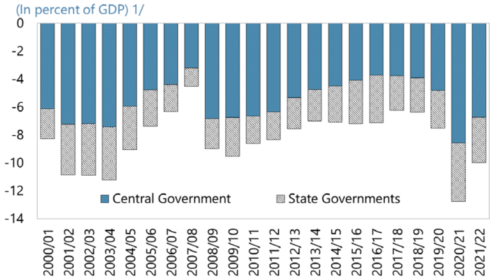
Sources: Haver Analytics; CEIC CDMNext; Consensus Economics; and IMF staff calculations.
Note: Real Interest Rate (RIR) is calculated as a difference between nominal repo rate (end-of-period) and 1-year ahead inflation expectations.

Figure 7. Fiscal Sector Developments

The fiscal deficit narrowed in FY2021/22, following a sharp widening at the start of the COVID-19 pandemic.

The deficit narrowed in FY2021/22…

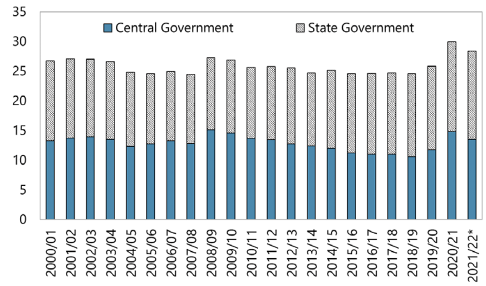
Government Balance
(In percent of GDP) 1/



1/ Includes subsidy-related bond issuance.
Sources: Haver Analytics, and IMF staff data.

…driven by lower expenditure, as pandemic-related measures are phased out…

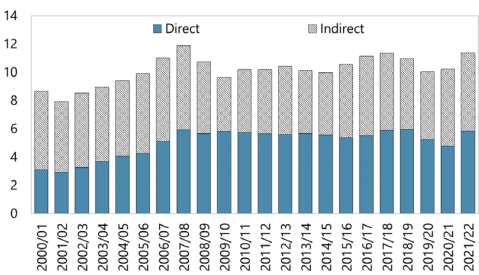
Government Recurrent Expenditure
(In percent of GDP)



Sources: Ministry of Finance; and IMF staff calculations.

… and revenues recovered.

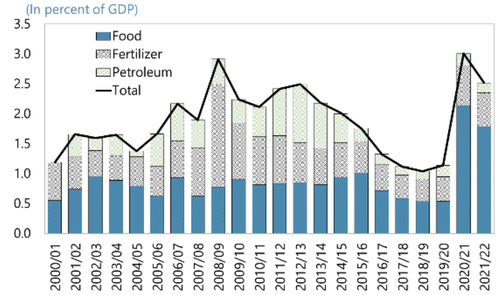
Central Government Revenue
(In percent of GDP)



Source: IMF staff data.

Subsidies fell but remain elevated…

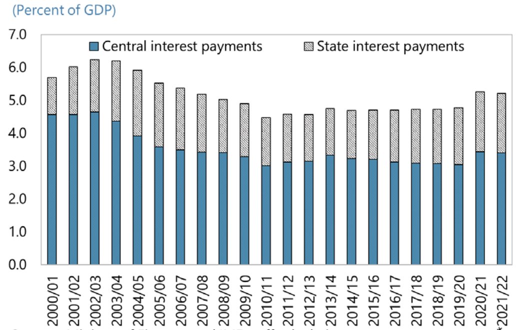
Government Subsidies
(In percent of GDP)



Source: IMF staff data.

…while higher interest expenses persist.

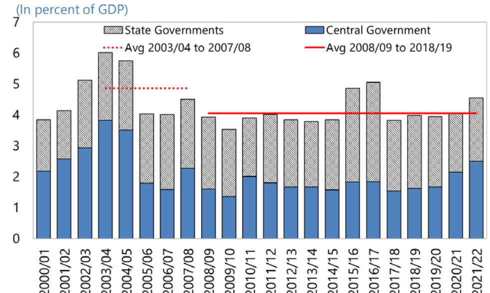
Interest Payments
(Percent of GDP)



Sources: Ministry of Finance; and IMF staff calculations.
*IMF staff projections.

Capital spending exceeded its pre-pandemic average.

Capital Spending
(In percent of GDP)



Sources: Haver Analytics; and IMF staff data.

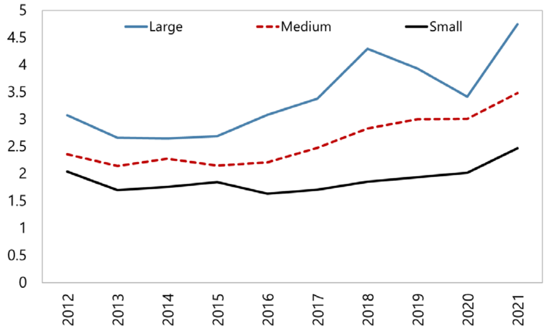
Figure 8. Corporate and Banking Sector Developments

The policy response supported the recovery of the corporate and financial sectors, but weaknesses persist.

Pandemic-related measures contributed to improving the health of firm balance sheets…….

Interest Coverage Ratio

(Earnings before Interest and Taxes (EBIT) to Interest Expenses, median)

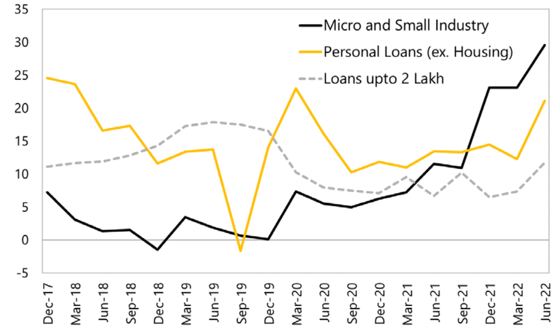


Sources: CMIE Prowess; and IMF staff calculations.

…and ensured a continued credit flow to households and MSMEs.

Non-Food Credit Growth

(In percent, year-on-year)

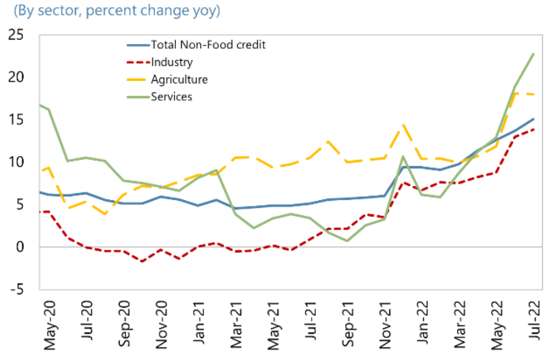


Sources: Reserve Bank of India; and IMF staff calculations.

The ongoing recovery in bank credit is common across sectors…

India: Bank Credit Growth

(By sector, percent change yoy)

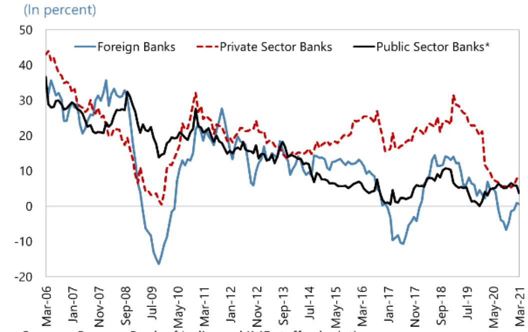


Sources: Reserve Bank of India and IMF staff calculations.

…but lending by public banks remains subdued.

Credit Growth

(In percent)

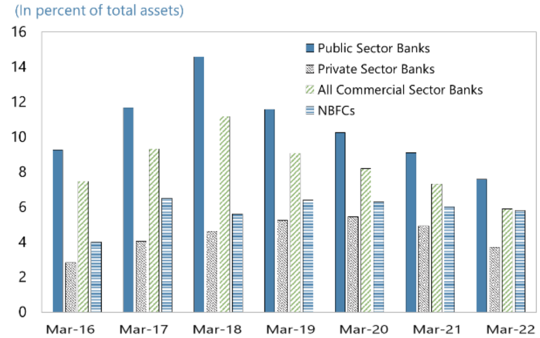


Sources: Reserve Bank of India; and IMF staff calculations.
*Public Sector Banks include Nationalised Banks and SBI and its associates prior to March 2017.

Despite declining recently, NPAs remain high …

Non-Performing Assets of Financial Institutions

(In percent of total assets)

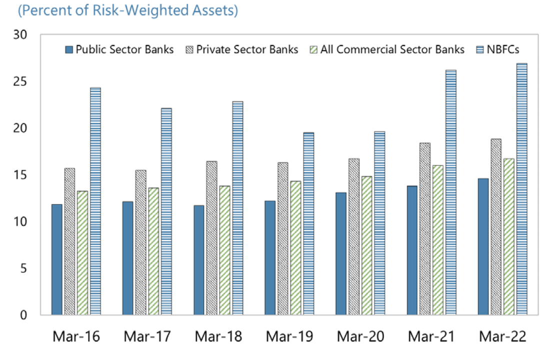


Source: Reserve Bank of India.

…and capital buffers have increased.

Capital Adequacy Ratio of Financial Institutions

(Percent of Risk-Weighted Assets)



Sources: Reserve Bank of India; and IMF staff calculations.

Table 1. India: Selected Social and Economic Indicators, 2018/19-2023/24 1/

I. Social Indicators

GDP (2021/22)		**Poverty (percent of population)**	
Nominal GDP (in billions of U.S. dollars):	3,176	Headcount ratio at $1.90 a day (2011):	22.5
GDP per capita (U.S. dollars) (IMF staff est.):	2,302	Undernourished (2019)	15.3
Population characteristics (2020/21)		**Income distribution (2011, WDI)**	
Total (in billions):	1.38	Richest 10 percent of households:	30.1
Urban population (percent of total):	34.9	Poorest 20 percent of households:	8.1
Life expectancy at birth (years, 2019/20):	69.9	Gini index (2011):	35.7

II. Economic Indicators

	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24
				Est.	Projections	
Growth (in percent)						
Real GDP (at market prices)	6.5	3.7	-6.6	8.7	6.8	6.1
Prices (percent change, period average)						
Consumer prices - Combined	3.4	4.8	6.2	5.5	6.9	5.1
Saving and investment (percent of GDP)						
Gross saving 2/	30.2	29.4	28.8	30.0	29.4	30.1
Gross investment 2/	32.3	30.2	27.9	31.2	32.8	33.0
Fiscal position (percent of GDP) 3/						
Central government overall balance	-3.9	-4.8	-8.6	-6.7	-6.5	-6.2
General government overall balance	-6.4	-7.5	-12.8	-10.0	-9.9	-9.0
General government debt 4/	70.4	75.1	89.2	84.2	83.5	83.9
Cyclically adjusted balance (% of potential GDP)	-6.8	-7.4	-8.7	-8.3	-8.5	-8.3
Cyclically adjusted primary balance (% of potential GDP)	-2.0	-2.6	-3.8	-3.3	-3.2	-2.7
Money and credit (y/y percent change, end-period)						
Broad money	10.5	8.9	12.2	8.8	8.9	9.0
Domestic Credit	11.8	8.3	9.5	9.0	13.6	11.4
Financial indicators (percent, end-period)						
91-day treasury bill yield (end-period)	6.1	4.4	3.3	3.8	…	…
10-year government bond yield (end-period)	7.4	6.1	6.2	6.8	…	…
Stock market (y/y percent change, end-period)	17.3	-23.8	68.0	18.3	…	…
External trade (on balance of payments basis)						
Merchandise exports (in billions of U.S. dollars)	337.2	320.4	296.3	429.2	450.3	462.8
(Annual percent change)	9.1	-5.0	-7.5	44.8	4.9	2.8
Merchandise imports (in billions of U.S. dollars)	517.5	477.9	398.5	618.6	737.7	769.6
(Annual percent change)	10.3	-7.6	-16.6	55.3	19.2	4.3
Terms of trade (G&S, annual percent change)	-1.8	1.5	1.6	-8.1	-2.8	2.2
Balance of payments (in billions of U.S. dollars)						
Current account balance	-57.2	-24.5	24.0	-38.7	-118.3	-109.7
(In percent of GDP)	-2.1	-0.9	0.9	-1.2	-3.5	-2.9
Foreign direct investment, net ("-" signifies inflow)	-30.7	-43.0	-44.0	-38.6	-47.7	-52.6
Portfolio investment, net (equity and debt, "-" = inflow)	2.4	-1.4	-36.1	16.8	-8.2	-18.0
Overall balance ("+" signifies balance of payments surplus)	-3.3	59.5	87.3	47.5	-20.1	17.8
External indicators						
Gross reserves (in billions of U.S. dollars, end-period)	412.9	477.8	577.0	607.3	540.5	558.3
(In months of next year's imports (goods and services))	8.2	11.1	9.0	7.9	6.7	6.5
External debt (in billions of U.S. dollars, end-period)	543.1	558.4	573.7	619.6	669.1	742.5
External debt (percent of GDP, end-period)	20.1	19.7	21.5	19.5	19.6	19.8
Of which: Short-term debt	8.7	8.4	8.8	8.6	8.6	8.9
Ratio of gross reserves to short-term debt (end-period)	1.8	2.0	2.4	2.2	1.8	1.7
Real effective exchange rate (annual avg. percent change)	-4.7	3.0	-0.9	0.3	…	…
Memorandum item (in percent of GDP)						
Fiscal balance under authorities' definition	-3.4	-4.7	-9.2	-6.7	-6.4	-6.2

Sources: Data provided by the Indian authorities; Haver Analytics; CEIC Data Company Ltd; Bloomberg L.P.; World Bank, *World Development Indicators*; and IMF staff estimates and projections.
1/ Data are for April–March fiscal years.
2/ Differs from official data, calculated with gross investment and current account. Gross investment includes errors and omissions.
3/ Divestment and license auction proceeds treated as below-the-line financing.
4/ Includes combined domestic liabilities of the center and the states, and external debt at year-end exchange rates.

Table 2. India: Balance of Payments, 2018/19-2023/24 1/

	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24
				Est.	Projections	
	(In billions of U.S. dollars)					
Current account balance	-57.2	-24.5	24.0	-38.7	-118.3	-109.7
Merchandise trade balance	-180.3	-157.5	-102.2	-189.5	-287.4	-306.8
Merchandise exports	337.2	320.4	296.3	429.2	450.3	462.8
Merchandise imports	517.5	477.9	398.5	618.6	737.7	769.6
Oil 2/	140.9	130.6	82.7	161.8	214.6	199.0
Non-oil	376.6	347.4	315.8	456.8	523.0	570.6
Services balance	81.9	84.9	88.6	107.5	124.2	139.2
Credit	208.0	213.2	206.1	254.5	303.7	338.0
Of which : Software Services	83.5	93.1	100.0	122.1	...	...
Debit	126.1	128.3	117.5	147.0	179.4	198.8
Primary income balance, net	-28.9	-27.3	-36.0	-37.3	-43.0	-37.8
Secondary income balance, net	70.0	75.3	73.6	80.5	87.8	95.7
Capital and Financial account balance	-57.8	-24.7	22.6	-38.4	-118.5	-109.8
Direct investment, net	-30.7	-43.0	-44.0	-38.6	-47.7	-52.6
Of which : Net incurrence of liabilities	43.3	56.0	54.9	56.2	64.7	71.3
Portfolio investment, net	2.4	-1.4	-36.1	16.8	-8.2	-18.0
Financial derivatives, net	-1.0	-4.1	4.8	6.4	6.8	7.1
Other Investment, net	-25.2	-35.6	10.6	-70.5	-49.4	-64.2
Reserve Assets, net	-3.3	59.5	87.3	47.5	-20.1	17.8
Errors and omissions	-0.5	1.0	-0.3	0.5	0.0	0.0
Overall balance 3/	3.3	-59.5	-87.3	-47.5	20.1	-17.8
Valuation changes 4/	-8.3	5.4	11.9	-17.2	-46.8	0.0
Increase in gross reserve stock						
(including valuation changes)	-11.7	64.9	99.2	30.3	-66.9	17.8
Memorandum items:						
Foreign exchange reserves	412.9	477.8	577.0	607.3	540.5	558.3
In months of next year's imports (goods and services)	8.2	11.1	9.0	7.9	6.7	6.5
Current account balance (percent of GDP)	-2.1	-0.9	0.9	-1.2	-3.5	-2.9
Merchandise trade balance (percent of GDP)	-6.7	-5.6	-3.8	-6.0	-8.4	-8.2
Direct investment in India (percent of GDP)	1.6	2.0	2.1	1.8	1.9	1.9
Overall balance (percent of GDP)	0.1	-2.1	-3.3	-1.5	0.6	-0.5
Gold imports (billions of U.S. dollars)	31.8	31.2	22.0	55.8	...	...
Gross domestic product (billions of U.S. dollars)	2,703	2,832	2,668	3,176	3,405	3,754

Sources: CEIC Data Company Ltd; Haver Analytics; and IMF staff estimates and projections.
1/ Data are for April-March fiscal years, based on BPM6, including sign conventions.
2/ Projection for 2022/23 takes into account lower costs of oil imports due to availability of the discounted oil from Russia.
3/ Positive sign "+" signifies balance of payments deficit.
4/ Calculated as difference between the stock of reserves and the overall balance of BOP. For 2022/23, projected as 67 percent of the decrease in the stock of reserves from end-March to end-September 2022.

Table 3. India: Reserve Money and Monetary Survey, 2018/19- August 2022/23 1/

	2018/19	2019/20	2020/21	2021/22	2022/23 August
Reserve money	(In billions of rupees, end-period)				
Reserve money	27,705	30,297	36,000	40,689	40,596
Net domestic assets of RBI	-781	-5,607	-5,994	-3,736	-2,641
Claims on government (net)	8,020	9,922	10,997	14,506	11,035
Center	8,005	9,897	10,963	14,490	10,987
States	15	25	33	16	48
Claims on commercial sector	154	132	87	166	330
Claims on banks	1,374	-2,141	-3,781	-5,603	-1,199
Other items (net)	-10,328	-13,520	-13,297	-12,805	-12,806
Net foreign assets of RBI	28,486	35,904	41,994	44,425	43,237
	(Contribution to twelve-month reserve money growth)				
Reserve money	14.5	9.4	18.8	13.0	10.3
Net domestic assets of RBI	10.9	-17.4	-1.3	6.3	15.5
Claims on government (net)	13.5	6.9	3.5	9.7	-2.4
Net foreign assets of RBI	3.6	26.8	20.1	6.8	-5.2
Monetary survey	(In billions of rupees, end-period)				
Broad money (M3)	154,321	168,000	188,446	204,937	210,514
Currency with public	20,522	23,497	27,518	30,357	30,625
Deposits	133,481	144,117	160,454	173,996	179,318
Non-bank deposits at RBI	317	385	474	584	572
Net domestic assets	123,612	129,989	142,657	156,397	163,162
Domestic credit	147,712	159,990	175,188	190,941	196,779
Net credit to government	43,885	49,604	58,504	64,776	64,713
Of which: RBI	8,020	9,922	10,997	14,506	11,035
Credit to commercial sector	103,827	110,386	116,685	126,165	132,066
Of which: Bank credit (excluding RBI)	103,674	110,255	116,598	126,000	131,737
Other items (net)	-24,100	-30,001	-32,531	-34,545	-33,618
Net foreign assets	30,708	38,010	45,788	48,541	47,352
	(Twelve-month percent change)				
Broad money (M3)	10.5	8.9	12.2	8.8	8.9
Net domestic assets	12.0	5.2	9.7	9.6	12.7
Domestic credit	11.8	8.3	9.5	9.0	11.2
Net credit to government	9.7	13.0	17.9	10.7	6.4
Credit to commercial sector	12.7	6.3	5.7	8.1	13.8
Of which: Bank credit (excluding RBI)	12.7	6.3	5.8	8.1	13.6
Net foreign assets	5.1	23.8	20.5	6.0	-2.5

Sources: CEIC Data Company Ltd.; Reserve Bank of India WSS; IMF IFS, and Fund staff calculations.

1/ Data are for April–March fiscal years, unless indicated otherwise.

Table 4. India: Central Government Operations 1/, 2018/19-2023/24

	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24
				Est.	Projections	
			(In percent of GDP)			
Revenue	**8.4**	**8.6**	**8.4**	**9.3**	**8.6**	**8.6**
Taxes 2/	6.9	6.8	7.2	7.7	7.6	7.6
Income tax	6.0	5.2	4.8	5.9	6.0	6.0
GST	3.1	3.0	2.8	3.0	3.1	3.1
Excise tax	1.2	1.2	2.0	1.7	1.1	1.1
Customs duties	0.6	0.5	0.7	0.8	0.7	0.7
Other taxes	0.0	0.0	0.0	0.1	0.0	0.0
Less: States' share	4.0	3.2	3.0	3.7	3.3	3.4
Grants	0.0	0.0	0.0	0.0	0.0	0.0
Other revenue 3/	1.4	1.8	1.2	1.6	1.0	1.0
Property income	0.7	1.0	0.6	0.8	0.3	0.3
Sale of goods and services	0.2	0.2	0.2	0.2	0.2	0.2
Miscellaneous and unidentified revenue	0.6	0.6	0.5	0.7	0.5	0.5
Expenditure	**12.3**	**13.4**	**17.0**	**16.0**	**15.1**	**14.8**
Expense 4/	**10.6**	**11.7**	**14.8**	**13.5**	**12.5**	**12.5**
Compensation of employees 5/	1.1	1.1	1.1	1.0	1.0	1.0
Interest	3.1	3.0	3.4	3.4	3.5	3.7
Subsidies 6/	1.0	1.1	2.8	1.9	2.0	1.6
Food 7/	0.5	0.5	2.0	1.2	1.2	0.9
Fertilizer	0.4	0.4	0.6	0.6	0.8	0.7
Petroleum	0.1	0.2	0.2	0.0	0.0	0.0
Grants and other expense	5.4	6.4	7.5	7.2	6.0	6.1
Grants	2.2	2.3	2.9	2.8	2.4	2.4
Other expense 8/	3.2	4.1	4.5	4.4	3.5	3.7
Net acquisition of nonfinancial assets	**1.6**	**1.7**	**2.2**	**2.5**	**2.5**	**2.3**
Net acquisition of nonfinancial assets	1.6	1.7	2.2	2.5	2.5	2.3
Gross Operating Balance	-2.3	-3.1	-6.4	-4.2	-4.0	-3.9
Net lending / borrowing (overall balance)	**-3.9**	**-4.8**	**-8.6**	**-6.7**	**-6.5**	**-6.2**
Memorandum items:						
Balance under authorities' definition 9/	-3.4	-4.7	-9.2	-6.7	-6.4	-6.2
Central government debt 10/	49.3	52.3	62.3	59.2	58.4	58.7

Sources: Data provided by the Indian authorities; and Fund staff estimates and projections.

1/ Data for April - March fiscal years

2/ Net tax revenue, defined as gross tax revenue collected by the central government minus state governments' share.

3/ Auctions for wireless spectrum are classified as non-tax revenues.

4/ Includes the surcharge on Union duties transferred to the National Calamity Contingency Fund.

5/ Pensions are included under expense not otherwise classified.

6/ Includes subsidy-related bond issuance.

7/ Starting in FY2020/21, includes food subsidies covered by the Food Corporation of India. For FY2020/21, excludes retroactive payment to Food Corporation of India for previous years' food subsidy bill.

8/ Other expense includes purchases of goods and services.

9/ Includes asset sales in receipts, and excludes certain non-tax revenue items. Includes the retroactive payment to Food corporation of India for previous years' foof subsidy bill.

10/ Central government debt includes SDR, and for FY2021/22 reflects the additional SDR allocation of about 0.6 percent of GDP.

Table 5. India: General Government Operations, 2018/19-2023/24 1/

	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24
				Est.	Projections	
			(In percent of GDP)			
Revenue	**20.0**	**19.9**	**18.3**	**20.2**	**19.0**	**19.2**
Taxes	17.4	17.0	16.2	17.5	17.0	17.2
Grants	0.0	0.0	0.0	0.0	0.0	0.0
Other revenue	2.5	3.0	2.1	2.7	2.0	2.0
Expenditure	**26.3**	**27.4**	**31.1**	**30.1**	**28.9**	**28.3**
Expense	22.3	23.5	27.0	25.6	24.2	23.8
of which: interest	4.8	4.8	5.3	5.2	5.4	5.6
Net acquisition of nonfinancial assets	4.0	4.0	4.0	4.6	4.7	4.5
Gross Operating Balance	-2.4	-3.5	-8.7	-5.4	-5.2	-4.5
Net lending (+)/borrowing (–) (fiscal balance)	**-6.4**	**-7.5**	**-12.8**	**-10.0**	**-9.9**	**-9.0**
Net financial worth, transactions	-6.4	-7.2	-12.8	-10.0	-9.9	-9.0
Net acquisition of financial assets	-1.1	-1.6	-1.5	-1.7	-1.2	-1.0
Domestic	-1.1	-1.6	-1.5	-1.7	-1.2	-1.0
Currency and deposits	-0.8	-1.3	-2.5	-2.6	-1.6	-1.5
Loans	0.1	-0.1	1.2	1.0	0.6	0.6
Equity and investment fund shares	-0.4	-0.3	-0.2	-0.1	-0.2	-0.1
Net incurrence of liabilities	5.3	5.5	11.2	8.3	8.7	8.0
Domestic	5.3	5.5	10.9	8.2	8.6	8.0
Debt securities	4.6	3.7	8.6	6.5	7.0	6.4
Other accounts payable	0.7	1.8	2.3	1.6	1.7	1.6
Foreign	0.0	0.0	0.4	0.2	0.1	0.1
Loans	0.0	0.0	0.4	0.2	0.1	0.1
Memorandum items:						
Primary balance	-1.6	-2.7	-7.5	-4.8	-4.5	-3.4
Nondefence capital expenditure	3.5	3.4	3.3	3.9	4.1	4.0
State and union territory governments' balance 2/	-2.5	-2.7	-4.2	-3.3	-3.4	-2.8
General government debt	70.4	75.1	89.2	84.2	83.5	83.9
Nominal GDP in billions of Rupees	188,997	200,749	198,009	236,646	273,112	307,114

Sources: Data provided by the Indian authorities; state level data from the RBI Study on State Finances (2021); and Fund staff estimates and projections.

1/ The consolidated general government comprises the central government (CG) and state governments. It does not include lower tiers of government (districts, municipalities), contrary to GFSM 2014 standards. Data for April-March fiscal years.

2/ The authorities treat states' divestment proceeds, including land sales, above-the-line as miscellaneous capital receipts. IMF Staff definition treats divestment receipts as a below-the-line financing item.

external debt at year-end exchange rates. For FY2021/22 reflects the additional SDR allocation of about 0.6 percent of GDP.

Table 6. India: Macroeconomic Framework, 2018/19-2027/28 1/

	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28
				Est.	Projections					
Growth (percent change)										
Real GDP (at market prices)	6.5	3.7	-6.6	8.7	6.8	6.1	6.8	6.8	6.5	6.2
Potential GDP	6.2	5.9	0.5	4.5	5.2	5.7	6.1	6.1	6.0	6.0
Output gap (in percent of potential GDP)	1.7	-0.4	-7.4	-3.7	-2.2	-1.9	-1.2	-0.6	-0.1	0.0
Prices (percent change, period average)										
Consumer prices	3.4	4.8	6.2	5.5	6.9	5.1	4.4	4.1	4.0	4.0
Saving and investment (percent of GDP)										
Gross saving 2/	30.2	29.4	28.8	30.0	29.3	30.1	30.6	30.9	30.9	31.1
Gross investment 3/	32.3	30.2	27.9	31.2	32.8	33.0	33.3	33.5	33.6	33.7
Money and credit (y/y percent change, end-period)										
Broad money	10.5	8.9	12.2	8.8	8.9	9.0	8.6	9.6	10.7	11.1
Bank credit to the private sector	12.7	6.3	5.7	8.1	14.5	11.9	10.2	11.6	13.2	13.3
Fiscal position (percent of GDP)										
Central government balance 4/	-3.9	-4.8	-8.6	-6.7	-6.5	-6.2	-5.7	-5.2	-4.9	-4.8
General government balance 4/	-6.4	-7.5	-12.8	-10.0	-9.9	-9.0	-8.5	-7.9	-7.5	-7.3
General government debt 5/	70.4	75.1	89.2	84.2	83.4	83.8	84.1	83.8	83.4	83.0
External trade (percent change, balance of payments basis)										
Merchandise exports (in U.S. dollars terms)	9.1	-5.0	-7.5	44.8	4.9	2.8	6.9	6.4	5.6	5.4
Merchandise imports (in U.S. dollars terms)	10.3	-7.6	-16.6	55.3	19.2	4.3	6.5	7.0	6.8	6.3
Balance of payments (in billions of U.S. dollars, BMP6 (including sign conventions))										
Current account balance	-57.2	-24.5	24.0	-38.7	-120.6	-112.4	-110.0	-118.9	-131.1	-140.6
(in percent of GDP)	-2.1	-0.9	0.9	-1.2	-3.5	-2.9	-2.6	-2.6	-2.6	-2.6
Foreign direct investment, net ("-" sign is net FDI inflow)	-30.7	-43.0	-44.0	-38.6	-48.6	-53.5	-58.4	-63.7	-69.3	-75.1
Portfolio investment, net ("-" sign denotes capital inflow)	2.4	-1.4	-36.1	16.8	-8.3	-18.3	-25.0	-27.3	-29.7	-32.2
Overall balance ("+" sign denotes surplus)	-3.3	59.5	87.3	47.5	-46.0	-10.9	13.9	26.6	40.9	63.7
External indicators										
Gross reserves (in billions of U.S. dollars, end-period)	412.9	477.8	577.0	607.3	547.1	536.2	550.1	576.7	617.7	681.4
(in months of imports) 6/	8.2	11.1	9.0	8.0	6.8	6.2	5.9	5.8	5.7	5.9
External debt (in billions of U.S. dollars, end-period)	509.8	557.6	556.8	603.4	671.7	746.8	829.3	919.9	1,019.1	1,127.4
External debt (percent of GDP, end-period)	20.1	19.7	20.9	19.0	19.4	19.5	19.9	20.2	20.6	21.0
Of which : short-term debt 7/	8.7	8.4	8.8	8.6	8.5	8.8	9.1	9.4	9.7	10.0
Ratio of gross reserves to short-term debt (end-period) 7/	1.8	2.0	2.4	2.2	1.9	1.6	1.5	1.3	1.3	1.3
GDP in billions of U.S. dollars	2,703	2,832	2,668	3,176	3,469	3,821	4,170	4,547	4,947	5,366

Sources: Data provided by the Indian authorities; CEIC Data Company Ltd; and IMF staff estimates and projections.

1/ Data are for April-March fiscal years unless otherwise mentioned.

2/ Differs from official data, calculated with gross investment and current account.

3/ Statistical discrepancy adjusted.

4/ Divestment and license auction proceeds are treated as financing; includes subsidy related bond issuance.

5/ Includes combined domestic liabilities of the center and the states, inclusive of MSS bonds, and sovereign external debt at year-end exchange rates.

6/ Imports of goods and services projected over the following twelve months.

7/ Including short-term debt on contracted maturity basis, all NRI deposits, and medium and long-term debt on residual maturity basis, different from authorities' definition.

Table 7. India: Indicators of External Vulnerability, 2018/19-2021/22 1/

	2018/19	2019/20	2020/21	2021/22
Financial indicators				
General government debt (percent of GDP)	70.4	75.1	89.2	84.2
Broad money (percent change, 12-month basis)	10.5	8.9	12.2	8.8
Private sector credit (percent change, 12-month basis)	12.7	6.3	5.7	8.1
91 day T-bill yield (percent; end-period)	6.1	4.4	3.3	3.8
91 day T-bill yield (real, percent; end-period) 2/	2.7	-0.4	-2.9	-1.7
External indicators				
Exports (percent change, 12-month basis in US$) 3/	9.1	-5.0	-7.5	44.8
Export volume (percent change, 12-month basis) 3/	5.1	-2.1	-6.3	20.3
Imports (percent change, 12-month basis in US$) 3/	10.3	-7.6	-16.6	55.3
Import volume (percent change, 12-month basis) 3/	4.7	-4.4	-14.0	20.5
Terms of trade (percent change, 12 month basis) 3/	-1.8	1.5	1.6	-8.1
Current account balance (percent of GDP)	-2.1	-0.9	0.9	-1.2
Capital and financial account balance (percent of GDP, "-" sign for inflow)	-2.1	-0.8	0.9	-1.2
Of which: Net portfolio investment (debt and equity, "-" sign for inflow)	0.1	0.0	-1.4	0.5
Other investment (loans, trade credits, etc., "-" sign for inflow)	0.9	1.4	-0.6	2.0
Net foreign direct investment ("-" sign denotes inflow)	-1.1	-1.5	-1.6	-1.2
Foreign currency reserves (in billions of U.S. dollars)	412.9	477.8	577.0	607.3
Official reserves (in months of prospective imports of goods and services)	8.2	11.1	9.0	7.9
Ratio of foreign currency reserves to broad money (percent)	18.6	21.1	21.5	21.7
Total short-term external debt to reserves (percent) 4/	56.9	50.0	40.9	44.9
Total external debt (percent of GDP)	20.1	19.7	21.5	19.5
Of which: public sector debt	2.9	2.9	3.5	3.1
Total external debt to exports of goods and services (percent)	99.6	104.7	114.2	90.6
External interest payments to exports of goods and services (percent)	3.2	2.8	1.7	1.5
External amortization payments to exports of goods and services (percent)	23.4	25.0	27.2	22.4
Exchange rate (Indian rupees per U.S. dollar, annual average)	69.9	70.9	74.2	74.5
REER (percent change; based on annual average level)	-4.7	3.0	-0.9	0.3
Financial market indicators				
Stock market index (end-period)	38,673	29,468	49,509	58,569
Foreign currency debt rating				
Moody's Investor Services	Baa2	Baa2	Baa3	Baa3
Standard and Poor's	BBB-	BBB-	BBB-	BBB-
Fitch Ratings	BBB-	BBB-	BBB-	BBB-
Spread of benchmark bonds (basis points, end of period) 5/	494.6	547.0	443.3	471.6

Sources: Data provided by the Indian authorities; Bloomberg L.P.; CEIC Data Company Ltd.; IMF, *Information Notice System* and staff estimates and projections.

1/ Data for April-March fiscal years.

2/ Equals nominal yield minus actual CPI inflation.

3/ Terms of trade including goods and services. Goods volumes are derived from partner country trade price deflators, and services volumes are derived using U.S. CPI from the WEO database.

4/ Including short-term debt on contracted maturity basis, all NRI deposits, and medium and long-term debt on residual maturity basis, different from authorities' definition.

5/ 10-year sovereign bond spread over U.S. bond.

Table 8. India: Financial Soundness Indicators, 2018/19-2021/22

	2018/19	2019/20	2020/21	2021/22
	(In percent, unless indicated otherwise)			
I. Scheduled commercial banks				
Risk-weighted capital adequacy ratio (CAR)	**14.3**	**14.8**	**16.3**	**16.9**
Public sector banks	12.2	12.9	14.0	14.6
Private sector banks	16.1	16.5	18.4	18.8
Foreign banks	19.4	17.7	19.5	19.8
Number of institutions not meeting 9 percent CAR	**2**	**2**	**1**	…
Public sector banks	1	1	0	…
Private sector banks	1	1	1	…
Foreign banks	0	0	0	…
Net nonperforming assets (percent of outstanding net advances) 1/	**3.7**	**2.8**	**2.4**	**1.7**
Public sector banks	4.8	3.8	2.2	2.3
Private sector banks	2.0	1.5	1.4	1.0
Foreign banks	0.5	0.5	0.6	0.7
Gross nonperforming assets (percent of outstanding advances)	**9.1**	**8.2**	**7.3**	**5.8**
Public sector banks	11.6	10.3	9.1	7.3
Private sector banks	5.3	5.5	4.9	3.8
Foreign banks	3.0	2.3	2.4	2.9
Return on assets 2/	**-0.2**	**0.1**	**0.7**	**0.9**
Public sector banks	-0.7	-0.3	0.3	0.5
Private sector banks	0.6	0.4	0.1	1.4
Foreign banks	1.5	1.5	1.6	1.4
Balance sheet structure of all scheduled commercial banks				
Total assets (in percent of GDP)	87.3	88.6	99.2	…
Loan-to-deposit ratio	79.9	78.1	73.1	74.3
Government securities/total assets	19.8	20.1	21.6	20.8
II. Non-Banking Financial Companies 3/				
Total assets (in percent of GDP)	15.1	16.6	17.6	…
Risk-weighted capital adequacy ratio (CAR)	20.1	23.7	25.0	26.8
Gross nonperforming assets (percent of outstanding advances)	6.1	6.8	6.4	6.3
Net nonperforming assets (percent of outstanding net advances) 1/	3.3	3.4	2.7	2.3
Return on assets 2/	1.7	1.3	1.8	1.8

Source: Reserve Bank of India; Bankscope; and IMF staff estimates.

1/ Gross nonperforming assets less provisions.

2/ Net profit (+)/loss (-) in percent of total assets.

3/ There were 9,680 NBFCs registered with the RBI as on September 30, 2021.

Table 9. India: High Frequency Economic Activity Indicators

% y-o-y		2021 Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2022 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Consumption																			
Urban	Domestic passenger vehicle sales		162.5	119.3	44.7	7.6	-41.2	-27.1	-18.6	-13.3	-8.1	-6.5	-3.9	-3.8	185.1	19.1	11.1	21.1	92.0
	Aviation: Passenger traffic	105921.3	608.7	53.8	136.4	132.6	76.5	68.7	65.5	53.3	-16.2	-1.0	37.7	87.8	474.7	247.9	97.9	54.9	49.0
	Consumer durables	1778.2	80.4	28.0	19.4	11.1	1.6	-3.2	-5.7	-1.9	-4.4	-9.7	-3.1	7.2	59.1	25.1	2.3	-2.5	
	Unemployment: Urban[1][2]	9.8	14.7	10.1	8.3	9.8	8.6	7.4	8.2	9.3	8.1	7.6	8.3	9.2	8.2	7.3	8.2	9.6	7.7
Rural	Domestic two-wheeler sales		26.1	4.0	-2.1	-14.6	-17.4	-24.9	-34.4	-10.8	-21.1	-27.3	-20.9	15.4	255.3	24.0	10.2	17.0	13.5
	Tractor sales	480.8	-2.4	22.1	8.2	-9.8	-9.5	3.2	-16.7	-22.5	-27.8	-26.4	-11.6	38.1	47.7	-10.9	-12.2	-1.0	18.9
	Cosumer non-durables	92.6	0.2	-3.9	-2.3	5.9	-0.1	0.7	-0.8	0.3	3.1	-6.8	-4.4	-0.8	1.4	3.0	-2.8	-9.9	
	Unemployment: Rural[1][2]	7.1	10.6	8.8	6.3	7.6	6.0	7.9	6.4	7.3	5.8	8.4	7.2	7.2	6.6	8.1	6.2	7.7	5.8
	Rural wages (male)		1.3	0.4	1.5	3.4	5.1	5.6	5.2	5.3	5.0	5.2	5.3	5.5	5.6	5.9	6.0	6.2	
Overall	Consumer credit	12.4	12.8	12.2	11.9	12.8	12.5	12.0	11.8	14.3	12.3	12.7	12.6	14.5	16.3	18.1	18.8	19.5	
	Consumer confidence[3]		48.5		48.6		57.7		62.3		64.4		71.7		75.9		77.3		80.6
Investment																			
	Production of capital goods	1028.6	74.9	27.3	30.3	20.0	3.3	-1.6	-2.6	-3.0	1.8	1.3	2.4	12.0	53.3	29.1	5.7	5.0	
	Railway traffic: Net tonne km	87.1	55.8	27.2	21.5	20.1	9.0	20.6	14.3	8.3	11.4	10.9	11.1	17.7	21.0	19.3	17.5	15.7	10.3
	Government Capex (YTD)	51.1	32.8	35.5	27.7	34.5	40.7	33.3	21.5	30.6	-5.8	-2.9	72.5	71.1	71.7	64.9	67.3	57.2	47.5
External sector																			
	Merchandise exports	202.7	68.3	47.9	49.7	46.3	22.7	43.4	34.6	44.3	27.9	34.5	26.4	29.2	20.9	30.4	8.2	1.6	4.8
	Merchandise exports (ex-oil)	204.1	54.8	42.4	35.1	37.4	19.0	30.1	19.2	30.7	20.7	20.2	9.9	17.5	13.3	11.1	1.5	-11.5	-2.1
	Merchandise imports	169.5	69.9	97.5	62.0	53.0	85.7	57.4	56.8	40.5	25.1	37.2	29.0	30.9	62.9	57.6	43.6	37.3	8.7
	Merchandise imports (ex-oil, ex-gold)	133.8	48.7	93.0	46.5	49.8	44.0	33.4	39.4	36.8	33.8	35.6	43.5	32.4	32.5	38.9	44.7	40.4	20.5
	Services exports	9.8	6.5	19.4	13.7	24.4	25.0	22.8	21.0	38.8	24.5	19.4	29.6	33.2	40.7	32.6	20.2	24.3	
	Services imports	3.4	0.1	8.8	13.4	23.6	24.1	22.2	24.8	29.9	34.0	25.0	25.2	46.1	52.8	45.5	22.3	27.1	
	Change in FX reserves (USDbn)	9.4	8.0	14.6	7.1	2.6	-4.8	4.0	-2.6	-5.1	-3.2	-0.4	-25.6	-9.5	7.5	-13.1	-14.0	-12.9	-25.8
	Manufacturing new export orders PMI[3]	54.9	53.6	48.8	54.8	50.6	51.5	52.6	51.7	51.3	51.1	51.6	48.4	54.2	57.1	54.9	52.6	53.9	55.2
	Service new export orders PMI[3]	44.0	37.0	40.4	40.5	40.0	39.5	46.3	45.1	44.6	47.7	44.2	42.1	40.2	41.7	43.5	44.9	43.0	47.0
Inflation																			
	CPI	4.2	6.3	6.3	5.6	5.3	4.3	4.5	4.9	5.7	6.0	6.1	7.0	7.8	7.0	7.0	6.7	7.0	7.4
	Food [4]	2.0	5.0	5.1	4.0	3.1	0.7	0.8	1.9	4.0	5.4	5.9	7.7	8.3	8.0	7.7	6.7	7.6	8.6
	Core	5.3	6.6	6.1	5.8	5.8	5.9	6.0	6.1	6.1	6.0	5.9	6.4	7.1	5.9	6.0	6.0	5.9	6.0
	Rural	3.8	6.5	6.2	5.5	5.3	4.1	4.1	4.3	5.4	6.1	6.4	7.7	8.4	7.1	7.1	6.8	7.2	7.6
	Urban	4.7	5.9	6.4	5.8	5.3	4.6	5.0	5.5	5.9	5.9	5.8	6.1	7.1	7.1	6.9	6.5	6.7	7.3
	WPI	10.7	13.1	12.1	11.6	11.6	11.8	13.8	14.9	14.3	13.7	13.4	14.6	15.4	16.6	16.2	14.1	12.4	10.7
Industry																			
	Industrial production	133.5	27.6	13.8	11.5	13.0	4.4	4.2	1.0	1.0	2.0	1.2	2.2	6.7	19.7	12.7	2.2	-0.8	
	Manufacturing PMI[3]	55.5	50.8	48.1	55.3	52.3	53.7	55.9	57.6	55.5	54.0	54.9	54.0	54.7	54.6	53.9	56.4	56.2	55.1
	New orders[3]	58.1	50.4	46.8	58.4	53.6	55.3	58.7	61.3	58.4	56.6	57.6	56.1	56.8	56.4	55.7	60.0	60.5	58.6
	Core industries (index)	62.6	16.4	9.4	9.9	12.2	5.4	8.7	3.2	4.1	4.0	5.9	4.8	9.5	19.3	13.2	4.5	3.3	
	Coal output	9.5	7.0	7.4	18.8	20.6	7.8	14.7	8.2	5.2	8.2	6.6	0.3	30.1	33.5	32.1	11.4	7.6	
	Steel output	494.8	55.1	25.2	9.4	6.9	7.1	5.9	0.9	-0.6	3.8	5.6	4.1	2.5	15.1	3.6	6.0	2.2	
	Cement output	606.6	11.7	7.5	21.7	36.3	11.3	14.6	-3.6	14.2	14.1	4.2	9.0	7.4	26.2	19.7	0.5	1.8	
	Electricity generation	38.5	7.5	8.2	11.0	16.0	0.9	3.2	2.1	2.9	0.9	4.5	6.1	11.8	23.4	16.5	2.3	0.9	
	Corporate (industry) credit	0.8	1.7	1.6	2.0	1.8	1.3	3.1	3.3	9.0	6.4	6.9	8.1	9.5	10.7	11.1	13.4	14.2	
	Business expectation[3]			121.9			128.0			139.3			137.8			134.7			
Services																			
	Services PMI[3]	54.0	46.4	41.2	45.4	56.7	55.2	58.4	58.1	55.5	51.5	51.8	53.6	57.9	58.9	59.2	55.5	57.2	54.3
	New business[3]	54.3	46.4	40.9	46.0	56.4	55.3	58.3	58.2	55.9	51.0	51.5	53.7	57.9	58.8	59.5	55.2	58.3	54.2
	Port traffic[1]	7.0	33.1	18.2	6.8	12.1	0.2	7.0	-0.2	-0.6	9.1	-4.5	0.8	-7.2	8.9	13.5	15.1	8.0	14.9
	Railway freight traffic	70.7	39.1	20.5	18.5	16.9	3.6	8.4	6.1	7.2	7.7	6.6	6.7	9.4	14.6	11.3	8.3	7.9	9.1
	Airline: cargo traffic	445.4	150.9	45.6	35.2	29.5	14.9	16.5	6.2	6.9	0.5	-2.8	0.3	2.3	13.8	13.9	6.1		
	Deposits	11.0	9.2	9.5	9.5	9.2	9.2	9.8	8.7	11.8	8.0	8.3	8.7	9.7	8.5	8.4	8.9	9.3	
	Bank credit	6.2	5.7	5.9	6.0	5.5	5.5	6.8	6.9	9.3	7.0	7.9	8.5	9.9	11.4	12.2	13.2	15.3	
	Services credit	2.2	3.4	4.0	3.8	2.1	0.8	2.3	2.9	10.4	6.0	6.3	8.7	11.2	12.7	12.8	16.5	17.2	
Agriculture																			
	Agricultural production	25.3	14.6	18.9	19.3	18.9	21.2	8.7	10.4	9.6	9.2	5.0	-2.9	-17.6	-25.4	-30.0	-31.8	-31.9	-36.0
	Rice stock [5]	7.0	9.0	9.3	14.9	20.9	31.5	36.5	46.5	18.7	8.1	4.7	11.0	9.1	10.7	6.8	-4.0	-8.8	-19.2
	Wheat stock	47.0	8.0	9.8	10.0	8.3	7.1	4.2	3.0	-3.7	-11.2	-20.8	-30.4	-42.3	-48.3	-52.8	-52.8	-52.1	-51.5
Other indicators																			
	Service Taxes (YTD)	-64.1	-68.9	-66.7	-72.8	-69.2	-63.0	-47.6	-44.0	-54.4	-72.7	-81.3	-79.8	-78.3	-77.0	-79.2	-78.4	-80.5	
	Gross tax (ex-service tax) (YTD)	24.2	33.5	36.7	38.0	37.3	39.3	37.0	35.3	33.5	30.3	29.5	28.3	28.8	28.4	27.3	27.6	25.9	
	BSE Sensex (Period Change %)	-2.44	1.93	5.17	0.56	4.83	6.41	2.79	-1.66	-2.95	3.34	-3.17	-2.24	3.12	-6.41	-1.76	2.25	7.87	-0.25
	US economic policy uncertainty index[1][3]	124.9	147.0	133.6	152.9	133.8	142.1	122.0	151.3	166.2	139.2	138.1	190.0	154.7	168.0	146.0	186.9	163.3	175.8
	India economic policy uncertainty index[1][3]	79.0	73.2	58.3	76.9	69.2	48.9	39.9	23.4	72.3	70.0	91.2	120.7	90.1	69.1	65.5	81.3	72.4	63.7

Sources: Bombay Stock Exchange(BSE), CEIC, Center for Monitoring Indian Economy (CMIE), Haver Analytics, Indian Ports Association, Ministry of Agriculture, Ministry of Commerce and Industry, Ministry of Railways, Ministry of Statistics and Program Implementation (MOSPI), OECD, Reserve Bank of India (RBI), Society of Indian Automobile Manufacturers; Baker, Bloom, and Davis (2012, 2015); and IMF staff estimates.

Notes: The cell is highlighted in dark green if the growth is above average. The cell is highlighted in dark red if the growth is below average. The average for each data series covers data points since 2012 H1 to latest month. Last date of access: October 25, 2022.

[1] Data from sources other than official sources. [2] Percent. [3] Index values. [4] Food Inflation refers to the year-on-year change in Consumer Food Price Index. [5] Rice stock excludes unmilled paddy stock.

Box 1. Unleashing India's Growth Potential[1]

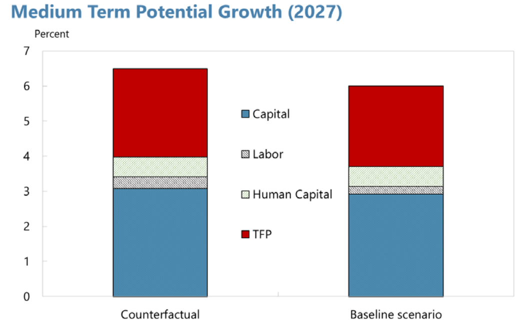
The pandemic had a sizable impact on the key factors of production, with labor, TFP and capital all affected, leading to some medium-term adverse impact. Successful implementation of wide-ranging structural reforms could provide much-needed support to growth over the medium term.

A growth accounting exercise shows that labor was one of the most important drivers of economic growth in the 1970s and 1980s. The contribution of capital[2] picked up from late 1990s and 2000s, when the role of labor declined. More recently, total factor productivity (TFP) growth played an important role in supporting growth, together with physical capital.

The pandemic had a severe near-term impact on the economy and can impact medium-term potential growth through four main channels. The first is capital growth, reflecting the initial sharp contraction in investment and the subsequent impact on capital accumulation. The second is labor input growth, where both the total employment ratio and hours per person declined sharply during the pandemic. While the medium-term impact on labor inputs may be limited, structural challenges such as low female labor force participation and high youth unemployment rate could continue to weigh on medium-term growth. Third, human capital growth is expected to decline in the near term due to forgone on-the-job training. The impact of schooling losses is expected to materialize over a longer horizon (beyond the five-year period analyzed here), especially for those in low-income households. Finally, TFP growth could decline should the reallocation of labor from productive sectors (industries and services) to less productive sectors (such as agriculture) that was observed in the early stages of the pandemic prove durable. However, technology adoption including digitalization could play a mitigating role.

A production function approach is used to estimate medium-term potential growth under both baseline and upside scenarios, accounting for the impact of the pandemic, and reform dividends from structural reforms, respectively. In the baseline scenario, potential growth is estimated to be about 6 percent in the medium term (2027). This is lower than a counterfactual without the pandemic (estimated at about 6.5 percent). Similar to the recent growth patterns, capital and TFP are found to be the main drivers of medium-term growth, with relatively small contribution from labor inputs despite the sizeable demographic dividend. This suggests potentially significant growth dividends from reforms that raise labor participation.

Medium Term Potential Growth (2027)



Note: The medium-term potential growth is computed based on a production function approach. For the counterfactual, we assume that the growth rate of factors inputs in the projection period would be consistent with the five year average from 2015 to 2019.

An illustrative upside scenario shows the potential dividends of structural reforms. On capital, we assume that additional reforms in domestic and external finance would improve financial intermediation, therefore increasing investment and capital accumulation. Further reforms in trade and product market could also attract higher foreign direct investment. On labor, further reforms to improve female labor force participation and reduce youth unemployment rate could help unleash the potential in India's labor markets. Strengthening vocational training and education will enhance the accumulation of human capital. Creating additional job opportunities in industries and services could help facilitate the shift of labor toward more productive sectors, improving TFP growth. In addition, further progress in digitalization could improve India's productivity in the medium and long run. In the upside scenario, a successful implementation of broad-based structural reforms could raise medium-term potential growth to about 7 percent, more than offsetting the persistent impact of the pandemic. However, uncertainty about potential growth estimates remains sizable under the current environment.

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[1] Kotera and Xu (forthcoming) "Unleashing India's Growth Potential", IMF Working Paper.

[2] Capital captures capital services provided by structures, machinery, transport equipment, and other assets (such as software and intellectual property products).

Box 2. Financial Sector and Economic Growth in India[1]

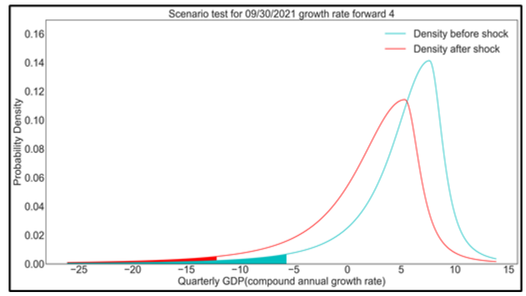
Higher credit growth and lower non-performing loans (NPLs) are associated with higher GDP growth. Policies to support credit growth and to strengthen balance sheets are particularly important during periods of low economic growth.

India's financial sector has faced several challenges in recent decades, including a rapid increase in NPLs after the global financial crisis and the 2018-2019 period of NBFC stress. Credit growth was weak for some time, with an estimated negative credit to GDP gap since 2012. Strong and sustained post-pandemic GDP growth, supported by credit provision, will be needed for India to achieve its development goals.

A growth-at-risk (GaR) approach was used to analyze how cyclical financial conditions affect GDP growth. The results suggest that higher credit and lower NPLs are associated with higher GDP in the near- and medium-term. More favorable credit conditions are particularly important in supporting the economic recovery during periods of low growth. A negative shock to credit and leverage could shift the entire growth distribution to the left, with lower expected growth and higher negative tail risks.

Bank-level panel regressions for both public and private banks were used to analyze the relationship between bank balance sheets, credit growth, and long-term growth. The results indicate that higher credit growth, arising from better capitalized banks with lower NPLs, was associated with higher GDP growth over the long term. Furthermore, at least for private banks, the level of capitalization is strongly correlated with credit growth.

Growth-at-Risk: Shock to Credit and Leverage



Notes: The results capture a two standard deviation negative shock to the credit and leverage partition, based on a growth-at-risk approach estimated using data from 2001Q4 to 2021Q3. The credit and leverage partition captures the credit to GDP ratio, the credit to GDP gap, credit growth, and the NPL ratio. Source: IMF Staff estimates.

These results highlight the importance of ensuring adequate credit growth and improving the balance sheets of banks, particularly through reducing problem loans, to sustain economic growth. During periods of low economic growth, policies to support credit growth and to strengthen balance sheets would be particularly important. For example, credit guarantee schemes for MSMEs, loan restructuring scheme for COVID-affected borrowers were important to support credit growth and cushion the economic impact of the pandemic. Furthermore, financial regulators should continue to ensure that loans benefiting from COVID-related restructuring schemes are closely monitored and properly provisioned for, to safeguard the health of financial sector balance sheets and help support the economic recovery. Additionally, a focus on ensuring that private banks are well capitalized, either through new equity issuance or reducing cash dividends, is crucial, given the relationship between their balance sheets and credit to the economy.

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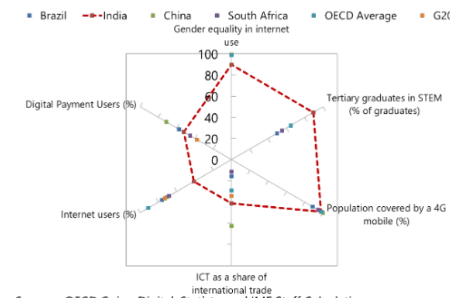
[1] MacDonald and Xu (2022) "Financial Sector and Economic Growth in India", IMF Working Paper WP/22/137.

Box 3. Digitalization and GovTech[1]

Investment in public digital infrastructure has improved the provision of government services and enabled the rapid deployment of support measures during the pandemic. To maximize this potential, it is crucial that policy addresses the digital divide.

India is at the forefront of digital development having rolled out digital infrastructure nationwide. India hosts 1.15 bn mobile subscriptions, has 0.53 active mobile broadband subscriptions per capita and 98 percent of the population has access to at least a 4G network. India also has had rapid growth in digital payments, the second highest share of new graduates in STEM fields in the OECD and second highest exports of ICT goods and services as a ratio of total exports in the G20. This was achieved through liberal telecommunications laws, open access for FDI, and the effective use of government technology platforms.

India's Digital Development



Sources: OECD Going Digital, Statista, and IMF Staff Calculations

Technology-based modernization of the public sector (GovTech) has enabled India to improve tax compliance, streamline the provision of services and provide a platform for innovation. India is one of the pioneers in embracing technology, at the whole of government level, to deliver citizen-centric public services. A key component is the India Stack, combining digital identification (Aadhaar), interoperable payments framework (UPI) and a data exchange layer, enabling greater access to finance and government services. This infrastructure is regularly used to make direct benefit transfers to 706 million beneficiaries and allowed rapid deployment of emergency support—to 318 million beneficiaries within two weeks from announcing the measure.[2] Importantly, using common standards and open interfaces encourages the private sector to use the platform for the provision of innovative services. For revenue administration, the roll-out of pre-filled income tax forms, by utilizing third-party information, has coincided with strong revenue collection.[3] The tax departments have also utilized artificial intelligence and machine learning to reduce fraud and improve compliance. The application of digital solutions continues with the expansion of India Stack into health, education and e-commerce.

India can build on its existing digital infrastructure to better target services. Currently, beneficiary databases for various support schemes are housed across different ministries. An integrated platform for individuals to apply for multiple social support programs would simplify the application process, helping to ensure that programs reach intended beneficiaries. It could also help generate cost savings through economies of scale, improve information quality and accuracy, as well as potentially identifying duplicate programs.[4] India is well placed to take advantage of such a system given its existing digital identification and payment system.

To maximize the benefits of GovTech, India will need to tackle two key challenges. First, it is essential to continue closing the digital divide. Despite significant progress, 57 percent of Indians are not internet users, and non-users are disproportionately female, live in rural areas, and in less wealthy states. Second, data should be adequately protected in law so that individuals have trust in using the digital services.

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[1] Dinar Prihardini and John Spray with contributions from the Information Technology Department.

[2] Jain, Dhingra, Johns, and Rautela. (2021): "A Review of the effectiveness of India's DBT system during COVID-19"

[3] Carrillo, Pomeranz, and Singhal (2017): "Dodging the taxman: Firm misreporting and limits to tax enforcement." American Economic Journal: Applied Economics, 9(2), 144 64.

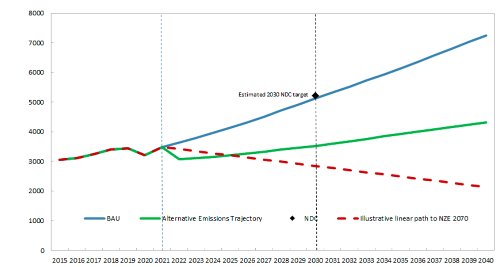
[4] Leite., George, Sun, Jones, and Lindert (2017): "Social Registries for Social Assistance and Beyond". World Bank Social Protection and Labour Discussion Paper No. 1704

Box 4. India's Transition to a Carbon-Neutral Economy[1]

India is at a pivotal juncture in its energy transition. India has made significant progress towards meeting its NDC targets and has announced a Net Zero 2070 target at COP26. In addition to sectoral policies, a gradual increase in subsidies on the use of renewable energy coupled with higher taxes on pollutants can move the emissions path towards this goal, building greater energy security and reducing health effects from pollution. External climate financing and technology transfer would help mitigate costs and ensure sustainability.

Under current policies, India is expected to see a 40.8 percent increase in total GHG emissions by 2030 (Figure 1, blue line). While a modest increase in short-term emissions may be necessary to meet development goals, India is moving away from an illustrative linear path to Net Zero 2070[2] (red line). Upfront action could lower the cost of meeting Net Zero because a) India is expected to increase fossil fuel investments in the power sector which have substantial irreversible fixed costs, and b) the scale up of alternatives is easier over longer time horizons allowing technology and policy to gradually adjust.

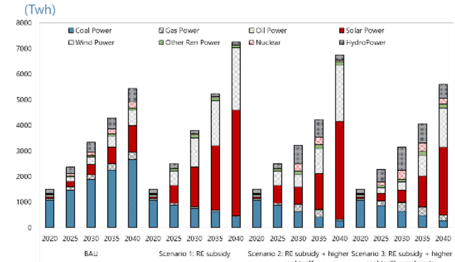
GHG All Emissions
(mtCO2e)



Source: IMF staff calculations using the IMF-ENV model.
Note: NDC target for India is a 45% reduction in emissions intensity of GDP (ceiling) by 2030. Target is estimated using historical emissions data and GDP growth projections and is met in baseline. Net-zero target for 2070 is declaration / pledge (illustrative linear pathway shown). Alternative emissions trajectory is a reduction equivalent to a $25 carbon price in 2030.

A possible intermediate alternative emissions trajectory (green line) can be achieved by incentivizing renewable energy and lowering the use of fossil fuels. Three model-based policy scenarios illustrate how combining renewable subsidies, higher tariffs on coal, and carbon taxes would each result in 31 percent lower GHG emissions by 2030 compared to business as usual (BAU).[3] In all scenarios growing energy demand is met through a gradual increase of renewable energy and allowing coal power to taper off, thus exceeding the goal of 50 percent non-fossil fuel electricity capacity.

Electricity Mix in India
(Twh)



Source: IMF staff calculations using the IMF-ENV model.
Note: Scenario 1 is a reduction through a renewable subsidy equivalent to a $25 carbon price in 2030, Scenario 2 is a renewable subsidy combined with a higher feed in tariff for coal, Scenario 3 is a renewable subsidy, higher feed-in tariff for coal and broader carbon tariff.

Policy choices matter. By 2030, a large renewable subsidy would lead to budgetary costs amounting to 2.3 percent of GDP. If financed through higher and distortionary direct taxation, this is projected to lead to 2.1 percent lower GDP by 2030. By contrast, if renewable subsidies are combined with higher coal tariffs and a broad carbon tax, revenue would increase by 0.7 percent of GDP. Additionally, this revenue can be spent on compensating the poorest making the policy progressive. As the policy is less distortionary, this lowers GDP by a more modest 0.3 percent of GDP. Given any policy to lower emissions will impose costs, financial and technological support from abroad is needed to relieve some of that burden.

Lower emissions have significant co-benefits, including lower deaths and fewer missed workdays from pollutants and improved energy security. Increasing renewable energy usage and allowing coal to taper-off in line with scenario 3 would lead to a 2.5 percent reduction in Particulate Matter (PM) 2.5 which would result in an estimated 330,000 cumulative fewer deaths from pollution by 2035. It would also decrease coal imports by 18 percent by 2030, thus increasing resilience to global changes in energy prices.

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[1] Margaux McDonald and John Spray with contributions from Geetika Dang, Research and Fiscal Affairs Departments.

[2] The Net Zero path is shown for illustrative purposes and is not a recommendation.

[3] IMF-ENV is the IMF's dynamic global general equilibrium climate model capturing detailed sectoral, trade, and employment consequences of policies to address climate change. Important caveats to this analysis include that long-run costs may be overestimated as it does not model new technology and short-run costs may be underestimated as there are minimal frictions to labor, commodity, and power markets.

Appendix I. External Sector Assessment

<table>
<tr><td colspan="8">Overall Assessment: The external position in fiscal year 2021/22 (ending in March 2022) was broadly in line with the level implied by medium-term fundamentals and desirable policies. Running CA deficits is broadly consistent with India's level of per capita income, favorable growth prospects, demographic trends, and development needs. External vulnerabilities stem from volatile global financial conditions and significant increases in commodity prices. In part reflecting the impact of the war in Ukraine on oil prices, the CA deficit is projected to widen in fiscal year 2022/23 but then stabilize over the medium term. The authorities have made some progress in external trade promotion and the liberalization of FDI and portfolio flows, but the existing tariff structure remains broadly unchanged.

Potential Policy Responses: To maintain the external sector balance at a comfortable level over the medium term, gradual withdrawal of fiscal and monetary policy stimulus, development of export infrastructure, and negotiation of free trade agreements with main trading partners to provide a sustainable boost to exports of goods and services should be accompanied by further investment regime liberalization and a reduction in tariffs, especially on intermediate goods. Structural reforms could deepen integration in global value chains and attract FDI, hence mitigating external vulnerabilities. Exchange rate flexibility should act as the main shock absorber, with intervention limited to addressing disorderly market conditions.</td></tr>
<tr><td>Foreign Asset and Liability Position and Trajectory</td><td colspan="7">Background. As of the end of 2021, India's NIIP had improved to –11.1 percent of GDP from –13.5 percent of GDP at the end of 2020. This reflected a relatively low CA deficit (amid the COVID-19 pandemic) and the accumulation of reserve assets. Gross foreign assets and liabilities were 30.5 percent of GDP and 41.7 percent of GDP, respectively. The bulk of assets were in the form of official reserves and FDI, whereas liabilities included mostly FDI and other investments.

Assessment. With the CA deficit projected to widen in 2022 (due to external shocks) and stabilize at a lower level thereafter, the NIIP-to-GDP ratio is expected to strengthen marginally over the medium term. India's external debt liabilities are moderate compared with peers, and short-term rollover risks are limited. The moderate level of foreign liabilities reflects India's incremental approach to capital account liberalization, which has focused primarily on attracting FDI.</td></tr>
<tr><td>2021 (% GDP)</td><td>NIIP: –11.1</td><td colspan="2">Gross Assets: 30.5</td><td>Debt Assets: 2.6</td><td colspan="2">Gross Liab.: 41.7</td><td>Debt Liab.: 20.1</td></tr>
<tr><td>Current Account</td><td colspan="7">Background. In fiscal year 2021/22, the CA returned to a small deficit of 1.2 percent of GDP from an unusual surplus of 0.9 percent of GDP in the previous year (due to the COVID-19 pandemic). As the pandemic eased, imports rebounded faster than exports on the back of pent-up domestic demand and rising prices of oil and other commodities. The CA deficit is projected to widen further to about 3 percent of GDP in fiscal year 2022/23, reflecting both the post-COVID economic recovery and the terms-of-trade shock from the Ukraine war, which affects India mostly through higher (and volatile) oil prices. Over the medium term, the CA deficit is projected to stabilize and converge to about 2.6 percent of GDP.

Assessment. The EBA cyclically adjusted CA balance stood at –1.6 percent of GDP in fiscal year 2021/22. The EBA CA regression estimates a norm of –1.9 percent of GDP, with a standard error of 0.7 percent, thus implying a CA gap of 0.3 percent of GDP. In the judgment of the IMF staff, a CA deficit of up to 2½ percent of GDP is financeable over time. Steady FDI inflows are not yet sufficient to cover protracted and large CA deficits, while portfolio flows are volatile and susceptible to changes in global risk appetite. Additional cyclical considerations are given to factor in the transitory impacts of the COVID-19 crisis (0.7 percent of GDP), which includes the impacts on travel (0.4 percent of GDP), transportation (0.6 percent of GDP), shifts in household consumption (–0.1 percent of GDP), and medical goods of (–0.1 percent of GDP). Thus, with the IMF staff–assessed CA norm and COVID-19–related adjustor, the IMF staff assesses the CA gap to be 1 percent of GDP, with a range of 0.3 to 1.7 percent of GDP. Positive policy contributions to the CA gap stem mostly from the domestic credit gap.</td></tr>
<tr><td>2021 (% GDP)</td><td>CA: –1.2</td><td>Cycl. Adj. CA: –1.6</td><td>EBA Norm: –1.9</td><td>EBA Gap: 0.3</td><td>COVID-19 Adj.: 0.7</td><td>Other Adj.: 0</td><td>Staff Gap: 1.0</td></tr>
<tr><td>Real Exchange Rate</td><td colspan="7">Background. In 2020 and early 2021, unusual CA surpluses resulted in appreciation pressures on the rupee. This trend abated and reversed when the CA returned to deficit in the second half of 2021 and volatile portfolio investments shifted to net outflows. The average REER in 2021 depreciated by about 1.1 percent from its 2020 average. As of May 2022, the REER was 2.4 percent above the 2021 average.

Assessment. The IMF staff CA gap implies a REER gap of –6 percent (applying an estimated elasticity of 0.16). EBA REER index and level models suggest an overvaluation of 10.1 percent and 8.5 percent, respectively. Consistent with the staff CA gap, however, the IMF staff assesses the REER gap to be in the range of –10.3 to –1.7 percent, with a midpoint of –6 percent, for fiscal year 2021/22.</td></tr>
<tr><td>Capital and Financial Accounts: Flows and Policy Measures</td><td colspan="7">Background. In FY2021/22, the financial account balance was about –1.2 percent of GDP (indicating net inflows to India), compared with outflows of 0.8 percent of GDP in 2020/21. FDI inflows decreased to 1.2 percent of GDP (from 1.6 percent of GDP in prior year) and volatile portfolio investments shifted to outflows of about 0.5 percent of GDP, while other investments reflecting mostly debt-creating flows increased to about 2.2 percent of GDP. During the year, the Indian authorities made further steps towards capital account liberalization. They increased the limits on FDI and portfolio investments, particularly for the oil, gas, and life insurance sectors.

Assessment. While FDI inflows covered the CA deficit in FY2021/22, structural reforms and improvement of the investment regime to promote FDI are needed. Volatile portfolio investments are very sensitive to changes in global financial conditions and country risk premia. Expected inclusion of India in international bond indices should increase portfolio investment inflows for financing the CA deficit over the medium term.</td></tr>
<tr><td>FX Intervention and Reserves Level</td><td colspan="7">Background. An unusual period of CA surpluses in 2020 and early 2021 allowed the Reserve Bank of India to replenish official FX reserves, which reached a record high of about US$638.5 billion at the end of 2021. The reserves decreased in subsequent months but remained at a comfortable level of about eight months of import coverage.

Assessment. Various criteria confirm that official FX reserves are adequate for precautionary purposes. As of the end of 2021, they represented about 223 percent of short-term debt (on residual maturity) and 195 percent of the IMF's composite metric. Consequently, accumulation of additional reserves is less warranted, and FX interventions should be limited to addressing orderly market conditions.</td></tr>
</table>

Appendix II. Risk Assessment Matrix 1/

Sources of risk	Risk likelihood	Expected impact	Policy response
External risks			
Intensifying spillovers from Russia's war in Ukraine.	High	Further sanctions resulting from the war and related uncertainties exacerbate trade and financial disruptions and commodity price volatility.	Diversify critical import sources. Secure export market access through multilateral and bilateral trade agreements. Accelerate transition towards renewable energy.
Commodity price shocks.	High	A combination of continuing supply disruptions (e.g., due to conflicts and export restrictions) and negative demand shocks causes recurrent commodity price volatility and social and economic instability.	Improve targeting of transfers to protect the most vulnerable and accelerate shift to renewable sources of energy. Maintain exchange rate flexibility to absorb external shocks but intervene to prevent disorderly currency movements.
De-anchoring of inflation expectations and stagflation.	Medium	Supply shocks to food and energy prices sharply increase headline inflation and pass through to core inflation, de-anchoring inflation expectations.	Tighten fiscal and monetary policies to anchor inflation expectations and prevent second-round effects of commodity price shocks; increase transfers to the poor as needed to alleviate the impact of inflation.
Abrupt global slowdown or recession.	Medium	Global and idiosyncratic risk factors combine to cause a synchronized sharp growth slowdown, with outright recessions in some countries, spillovers through trade and financial channels, and downward pressures on some commodity prices.	Rebuild fiscal buffers and maintain strong external position to withstand external and domestic shocks. Further enhance the environment for attracting FDIs and other stable non-debt creating capital flows as well as portfolio investments.
For EMDEs:	High	Sharp tightening of global financial conditions combined with volatile commodity prices leads to spiking risk premia, widening of external imbalances and fiscal pressures, and capital outflows.	Maintain exchange rate flexibility to absorb external shocks. With adequate reserves, provide foreign exchange liquidity to prevent disorderly currency movements.
Deepening geo-economic fragmentation and geopolitical tensions.	High	Broadening of conflicts and reduced international cooperation accelerate deglobalization, resulting in a reconfiguration of trade, supply disruptions, technological and payments systems fragmentation, rising input costs, financial instability, a fracturing of international monetary and financial system, and lower potential growth.	Continue building capacity for the use of Indian rupee for international trade invoicing and settlement. Play a stabilizing role in the region by promoting mutually beneficial cooperation.
Cyberthreats.	Medium	Cyberattacks on critical physical or digital infrastructure (including digital currency platforms) trigger financial instability and disrupt economic activities.	Further improve protection of India's digital assets against hacking attempts. Maintain back-up copies of critical databases.

1/ The Risk Assessment Matrix (RAM) shows events that could materially alter the baseline path. The relative likelihood is the staff's subjective assessment of the risks surrounding the baseline ("low" is meant to indicate a probability below 10 percent, "medium" a probability between 10 and 30 percent, and "high" a probability between 30 and 50 percent). The RAM reflects staff views on the source of risks and overall level of concern as of the time of discussions with the authorities. Non-mutually exclusive risks may interact and materialize jointly.

Sources of risk	Risk likelihood	Expected impact	Policy response
Domestic risks			
Large scale social discontent.	Medium	Rising food and fuel prices, or the pursuit of difficult structural reforms could create social discontent, causing capital outflows, slowing economic growth, and giving rise to economically damaging policies.	Increase spending on social protection to the poorest segments. Avoid sharp hikes of food and fuel prices or offset them with transfers to the poor. Communicate clearly to explain the benefit from structural reforms and protect the most vulnerably from possible adverse impact.
Local COVID-19 outbreaks.	Medium	Emergence of more contagious vaccine-resistant variants forces new mobility restrictions or inhibit commerce. This results in extended supply chain disruptions, slower growth, capital outflows, and lower consumer and business confidence.	Increase public expenditure in health infrastructure, education, and social safety nets to mitigate the immediate impact of the pandemic and boost potential growth.
Financial sector vulnerabilities.	Medium	Tightening financial conditions can result in deterioration of bank and NBFC asset quality, which in turn would cause financial stress, limit credit provision, and weigh on long-term growth prospects.	Encourage banks to build capital buffers and to recognize problem loans. Implement targeted prudential policies to reduce vulnerabilities. Implement governance reforms in the PSB sector.
Weakening fiscal position and materialization of fiscal risks.	Medium	Further weakening of fiscal position leads to a sharp increase in financing costs and the realization of contingent liabilities, with broader implications for financial conditions and the financial system.	Enhance fiscal policy space through a credible medium-term fiscal consolidation strategy anchored on stronger revenue mobilization, increased expenditure efficiency and clear communication. Reduce the interconnectedness between the sovereign and banks' balance sheets
Natural disasters related to climate change.	Medium	More frequent natural disasters deal severe damage to infrastructure and amplify supply chain disruptions and inflationary pressures, causing water and food shortages and reducing medium-term growth.	Increase infrastructure investments to mitigate the impact of the natural disasters. Accelerate transition to a carbon-neutral green economy. Strengthen social safety net. Support climate resilient agriculture.

Appendix III. Debt Sustainability Analysis

Debt sustainability risks have increased for India due to high debt levels and elevated gross financing needs amidst monetary policy tightening. Public debt to GDP ratio[1] *is expected to increase from 83 percent of GDP in FY2021/22 remaining at around this level, before gradually declining from FY2025/26 onwards. Gross financing needs remain high at around 15 percent of GDP over the next five years. Debt dynamics remain favorable in the medium term and support a sustainable debt path. Rising interest rates and slowing growth underline the need for a credible fiscal consolidation strategy to reduce public debt and regain fiscal space. Risks are mitigated as the bulk of public debt are fixed rate instruments denominated in domestic currency and, due to regulatory requirements, predominantly held by residents. In the long term, debt dynamics depend on structural reforms to lift India's growth potential and on maintaining fiscal discipline.*

1. **India's debt-to-GDP ratio peaked at 89 percent in FY2020/21 and is projected to remain elevated over the medium term**. The economic recovery and associated narrowing of the deficit brought debt levels to 83.4 percent of GDP at the end of FY2021/22. The slow pace of fiscal consolidation means that debt is expected to remain at around this level, before gradually declining from FY2025/26 onwards. Nominal GDP growth is projected to increase to 15.4 percent in FY2022/23 as the economic recovery continues amidst inflationary pressures, before moderating to around 11 percent in the medium term. Inflation is expected to decline 6.0 percent in FY2023/24. Monetary policy tightening and a gradual normalization of commodity prices are expected to bring inflation to its long-term target of around 4 percent by FY2027/28. Increases in the policy rates are reflected in a higher effective interest rate of around 7.6 percent. India's debt-stabilizing primary deficit is estimated at 2.3 percent of GDP.

2. **India's public debt sustainability analysis is based on the following macroeconomic assumptions**:

- **Growth assumptions.** Growth is projected at 6.8 percent on FY2022/23 and declining to about 6 percent by FY2027/28. GDP growth is expected to moderate amid higher oil prices, weaker external demand, and tighter financial conditions. Near-term growth has been revised downwards compared to the previous DSA due to less favorable external conditions and front-loading of monetary policy tightening.

- **Fiscal assumptions.** The general government fiscal deficit is projected to remain at around 10 percent of GDP in FY2022/23, reflecting buoyant revenues and policy measures that were implemented to mitigate cost of living pressures (e.g., fuel tax cuts, free food rations, and higher fertilizer subsidies). A gradual narrowing of the deficit is expected from FY2023/24 onwards as revenues continue to recover, fiscal support is withdrawn, and commodity prices normalize. The

[1] Public debt figures reported in the DSA reflect the consolidated liabilities of the central and state governments (general government). They exclude Special Drawing Rights and therefore are lower than the figures reported in the main text and staff report tables.

primary deficit is projected to decline to 1.7 percent of GDP by FY2027/28, in line with the adjustment path in the previous DSA.

3. Despite mitigating factors, debt sustainability risks have increased due to higher effective interest rates combined with high gross financing needs and slowing growth. Gross financing needs are estimated at 16 percent of GDP in the short term, before moderating to around 15 percent of GDP. Nominal GDP growth is expected to moderate to 11 percent of GDP over the forecast horizon. At the same time, effective interest rates are expected to increase somewhat from 7 percent in FY2021/22 to 7.7 percent by F2024/25 before moderating to 7.6 percent in the medium term. Additional increases in interest rates, relative to those that have been factored in the baseline, would further lift debt servicing costs and heighten debt sustainability risks. That said, the structure of India's debt is a mitigating factor for sustainability risks. The public debt stock is comprised of fixed rate instruments with long maturities (the weighted average maturity of central government outstanding debt securities is 12 years), the bulk of which is denominated in domestic currency. Foreign currency-denominated public debt is largely on concessional terms. Non-resident holdings of government debt are quite low at less than 2 percent of central government securities. The composition of debt is set to remain the same over the projection period, with the bulk of financing needs met by the issuance of medium and long-term debt denominated in domestic currency and held by residents. Delays in medium-term consolidation would elevate debt sustainability risks.

4. Debt dynamics over the medium term are subject to significant uncertainty.

- **Realism of baseline assumptions.** Assumptions on fiscal consolidation are within the median for surveillance countries and are expected to be met. Past forecast errors in projecting real GDP growth and the primary balance are reasonable, with a percentile rank of 50 percent and 60 percent, respectively.

- **Risks to debt sustainability**. The primary risk to India's debt sustainability is low growth. The stress test corresponding to a growth shock, in which output growth is 3.4 percentage points lower than the baseline in FY2023/24 and FY2024/25, yields a deteriorating debt path with debt-to-GDP peaking at about 93 percent of GDP and gross financing needs reaching a peak of about 18 percent of GDP. The combined macro-fiscal shock incorporates the same growth shock, a primary balance shock in which the medium-term fiscal adjustment is delayed (with a cumulative impact on the primary deficit of about 5 percent of GDP relative to baseline), and an interest rate shock that leads to a 315 basis points increase in interest rate relative to baseline through the medium term. In this adverse scenario, debt increases to 95 percent of GDP in the medium term. Fiscal risks reflect higher macroeconomic uncertainty, particularly from the external sector, and contingent liabilities from public sector banks and electricity generation corporations[2]. The stress test corresponding to a contingent liability shock suggests that debt

[2] Central government non-financial SOEs hold 22 percent of GDP in assets, while public sector banks hold 60 percent of GDP in assets.

would peak at just below 100 percent of GDP and would decline very gradually in the medium term.

5. Vulnerabilities are high in the heat map, reflecting the high baseline debt-to-GDP ratio and gross financing needs. Under all shocks, debt sustainability metrics signal high risks, reflecting the breach of the debt and gross financing risk thresholds of 70 percent and 15 percent of GDP, respectively. This is consistent with debt sustainability metrics in staff's previous assessment (2021 India Article IV Report). Risks stemming from market perception (measured by bond spreads) and external financing requirements (defined as the current account balance and amortization of short-term external debt) are assessed at a medium level of vulnerabilities.

6. Factors driving India's favorable debt dynamics are eroding hence fiscal consolidation and structural reforms become crucial for reducing public debt. With growth slowing to 6 percent of GDP and monetary tightening under the baseline, the interest-rate and growth differential narrow over the projection period. Under a constant primary balance of -1.7 percent of GDP (its projected level at the end of staff's medium-term horizon), and an interest rate-growth differential of 3.5 percentage points, debt would decline to 70 percent of GDP (its average level before the pandemic) in about 17 years. A primary balance of about -0.5 percent, on the other hand, would bring the debt-to-GDP ratio to 70 percent in about seven years under the same interest rate-growth differential. This highlights the importance of further fiscal consolidation and fiscal discipline in the medium term to achieve a meaningful reduction in public debt. Long-term debt dynamics also depend critically on the economy's growth potential. Strong implementation of the structural reform agenda is needed to support long-term growth prospects and to avoid placing a greater burden on fiscal policy to achieve debt sustainability. If the interest rate-growth differential is higher by 1 percentage point, bringing debt down to 70 percent in seven years, would require a considerably larger fiscal consolidation—a primary balance of about 0.3 percent of GDP.

Figure 1. India Public Sector Debt Sustainability Analysis (DSA) - Baseline Scenario

(in percent of GDP unless otherwise indicated)

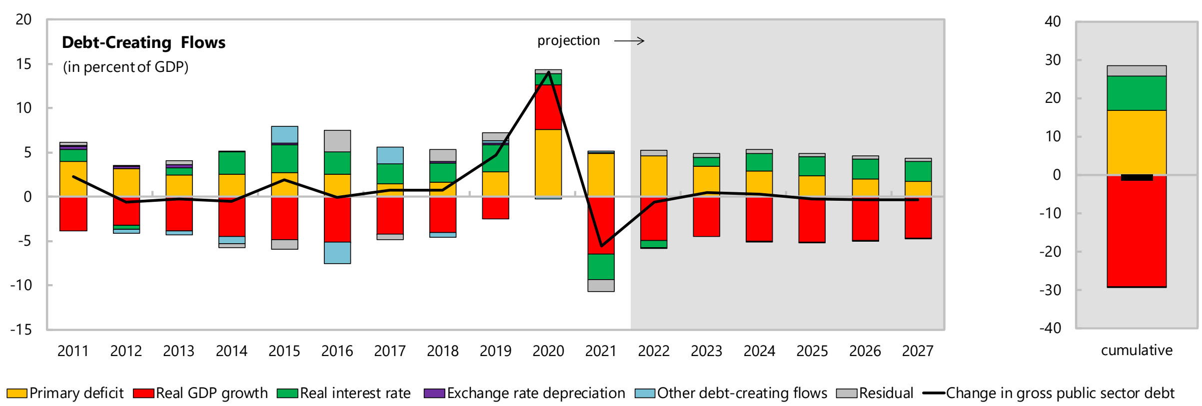
Debt, Economic and Market Indicators [1/]

	Actual			Projections					
	2011-2019 [2/]	2020	2021	2022	2023	2024	2025	2026	2027
Nominal gross public debt	69.1	89.0	83.4	82.9	83.3	83.6	83.3	83.0	82.6
Public gross financing needs	11.7	18.7	15.6	16.2	15.3	14.7	14.7	14.1	14.9
Real GDP growth (in percent)	6.6	-6.6	8.7	6.8	6.1	6.8	6.8	6.5	6.2
Inflation (GDP deflator, in percent)	5.5	5.6	10.0	8.0	6.0	4.6	4.4	4.2	4.2
Nominal GDP growth (in percent)	11.1	-1.4	19.5	15.4	12.4	11.7	11.5	11.0	10.6
Effective interest rate (in percent) [4/]	7.7	6.9	7.0	7.4	7.6	7.7	7.6	7.5	7.6

As of August 26, 2022		
Sovereign Spreads		
EMBIG (bp) 3/		417
5Y CDS (bp)		123
Ratings	Foreign	Local
Moody's	Baa3	Baa3
S&Ps	BBB-	BBB-
Fitch	BBB-	BBB-

Contribution to Changes in Public Debt

	Actual			Projections							
	2011-2019	2020	2021	2022	2023	2024	2025	2026	2027	cumulative	debt-stabilizing primary balance [9/]
Change in gross public sector debt	1.0	14.1	-5.6	-0.6	0.4	0.3	-0.2	-0.3	-0.4	-0.8	-2.3
Identified debt-creating flows	0.6	13.6	-4.2	-1.3	-0.1	-0.2	-0.6	-0.7	-0.7	-3.5	
Primary deficit	2.6	7.6	4.9	4.6	3.5	2.9	2.3	2.0	1.7	16.9	
Primary (noninterest) revenue and grants	19.6	18.2	20.1	19.0	19.2	19.5	19.8	20.0	20.3	117.8	
Primary (noninterest) expenditure	22.2	25.8	24.9	23.6	22.6	22.4	22.1	22.0	22.0	134.7	
Automatic debt dynamics [5/]	-1.9	6.2	-9.2	-5.8	-3.5	-3.0	-2.9	-2.6	-2.3	-20.2	
Interest rate/growth differential [6/]	-2.1	6.3	-9.3	-5.8	-3.5	-3.0	-2.9	-2.6	-2.3	-20.2	
Of which: real interest rate	1.9	1.3	-2.9	-0.8	0.9	2.1	2.2	2.3	2.3	8.9	
Of which: real GDP growth	-4.0	5.0	-6.5	-4.9	-4.5	-5.1	-5.1	-4.9	-4.6	-29.1	
Exchange rate depreciation [7/]	0.2	-0.1	0.1	…	…	…	…	…	…	…	
Other identified debt-creating flows	-0.1	-0.2	0.1	-0.1	0.0	0.0	0.0	0.0	0.0	-0.2	
Consolidated General Govt - Domestic Financing:											
Privatization Receipts (Rs Billion, FY-March)	-0.3	-0.2	-0.1	-0.2	-0.1	-0.1	-0.1	-0.1	-0.1	-0.7	
Contingent liabilities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Residual liabilities to NSSF	0.3	0.0	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.5	
Residual, including asset changes [8/]	0.4	0.4	-1.4	0.7	0.5	0.4	0.4	0.3	0.3	2.7	



Source: IMF staff.

1/ Public sector is defined as general government.

2/ Based on available data.

3/ Long-term bond spread over U.S. bonds.

4/ Defined as interest payments divided by debt stock (excluding guarantees) at the end of previous year.

5/ Derived as [(r - π(1+g) - g + ae(1+r)]/(1+g+π+gπ)) times previous period debt ratio, with r = interest rate; π = growth rate of GDP deflator; g = real GDP growth rate; a = share of foreign-currency denominated debt; and e = nominal exchange rate depreciation (measured by increase in local currency value of U.S. dollar).

6/ The real interest rate contribution is derived from the numerator in footnote 5 as r - π (1+g) and the real growth contribution as -g.

7/ The exchange rate contribution is derived from the numerator in footnote 5 as ae(1+r).

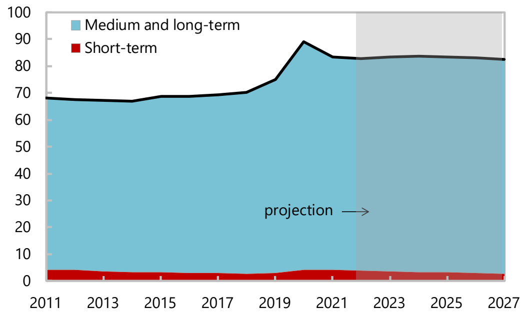
8/ Includes asset changes and interest revenues (if any). For projections, includes exchange rate changes during the projection period.

9/ Assumes that key variables (real GDP growth, real interest rate, and other identified debt-creating flows) remain at the level of the last projection year.

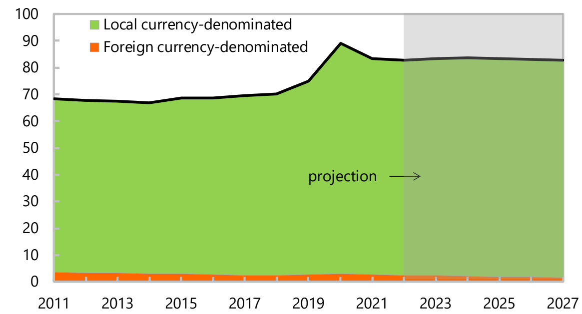
Figure 2. India Public DSA - Composition of Public Debt and Alternative Scenarios

Composition of Public Debt

By Maturity
(in percent of GDP)



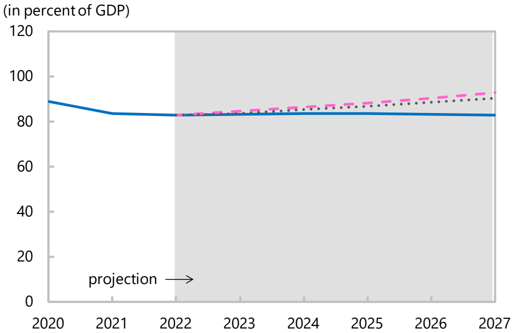
By Currency
(in percent of GDP)



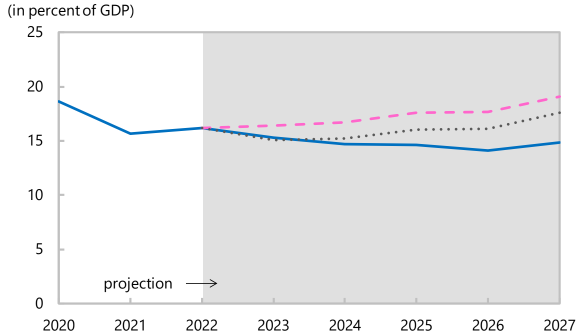
Alternative Scenarios

Baseline   Historical   Constant Primary Balance

Gross Nominal Public Debt
(in percent of GDP)



Public Gross Financing Needs
(in percent of GDP)



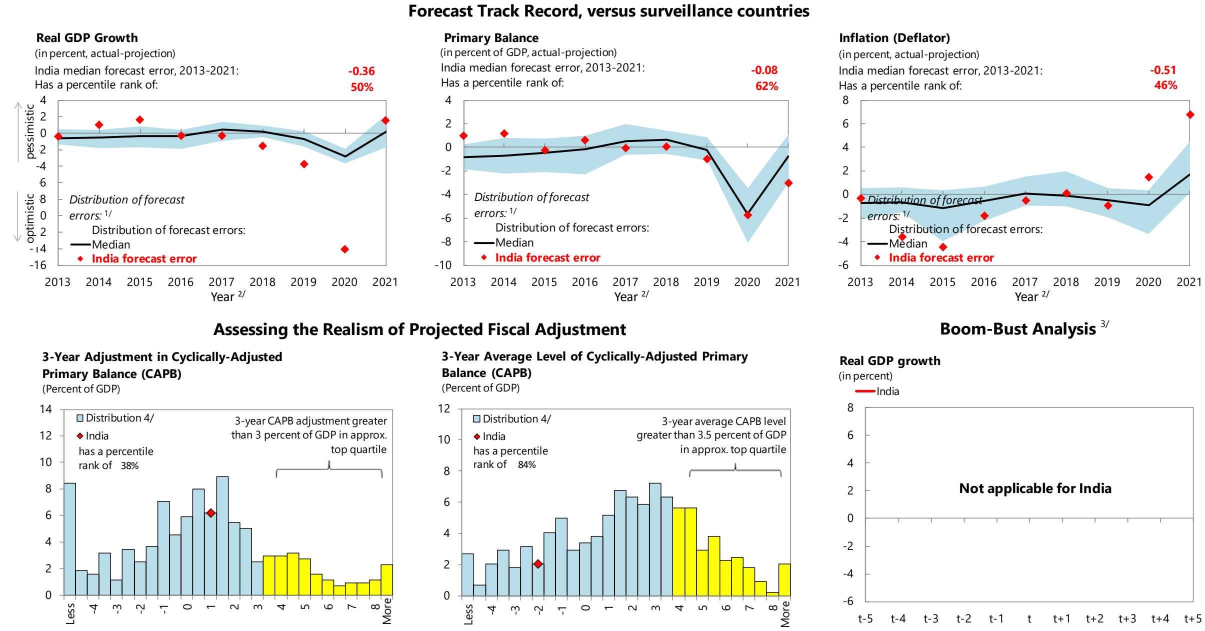
Underlying Assumptions
(in percent)

Baseline Scenario	2022	2023	2024	2025	2026	2027
Real GDP growth	6.8	6.1	6.8	6.8	6.5	6.2
Inflation	8.0	6.0	4.6	4.4	4.2	4.2
Primary Balance	-4.6	-3.5	-2.9	-2.3	-2.0	-1.7
Effective interest rate	7.4	7.6	7.7	7.6	7.5	7.6
Constant Primary Balance Scenario						
Real GDP growth	6.8	6.1	6.8	6.8	6.5	6.2
Inflation	8.0	6.0	4.6	4.4	4.2	4.2
Primary Balance	-4.6	-4.6	-4.6	-4.6	-4.6	-4.6
Effective interest rate	7.4	7.6	7.7	7.6	7.5	7.5

Historical Scenario	2022	2023	2024	2025	2026	2027
Real GDP growth	6.8	5.5	5.5	5.5	5.5	5.5
Inflation	8.0	6.0	4.6	4.4	4.2	4.2
Primary Balance	-4.6	-3.2	-3.2	-3.2	-3.2	-3.2
Effective interest rate	7.4	7.6	7.7	7.7	7.7	7.7

Source: IMF staff.

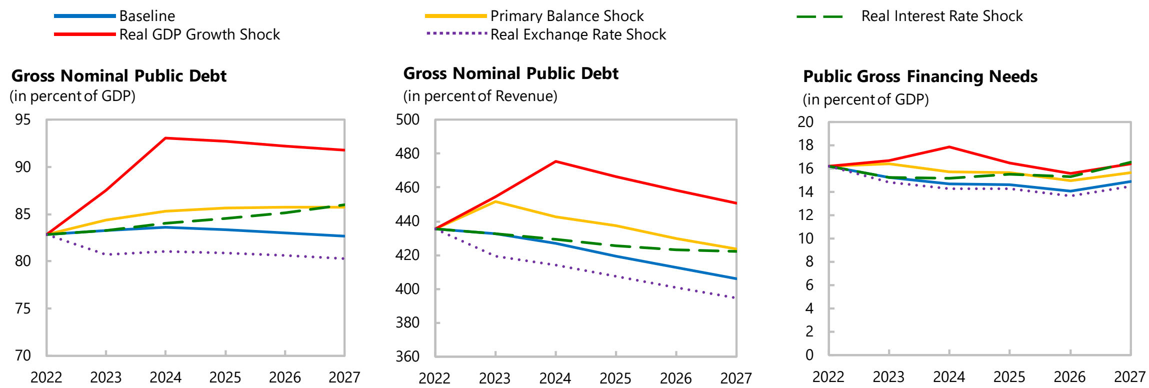
Figure 3. India Public DSA - Realism of Baseline Assumptions



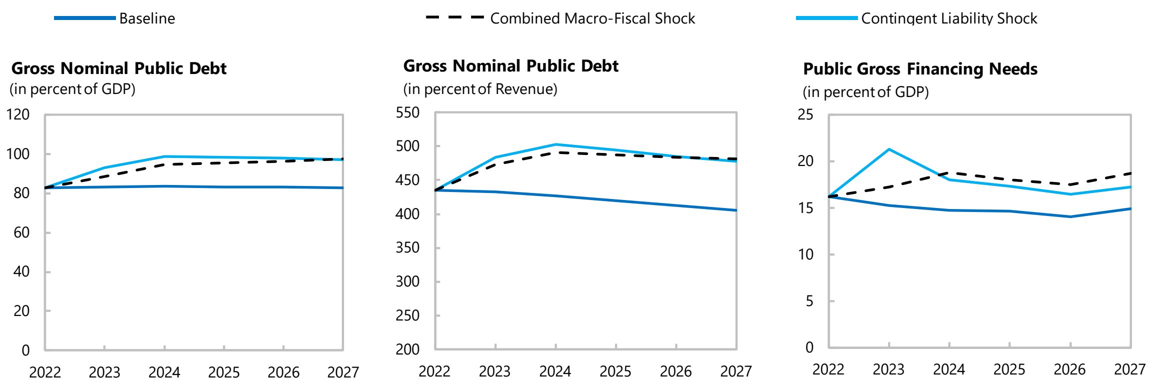
Source : IMF Staff.
1/ Plotted distribution includes surveillance countries, percentile rank refers to all countries.
2/ Projections made in the spring WEO vintage of the preceding year.
3/ Not applicable for India, as it meets neither the positive output gap criterion nor the private credit growth criterion.
4/ Data cover annual observations from 1990 to 2011 for advanced and emerging economies with debt greater than 60 percent of GDP. Percent of sample on vertical axis.

Figure 4. India Public DSA - Stress Tests

Macro-Fiscal Stress Tests



Additional Stress Tests



Underlying Assumptions
(in percent)

	2022	2023	2024	2025	2026	2027
Primary Balance Shock						
Real GDP growth	6.8	6.1	6.8	6.8	6.5	6.2
Inflation	8.0	6.0	4.6	4.4	4.2	4.2
Primary balance	-4.6	-4.6	-3.5	-2.9	-2.3	-2.0
Effective interest rate	7.4	7.6	7.8	7.7	7.7	7.7
Real Interest Rate Shock						
Real GDP growth	6.8	6.1	6.8	6.8	6.5	6.2
Inflation	8.0	6.0	4.6	4.4	4.2	4.2
Primary balance	-4.6	-3.5	-2.9	-2.3	-2.0	-1.7
Effective interest rate	7.4	7.6	8.2	8.6	8.9	9.2
Combined Shock						
Real GDP growth	6.8	2.7	3.5	6.8	6.5	6.2
Inflation	8.0	5.2	3.7	4.4	4.2	4.2
Primary balance	-4.6	-5.0	-5.0	-2.9	-2.3	-2.0
Effective interest rate	7.4	7.7	8.3	8.6	8.9	9.2

	2022	2023	2024	2025	2026	2027
Real GDP Growth Shock						
Real GDP growth	6.8	2.7	3.5	6.8	6.5	6.2
Inflation	8.0	5.2	3.7	4.4	4.2	4.2
Primary balance	-4.6	-4.4	-4.7	-2.3	-2.0	-1.7
Effective interest rate	7.4	7.6	7.7	7.8	7.7	7.7
Real Exchange Rate Shock						
Real GDP growth	6.8	6.1	6.8	6.8	6.5	6.2
Inflation	8.0	10.1	4.6	4.4	4.2	4.2
Primary balance	-4.6	-3.5	-2.9	-2.3	-2.0	-1.7
Effective interest rate	7.4	7.7	7.6	7.5	7.5	7.6
Contingent Liability Shock						
Real GDP growth	6.8	1.6	2.3	6.8	6.5	6.2
Inflation	8.0	4.9	3.5	4.4	4.2	4.2
Primary balance	-4.6	-8.5	-2.9	-2.3	-2.0	-1.7
Effective interest rate	7.4	8.1	8.2	8.0	7.9	7.9

Source: IMF staff.

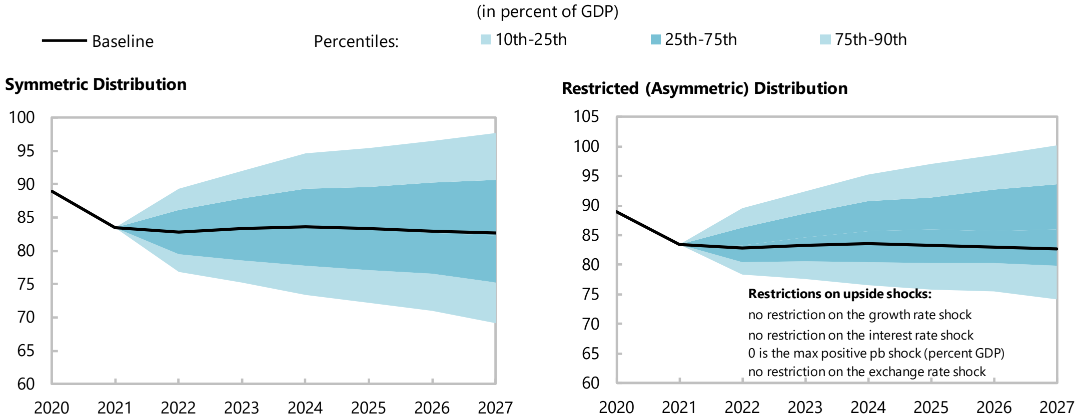
Figure 5. India Public DSA Risk Assessment

Heat Map

Debt level [1/]	Real GDP Growth Shock	Primary Balance Shock	Real Interest Rate Shock	Exchange Rate Shock	Contingent Liability shock
Gross financing needs [2/]	Real GDP Growth Shock	Primary Balance Shock	Real Interest Rate Shock	Exchange Rate Shock	Contingent Liability Shock
Debt profile [3/]	Market Perception	External Financing Requirements	Change in the Share of Short-Term Debt	Public Debt Held by Non-Residents	Foreign Currency Debt

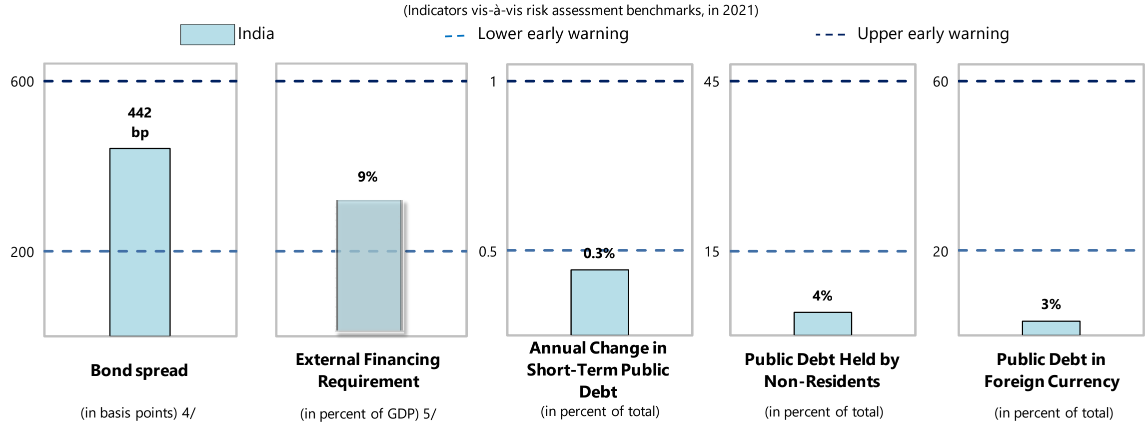
Evolution of Predictive Densities of Gross Nominal Public Debt

(in percent of GDP)



Debt Profile Vulnerabilities

(Indicators vis-à-vis risk assessment benchmarks, in 2021)



Source: IMF staff.

1/ The cell is highlighted in green if debt burden benchmark of 70% is not exceeded under the specific shock or baseline, yellow if exceeded under specific shock but not baseline, red if benchmark is exceeded under baseline, white if stress test is not relevant.

2/ The cell is highlighted in green if gross financing needs benchmark of 15% is not exceeded under the specific shock or baseline, yellow if exceeded under specific shock but not baseline, red if benchmark is exceeded under baseline, white if stress test is not relevant.

3/ The cell is highlighted in green if country value is less than the lower risk-assessment benchmark, red if country value exceeds the upper risk-assessment benchmark, yellow if country value is between the lower and upper risk-assessment benchmarks. If data are unavailable or indicator is not relevant, cell is white.
Lower and upper risk-assessment benchmarks are:

200 and 600 basis points for bond spreads; 5 and 15 percent of GDP for external financing requirement; 0.5 and 1 percent for change in the share of short-term debt; 15 and 45 percent for the public debt held by non-residents; and 20 and 60 percent for the share of foreign-currency denominated debt.

4/ Long-term bond spread over U.S. bonds, an average over the last 3 months, 28-May-22 through 26-Aug-22.

5/ External financing requirement is defined as the sum of current account deficit, amortization of medium and long-term total external debt, and short-term total external debt at the end of previous period.

Appendix IV. Recent and Planned Capacity Development

1. **The Fund's capacity development (CD) activities with India have been scaled up in recent years**. This has been underpinned by the large financial contribution made by the government to SARTTAC. During the early phase of the pandemic, the CD engagement was recalibrated toward online delivery for both the central and state levels, with a focus on areas that would support the recovery. The online delivery allowed high-level and cross-country participations and dialogue. New formats were also used to strengthen learning, including selected forms of blended and hybrid delivery of virtual CD. Starting in March 2022, in-person training at the SARTTAC has been restarted.

2. **Since its inauguration in February 2017, the SARTTAC has anchored the CD delivery in the region**. SARTTAC has delivered training to more than 6,000 officials (excluding webinars) at some 250 events and conducted approximately 350 technical assistance (TA) missions. During the pandemic, engagement has been mostly virtual. As highlighted in its FY2021 Annual Report, SARTTAC provided extensive training and TA in the Fund's core areas of expertise such as macro-fiscal forecasting, financial programming, national accounts, government finance statistics, revenue administration, public financial management, monetary operations and financial sector supervision. A total of 751 Indian officials, including early to mid-career officials and officials from the Indian Economic and Administration Services, received training in FY2021 through SARTTAC, up 75 percent from the previous year. Noteworthy uptake of PFM-related TA reflected strong ownership at the state level, Odisha and Tamil Nadu in particular, with agreement on multi-year CD plans in both states. Ongoing workplans in FY2013 include TA on PFM (cash and commitment control, fiscal reporting, budget execution and control), training on the compilation and dissemination of government finance statistics – all at the state level; and TA on national accounts estimates and consumer and producer prices; and macro- and fiscal-related cohort training at the national level. A subnational Public Investment Management Assessment (PIMA) is also planned for Tamil Nadu.

3. **In line with the Fund's CD strategy:**

- **Ongoing activities and collaboration with Indian authorities has helped with customization for country needs**. For India and SARTTAC member countries, new regional courses were offered on the role of public financial management (PFM), around digitalization and climate change issues, nowcasting and near-term forecasting, on gender inequality and macroeconomics, while webinars addressed climate risk in the financial sector and cybersecurity. Furthermore, cohort training in India intensified, notably in core macroeconomic and revenue administration issues. The macro-training was principally provided to civil servants through Lal Bahadur Shastri National Academy of Administration (LBSNAA)—India's apex academy for civil service training, while revenue administration training was done in support of the Central Board of Direct Taxes' learning and development program. Training on fiscal risk management was also done for the Office of the Comptroller and Auditor General. In addition, SARTTAC supported training needs at the RBI through its College of Supervisors and the RBI Academy (on more general banking governance issues).

- **CD activities have been further integrated with surveillance and IMF policy advice, including emerging priority areas**. In addition to the regular CD delivery, APD and functional departments (e.g., MCM) have worked with the authorities on specific queries that can aid policy formulation. Emerging priority areas are receiving close attention. For example, in the area of financial sector supervision and regulation, contemporary challenges were addressed in a set of national webinars on cyber risks facing regulators in the financial sector and on addressing climate risks in prudential supervision and regulation, in collaboration with MCM.

Appendix V. Uptake of Previous IMF Advice

1. **The pandemic waves and the shifting global policy landscapes posed challenges for policy formulation, but policies have been broadly consistent with Staff's past advice**. Monetary, fiscal and exchange rate policies since the last Article IV have been broadly consistent with IMF advice while the challenges of structural and financial sector reforms and medium-term fiscal consolidation have remained elevated. Since the last Article IV, policies have focused on supporting the recovery and addressing new external shocks as the pandemic-related support measures were gradually recalibrated.

2. **The recalibration of monetary policy has been appropriate**. Monetary policy has been tightened as the recovery gained momentum and the economy faced both external and domestic shocks from the war in Ukraine and global monetary tightening.

3. **The recent pandemic waves further delayed medium-term fiscal consolidation as advocated in the last Article IV**. After deteriorating sharply during the pandemic, the fiscal deficit narrowed in FY2021/22, reflecting the recovery and phasing out of pandemic-related expenditures. Accommodative fiscal stance has appropriately focused on supporting the vulnerable groups and the economy amid the pandemic shocks. A credible and clearly communicated medium-term fiscal consolidation, advocated by staff, remains critical to enhance policy space, reduce crowding out, and facilitate a private sector led recovery.

4. **Financial sector policies provided important support to the corporate sector during the pandemic, but most measures have now been appropriately discontinued**. As advised by staff, policies are shifting toward facilitating the exit of non-viable firms, encouraging banks to build capital buffers and recognize problem loans. Staff past advice on financial sector reforms and their steadfast implementation, including on the PSBs, is now more urgent to support a more durable and inclusive recovery.

5. **The authorities' responses to external sector developments have been in line with past Fund advice**. Amid the recent external shocks, the RBI appropriately relied on exchange rate flexibility, while foreign exchange reserves were used to smooth excessive market volatility. There has been some progress on further liberalization to facilitate trade and investment, but more is needed to reduce trade barriers and promote India's integration in GVCs.

6. **Some structural reforms, key to staff's policy advice, continue to face implementation challenges**. Whilst the passage of four new labor codes should help enhance inclusive and sustainable growth, implementation, which is the responsibility of states, has been delayed. Agricultural reforms, essential to modernizing the sector and adapting to climate change, remain in planning stages. Privatization milestones were achieved with the sale of Air India and listing of The Life Insurance Corporation of India, while others are delayed. India announced the sale of two state-owned banks in the FY2021/22 budget, although this is yet to happen and may require amendments to the Bank Nationalization Act. The FY2022/23 Budget did not announce any new privatization initiatives. The increased use of digital government services represents a significant governance

reform. The launch of the single window system is welcome and should be expanded to further reduce bottlenecks. Further strengthening of the judicial system, in line with previous staff advice, is needed.

Appendix VI. Options for Central Bank Digital Currency for India

The Indian authorities have announced the launch of a Central Bank Digital Currency (CBDC), which is expected to help achieve several objectives. In India the debate has so far covered multiple goals, including improving the domestic payment system and facilitating cross-border transactions.[1] The extent to which CBDC can deliver on these objectives will depend in no small part on the selected design features. Different characteristics would involve different potential advantages and risks, affecting the cost-benefit analysis for each of the goals listed above. In particular, the presence of potentially competing private providers could limit the benefits and make it more difficult to justify the cost of adopting a CBDC.

A. Different CBDCs for Different Goals

CBDC to Improve the Domestic Payment System

1. **A retail CBDC, which is accessible to households and firms, appears to be the most relevant form if the goal is to improve the domestic payment system**. While potentially still beneficial, a wholesale CBDC would provide limited advantages compared with central bank reserves for domestic transactions, for instance by allowing for new forms of conditional payments and thus reducing settlement risks. The major benefits from wholesale CBDC could come from facilitating cross-border transactions, as discussed in the next section.

2. **Among the different possible operational models for a retail CBDC, central banks around the world are currently mostly exploring the intermediated model**. This approach implies that the central bank issues digital money but delegates functions to financial intermediaries that interact with end users (IMF, 2022). As an example, the RBI could be involved in the payment chain of CBDC, from issuance to settlement, maintenance, and R&D, while the distribution and client service could be undertaken by the private sector. The intermediated model seems best suited to exploit synergies between the public and private sectors, which could play a key role especially in light of the successful cooperation between RBI and the private sector in developing the current retail payment system. The success of this operational model rests on the ability to offer the right incentives for banks to cooperate with the RBI. At the same time, the RBI could generate additional beneficial competition in the private payments sector, which in turn could further advance financial inclusion. For instance, competition to expand the customer base may incentivize the design of user-friendly features and apps that would expand the access to CBDC.

3. **Indian macroeconomic conditions suggest that remunerating a CBDC may not be a required feature, at least initially**. While in theory a remunerated retail CBDC could help overcoming the zero-lower bound on interest rates, this issue appears more prominent in advanced economies characterized by a lower natural rate. Other potential benefits, for instance in terms of

[1] For instance, see the speech by India's finance minister Nirmala Sitharaman on February 1, 2022.

monetary policy transmission, need to be assessed against costs and operational hurdles.[2] Overall, a digital version of physical cash could be a good first step and remuneration could be added later if deemed optimal.

4. **Regarding the improvement in currency management, potential gains appear limited**. Market analysts estimate that the overall operating costs associated with physical cash amount to about $3.4 bn, which amounts to about 0.1 percent of GDP. Given that the RBI has no objective to end the circulation of cash, and most likely physical cash will not disappear, this value represents a theoretical upper bound. Of course, these potential economic gains should be assessed against the costs of managing a CBDC, for which estimates are not currently available.

5. **While a CBDC could reduce the costs of currency management, it is not clear to which extent it would improve the efficiency of the payments system in India**. The main reason is the availability of payment providers on the Unified Payments Interface (UPI), that have most of the attributes of a retail CBDC and even some additional features. The growth in the use of instantaneous payments has already led to a significant substitution away from other traditional means of payments (Figure 1). Private providers offer real-time payments at relatively low cost for both peer-to-peer and peer-to-merchant transactions. They also allow users to perform offline transactions, which is a crucial feature to expand financial inclusion in a country where 400 million people are estimated to own feature phones but no smartphones. Given these premises, it is not surprising that about 80 percent of retail transactions now take place via the UPI platform (Figure 2).

6. **The success of UPI and private providers may lead to a lower-than-expected demand for a retail CBDC, unless the latter has some evident advantage**. At this stage, it is not clear whether a CBDC will offer enough benefits to effectively compete with private payments. On the contrary, private providers seem to hold some advantages. For instance, the possibility to perform offline payments using CBDC is still being studied and this technology may not be available soon. However, a CBDC could prove to be beneficial by providing a public-sector alternative that could enhance market competition and lower costs.

CBDC to Facilitate Cross-Border Payments

7. **International payments suffer from inefficiencies that make transactions slower, costlier, less transparent, and less accessible when compared with domestic payments** (FSB, 2020). In this respect, India faces similar challenges as other countries, although perhaps of a larger magnitude given the high volume of remittances (Figure 3). A CBDC could be used in this respect as an avenue for cross-border payments. How to factor in an international dimension into a CBDC is currently the focus of the G20 Roadmap for Enhancing Cross-Border payments (BIS, 2022). The analysis includes the possibility of using both retail and wholesale CBDC. The RBI could opt for

[2] By setting the return on CBDC, the central bank would directly control an interest rate that affects the consumption-saving choice of households and firms, without relying on banks to transmit changes in policy rates to deposit rates. This process could be slow and partial depending on structural factors and macroeconomic conditions.

introducing both a retail and wholesale CBDC, addressing inefficiencies for both retail and wholesale transactions (HKMA, 2022).

8. International cooperation would be a key factor for success, as it would ensure the highest degree of compatibility between national CBDCs. While continuing to contribute to international efforts to develop a cross-border CBDC, India could try to spearhead the process, for instance by establishing bilateral agreements with major economic and financial partners in the region. Collaboration with domestic financial intermediaries would still be warranted to fully reap benefits, for instance in terms of expanding access to a CBDC. Importantly, remuneration is not necessary as long as the CBDC is cheaper than other alternative means of international payments.

9. Lower-than-expected demand for a CBDC is a relevant risk that needs to be considered. The introduction of a CBDC could facilitate transactions to and from India. If the latter are strongly limited, other countries may see their incentives to engage with India diminished. Importantly, the Government, RBI and NPCI are currently collaborating on connecting the UPI platforms to systems in other countries. If successful, a CBDC could face lower demand due to the presence of a competitor for cross-border transactions, as is the case for domestic transactions.

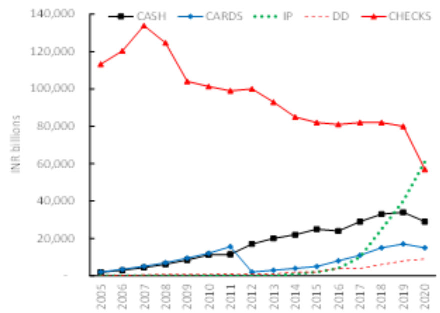
B. Other Risks and Final Considerations

10. The adoption of a CBDC necessarily involves risks. Specific design choices may generate or intensify risks related to banking disintermediation, capital flow management, operational disruption, and legal foundations, as discussed in detail in IMF (2018) and IMF (2021). It is not clear to which extent the authorities can guarantee the same degree of anonymity that physical cash provides, hindering the introduction of a digital substitute for cash. Safeguards that govern the collection, use, and sharing of confidential information could partially protect the privacy of a CBDC's users. However, full anonymity, would generally not be compatible with anti-money laundering and combating the financing of terrorism (AML/CFT) and the authorities should keep in mind financial integrity implications when designing a CBDC.

11. Moreover, the adoption of a CBDC involves operational costs and reputational risks, especially because of the complexity and novelty of the project. As of now, there are no estimates for the costs to develop, establish, and maintain the infrastructures needed for a successful CBDC. Risks associated with treating personal data and effectively dealing with cyber-attacks could harm the credibility of a CBDC-issuing central bank. Against this background, a relatively low demand for the CBDC together with high implementation costs could negatively affect the central bank's reputation. The presence of important risks, together with the performance of existing payments providers and uncertainty about economic gains, advocates for a prudent and gradual implementation of a CBDC.

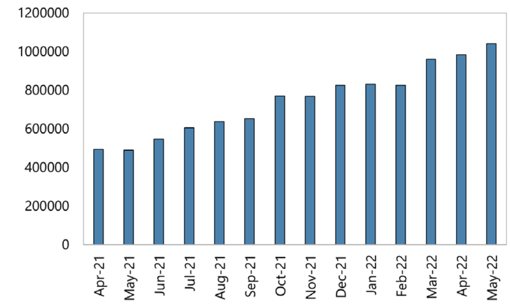
12. All in all, the above considerations suggest that efforts in India should prioritize a CBDC that facilitates cross-border payment. While CBDC could also improve the domestic payment system, this may be a lower priority for India given the efficiency of the domestic payments system. Capacity for analysis and testing of different types of CBDC should be enhanced, devoting particular attention to evaluating the incentives for CBDC adoption by the general public. Finally, clear and transparent communication about expected benefits, cost and risks should support the process in order to align stakeholders' and authorities' expectations, mitigating reputational risks.

Figure 1: Development in Payment Values



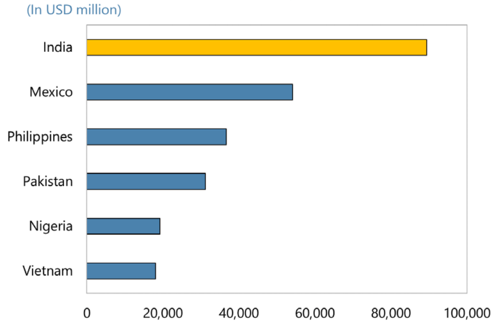
Source: Khiaonarong and Humphrey (2022).

Figure 2: UPI Transaction Value
(In INR crore)



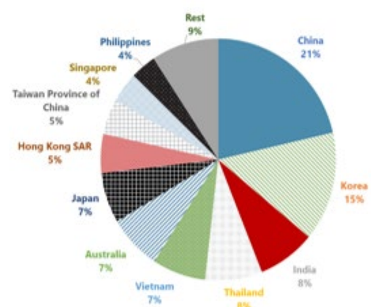
Source: NPCI.

Figure 3: Remittance Inflows by EMDE
(In USD million)



Source: World Bank-KNOMAD, 2022.

Figure 4: CryptoAsset Volume Received by Asian Countries



Sources: Chainalysis; and IMF staff calculations.

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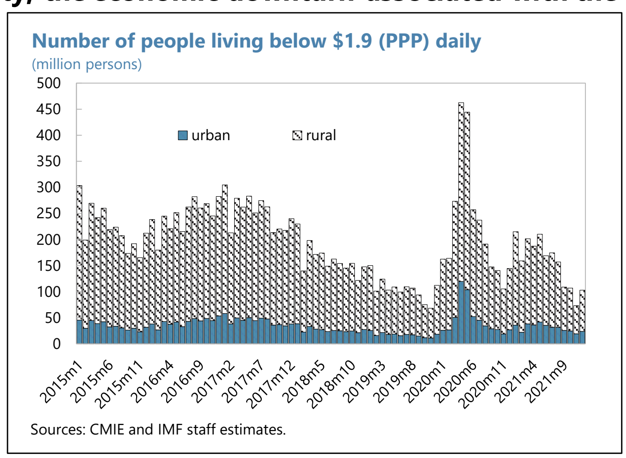
Appendix VII. Inequality and Poverty in India: Impact of the Pandemic and Policy Response

India has made significant progress in reducing poverty in recent decades. The economic downturn associated with the COVID-19 pandemic is estimated to have temporarily increased poverty and inequality. Government's expansion of food subsidies has likely provided significant mitigation to the rise in poverty during the pandemic.

1. **India has made significant progress in reducing poverty in recent decades, supported by high economic growth and expansion in social assistance programs**. World Bank estimates suggest poverty has declined from 40 percent in 2004 to 22.5 percent in 2011—the year of the latest official household expenditure survey.[1] Various estimates suggest continued poverty reduction since 2011, albeit to an uncertain degree. (Bhalla et. al, 2022 and Roy and van der Weide, 2022) While India's robust growth over the past decade likely contributed to such reduction, the authorities have also expanded social assistance programs, most notably the 2013 National Food Security Act which provided enhanced rations of food to the bottom 50 and 75 percent of the urban and rural population respectively. Broader measures of poverty likely declined as well, reflecting the government's development interventions in health and education—for example, saturation of village electrification and toilets which has been achieved in 2018. Notwithstanding the larger uncertainty, existing estimates of inequality based on recent, albeit unofficial household surveys (Roy and van der Weide, 2022) point to a modest decline over the last decade, after increasing during the preceding decades.

2. **Notwithstanding considerable uncertainty, the economic downturn associated with the pandemic is estimated to have at least temporarily increased poverty and inequality in the near term**. A privately provided nationally representative household survey, which has tracked household income and consumption through the pandemic,[2] suggests that the number of people with daily consumption expenditures below 1.9 $PPP has increased sharply in 2020 but that it has declined toward the end of 2021 to close to pre-pandemic levels. While all income groups experienced a decline in



Sources: CMIE and IMF staff estimates.

[1] Based on official household surveys and the 1.9 $PPP per day threshold. The World Bank estimates differ from official measures which suggest poverty was around 12.2 percent in 2011-12.

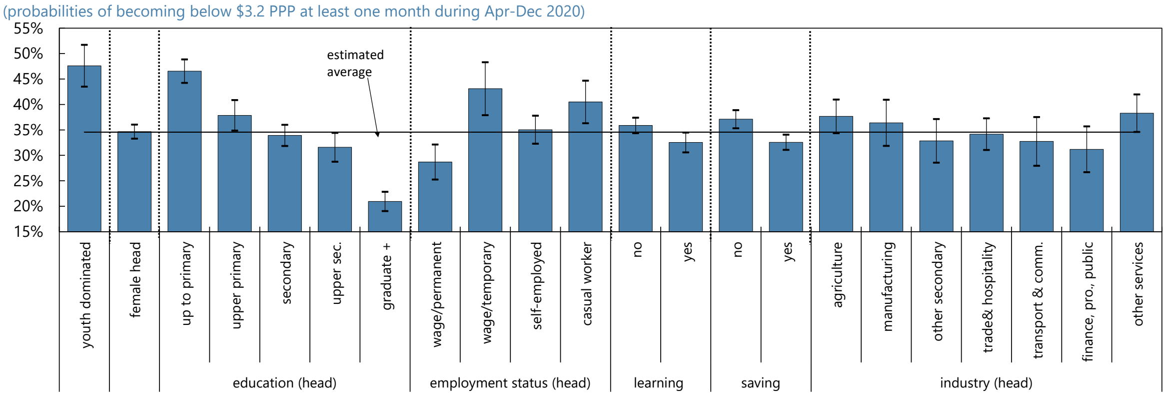
[2] We use the CMIE's Consumer Pyramids Household Survey (CPHS) and supplement it by using the National Family Health Survey (NFHS) 2015-16 and 2019-2021 to adjust CPHS household weights to improve its representativeness. For this reweighting procedure, we used assets ownership, demographic, and education variables observed in the NFHS. For an extended discussion of the CMIE weights please see Bhalla and Das (2022). For the descriptive poverty and inequality analysis, we are treating the CMIE-CPHS as across-section data, optimizing the weights for each household every month.

income during the pandemic, the impact on lower income groups was larger, suggesting a temporary increase in income inequality.[3] Contrary to income inequality, inequality in terms of consumption temporarily improved because the top earners cut consumption at a larger magnitude than the bottom earners.

3. **Demographic, education, and labor market characteristics help explain developments in poverty and consumption inequality during the pandemic**. Estimates[4] suggest that households headed by young and less educated persons faced a higher probability of becoming poor during the pandemic. Labor market characteristics also mattered, with households headed by casual workers and workers with temporary contracts facing a higher probability of becoming poor. Being employed in physical or manual type jobs was also associated with a slightly higher incidence of poverty. Finally, conducting learning activities and having savings had a positive impact on consumption, preventing a fall below the poverty line.

Estimated probabilities of becoming poor after the pandemic

(probabilities of becoming below $3.2 PPP at least one month during Apr-Dec 2020)



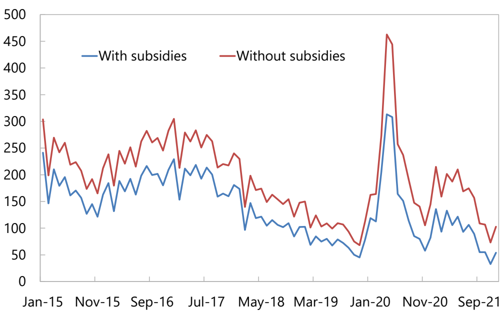
Sources: CMIE and IMF staff estimates.

[3] The increase is consistent with the World Bank nowcasting that shows a significant increase in global poverty in 2020 (see: https://blogs.worldbank.org/opendata/pandemic-prices-and-poverty).

[4] For this regression analysis, we exploit the panel structure of the database. Since the adjusted weight of the same households could be volatile over time due to the reweighting procedures (footnote 2), we used the averaged weights (Apr-Dec 2020) for each household so that each household could have one stable weight.

4. Policy simulations suggest that the government's expansion of food subsidies has likely contributed to a reduction in poverty during the pandemic. The Indian authorities expanded social assistance during the pandemic, including through additional food subsidies, cash transfers and the rural employment guarantee scheme. Because the household survey used in the analysis only captures consumption expenditures, a simulation exercise is conducted to account for the impact of food subsidies in our estimates of poverty. Namely, an estimate of monthly per capita value of food subsidies is added to household consumption expenditures, similar to the approach in Bhalla et al. (2022), targeting the bottom 50 percent and 75 percent of households in urban and rural areas respectively, using the current month's income distribution to determine eligibility. Impact of food subsidies is uncertain and depends on assumptions on leakage of benefits. Preliminary estimates suggest that food subsidies significantly lowered the increase in poverty during the pandemic, by about 30-40 percent based on the 1.9 $PPP threshold.[5]

Number of people living below $1.9 (PPP) daily
(million persons)



Sources: CMIE and IMF staff estimates.

[5] This is consistent with evidence from other countries that were able to minimize the effects of COVID through policy intervention (see, for example Stantcheva (2022), Carta and Philippis (2021), Chety et al.(2020), and Galasso et al. (2020)).

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Appendix VIII. Evolution of India's Trade Policy

1. **India's global trade integration increased dramatically in 1990-2010.** Reflecting trade liberalization, India's average import tariff rate decreased from over 80 percent in 1990 to about 13 percent in 2008. India's trade openness—measured as ratio of external trade in goods and services to GDP—steadily increased from 15 percent 40 years ago to about 56 percent in 2012. Alongside, India's integration in the global value chain (GVC) has been on the rise from 1990 to 2011, when the share of foreign value added (FVA) in India's exports reached nearly 17 percent (Figure 1).

2. **In 2000s, India joined a number of regional and bilateral free-trade agreements (FTAs).** Most notably, India joined Asia-Pacific Trade Area (APTA) in 2005 and South Asia Free Trade Area (SAFTA) in 2006, signed an agreement with MERCOSUR in 2009 and an FTA with ASEAN in 2010. Moreover, India negotiated bilateral FTAs with its neighbors and trading partners including Afghanistan, Australia, Bhutan, Chile, Japan, Malaysia, Nepal, Singapore, Sri Lanka, South Korea, and Mauritius.

3. **However, in 2010s the focus of trade policy shifted.** The "Make in India" strategy and a policy of economic self-reliance was announced in 2014. The simple average import tariff increased from about 13 percent in 2015 to about 18 percent in 2021, which is significantly above the level of peer countries. Even as India's integration in GVCs—as measured by the share of FVA in exports—remained broadly stable, its trade openness ratio declined, reaching a low of 38 percent 2020. Non-tariff barriers remained elevated, well above the level of peer countries. Despite participating in the negotiations, India did not join the Regional Comprehensive Economic Partnership (RCEP) at its formation in 2020. RCEP is an agreement between fifteen Asian countries covering roughly 30 percent of the global population and GDP, including the regional heavyweights Australia, China, Indonesia, and Japan.

4. **India is faced with lower tariffs in its main export markets compared to tariffs it imposes on imports.** India's average trade-weighted import tariff was about 12.6 percent in 2020, significantly above the numbers for the peer countries. (Simple average applied import tariff for most favored nation, MFN, was even higher, at 18.3 percent in 2021.) But India's applied weighted tariff faced in major markets was only 2.9 percent in 2020, slightly above peers.[1]

5. **India's Foreign Trade Policy (FTP) originally approved for 2015–2020 has been extended to September 2022.** The FTP adopted in 2015 aimed to increase India's share of global trade from about 2.1 percent to 3.5 percent and double exports to US$900 billion by 2020. To achieve these ambitious goals, the FTP formulated several incentive schemes for Indian exporters. Merchandise Exports from India Scheme (MEIS) and Service Exports from India Scheme (SEIS) provided exporters tax and custom duties rebates for up to 5 percent of export value. The Export Promotion Capital Goods (EPCG) scheme allowed imports of capital goods at zero customs duty. The

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[1] Data sources: WTO, World Tariff Profiles 2022; and WTO databases.

Interest Equalization Scheme (IES) provided capital loans to export producers at subsidized low interest rates of 2-3 percent.

6. **The applied schemes have been reviewed regularly to ensure their efficiency and compliance with the WTO rules.** From 2021, MEIS was effectively replaced by a new scheme named Remission of Duties and Taxes on Export Products (RoDTEP), in part because the MEIS was challenged at the WTO. SEIS and some other export promotion schemes have been suspended as well, in part reflecting WTO rulings against them. The government engaged in consultations with industry representatives to develop new export promotion schemes, to be reflected in the new trade policy.

7. **The government's trade-promotion policies are shifting to complement direct export support with export infrastructure development.** The authorities intensified the use of the Trade Infrastructure for Export Scheme (TIES) launched in 2017. The scheme focused on developing export infrastructure, creating better logistic processes, providing "first-mile" and "last-mile" connectivity, maintaining and enhancing quality, and enforcing strict regulations for export projects. TIES envisaged the creation of multiple facilities such as border trading posts, quality-testing units, certification labs, export warehousing and packaging, cold storage provisions, trade promotion centers, dry ports, development of Special Economic Zones for trade activity as well as ports and airports cargo terminals.

8. **Also, the authorities stepped up the use of incentives designed to directly stimulate output rather than exports.** Production-linked Incentive (PLI) schemes introduced in March 2020 amid the Covid pandemic initially targeted three industries—mobile manufacturing and electric components, pharmaceutical, and medical device manufacturing. The PLI concept has since expanded to multiple sectors, to boost India's manufacturing capabilities and encourage export-oriented production. PLIs provide qualifying manufacturing companies incentives (subsidies) amounting to up to 20 percent of the incremental increase in sales of eligible products (compared with the base year) for a 4-6-year period.

9. **India has been recently pursuing new bilateral and regional trade agreements.** In 2022, India signed a Comprehensive Economic Partnership Agreement (CEPA) with the United Arab Emirates (UAE) and an interim Economic Cooperation and Trade Agreement (ECTA) with Australia, which are expected to substantially increase bilateral trade in the next few years. India is actively negotiating new trade agreements with Canada, the UK, the EU, and other countries.

10. **Concerns about domestic inflation and food and energy security amid external shocks gave rise to international trade restrictions.** India restricted wheat exports in mid-May 2022, though the restrictions were relaxed almost immediately to allow some wheat exports to proceed. Exceptions were allowed for shipments backed by letters of credit that had already been issued and those to countries that requested supplies to meet their food security needs (such as Egypt). Also in May, the government put a cap on sugar exports to ensure its domestic availability. Trying to stem the increase in gold imports, the authorities raised import duties on gold from 10.75 percent to

15 percent in July. Furthermore, they restricted wheat flour export by requiring exporters to obtain permissions for it. The authorities also increased export duties on fuel exports and required that fuel product exporters supply fuel for the domestic market. New restrictions required oil companies exporting gasoline (or diesel) to sell to the domestic market the equivalent of 50 percent (for diesel, 30 percent) of the amount sold overseas in FY2022/23. In addition, in September 2022 the government restricted export of broken rice and introduced a 20 percent duty on exports of all other varieties of rice except basmati and parboiled rice.

11. India has increased discounted oil imports from Russia. Sanctions on Russia have resulted in an extraordinary increase in the price discount on the Russian oil URALS compared to the international oil price benchmark BRENT, to about 30-35 US$/bbl from about 2-3 US$/bbl in regular times.[2] After the war in Ukraine broke out, the share of Russian crude oil in India's total volume of oil imports increased from a mere 1 percent in 2021 to about 20 percent in June 2022. This could have reduced the average-weighted oil import price for India by up to 6-7 US$/bbl in that month.[3] In value terms, according to the Ministry of Commerce data, Russia's share in India's crude oil imports increased from 2.2 percent in 2021 to 16.8 percent in June 2022.

12. Further efforts toward investment regime liberalization and tariff reduction could help deepen integration in global value chains and attract FDI. India's integration in GVCs has stalled, at a time when deepening geo-economic fragmentation is creating new headwinds for the integration process. To overcome the old and new challenges, India's push for export promotion should be combined with renewed efforts toward trade and investment liberalization, including reduction of tariffs (especially on intermediate goods) and lowering of non-tariff barriers (including for services imports). Together with comprehensive structural reforms, this could help boost exports and perpetuate the virtuous cycle of trade and resilient growth.

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[2] Data sources: Thomson Reuters; https://www.neste.com/investors/market-data/urals-brent-price-difference#8eaa100b.

[3] For example, if India imports 80 percent of oil at the international price benchmark and remaining 20 percent at a price discount of 30 US$/bbl, then the average-weighted oil import price will be by 6 US$/bbl less than the international price benchmark.

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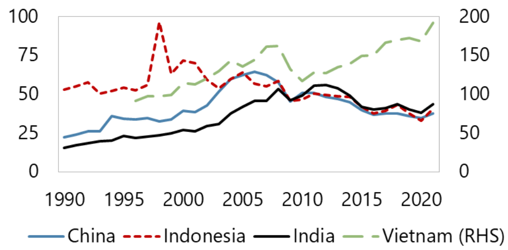
Figure 1. Trade Openness and Tariff Barriers in India and Peer Countries, 1990-2021

India's trade openness increased in 1990-2010, but then reversed over the last decade.

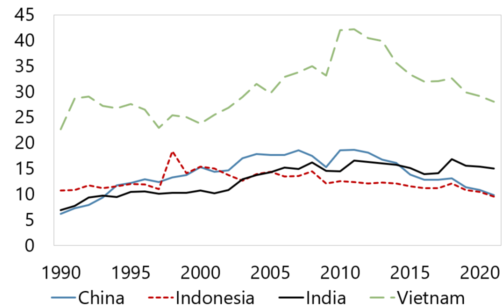
Trade Openness, 1990-2021
(Exports and imports as percent of GDP)



Source: World Bank, World Development Indicators.

India's integration in the global value chains (GVCs) increased in 1990-2010 but stalled in the 2010s.

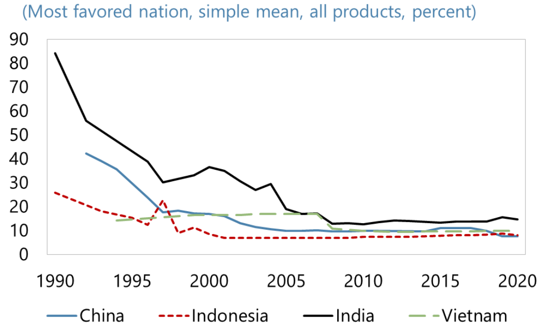
Share of Foreign Value Added (FVA) in a Country's Exports, 1990-2021
(Percent)



Sources: Eora; and IMF staff estimates.

India's average import tariff rate decreased radically over 1990-2010 but stalled since.

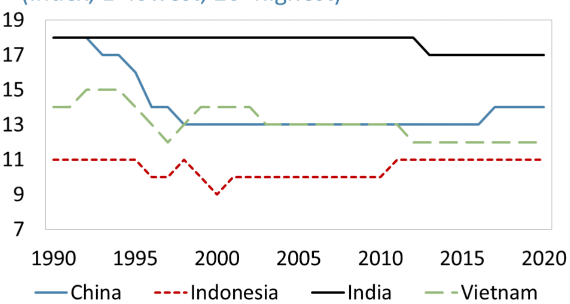
Import Tariff Rates, 1990-2020
(Most favored nation, simple mean, all products, percent)



Source: World Bank, World Development Indicators; and World Trade Organization.

India's nontariff barriers remain elevated and above the level of peer countries.

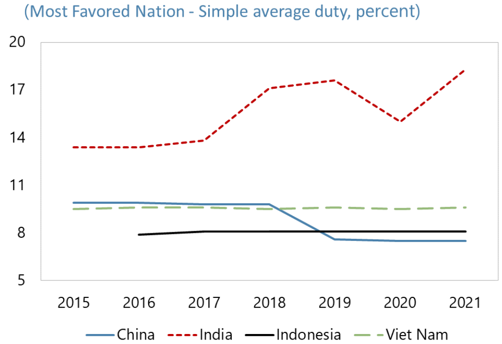
Nontariff Barriers, 1990-2020
(Index, 1=lowest, 20=highest)



Source: Estefania Flores and others, 2022.

India's average tariff protection further increased in recent years…

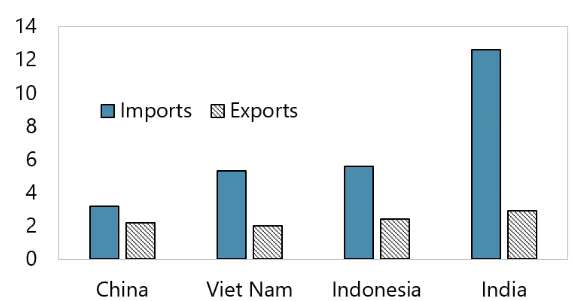
Average Import Tariff, 2015-21
(Most Favored Nation - Simple average duty, percent)



Source: World Trade Organization.

… and above the level India's exports face in its main partner countries.

Average-weighted Import and Export Tariffs in 2020
(In percent)



Source: World Trade Organization.

INTERNATIONAL MONETARY FUND

INDIA

STAFF REPORT FOR THE 2022 ARTICLE IV CONSULTATION—INFORMATIONAL ANNEX

November 4, 2022

Prepared By: Asia and Pacific Department

CONTENTS

FUND RELATIONS

(As of September 30, 2022)

Membership Status:

Joined December 27, 1945; Article VIII.

General Resources Account

	SDR Million	% Quota
Quota	13,114.40	100.00
Fund Holdings of Currency (Holdings Rate)	9,354.29	71.33
Reserve Tranche Position	3,770.41	28.75
Lending to the Fund		
New Arrangements to Borrow	59.22	

SDR Department:

	SDR Million	% Allocation
Net cumulative allocation	16,547.82	100.00
Holdings	13,658.43	82.54

Outstanding Purchases and Loans: None

Financial Arrangements:

Type	Date of Arrangement	Expiration Date	Amount Approved (SDR Million)	Amount Drawn (SDR Million)
Stand-By	10/31/91	06/30/93	1,656.00	1,656.00
Stand-By	01/18/91	04/17/91	551.93	551.93
EFF	11/9/81	05/01/84	5,000.00	3,900.00

Projected Payments to Fund
(SDR million; based on existing use of resources and present holdings of SDRs):

	Forthcoming				
	2022	2023	2024	2025	2026
Principal	0.00	0.00	0.00	0.00	0.00
Charges/interest	12.87	58.20	58.23	58.17	58.20
Total	12.87	58.20	58.23	58.17	58.20

Exchange Rate Arrangement:

The exchange rate in India is classified as floating. The exchange rate of the rupee is determined in the interbank market, where the Reserve Bank of India (RBI) intervenes at times. The RBI's role is to modulate excessive volatility so as to maintain orderly conditions. On August 20, 1994, India accepted the obligations of Article VIII, Sections 2, 3, and 4 of the IMF Articles of Agreement. India maintains the following restrictions on the making of payments and transfers for current international transactions, which are subject to Fund approval under Article VIII, Section 2(a): restrictions related to the non-transferability of balances under the India-Russia debt agreement; restrictions arising from unsettled balances under inoperative bilateral payments arrangements with two Eastern European countries; and a restriction on the transfer of amortization payments on loans by nonresident relatives. The Executive Board has not approved these restrictions.

Article IV Consultation:

The previous Article IV consultation discussions were held in July 2021. The Staff Report (IMF Country Report No. 21/230) was discussed by the Executive Board on September 17, 2021.

FSAP Participation:

Concluding meetings for the latest FSAP Update were held in Delhi and Mumbai in July 2017—the FSSA Update report was published in December 2017 (Country Report No. 17/390). A Detailed Assessment of Observance of the Basel Core Principles for Effective Banking Supervision was issued in January 2018 and published as Country Reports No. 18/4.

Capacity Development (Technical Assistance and Training):

Recent and planned IMF capacity development and training activities with India are discussed in Appendix IV of the staff report.

Resident Representative:

A resident representative's office was opened in November 1991. Mr. Luis Breuer has been the Senior Resident Representative since July 2019.

INFORMATION ON THE ACTIVITIES OF OTHER IFIS

Information on the activities of other IFIs in India can be found at:

- World Bank: http://www.worldbank.org/en/country/india/overview
- Asian Development Bank: Asian Development Bank and India: Fact Sheet (adb.org)

STATISTICAL ISSUES

(As of October 1, 2022)

I. Assessment of Data Adequacy for Surveillance
General: Data provision is broadly adequate for surveillance. However, upgrading and expanding statistics would help policy formulation.
National Accounts and employment statistics: In January 2015 the Central Statistical Office (CSO) released a new series of national accounts, with base year 2011/12. In addition to the shift in the base year for measuring growth, the revisions reflected a review of source data and compilation methods, and implementation of the 2008 System of National Accounts. For current price estimates, the data sources provide adequate coverage of economic activities, and the methodology is broadly consistent with international standards and best practices. Nonetheless, an indirect -tax -based extrapolation of trade turnover value from the base year does not provide an accurate gauge of growth of economy -wide value added from trade. The supply-side data are deemed to be of better quality than expenditure-side data. There are still some weaknesses in the deflation method used to derive value added. Also, the compilation of constant price GDP deviate from the conceptual requirements of the national accounts, in part due to the use of the Wholesale Price Index (WPI) as a deflator for many economic activities. The appropriate price to deflate GDP by type of activity is the Producer Price Index (PPI), which is under development. Large revisions to historical series, the relatively short time span of the revised series, major discrepancies between GDP by activity and GDP by expenditure, and the lack of official seasonally-adjusted quarterly GDP series complicate analysis. There are long-standing deficiencies in employment data: they cover the formal sector, which accounts for a small segment of the labor market, as well as the informal sector, and are available only with a substantial lag.
Price statistics: In early 2011, an all-India Consumer Price Index (CPI) with updated weights was released, which covered both rural and urban India, with 2009/10 as a base year. In addition, separate corresponding urban and rural CPI series were published. In early 2015, the CPI weights were updated again using 2011/12 expenditure data and the CPI series was revised from January 2015. The CPIs are published with a lag of about one month. There are also four other CPIs, each based on the consumption basket of a narrow category of consumers (namely industrial workers, urban and non-manual employees, agricultural laborers, and rural laborers). With the exception of the industrial workers' CPI which is based on weights from 2016, the other indices are based on weights that are over ten years old. The weights for the existing wholesale price index (WPI) are from 2011/2012. A recent TA mission supported the authorities in the development of a new producer price index (PPI) for agricultural and industrial activities, with a target release date of December 2023. The new PPI will better align with national accounts concepts and therefore allow for more accurate estimation of real output in India. A quarterly House Price Index (HPI) is published by the Reserve Bank of India (RBI) and is based on transaction-level data received from the housing registration authorities in ten major cities. This has helped surveillance in this area, though geographic coverage remains limited, and price data for commercial real estate are not available. The Labour Bureau, Ministry of Labour and Employment have started producing a series covering rural wage data, which helps surveillance, but economy-wide wage data are scant.
Government finance statistics: The Ministry of Finance (MoF) is responsible for compiling and disseminating the Government Financial Statistics (GFS). Although, under the G-20 Data Gaps Initiative, authorities engaged both on expanding the GFS reporting coverage to include state government and to compile quarterly consolidated general government data these have not been formalized, discussions on the general government operations is yet to

include extra-budgetary funds, local governments, and social security funds. There is also scope to improve the analytical usefulness of the presentation of the fiscal accounts from which GFS are derived.

Monetary and financial statistics: The RBI web site and the RBI *Bulletin* publish a wide array of monetary and financial statistics, including reserve money and its components, the RBI's survey, the monetary survey, liquidity aggregates (outstanding amounts), interest rates, exchange rates, foreign reserves, and results of government securities auctions. In 2011, the RBI started publishing a weighted -average lending interest rate and other lending rates at annual frequency. The frequency and quality of data dissemination have improved substantially in recent years.

The RBI reports data on several series of the Financial Access Survey (FAS), including mobile and internet banking, mobile money, gender-disaggregated data, and the two indicators (commercial bank branches per 100,000 adults and ATMs per 100,000 adults) adopted by the UN to monitor Target 8.10 of the Sustainable Development Goals (SDGs).

The RBI reports monetary data to STA in non-standard format. The RBI also provides "test" data using the standardized reporting forms. However, the test data do not contain sufficient details (e.g., instrument, currency and counterparty sector breakdowns) to construct a complete and analytically useful picture of India's financial sector that is also consistent with the guidelines provided in the Monetary and Financial Statistics Manual. In addition, data reported cover depository corporations only, and data on other financial corporations such as insurance corporations, pension funds, and investment funds are not covered.

The RBI reports 13 core Financial Soundness Indicators (FSIs) and nine additional FSIs for deposit takers as well as one core and two additional FSIs on real estate markets on a quarterly basis for publication on the IMF's FSI website. The RBI could improve its coverage of the additional FSIs to include other sectors, notably, other financial corporations, nonfinancial corporations, and households.

Financial sector data: As for reporting of financial soundness indicators (FSIs), all 12 core and 11 encouraged FSIs for deposit takers as well as three FSIs for real estate markets are reported on a quarterly basis. FSIs for other financial corporations, nonfinancial corporations, and households are not reported.

External sector statistics: The concepts and definitions used to compile balance of payments statistics are broadly in line with the sixth edition of the *Balance of Payments and International Investment Position Manual* (BPM6). However, trade data have valuation, timing, and coverage problems. Data on imports of goods in the balance of payments are registered in c.i.f. prices while the *BPM6* requires the f.o.b. pricing. Data on trade in goods prices, volumes, and composition are not regularly available on a timely basis. External debt statistics are available on a quarterly basis with a one quarter lag. Estimates of short-term external debt are presented on an original maturity basis. The short-term maturity attribution on a residual maturity basis is available quarterly (and includes residual maturity of medium- and long-term nonresident Indian accounts). The international investment position (IIP) statistics cover the sectors prescribed in the *BPM6* and these data are disseminated within three months of the reference period in respect of quarterly data.[1] Coverage of direct investment positions data is hampered by the absence of appropriate legal or institutional authority. India disseminates monthly the Data Template on International Reserves and Foreign Currency Liquidity as prescribed under the SDDS. More up-to-date information on certain variables, such as total foreign reserve assets, foreign currency assets, gold, and SDRs, are available on a weekly basis and are disseminated as part of a weekly statistical supplement on the RBI web site.

[1] The IIP as published by the RBI values equity liabilities at acquisition cost, while the Fund uses market prices, resulting in substantial differences.

II. Data Standards and Quality	
Subscriber to the Fund's Special Data Dissemination Standard (SDDS) since December 1996. Uses flexibility options on the timeliness of employment, unemployment, and general government operations.	A Report on *Observance of Standards and Codes—Data Module; Response by the Authorities, and Detailed Assessments Using the Data Quality Assessment Framework* was published on April 2, 2004.

India: Table of Common Indicators Required for Surveillance

(As of October 1, 2022)

	Date of latest observation	Date received	Frequency of Data[7]	Frequency of Reporting[7]	Frequency of Publication[7]
Exchange Rates	10/01/22	10/01/22	D	D	D
International Reserve Assets and Reserve Liabilities of the Monetary Authorities[1]	09/23/22	09/30/22	W	W	W
Reserve/Base Money	09/23/22	09/28/22	W	W	W
Broad Money	09/09/22	09/22/22	BW	BW	BW
Central Bank Balance Sheet	August 2022	09/16/22	W	W	W
Consolidated Balance Sheet of the Banking System	09/09/22	09/22/22	BW	BW	BW
Interest Rates[2]	10/01/22	10/01/22	D	D	D
Consumer Price Index	August 2022	09/12/22	M	M	M
Revenue, Expenditure, Balance and Composition of Financing[3] – General Government[4]	2021/22	02/16/22	A	A	A
Revenue, Expenditure, Balance and Composition of Financing[3]– Central Government	August 2022	09/30/22	M	M	M
Stocks of Central Government and Central Government-Guaranteed Debt[5]	Apr-Jun 2022	09/30/22	Q	Q	Q
External Current Account Balance	Apr-Jun 2022	09/29/22	Q	Q	Q
Exports and Imports of Goods and Services	August 2022	09/14/22	M	M	M
GDP/GNP	Apr-Jun 2022	08/31/22	Q	Q	Q
Gross External Debt	Apr-Jun 2022	09/29/22	Q	Q	Q
International Investment Position[6]	Apr-Jun 2022	09/30/22	Q	Q	Q

[1] Any reserve assets that are pledged of otherwise encumbered should be specified separately. Also, data should comprise short-term liabilities linked to a foreign currency but settled by other means as well as the notional values of financial derivatives to pay and to receive foreign currency, including those linked to a foreign currency but settled by other means.
[2] Both market-based and officially-determined, including discount rates, money market rates, rates on treasury bills, notes and bonds.
[3] Foreign, domestic bank, and domestic nonbank financing.
[4] The general government consists of the central government (budgetary funds, extra budgetary funds, and social security funds) and state and local governments.
[5] Including currency and maturity composition.
[6] Includes external gross financial asset and liability positions vis-à-vis nonresidents.
[7] Daily (D); weekly (W); bi-weekly (BW); monthly (M); quarterly (Q); annually (A); irregular (I); and not available (NA).

Statement by Krishnamurthy Venkata Subramanian, Executive Director for India, Sanjay Hansda, Senior Advisor to Executive Director and Simanchala Dash, Advisor to Executive Director
November 28, 2022

1. The Indian Authorities thank the Staff for constructive discussions and convey their appreciation to the Management and the Staff for their continued engagement. The Authorities look forward to continuing this healthy partnership. This BUFF statement focuses on providing a complete and true picture of the Indian economy.

2. This statement brings together our current perspectives as well as those gathered from last year's Article IV discussions. Like every other economy in the world, the Indian economy was impacted adversely by the pandemic, the conflict in Europe, the imposition of sanctions, and the synchronized tightening of monetary policy in advanced economies. However, it witnessed a V-shaped recovery in 2021-22 despite the devastating 2nd wave in Q1 and the 3rd wave in Q4. This was largely due to robust and swift policy initiatives by the Authorities. In the first quarter of the current year 2022-23, the economy has posted an impressive 13.5% growth, notwithstanding the drag from net exports in the wake of the global slow-down.

3. Driven by the surge in crude oil and other commodity prices, and adverse supply shocks emanating from geopolitical tensions, inflation has persisted at elevated levels. In a cross-country framework, we observe a strong positive relationship between 3-year growth and change in inflation, implying that fiscal stimulus, which is now causing unprecedented inflation world-wide, drove 3-year GDP growth in all countries barring India and Germany. India thus stands out as the positive outlier because of supply-side measures and the sharply targeted demand-side stimulus. India's fiscal stance during the pandemic was a calibrated expansion in public expenditures with a sharp focus on boosting capex to strengthen the supply side, which also helped to restrain inflationary pressures. The economy increasingly adapted to the new remote work environment, beginning with COVID, with enhanced use of digitalization.

4. The policy package that included fiscal, monetary, and financial measures, which provided support to businesses and households during the pandemic, has turned even more focused and targeted now. India, in contrast to most other economies, continued its agenda of structural reforms during the pandemic and beyond. These wide-ranging structural reforms,

which are focused on enhancing the efficiency of all factor markets, include labour reforms, an ambitious program of privatization and asset monetization.

5. While the IMF expects GDP to grow at 6.8% in 2022-23 and 6.1% in 2023-24, RBI projects it to grow at 7.0% and 6.5% respectively. The ongoing structural reforms also suggest that the economy will continue to perform. The September 2022 IIP (Index of Industrial Production) data is now above the pre-pandemic level.

6. Headline consumer price inflation is projected at 6.7% during 2022-23 and is expected to soften to 5.8% by Q4 of 2022-23 and further to 5.0% in Q1:2023-24 [currently at 6.8% y-o-y in October 2022]. Thus, after the blip set in recent months (supply disruptions, oil prices), inflation is projected to remain above the upper bound of the Reserve Bank's target of 4 (+/-2)%in Q3:2022-23. Inflationary trends are being closely monitored, and the monetary authorities have decided to remain focused on withdrawal of accommodation to ensure that inflation remains within the target going forward, while supporting growth.

Structural Reforms

7. The Government has been steadfast in pursuing structural reforms even during the pandemic. As noted by staff, wide-ranging structural reforms are currently being implemented by the Government. Expansion of domestic production-linked incentive schemes to labour-intensive and green sectors, state renewable purchase obligations, and agriculture and labour-market reforms are expected to support sustainable and equitable growth. Labour market reforms are expected to improve labour market functioning, support formalization, enhance female participation, and expand social security benefits for workers.

8. We agree with Staff observations that advancing agriculture and land reforms would address market distortions, increase efficiency, and improve productivity. Implementation of climate-friendly policies is critical for long-term structural reforms towards achieving green and inclusive growth. India continues to play a leading role in the implementation of the climate goals under the Paris agreement. India has recently updated its NDCs (Nationally Determined Contributions) and seeks to achieve Net Zero status by 2070. The drive towards renewable sources of energy and reducing carbon footprint in the economy has yielded significant results on the ground. However, the Authorities believe that implementation of the Paris Agreement on climate change must be based on the principles of equity and common but differentiated responsibilities and respective capabilities, as agreed to, and be

accompanied by climate financing and technology transfer. Further, the idea of a carbon price floor, mooted by the Staff, may not be a feasible option as it has huge welfare implications, particularly considering the high indirect fuel taxes on carbon in India.

Fiscal Issues

9. The Authorities largely agree with the Staff for maintaining an accommodative fiscal policy stance in the near term until uncertainties ease, and to have a credible medium-term fiscal consolidation plan, including amendments to the FRBM Act thereafter, to maintain market confidence and fiscal space. The central government fiscal deficit is budgeted at 6.4% of GDP in the current year and the Authorities are strongly committed to reducing it to 4.5% of GDP by 2025-26. Authorities do not share the staff's view that India's fiscal space is at risk. Public debt remains very much sustainable given favourable growth dynamics and the strong commitment to consolidation. Given real growth of about 7%, inflation of about 4% expected this decade (i.e., nominal growth of about 11%), and interest rate of about 7%, the r-g differential will be sharply negative, which will drive the debt/GDP ratio down sharply. In fact, the Economic Survey 2020-21 showed that in a worst-case scenario where the real growth is only 4% in the next 10 years, public debt is sustainable. The results also showed that even at high primary deficits, low real growth, and high nominal interest rates, India's debt will remain sustainable. Debt sustainability risks are also mitigated as the bulk of the public debt is domestic currency denominated, contracted at fixed rates and held by residents. Overall, revenue performance has been buoyant in the current year driven by better compliance. Streamlining of GST with an e-invoice system, GST audits, closer scrutiny of returns and rate rationalization are reflected in augmented tax revenues. Personal income tax and corporate tax collections have been strong.

Monetary Policy

10. RBI has tightened monetary policy in view of persistent inflationary pressures – a cumulative increase of 190 bps in the policy repo rate (currently at 5.90%), a 50-bps increase in the cash reserve ratio and discontinuation of the government securities purchase program. Systemic liquidity also moderated due to capital outflows. The Central Bank (Reserve Bank of India) would stay the course in its continued focus on withdrawal of accommodation to ensure that inflation remains within the target going forward, despite the challenges associated with spillover from advanced economies' monetary policy actions and the difficulties with consistent forward guidance in a highly uncertain environment. There has

been limited Rupee depreciation vis-à-vis USD in 2022 so far as compared with many other emerging market currencies. Going forward, exchange rate flexibility would continue to be the first line of defence in absorbing external shocks, with interventions limited to addressing disorderly market conditions. We agree with the staff that India's external position remains sufficiently strong with the current level of reserves and strong FDI and portfolio flows to withstand external shocks in the near term. It may be highlighted that although CAD is likely to widen in FY2022-23, the projection of CAD at 3.5% of GDP seems to be on the higher side. In our view, moderation in crude oil prices (Indian basket below US$ 100 since August 2022), and resilience of services exports and remittances may keep the CAD within 3% of GDP in 2022-23.

11. RBI has launched the first pilot project in CBDC - Wholesale segment on November 1, 2022, for settlement of secondary market transactions in government securities. Settlement in central bank money would reduce transaction costs by pre-empting the need for settlement guarantee infrastructure or for collateral to mitigate settlement risk. Going forward, other wholesale transactions, and cross-border payments will be the focus of future pilots, based on the learnings from this pilot. The other pilot: CBDC - Retail segment is planned for a launch shortly.

Financial Sector

12. The financial sector continues to be robust and resilient with banks well-capitalized and a strong regulatory framework for supervision in place. As pointed out by staff, credit quality indicators have improved, reflecting stronger corporate and financial sector balance sheets as also the overall resilience of the financial sector. A key distinguishing feature of India's insolvency regime has been its focus on resolution rather than liquidation. Asset quality review is an ongoing feature of the supervisory framework, which helps in the early detection and identification of potential and actual NPAs, which are then sought to be resolved under the IBC (Insolvency and Bankruptcy Code). We, therefore, do not see any reason for the concern expressed by the Staff that, "incentives to recognize and address problem loans at an early stage are crucial' to 'structurally improve banks' asset quality" as there are already robust systems in place to identify/recognize NPAs.

13. Further, we do not subscribe to the Staff's view that slow progress in the 'pre-pack' route for the resolution of MSMEs is due to a lack of resources when, actually, there have been hardly any filings under this route. Staff's concern on banks' exposure to sovereign

bonds in a rising interest rate scenario appears overstretched in view of substantial HTM holding as also the mitigating effect of investment fluctuation reserves with banks.

14. As noted by staff, the new scale-based regulatory framework for NBFCs, effective October 2022, aims to further reduce potential regulatory arbitrage between banks and NBFCs. While digitalisation including the recent steps of offline and feature-phone-based payments will surely improve access to financial services, the Authorities strongly believe that fintech advances need to be consistent with the regulatory framework, containing potential vulnerabilities.

Pandemic and Poverty Alleviation

15. Like the rest of the world, the pandemic led to a decline in economic activity, affected inequality and hurt the poor the most. Recognizing this, and as part of its strategy to combat the expected poverty increase, Authorities significantly expanded income support, especially for those at the bottom of the income pyramid. For example, food subsidies increased five times in FY 2020-21 (April-March) from the pre-pandemic 2019-20 level. While it declined in 2021-22, it remains nearly three times its pre-pandemic level. In 2022-23, it was budgeted to decline marginally. However, with the extension of the free food program of the Government to end-December 2022, the level of support is expected to sustain in 2022-23 as well.

16. The rules of allocation of food subsidies were also changed. The implementation of the new One-Nation-One-Ration Card policy meant that the bottom two-thirds of the population eligible for food subsidy could now access it from anywhere in India rather than be restricted to the state of their registration. This change was especially beneficial for the migrant and poor workers. Further, given the large pool of human capital and the limited extent of pandemic-related learning losses, authorities do not see any impact on potential growth over the medium term, although they pointed out that policies are being implemented to ensure catch-up for learning losses during the pandemic.

17. In deriving their conclusions on poverty trends, it appears that the Fund's Article IV report may not fully reflect the significant support provided by the government to mitigate the impact of the COVID-induced declines in economic activity and their effect on poverty.

18. We would also like to express our reservations about the data used to estimate poverty, employment, and inequality. While the weights used from the unofficial data sources have

been adjusted, the poverty estimates continue to rely on the World Bank methodology, which uses the URP (i.e., uniform resource period) method whereas the official estimates use the MMRP (i.e., modified mixed reference period) method.

19. Under the risk assessment matrix, the risk likelihood with respect to large-scale social discontent, we would like to indicate that there is no such evidence of inflation causing social discontent in India, especially as India has not experienced hyperinflation. Even during the current pandemic, inflation has not increased abruptly reflecting coordinated monetary-fiscal measures.

Potential Growth

20. The staff has estimated the potential growth to be about 6% in the medium term in the baseline scenario and 7% in the upside scenario. The RBI has, however, placed it in a range of 6.5-8.6%. The staff analysis is based on unofficial employment surveys. Particularly, female labour force participation rate (FLFPR) is estimated to be very low. On the contrary, FLFPR based on official statistics, if adjusted in line with the UN SNA would be closer to the levels in South Asian and Middle Eastern economies. Further, the staff analysis appears to have missed out on improvements in the quality of employment. The envisaged declining employment-to-population ratio is also contrary to expectations with the emphasis on manufacturing, going forward.

21. Emerging Market Economies are evolving and more complex, and it requires greater analytical rigour to comprehend the economic dynamics and the underlying growth impulses, especially when key structural reforms are changing the economic path for such economies. As fellow economists, we appreciate staff efforts and urge an approach where the different boundary conditions of such economies are incorporated into the standard paradigms that are primarily focused on describing advanced economies.