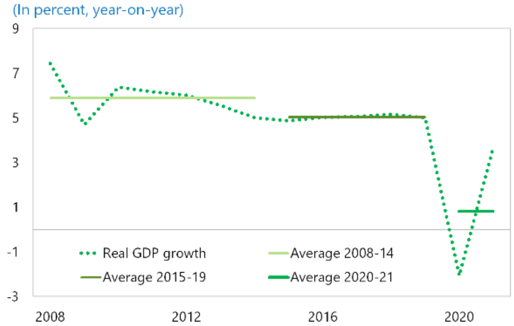
CONTEXT

1. **When the COVID-19 pandemic hit in 2020, Indonesia benefited from strong initial conditions and substantial policy space**. Prudent policy conduct within solid macroeconomic policy frameworks provided for price stability and growth, and low budget deficits and public debt ratios. Banking regulations were in line with Basel III, and the banking system was well capitalized and liquid. As elsewhere, the pandemic led to disruptions to economic activity and a recession in 2020. The recession was less severe than in most countries, reflecting both policy support and less stringent containment measures.

2. **The authorities responded with a bold, comprehensive policy package to cushion the impact of the pandemic**. The response required the temporary suspension of the central pillars of the macroeconomic policy framework, notably the budget deficit ceiling of 3 percent of GDP and the ban on direct budget financing by Bank Indonesia (BI). The crisis measures included fiscal policy packages under the National Economic Recovery Program (PEN), monetary policy easing, and financial policy measures (Appendix I). Despite the challenges posed by the pandemic, the authorities accelerated structural reforms, starting with an omnibus bill on job creation passed in October 2020 followed by a tax reform in 2021 that introduced a carbon tax.

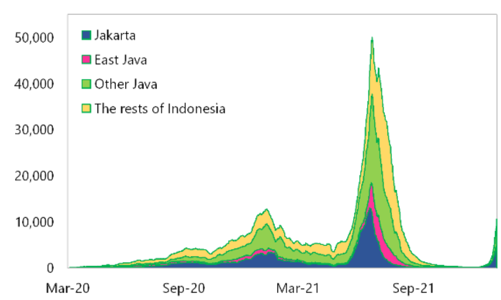
3. **The pandemic has highlighted the need to tackle longstanding structural challenges**. Indonesia's low government revenue intake has limited the scope for public spending on development and slowed the initial health policy response. Progress in poverty reduction has been partly reversed during the pandemic, while inequality has likely increased, with an asymmetric impact of the pandemic across sectors and regions. With international investors reducing their exposure to emerging market assets, the increased issuance of rupiah government bonds due to the COVID-19 response had to be absorbed by domestic markets, which lack depth. The pandemic provides an opportunity to mobilize political consensus around longstanding structural reforms to promote private sector investment and boost productivity growth.[1]

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



Sources: Haver Analytics; and IMF staff estimates.

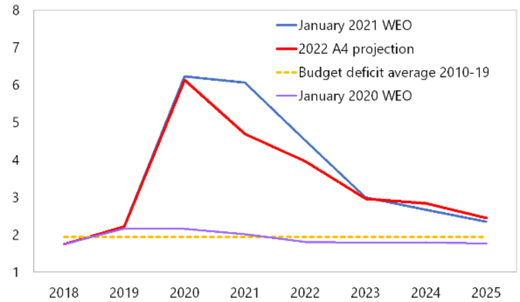
Daily New Cases
(7-day moving average)



Sources: Indonesian Ministry of Health; and IMF staff estimates.

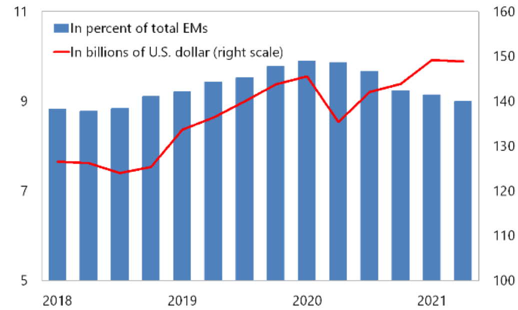
[1] Realizing Indonesia's Economic Potential, IMF 2018.

Budget Deficit
(In percent of GDP)



Source: IMF, *World Economic Outlook*.

General Government Debt Securities Held by Foreigners



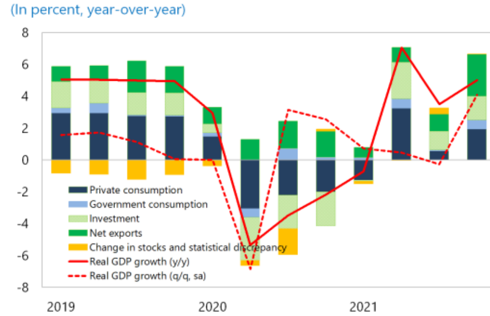
Sources: Sovereign Investor Base estimates by Arslanalp and Tsuda (2014); and IMF staff estimates.

THE PANDEMIC AND RECENT DEVELOPMENTS

4. The pace of economic recovery has recently picked up, buoyed by increased mobility and global commodity markets.

- Indonesia's economic recovery was slower than expected in the first half of 2021. The prolonged pandemic and associated containment measures were more disruptive to economic activity than anticipated in late 2020 and weighed on domestic demand.

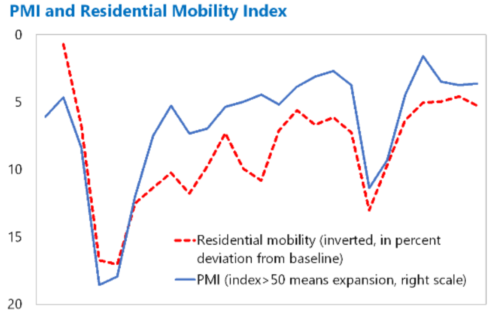
Contribution to Real GDP Growth
(In percent, year-over-year)



Sources: Haver Analytics.; and IMF staff estimates.

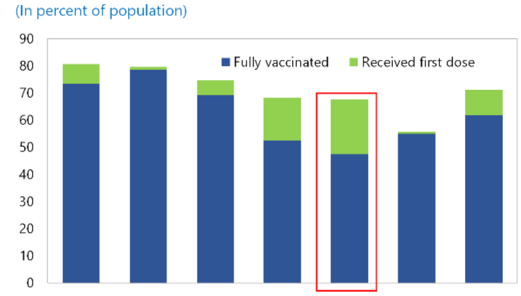
- The mid-2021 surge of the Delta variant was met by renewed restrictions on mobility, but these afforded greater scope for business operations to continue when they were considered safe, resulting in a much smaller contraction in real GDP in the third quarter compared to the declines

PMI and Residential Mobility Index



Sources: Google, COVID-19 Community Mobility Report via CEIC Data Ltd.; and Haver Analytics.

Vaccinated People for COVID-19 1/
(In percent of population)

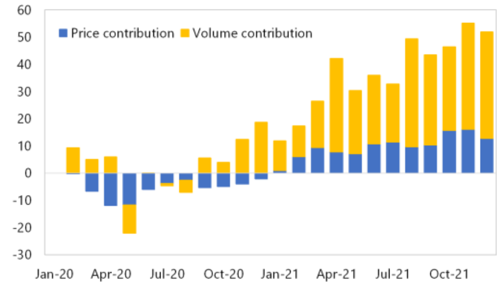


Sources: Our World in Data via CEIC; PHL authorities data; and IMF staff estimates.
1/ As of February 6, 2022 or latest available data.

in 2020. By targeting the health policy response to the Delta variant and doubling the original 2021 budget allocation to the PEN program, the authorities succeeded in reversing the infection curve quickly.[2] They also accelerated the execution of the vaccination program. Mobility indicators returned to pre-pandemic levels in November.

- Global commodity markets boosted the economic recovery (Appendix II). Rising exports have reflected both higher commodity prices and export volumes, notably to China and other trading partners in Asia. The current account balance moved from a deficit of 0.7 percent of GDP in 2021Q2 to a surplus of 1.5 percent in 2021Q3.

Indonesia: Decomposition of Merchandise Exports
(Contributions in cumulative percent change; nominal)



Sources: Haver Analytics; and IMF staff estimates.

- Inflation remained below BI's 3±1 percent target corridor in 2021. Both headline and core inflation fluctuated around 1½ percent, reflecting still considerable economic slack and exchange rate stability, but also the presence of administered end-user prices for major commodities, including fuel prices, and for products using these commodities as inputs (e.g., electricity). Inflation expectations, as measured by the one-year ahead consensus forecast, remain well anchored around the midpoint of BI's inflation target range of 2–4 percent.

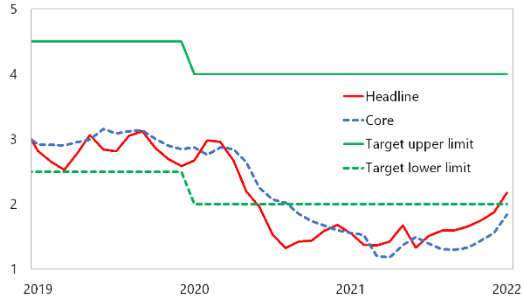
Inflation Expectations
(In percent, year-on-year)

Source: Consensus Forecast.

- Inflation in Indonesia and ASEAN emerging market economies has overall been more moderate—and generally below central bank targets—in 2021 compared to peers in other regions. This divergence reflects more moderate increases in local food and energy prices than those observed on global markets, as well as smaller increases in shipping costs for trade routes into Asia than for those routes into other regions.

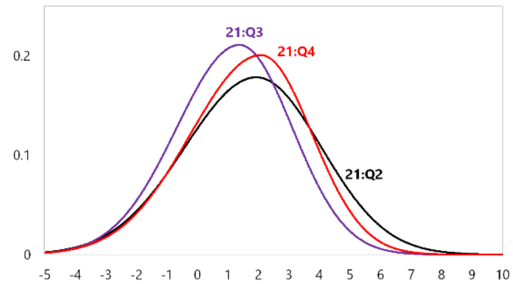
[2] Under the emergency law authorizing the PEN program, until 2022, the government has the exceptional authority to reallocate budgetary resources during the year without parliamentary approval.

Inflation Developments
(In percent, year-on-year)



Sources: Haver Analytics; and IMF staff estimates.

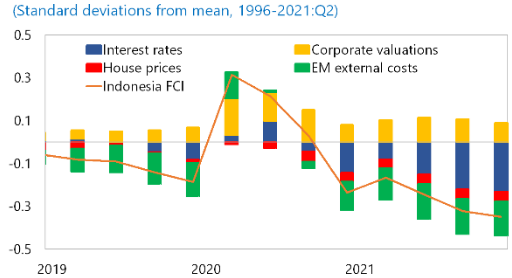
Fitted Densities of CPI Inflation Subcomponents
(Annualized month-on-month, in percent)



Sources: Statistics Indonesia (BPS); and IMF staff estimates.

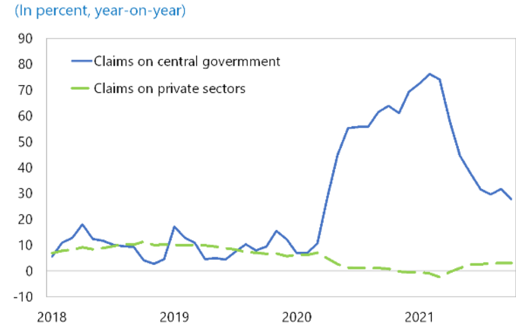
5. **Financial conditions eased through much of 2021, and bank credit to the private sector started to pick up in the second half of the year along with some improvement in the nonfinancial corporate sector**. Fund staff's financial condition index declined after a short-lived, minor tightening early in the year, reflecting both favorable global market conditions and accommodative monetary policy in Indonesia. Funding growth in the banking system has remained strong, although deposit growth slowed to around 8 percent (y/y) in September 2021 after double-digit growth in 2020. Much of the funding was used for purchases of rupiah government bonds—the share of government bonds in banking system assets increased from 12.7 percent at end-2020 to 14.2 percent as of end-September 2021. Credit to the private sector, which had been sluggish even before the pandemic due to high borrowing costs and weak demand, fell in 2020 as the economy slipped into recession. Credit growth rebounded in mid-2021 as BI relaxed monetary conditions. Public banks led the credit recovery. With easier financial conditions, the profitability of the nonfinancial corporate sector improved in the first half of 2021, but the median interest coverage ratio remained low at about 2, reflecting weak pre-pandemic conditions in many firms (Table 9).

Financial Conditions Index (FCI) 1/
(Standard deviations from mean, 1996-2021:Q2)



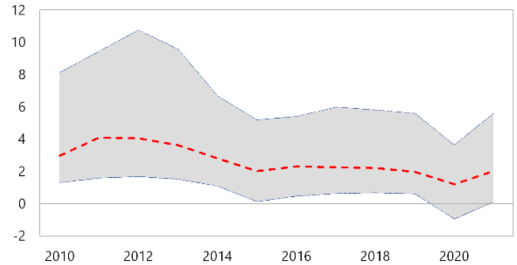
Source: IMF staff calculations.
1/ The weights of the sub-components are derived from PCA. Negative values represent financial conditions that are loose relative to the historical average of 1996 or earliest data available through 2020; the interest rates category includes the real short-term rate, the sovereign spread on local currency debt, and the interbank spread; the corporate valuations category includes the equity market price-to-book ratio; and the external costs category includes the sovereign spread and the corporate spread on external debt, and the external debt-weighted exchange rate.

Banks: Public vs. Private Sector Claims
(In percent, year-on-year)



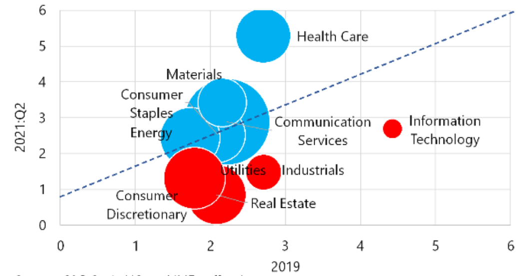
Sources: Bank Indonesia via Haver Analytics; and IMF staff estimates.

Indonesia: Interest Coverage Ratio 1/
(In percent)



Sources: Haver Analytics; and IMF staff estimates.
1/ The shaded area indicates the interquartile range, and the dotted line indicates the median ICR path.

Indonesia: Interest Coverage Ratio By Industry 1/
(In percent, median)

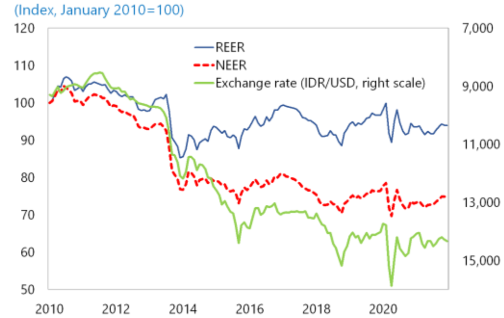


Sources: S&P Capital IQ; and IMF staff estimates.
1/ The size of each bubble indicates the median asset size in each industry. The red bubbles are industries that have not yet recovered their end-2019 ICR levels as of end-2021:Q2.

6. Net capital inflows stabilized in 2021 after considerable volatility at the onset of the pandemic. Portfolio inflows into equity and corporate debt increased strongly compared to 2020. With markets anticipating monetary policy normalization in advanced economies, inflows into rupiah government securities became more volatile with the share of nonresident holdings declining to 19 percent. Foreign direct investment also strengthened in 2021. Overall, Indonesia posted a substantially higher overall balance and reserve accumulation of about US$9 billion, of which around US$6 billion was due to the SDR allocation that the authorities plan to keep as reserves. The foreign exchange reserves level remained adequate.

7. The rupiah exchange rate remained stable, with the external position in 2021 broadly in line with the level implied by medium-term fundamentals and desirable policies. The preliminary External Balance Assessment suggests that, after adjustments for transitory, structural, and demographic factors, the current account balance and real effective exchange rate were close to model norms (Appendix IV). After a small deficit of 0.4 percent of GDP in 2020, the current account balance recorded a modest surplus of around 0.4 percent of GDP in 2021 on account of higher commodity prices and exports, with projected deficits of 0.1 percent and 1.5 percent, respectively, in 2022–23 as domestic demand strengthens. The near-balanced current account positions in 2020 and 2021 cushioned the impact of capital flows on the exchange rate and external vulnerabilities.

Exchange Rates
(Index, January 2010=100)



Sources: IMF, Information Notice System; and IMF staff estimates.

OUTLOOK, RISKS, AND SPILLOVERS

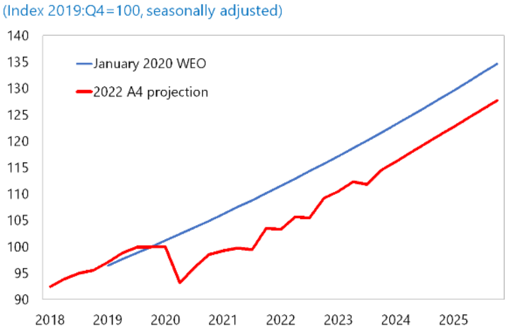
A. Outlook

8. The economic recovery is set to strengthen further in 2022–23. The domestic spread of the omicron variant will reduce growth somewhat in 2022Q1, but the effect is expected to be short-

lived, with activity continuing its recovery in 2022Q2 supported by the gradual easing of mobility restrictions, the policy support in place, and favorable global commodity markets. The pandemic situation is expected to improve during 2022, with the vaccination target (77 percent of the population) reached by midyear, which should boost business and consumer confidence. Investment will also be lifted by higher profitability, notably in commodity-related sectors, and moderating bank lending constraints. The emerging momentum appears self-sustaining and should more than offset the impact of the fiscal consolidation expected next year. Real GDP growth is projected at 5.4 percent for 2022 and 6 percent in 2023. The strength of the recovery would reduce economic slack by two thirds, with the output gap reduced from −4.9 percent of GDP in 2020 to −1.9 percent in 2023. Annual inflation in 2022−23 is projected to remain close to the 3 percent midpoint of the target corridor.

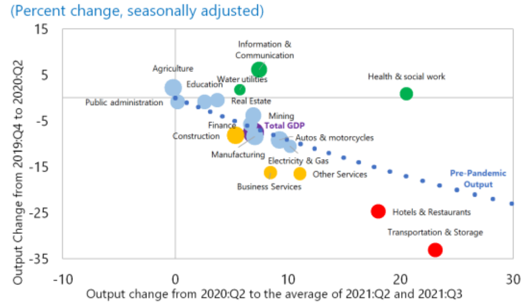
9. The medium-term outlook is clouded by some economic scarring from the pandemic. After the deep economic downturn in 2020, most sectors have been recovering, albeit at an uneven pace and with differences across provinces. As of 2021Q3, many sectors were back at or above pre-pandemic output levels, while others were lagging (red and yellow dots in the chart). The latter reflects the persistent loss of income in some sectors, and the ensuing negative direct impact on employment and investment, as well as obstacles to labor and capital moving to other sectors. The real GDP forecast implies a loss in output of about 6 percent in 2025 relative to the level envisaged in the January 2020 WEO. Nevertheless, given Indonesia's pre-pandemic policy buffers, ongoing structural reforms, and banking system resilience, the loss is expected to be relatively moderate in comparison with past experience—output loss was about 40 percent during the Asian crisis—and peers. Accordingly, the forecast assumes no persistent effects on potential output growth in the medium term.[3]

Real GDP
(Index 2019:Q4=100, seasonally adjusted)



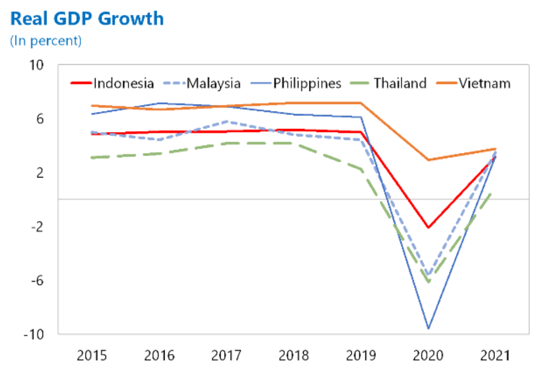
Sources: IMF, World Economic Outlook; and IMF staff estimates.

Real GDP by Sector 1/
(Percent change, seasonally adjusted)

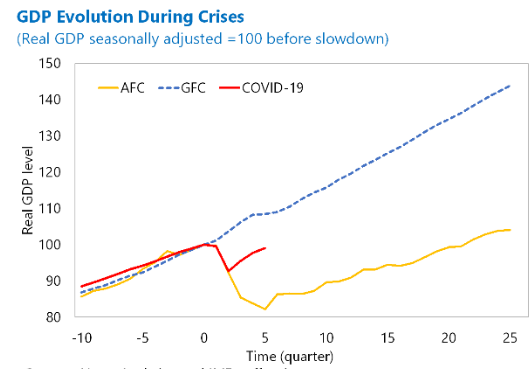


Sources: Badan Pusat Statistik; and IMF staff estimates.
1/ Colors capture relative performance: green--outperforming sectors; blue--mid-performing sectors; orange--underperforming sectors; and red--greatly underperforming sectors.

[3] The *Selected Issues* chapter, "The Pandemic and its Scarring Effects in Indonesia," presents a detailed analysis of the heterogeneous impact of the pandemic across economic sectors and provinces, including a historical context, and the policy implications, highlighting the need for well-sequenced structural reforms, financial sector resilience, and availability of fiscal space (e.g., for active labor policies during the recession) to avoid large scarring effects. Looking forward, see also paragraph 39 for recommended measures to increase productivity, reduce pandemic scarring, and foster reform complementarities.



Source: IMF, World Economic Outlook.



Sources: Haver Analytics; and IMF staff estimates

B. Risks

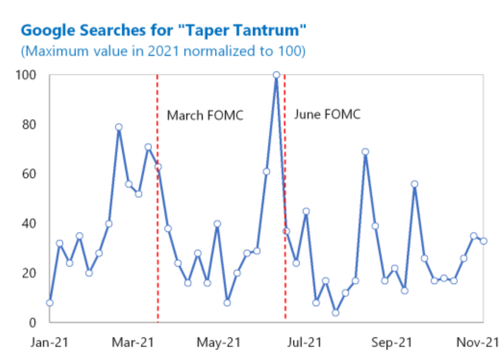
10. The outlook is improving, but the balance of risks is tilted to the downside and remains fluid with evolving risks from external spillovers and the omicron variant.

- ***On the downside***, renewed infection surges remain a risk, including from Omicron or more aggressive COVID-19 variants (Appendix III). Risks of tighter global financial conditions have also increased as higher-than-expected inflation globally could prompt central banks to rein in monetary policy earlier than expected. The resulting repositioning by market participants could lead to higher risk premia for credit, equities, and currencies of emerging markets.

- ***On the upside***, the boost from global commodity markets could continue longer than expected, while the extent of economic scarring in Indonesia could be smaller for the reasons noted in paragraph 9.

- ***Climate change risks***. Indonesia is among the countries most susceptible to climate change-related natural hazards, which could lead to more economic disruption and fiscal pressures. It also faces transition risks on the path to a greener global economy, including risks of stranded assets, given the significance of rents from coal, and deforestation in the economy.

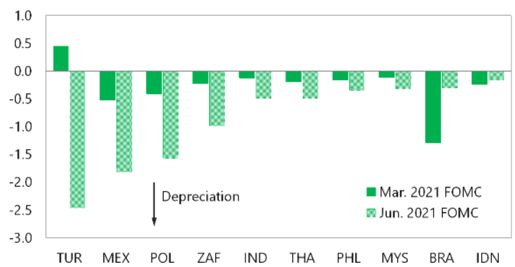
11. Monetary policy surprises in advanced economies, notably the United States, could prematurely tighten domestic monetary conditions and bring corporate solvency risks to the forefront. If such surprises materialized, Indonesia could face increased risks of disruptive capital outflows, exchange rate depreciation, and higher financing costs, especially for rupiah-denominated debt, as was presaged by market reactions to U.S. monetary policy announcements in 2021. These negative shocks could hit Indonesia before its recovery is entrenched. Their economic impact could be amplified by leverage in the



Sources: Google Trends; and IMF staff estimates.

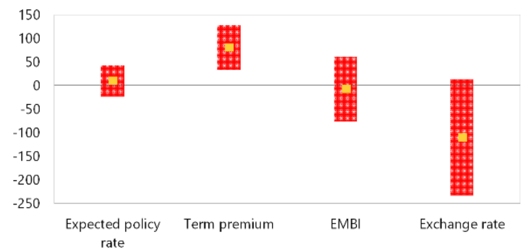
nonfinancial corporate sector, as well as the tighter sovereign-financial sector linkages, given increased bank holdings of rupiah-denominated government bonds. Pockets of corporate solvency risks could develop, as a result of the uneven sectoral impact of the pandemic. A readjustment of the macroeconomic policy mix could be needed, depending on the nature and size of these and other shocks.[4] On the positive side, Indonesia has stronger fundamentals than during the episode of broad capital outflows from emerging markets in 2013, including a lower share of nonresident holdings of rupiah government debt, which is now at 19 percent versus 33 percent; a stronger current account, which is now at 0.4 percent of GDP surplus versus a 3.2 percent deficit; and significantly higher reserves, a 45 percent increase during 2013–21.

Change in EM FX Rates After U.S. FOMC Announcements 1/
(In percentage points)



Sources: Haver Analytics; and IMF staff estimates.
1/ Defined as the change in the local currency/USD exchange rate on days of or immediately following FOMC announcements.

Effects of U.S. Monetary Policy Surprises on EM Financial Conditions 1/
(In basis points)



Source: Reproduced from Figure 4.7 in Chapter 4 of the April 2021 IMF WEO.
1/ The yellow squares show the response of each variable to a 100-bps surprise monetary policy tightening in the United States. The red bars indicate 90 percent confidence intervals.

Authorities' Views

12. The authorities broadly agreed with staff's outlook for the economic recovery and assessment of risks facing the Indonesian economy. They expected the economic recovery to strengthen further in 2022, with the main risks to the recovery coming from more severe pandemic-induced disruptions and spillovers from the tightening of U.S. monetary policy. In this regard, strengthening the synergy of national policies will need to continue to overcome the pandemic, maintain macroeconomic stability, and support the recovery process. They also underscored staff's view that Indonesia has stronger fundamentals than in previous episodes of global financial tightening—including a sound fiscal framework and low public debt, a strong current account, adequate reserves, and a well-established policy framework that features a flexible exchange rate and well-anchored inflation expectations—that will give them policy space to maneuver in a difficult external environment.

POLICY DISCUSSIONS

13. Restoring the central tenets of the pre-pandemic macroeconomic policy frameworks and accelerating structural reforms will reinforce Indonesia's strong policy track record and lay the basis for sustainable growth. While policy support will still be needed until the recovery

[4] The *Selected Issues* chapter, "Indonesia's Exit Strategy from COVID-19: Policy Considerations and Scenario Analyses," includes scenario analyses of monetary policy spillovers.

firms up, a gradual and coordinated unwinding of pandemic-related expansionary policies would safeguard economic and financial stability, as well as rebuild buffers for tackling downside risks. With the stronger-than-expected growth outcome in 2021, the trade-off between unwinding exceptional policies and providing adequate macroeconomic policy support has eased. Fiscal consolidation can proceed as planned, while keeping monetary and macroprudential policies accommodative in the short term, provided inflation expectations remain well-anchored. The authorities have made significant progress with the structural reform agenda despite the pandemic and should continue to leverage the political momentum to push ahead with structural reforms to promote private sector investment that is critical as an engine of growth over the medium term.

A. Fiscal Policy

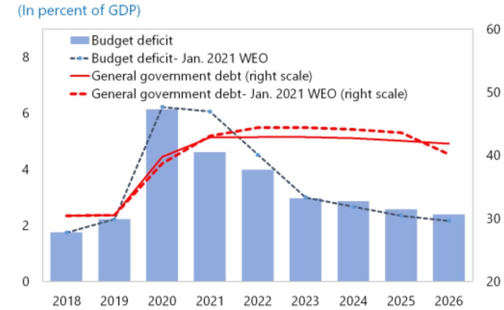
14. Preliminary 2021 budget data suggest that the budget deficit narrowed to 4.6 percent of GDP in 2021, below the target of 5.7 percent. This lower deficit reflects stronger-than-expected revenue performance. Tax revenue, notably VAT and trade-related taxes, and nontax revenue surprised on the upside, lifted by global commodity prices. Spending on goods and services and subsidies increased, more than offsetting the lower-than-budgeted expenditure on interest payments and salaries. The execution of the PEN program reached IDR 658.6 trillion, around 88.4 percent of budget allocations, which is slightly higher than the execution rate of 83.4 percent in 2020.

15. The authorities plan to return to the budget deficit ceiling of 3 percent of GDP by 2023, starting from the more favorable fiscal situation in 2021. The cumulative adjustment in primary spending needed in 2022–23 will thus be lower than expected at the time of the last Article IV consultation.

- ***2022 Budget***. The authorities aim to consolidate fiscal finances by phasing out emergency COVID-19 support. The budget accommodates the continued need for expenditure on health and social protection while the pandemic continues—related allocations to the PEN program are broadly unchanged from those in the 2021 budget—but other support under PEN will be reduced. The deficit target in the 2022 budget of 4.8 percent of GDP (IDR868 trillion), an adjustment of 0.9 percent of GDP relative to the 2021 budget target of 5.7 percent, does not incorporate the revenue effects of the recently adopted tax reform. The 2022 budget also does not consider the implications from the recently approved law to move the capital city to Kalimantan, construction of which is not expected to affect the planned return to the 3 percent deficit ceiling; any additional expenditures would be covered through reallocations within the budget.

- ***Tax reform***. The tax reform bill that was passed in October 2021 is expected to raise additional revenue already in 2022. As detailed in Appendix V, the main elements of the reform, in addition to administrative measures to increase tax compliance and efficiency, are: (i) an increase of the standard VAT rate from 10 to 12 percent in two steps—to 11 percent in April 2022 and to 12 percent by 2025 at the latest—with a reduction of the list of exempted goods and services; (ii) a new personal income tax bracket with a 35 percent tax rate on individuals earning above IDR 5 billion annually, coupled with an increase in the upper bound of the lowest bracket from IDR 50 million to IDR 60 million and the inclusion of fringe benefits in the income tax base; (iii) cancellation of the reduction in the corporate income tax rate from 22 to 20 percent; and (iv) a tax amnesty to encourage the declaration of unreported assets, similar to the 2016 tax sunset program, but with higher tax rates, ranging from 6 to 18 percent of the asset values.

Budget Deficit and General Government Debt
(In percent of GDP)



Source: IMF staff estimates.

- ***Deficit forecast below budget in 2022***. Fund staff project a lower deficit of 4 percent of GDP, broadly in line with the size of the authorities' planned adjustment. Assuming expenditure levels in line with the budget, the higher commodity prices and the tax reform should bring in additional revenue in 2022 compared with budget expectations.

Indonesia: Central Government Budgets, 2019–22
(In percent of GDP)

	2019	2020		2021		2022	
	Outcome	Original Budget	Outcome 1/	Budget 1/	Estimate	Budget 1/	Proj. 1/
Revenue and grants	12.2	12.8	10.7	10.3	11.8	10.0	11.4
Tax revenue	9.7	10.7	8.3	8.5	9.1	8.2	9.3
Expenditure	14.6	14.5	16.8	16.2	16.4	14.7	15.4
Current	13.4	13.5	15.6	14.8	14.9	13.6	13.8
Interest payments	1.7	1.7	2.0	2.2	2.0	2.2	2.6
Capital	1.2	1.1	1.2	1.5	1.5	1.1	1.5
Of which:							
PEN 2/ 3/	...	...	3.8	4.4	3.9	2.5	2.5
Health	...	...	0.4	1.3	1.2	0.7	0.7
Social protection	...	...	1.4	1.1	1.0	0.8	0.8
Bussiness incentives	...	...	0.4	0.4	0.7	1.0	1.0
Other business support	...	...	1.1	1.0	0.4	...	...
Regional transfers	...	...	0.4	0.7	0.6	...	...
Primary balance	-0.5	-0.1	-4.1	-3.7	-2.6	-2.5	-1.3
Balance	-2.2	-1.8	-6.1	-5.9	-4.6	-4.7	-4.0
Memorandum item:							
Cyclically-adjusted primary balance	-0.4	...	-3.3	-3.4	-1.8	...	-0.8

Sources: Indonesian authorities; and IMF staff estimates.

1/ Based on staff projections for nominal GDP.
2/ Spending under the National Economic Recovery Program (PEN), which is included in the budget and includes tax relief and below-the-line measures (e.g., loan guarantees).
3/ The PEN entries in the 2021 Budget column are those after the July augmentation of the PEN program.

16. **The government's commitment to reinstating the deficit ceiling is commendable and would bolster macroeconomic policy credibility**. The suspension of the ceiling was appropriate, given the pandemic. Nevertheless, the ceiling is a central pillar of the macroeconomic policy framework and has served Indonesia well. Adherence to the ceiling as a fiscal anchor will enhance fiscal space and policy flexibility post-pandemic. Indonesia's debt-stabilizing primary balance is estimated at around −1 percent of GDP (DSA, Appendix VI). With interest payments projected to converge to around 2 percent of GDP over the medium term, capping the overall deficit to 3 percent ensures that the debt-to-GDP ratio will remain on a sustainable path. Risks to public debt sustainability would thus remain low, despite higher public debt ratios and increased quasi-fiscal risks, including from state-owned enterprises (SOEs) (Appendix VI). More broadly, current public debt ratios and other indicators are at levels that suggest that Indonesia still has some fiscal space

after the exceptional policy response to the pandemic. Combined with revenue measures, the deficit ceiling would provide room for the government to increase high priority and productive spending.

17. The return to the deficit ceiling would not unduly slow the economic recovery and could be delayed if downside risks materialize. The negative fiscal impulse of 1 percent of GDP in 2022 and 0.7 percent of GDP in 2023 under the baseline can be absorbed, given other drivers of growth, and with monetary and macroprudential policy remaining accommodative in the short term. As for the composition of the expenditure adjustment, much of the consolidation will be achieved through the full unwinding of PEN, which will also permit redirection of resources to other priority spending. In addition, the flexibility to reallocate expenditure in 2022 without a supplementary budget will allow fiscal policy to adjust as needed. However, under more severe downside scenarios, such as a slower recovery or a rapid resurgence of COVID-19 infections and related containment measures, longer-lasting pandemic support could become necessary. To avoid negative market reaction to a delay in reinstating the budget ceiling, it would be important to clearly communicate the reasons and modalities, including the interaction of fiscal and monetary policies.

18. An updated and specific medium-term fiscal strategy should be part of the planned exit from the exceptional policy response to the pandemic. With the deficit ceiling as an anchor, the strategy should clarify medium-term budget objectives in terms of revenue, spending, and financing beyond 2023 and clearly lay out risks and contingency policies. It should identify areas for further rationalization of current spending, including energy subsidies,[5] and measures to raise additional fiscal revenues. Collectively, these measures would free up fiscal resources that could be used to expand social assistance benefits to poor households and reallocate new resources to finance high-priority spending in infrastructure, health, and education, as well as build buffers against future shocks.

19. Adopting a medium-term strategy to raise government revenue is essential to support the government's development agenda. The 2021 tax reform bill is an important first step toward addressing Indonesia's low revenue intake. Overall, staff estimates that the reform could raise revenue by at least one percentage point of GDP by 2026. However, the adopted measures are unlikely to generate sufficient revenue to finance productive spending to a level needed to achieve Indonesia's Sustainable Development Goals and high-income status, as laid out in the *Vision of Indonesia 2045*. Without additional measures, the tax revenue ratio will remain lower than that of emerging market peers in 2026 (the median tax ratio of all peers averaged around 18 percent in 2010−19, and 15.4 percent for regional peers). Additional measures to broaden the tax base, which could include steps to lower the VAT registration and basic personal income tax exemption thresholds, and improve tax compliance (e.g., imposing an alternative minimum tax on businesses, designing a compliance improvement program targeted at high-net-worth individuals and professionals) as suggested in earlier capacity development work by the Fund (Table 12), could enhance revenue mobilization over the medium term.

[5] The energy subsidy reform is discussed in Box 1 of Chapter 7 of *Indonesia: Selected Issues* for the 2020 Article IV consultation.

20. The efforts to ensure the effectiveness of COVID-19 related fiscal measures should continue. The Ministry of Finance (MOF) consulted with the Audit Board of Indonesia at the design stage of the programs included in PEN, before their rollout, to ensure that the programs and related regulation are accountable and effective. Monthly reporting requirements for COVID-19-related programs allow the Ministry to assess the use, the traction, and the effectiveness of the programs against their objectives. The authorities should also conduct and publish a full ex-post evaluation of the effectiveness of fiscal incentives, a procurement audit under PEN, including a list of the companies awarded contracts and their beneficial owners, and draw lessons for future use. The Ministry's *Tax Expenditure Reports*, published since 2018, have provided for a welcome increase in fiscal transparency.

Authorities' Views

21. The authorities reiterated their commitment to return to the 3 percent deficit ceiling by 2023. The implementation of the tax harmonization law has already begun and will yield additional revenues that were not incorporated in the 2022 budget. The execution of public spending related to the construction of the new capital, which would also rely on private funds, will not affect the timing of the return to the deficit ceiling. In the event of adverse monetary policy spillovers, they have adequate cash reserves to cushion the potential impact on their borrowing costs.

22. The authorities concurred with the importance of specifying a clear medium-term fiscal strategy as part of the exit strategy. They are formulating a fiscal framework that will lay out their revenue, expenditure, and financing strategy through 2025. They also agreed that further revenue measures are needed to finance high priority spending critical to achieving Indonesia's development goals. Additional measures, including the launch of a core IT infrastructure by 2024, are expected to improve tax compliance, strengthen auditing, and reduce tax avoidance. On the expenditure side, improving the beneficiary database to enable more targeted cash transfers to the most vulnerable households is a priority. The authorities are optimistic that the recently adopted zero-based budgeting approach will enhance spending efficiency.

B. Monetary Policy

23. Bank Indonesia further eased its monetary policy stance in 2021. As part of the exceptional policy response to the pandemic, BI influenced domestic monetary conditions both with the policy interest rate and quantity-oriented instruments. As of end-December 2021, BI's holdings of government bonds rose by 40 percent from end-December 2020, mostly from primary market purchases under the market mechanism (about IDR 143 trillion, equivalent to

Indonesia: Monetary Survey, 2019–2021

	2019	2020	2021 Est.
	(In percent of GDP, eop)		
Net foreign assets	9.5	11.1	10.2
Net domestic assets	29.2	33.6	36.1
Net claims on government	4.5	10.9	11.1
Of which : held by Bank Indonesia	1.7	4.7	6.5
Claims on private sector	32.5	33.2	32.1
Broad money	38.8	44.7	46.4
Base money	7.6	7.8	8.5
Memorandum items:	(Annual percentage change)		
Broad money	6.5	12.5	13.9
Base money	2.9	0.4	19.3

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

12 percent of the end-2020 monetary base) and under the BI-MOF agreement announced in August 2021 (about IDR 215 trillion, equivalent to 18 percent of the end-2020 monetary base) following the BI-MOF coordination (Appendix VII). BI has kept the policy rate on hold at 3.5 percent after a 25-basis point cut in February 2021, with the overnight interbank rate staying close to the lower end of the interest rate corridor since July 2020. The monetary policy stance is thus moderately accommodative, with market rates below the Fund staff-estimated range for the neutral real policy rate (2 to 3 percent).

24. BI policies must remain nimble given fluid risks to inflation and the recovery and should seek to gradually reduce excess banking system liquidity.

- BI has announced that it expects its policy stance to stay accommodative through much of 2022, based on projections of a gradual increase in inflation. This call is appropriate under the baseline outlook, considering the sizeable economic slack, well-anchored inflation expectations, the planned fiscal consolidation in 2022, and downside risks.

- As bank credit continues to improve amid abundant banking system liquidity, BI should gradually reduce excess liquidity, with a view to remaining ahead of the curve and maintaining stability in anticipation of Fed tightening. Reducing excess liquidity would help create the conditions conducive to future changes in the policy rate and normalize BI's interest rate corridor setting, by bringing the overnight interbank money market rate (currently at the floor rate of 2.75 percent) back to the midpoint of the corridor over time. In January 2022, BI announced a gradual increase in the rupiah reserve requirement (RRR) by a cumulative 300 bps for conventional banks and 150 bps for sharia banks over March–September 2022, as part of its efforts to normalize liquidity conditions in the banking system.

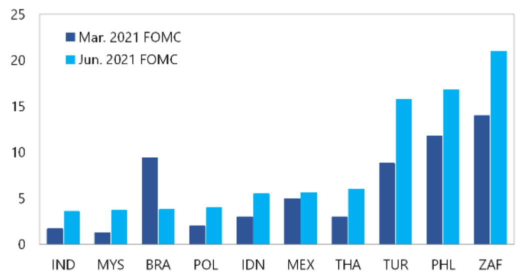
- Outside the baseline scenario, BI should decisively tighten monetary policy if broader, more sustained upward price pressures emerge that could de-anchor inflation expectations (inflation expectations breaching the upper end of the BI target range), and tighten macroprudential policies if excess liquidity in the banking system were to translate into a rapid credit acceleration and an increase in financial stability risks. Conversely, BI has space to lower the policy rate if downside risks materialize.

- With substantial bond purchases already scheduled for 2022 under the 2021 BI-MOF agreement, BI needs to strike a balance between the benefits and risks of further monetary budget financing during 2022. Primary market purchases under the market mechanism should be confined to last resort-based intervention in periods of severe market dysfunction.

25. The authorities' commitment to exit from monetary budget financing by the end-2022 target date is welcome. Law No. 2 of 2020 temporarily authorizes BI's primary market purchases of government bonds through end-2022. Given the strengthening fiscal position, keeping this endpoint as currently legislated would help safeguard monetary policy credibility and BI's operational independence. While the purchases have so far been comfortably absorbed within BI's policy remit, without undue domestic and external pressures, if continued they could erode market

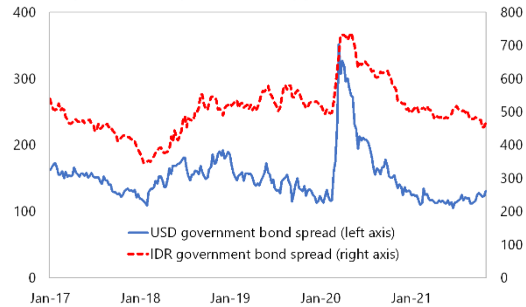
discipline and inhibit financial market development, as well as pose risks to BI's profitability and balance sheet. These costs could increase with adverse monetary policy spillovers from advanced economies. Moreover, additional large BI purchases in the absence of clear signs of market dysfunction in 2022 could increase the risk of distorting price signals and in turn discourage purchases by nonresidents, at a time when market conditions in the rupiah government bond market are beginning to normalize and fiscal financing needs are decreasing. For these reasons, Fund staff would not advise extending monetary budget financing beyond 2022.

Change in EM Bond Yields After U.S. FOMC Announcements 1/
(In basis points)



Sources: Haver Analytics; and IMF staff estimates.
1/ Defined as the change in 10-year local currency government bond yields on days of or immediately following FOMC announcements.

Indonesia: 10-Year Government Bond Spread
(In basis points, over 10-year U.S. Treasury yield)



Sources: Haver Analytics; and IMF staff estimates.

26. BI should revert to conventional policy tools in the medium term. As monetary budget financing would no longer be warranted past 2022, BI could use government bond purchases in the secondary market as needed for market stabilization purposes, including as part of its triple FX intervention strategy.[6] Policy rate movements would provide clearer signals of changes in the monetary stance as exceptional pandemic measures are phased out.

27. If faced with adverse monetary policy spillovers, BI should preserve monetary policy space by allowing the exchange rate to act as a shock absorber. Under the baseline, the tightening of U.S. monetary policy could lead to capital outflows from Indonesia, but this would be accompanied by strong global demand that would strengthen the current account. In the event of a sudden pickup in global risk premia that put pressure on the rupiah, the exchange rate should be allowed to act as a shock absorber. If spillovers become disruptive or the exchange rate acts as a shock amplifier, further monetary policy tightening and FX intervention to counter disorderly market conditions would help mitigate the impact on balance sheets with currency mismatches. In such circumstances, more gradual fiscal consolidation in 2022–23 could also be warranted to preserve the economic recovery.

[6] The triple intervention strategy involves BI's interventions in the spot and domestic non-deliverable forward (DNDF) markets, and purchases of local currency government bonds from the secondary market, with the objective of stabilizing the rupiah.

Authorities' Views

28. The authorities underscored the importance of safeguarding macroeconomic stability while supporting the economic recovery. BI will stay ahead of the curve in anticipation of monetary policy tightening by the U.S. Fed and other advanced economies. They stated that monetary policy in 2022 will focus on maintaining stability, while mitigating the global impact of policy normalization in advanced economies, particularly by the U.S. Fed. The low policy rate will be maintained until there are indications of inflation pressures emerging, and future adjustments to the policy stance will be made in a measured and prudent manner to mitigate the risk of interrupting the recovery. Meanwhile, BI stressed that liquidity policy normalization will be carried out by gradually increasing the RRR starting in March 2022. The increases in the RRR should not weigh on credit growth given the gradual pace of increase and the abundant liquidity in the banking system. BI will keep the exchange rate flexible and undertake foreign exchange interventions as needed to counter excessive market volatility. BI reaffirmed that government bond purchases under the market mechanism will be based on market conditions and capped in size.

C. Financial Sector Policies

29. Financial soundness indicators suggest continued strong health in the banking system. Financial stability risks remain moderate, although this assessment is subject to an unusual degree of uncertainty due to pandemic disruptions and associated forbearance measures. System-wide bank liquidity and capital adequacy ratios are above pre-pandemic levels, with the increases in the latter largely reflecting the higher share of rupiah government bonds in bank assets relative to the rise in banks' risk-weighted assets.

30. Asset quality risks have generally declined along with the economic recovery but are still elevated in sectors hard-hit by the pandemic. The share of nonperforming loans (NPLs), while somewhat higher than at end-2020, remains low at around 3 percent of total loans (Table 9). Relative to bank capital, NPLs net of provisions remain below pre-pandemic levels at 3.9 percent. The broader category of loans-at-risks started to decline in 2021, mostly reflecting repayments and positive total loan growth. In the nonfinancial corporate sector, sales and profitability have generally improved with the economic recovery. However, some nonfinancial firms still have interest coverage ratios below one, consistent with some sectors lagging in the recovery (trade, transportation, hotels, and restaurants).[7]

31. The credit outlook is improving, bolstered by accommodative monetary and macroprudential policies, as well as improved access to government guarantees for bank lending to MSMEs. On the supply side, lending standards have started to ease, consistent with a decline in asset quality risks, while demand for credit has increased with the pickup in economic activity. These factors have translated into a credit rebound in 2021, led by public banks. The

[7] The selected issues chapter, "Impact of COVID-19 on Nonfinancial Corporate Vulnerabilities in Indonesia," for the 2020 Article IV consultation has deeper analysis of the balance sheet and income positions of the nonfinancial corporate sector before the pandemic.

authorities have supported the credit rebound through changes in macroprudential policies, including reactivation of the macroprudential intermediation ratio in stages starting in May 2021 and easing the loan-to-value ratio to up to 100 percent on property and car loans from March 2021 until end-2022.[8] They also established a new target for the "macroprudential inclusive financing ratio" in August 2021, which requires banks to extend 30 percent of their loans to micro, small, or medium enterprises (MSMEs), either directly or indirectly through on-lending by other intermediaries, to be achieved by mid-2024. Take up of the government's guarantee scheme for bank lending to MSMEs increased to IDR 53.4 trillion at end-2021 (0.3 percent of GDP), from IDR 18.1 trillion in 2020, following an expansion of the scheme to 22 sectors and an easing of eligibility criteria.

32. While crisis-related measures are still in place, intensive supervision will be required to ensure prudent lending.

- Supervisory guidance should continue to ensure that loan restructuring is only granted to firms with a high likelihood of post-pandemic viability, and that banks provision proactively for credit losses and properly monitor credit risks of sectors with economic scarring or firms with high pre-pandemic leverage.
- The new target for the inclusive financing ratio could lead to imprudent lending to MSMEs if it is applied rigidly, especially if it entails indirect lending through other intermediaries. Supervision intensity by the Financial Services Authority (OJK) should be higher for banks with riskier profiles (for example, through more frequent on-site inspections and review of credit classification).
- While public banks' stabilizing role has been effective in reviving credit, this role could involve quasi-fiscal risk and costs that need to be effectively managed.
- In the medium term, credit growth could be facilitated by reducing information asymmetries. This could be achieved by improving the coverage and upgrading the information sharing functions of the national credit bureau and establishing private credit bureaus, along the lines of the 2017 FSAP recommendations. Banks would be better able to assess credit risks, ensure accurate loan classification and provisioning, and enhance financial inclusion.

33. Consideration should be given to unwinding regulatory incentives as credit growth recovers. Guidance to encourage restructuring helped avoid costly loan defaults in the early phases of the pandemic, recognizing the need to support the economy during a highly uncertain situation. However, almost two years into the pandemic, banks should be better positioned to gauge credit

[8] With a view to ensure adequate bank liquidity and to incentivize credit extension, BI sets a target range for the macroprudential intermediation ratio (MIR) for banks, i.e., the ratio of loans to the nonfinancial sector (including securities issued by the sector) to the amount of deposits and securities issued by banks, both with a view to ensure adequate bank liquidity and to incentivize credit extension. Since July 2019, the MIR range has been set to 84−94 percent. BI can impose a penalty if the MIR is below the target range, by requiring a bank to increase holdings of nonremunerated deposits at BI. This penalty was suspended during the pandemic to provide banks with more flexibility in their asset allocation, but starting 2022, the penalty has been reintroduced for banks with MIRs below 84 percent.

risk and resume normal lending activities. Against this backdrop, the authorities could consider ending the relaxation of loan classification standards ahead of schedule (2023Q1). Furthermore, if credit growth accelerates sharply in one or more sectors, macroprudential policies should also be tightened and targeted appropriately to mitigate financial stability risks.

34. Continued strengthening of the regulatory and institutional framework will be important to address potential asset quality issues. OJK has addressed the increased solvency risks of smaller banks through higher minimal capital requirements, which will increase to IDR 3 trillion by end-2022. As a result, a few smaller banks were taken over by larger, adequately capitalized banks. However, addressing solvency risks through mergers might not always be feasible or timely, and the authorities should consider steps to strengthen the crisis management and resolution frameworks recommended in the 2017 FSAP (Table 11). In the case of a well-defined public interest, recapitalization of companies through budgetary means could be appropriate—the authorities recapitalized two state-owned banks in 2021 and are considering the recapitalization of some SOEs. The reform of insolvency proceedings should also be considered, to allow for out-of-court settlement or fast-track court proceedings that would ensure consistent resolution and facilitate asset recovery and reinvestment.

35. The authorities appropriately consider financial deepening and greater financial inclusion a policy priority. Policy efforts focus on harnessing the digital transformation in the financial sector in an inclusive manner, building on the rapid growth in e-commerce and digital transactions during the pandemic.[9] In the context of its *Indonesia Payment System Blueprint (BSPI) 2025*, BI fosters the integration of the digital economy and finance using the Bank Indonesia Fast Payment (BI-FAST) system, and the Quick Response Indonesia Standard (QRIS) Code in the retail payment system. The authorities have also issued new regulation to clarify the framework for digital banks. In addition, the *Money Market Development Blueprint 2025* seeks to establish a central counterparty (CCP); standardize repo transactions for clearing via the CCP; strengthen the regulatory framework; and implement the Multi-Matching Electronic Trading Platform.[10] Lastly, the authorities have deepened financial cooperation with countries in the region, by establishing new bilateral swap agreements and local currency settlements of cross-border transactions.

36. The financial sector omnibus bill under preparation will represent an important step toward financial deepening, inclusion, and stability. The bill aims to provide the legal foundation for financial deepening, focusing, inter alia, on the development of capital markets through fostering an institutional investor base, including insurance companies and pension funds. Building on this, the bill should also tackle regulatory reform, including stronger crisis management and resolution frameworks, as well as other FSAP recommendations (Table 11). It would also be an opportunity to streamline the regulatory architecture, and to update the regulatory and supervisory framework to

[9] Chapter 6 of *Indonesia: Selected Issues* for the 2020 Article IV consultation present policy issues related to digitalization as a tool for a more inclusive recovery in Indonesia.

[10] The selected issues chapter, "Money Markets in Indonesia: Recent Evolution and Implications of Introducing a Central Bank Digital Currency," presents an in-depth discussion of related policy issues.

accommodate growth in the fintech sector, as suggested in earlier capacity development work by the Fund (Table 12).

Authorities' Views

37. The authorities stressed the need to continue to support the incipient recovery in bank credit. They see the recovery in credit as generally lagging the recovery in domestic demand partly due to the scarring effects of the pandemic that weakened household and nonfinancial corporates' demand for credit. They view accommodative macroprudential policies to boost credit growth and government credit guarantees to SMEs and corporates as a necessary part of the overall policy package to further support the momentum of the economic recovery, including by increasing financial inclusion. The authorities agreed with Fund staff's recommendation that strengthening the national credit bureau would help reduce the information asymmetry between banks and borrowers and could facilitate credit expansion. The authorities published regulation relating to the Credit Information Management Agency in 2019, and since then, the OJK has issued licenses for private credit bureaus to support the provision of credit information sharing between banks and borrowers. Given the still uncertain environment, the authorities prefer to keep the relaxation of loan classification standards until 2023Q1 to maintain banking sector stability. The authorities are hopeful that the financial sector omnibus bill will be approved this year. Further deepening of the repo and money market will enhance efficiency and monetary policy transmission. The authorities are finalizing the concept design of a digital rupiah with a focus on its interoperability, interconnection, and integration aspects with the payment systems and other financial market infrastructure.

D. Structural Policies

38. The omnibus law on job creation is a major reform to improve the ease of doing business in Indonesia that could help promote competitiveness and long-term growth. The authorities are addressing legal challenges relating to the new approach adopted in the omnibus law. Once these are resolved, the law could pave the way for stronger investment and growth. To this end, it will be critical that the regulatory and institutional frameworks to implement the law follow high quality governance and transparency standards. In addition, and as recommended by past Fund capacity development on public financial management (Table 12), improving the multiyear budgeting of capital spending and enhancing the appraisal and implementation of infrastructure projects are priority actions.

- ***Investment climate***. The law aims to achieve a significant easing of the regulatory burden on private sector activity and restrictions on investment. Implementation should help in attracting foreign capital, reducing vulnerabilities to corruption (e.g., streamlining and reducing the scope for discretion in licensing requirements) and the cost of investment, and promoting export competitiveness—benefits that would be reinforced by the implementation of the Regional Comprehensive Economic Partnership and other trade liberalization steps.

- ***Indonesian Investment Authority (INA)***. This government fund, the creation of which was authorized under the law, was established in 2021 and has commenced operations. It is

designed to channel equity investment into infrastructure projects, with foreign, private, and Indonesian government participation. The INA plans to start with relatively low risk, mature infrastructure investments—a first project financing a toll road is underway. Given quasi-fiscal risks, strong governance settings, and a focus on areas where other forms of financing will be less competitive, will be important for INA's success.

- ***Labor market policies***. The easing of labor market restrictions (employment protection, especially high firing costs) included in the law should be beneficial to economic restructuring, growth, and employment in the longer term. Their implementation should consider the pace of the current economic recovery and be aligned with the establishment of unemployment insurance to help minimize short-term costs to workers.

39. The structural reform strategy should include measures to reduce pandemic scarring and foster reform complementarities. While the job omnibus law will be important for increasing investment and productivity growth, its impact would be enhanced by reforms (i) in the education system, establishing a pipeline of skilled workers and promote female labor force participation; (ii) in the financial sector, easing financing constraints from shallow markets, as envisaged in the financial sector omnibus law; (iii) in the infrastructure sector, promoting innovation, including through digitalization; and (iv) in several areas of the governance framework (e.g., tax administration and compliance, government procurement, and product market regulations) to reduce corruption risks and enhance efficiency. The authorities are making progress on several fronts, such as in education with improvements in teacher training and remote learning, and in governance where it has now been legally and constitutionally established that the KPK has the mandate to investigate and prosecute corruption crimes. Nevertheless, government infrastructure spending, which averages about 3 percent of GDP annually, needs to progressively increase overtime.[11] These broad reforms, combined with a concerted effort to raise fiscal revenues, should help Indonesia climb the value-added chain in manufacturing and diversify its economy.

40. The government is taking steps toward climate change mitigation.[12] The targets in the updated Nationally Determined Contribution (NDC) submitted to COP26 imply further increases in greenhouse gas emissions from current levels. Indonesia has not yet committed to a net zero pledge but is considering scenarios in which net zero would be reached by 2060 or sooner. The 2021 tax reform bill includes a carbon price of IDR 30,000 per ton of CO_2e (about US$2) that will apply to coal-fired power plants and come into effect in April 2022.[13] The authorities are also seeking to establish an emission trading system (ETS) by 2024 and have launched a voluntary pilot program in the power sector, with the participation of 32 coal-fired power plants. Additionally, a moratorium on new plans for coal-fired power plants will support the shift from coal to renewable sources in

[11] According to the ADB, Indonesia's infrastructure needs, adjusted for climate change, are estimated at 6.0 percent of GDP annually.

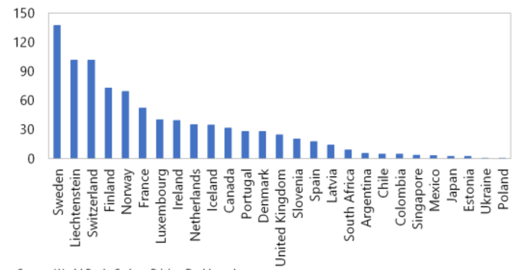
[12] The selected issues chapter, "Indonesia: An Inclusive Transition toward a Greener Economy—Carbon Pricing and Green Financing," presents an in-depth discussion of related policy issues.

[13] The carbon price will be applied on CO_2 emissions above a threshold (a cap and tax system). The related regulations are under consideration as of January 2022.

electricity generation.[14] Finally, the authorities have been issuing green sukuks since 2018 and have launched Indonesia Green Taxonomy version 1.0. on January 20, 2022.

41. The climate change mitigation strategy would benefit from more ambition and integration among its main elements. The carbon price is low and has a narrow coverage of emission sectors. Plans for a predictable and increasing path for the carbon price will need to be adopted. The ETS could address this gap and should include sectors with the largest CO_2 emitters, and set free allowances sufficiently low to ensure a meaningful carbon price equivalent. In addition, with current energy subsidies and the lack of market pricing for fossil fuels and electricity, end user prices are not affected by carbon pricing measures. It will be essential to promptly move ahead with the reform of energy subsidies and pricing. Mobilizing private investment through the development of green financing market infrastructure will also be vital to enable Indonesia to achieve its NDC targets and development goals.[15] Finally, continuous progress in the monitoring and execution of adaptation plans would be desirable in view of Indonesia's high exposure to natural hazards, including a rising sea level.

Selected Countries: Carbon Taxes, April 2021 1/
(U.S. dollar per ton of CO2e)



Source: World Bank, Carbon Pricing Dashboard.
1/ Prices are not necessarily comparable between carbon pricing initiatives because of differences in the number of sectors covered and allocation methods applied, specific exemptions, and different compensation methods.

Authorities' Views

42. The authorities concurred with the priorities Fund staff identified on structural reform. They plan to frontload the implementation of the agenda to address the scarring effects of the pandemic. The authorities are working closely with Parliament to address the legal challenges related to the omnibus law, which they expect to be resolved in 2022. While the pandemic has delayed progress on planned education reforms, a recently passed law on central and regional government relations (HKPD) would improve reform outcomes by strengthening the accountability of local governments.

43. The authorities agreed with Fund staff's assessment and policy recommendations on climate change. Energy subsidy and pricing reforms will make Indonesia's carbon price more effective, while it is important to move gradually to cushion the impact on the poor and minimize inflationary pressures amid the pandemic. The introduction of the carbon tax rate at an initially low rate was not intended to generate revenue but to signal the authorities' commitment to deliver on a

[14] The moratorium does not apply to coal-fired plants already approved. The state-owned electricity utility provider, PLN, aims for about half of the new generation capacity added in 2021–30 to be from renewable energy sources, which would lower the share of coal-based power generation to around 60 percent by 2030 while that of renewables would rise to around 25 percent.

[15] Fund staff estimate that the annual financing needed to achieve Indonesia's NDC targets would amount to 2.8 percent of GDP.

framework for climate mitigation, rather than raising revenue through this tax. The current rate and coverage of carbon pricing could be adjusted when conditions permit. The initial application of the carbon tax to the power sector will be used as a reference for the future expansion of the tax to other sectors.

STAFF APPRAISAL

44. The authorities' decisive action in response to the pandemic has succeeded in maintaining economic and financial stability. The economy is recovering at a brisk pace, inflation is low, the credit outlook is improving, and the external position is strong—boosted by favorable global commodity prices—and in line with medium-term fundamentals and desirable policies. With ample reserves and relatively low public debt, Indonesia is well positioned to extend further support if severe downside risks materialize. Over the medium term, recent and prospective structural reforms could reduce the extent of pandemic scarring and reverse the deterioration over the last two years in poverty and income inequality.

45. While the outlook is improving, downside risks are significant. The emergence of more aggressive COVID-19 variants could put further pressure on the health system and lead to renewed mobility restrictions, and risks of spillovers from tighter global financial conditions have increased as inflation becomes more broad-based in many countries. Policies will have to remain nimble and adapt to incoming data, carefully balancing the need to support the recovery with the need to rebuild policy buffers and implement structural reforms.

46. With the recovery underway, gradually phasing out exceptional monetary and fiscal support that was deployed during the pandemic is appropriate. Staff support the authorities' plan to return to the budget deficit ceiling of 3 percent of GDP in 2023—the central anchor of the fiscal framework—and to end monetary budget financing by end-2022. With the strengthening fiscal position, BI should limit primary market purchases under the market mechanism in 2022 to periods of severe market dysfunction. If the recovery stalls and a slower pace of normalization is called for, the reasons for the delay in the exit strategy as well as the path to return to it should be clearly and carefully communicated.

47. Restoring the fiscal anchor in 2023 will bolster the credibility and sustainability of the fiscal framework. Adherence to the ceiling will preserve fiscal space and policy flexibility, while allowing the government to focus its efforts on raising additional fiscal revenue to support its ambitious structural reform agenda. The medium-term fiscal strategy should be clearly communicated and should identify specific measures, targets, and contingencies, including steps to reform energy subsidies and pricing. Savings from the subsidy reform could be used to strengthen the social safety net.

48. The fiscal consolidation to facilitate the return to the deficit ceiling is not expected to unduly impede the recovery in 2022. The stronger-than-expected growth outcome in 2021 has eased concerns that the return to the deficit ceiling in 2023 would require too steep an expenditure adjustment. The authorities aim to consolidate public expenditure by phasing out emergency

COVID-19 support, while favorable commodity prices and the tax reform should bring in additional revenue. Furthermore, available cash reserves and flexibility to reallocate budget resources enable the government to respond rapidly to shifting needs and unexpected shocks.

49. Monetary policy should remain accommodative until the recovery is more firmly entrenched, as long as inflation and inflation expectations remain well anchored. In this context, BI's commitment to stay ahead of the curve is welcome, including its move to gradually reduce excess banking system liquidity. If faced with adverse monetary policy spillovers, BI should preserve monetary policy space by allowing for greater exchange rate flexibility. In the medium term, a return to conventional tools would allow the policy rate to provide a clearer signal of the monetary stance.

50. The financial system appears sound, but while crisis-related measures are still in place, intensive supervision is required to closely monitor credit risks. With the credit cycle lagging the recovery and asset quality risks declining, accommodative macroprudential policies, as well as improved access to government guarantees for bank lending to MSMEs and corporates, are appropriate to sustain the credit rebound. However, intensive supervision is required to ensure that banks proactively provision for credit losses and mitigate quasi-fiscal risks from public banks. As credit growth recovers, the authorities should consider ending the relaxation of loan classification standards ahead of the current 2023 target date. Further credit deepening could be achieved by improving the role of credit bureaus in reducing information asymmetries.

51. The authorities' broad structural reform agenda will help address scarring from the pandemic and support medium-term growth. Private sector activity and investment will be bolstered by the 2021 omnibus law on job creation, and its impact could be enhanced by concurrent improvements to education, financial sector inclusion and deepening, infrastructure development, and governance frameworks. In this regard, the authorities' agenda for digital transformation, which will initially be focused on the financial sector, is welcome. The implementation and timing of these broad reforms should consider the uneven impact of the pandemic across sectors, provinces, and income groups. Garnering political support for the effective implementation of the structural reform agenda, combined with a concerted effort to raise fiscal revenues, will help Indonesia build a more inclusive, diversified, and resilient economy.

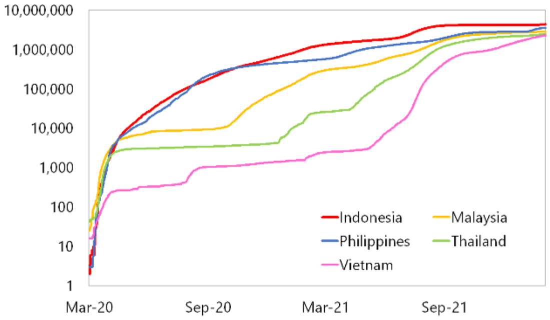
52. Fund staff endorse the authorities' recent climate change mitigation measures and welcome their commitment to undertake further reforms. The setup of an ETS and the introduction of a carbon pricing scheme are important first steps in climate change mitigation. Further progress could be achieved by introducing a predictable and increasing path for carbon pricing, moving ahead with the energy subsidy and pricing reforms, expanding the ETS to include the largest GHG emitters, and fostering a green financial market.

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

Figure 1. COVID-19 Developments

Indonesia has seen significant spread of COVID-19.

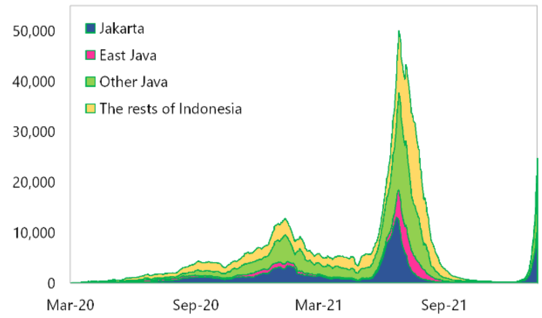
ASEAN: Number Cases
(In natural logarithmic scale, cumulative cases)



Sources: World Health Organization; and IMF staff estimates.

Daily new cases have been increasing because of omicron.

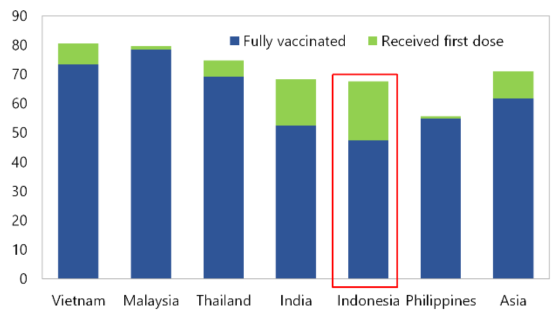
Daily New Cases
(7-day moving average)



Sources: Indonesian Ministry of Health; and IMF staff estimates.

Half of the population are fully vaccinated, but Indonesia lags behind Asian peers…

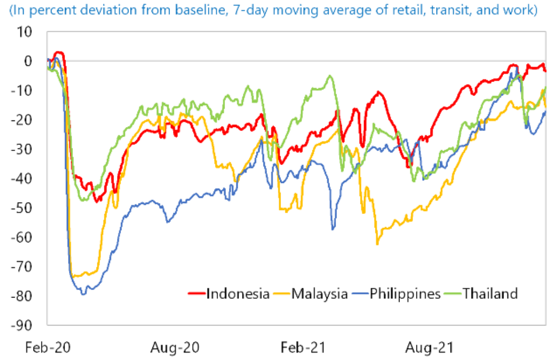
Vaccinated People for COVID-19 1/
(In percent of population)



Sources: Our World in Data via CEIC; PHL authorities data; and IMF staff estimates.
1/ As of February 6, 2022 or latest available data.

Mobility has rebounded following the second wave, reaching levels well above those ASEAN peers.

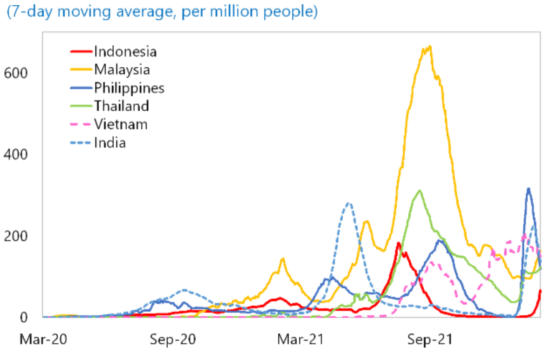
ASEAN: Mobility Trends
(In percent deviation from baseline, 7-day moving average of retail, transit, and work)



Sources: Google, COVID-19 Community Mobility Reports; and IMF staff estimates.

Daily new cases have been is increasing.

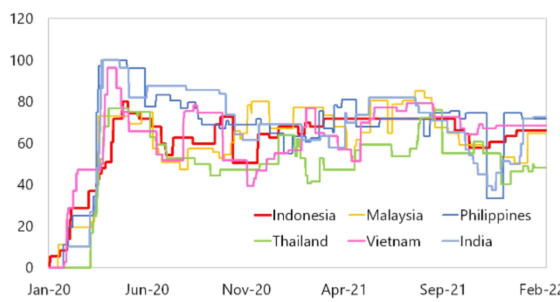
Selected Asian Countries: Number of New Cases
(7-day moving average, per million people)



Sources: World Health Organization; and IMF staff estimates.

Indonesia's social restrictions have been increased.

Index of COVID-19 Containment Policy Stringency 1/
(Between 1-100)

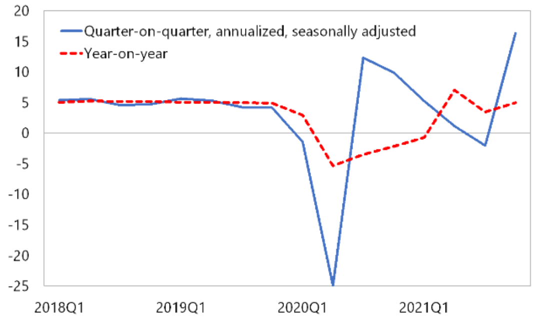


Source: University of Oxford, The Oxford COVID-19 Government Response Tracker.
1/ The index records the strictness of lockdown style policies; not scoring the appropriateness or effectiveness of a country's response. A higher number does not necessarily mean better.

Figure 2. Recent Economic Developments

Real GDP growth has bounced back…

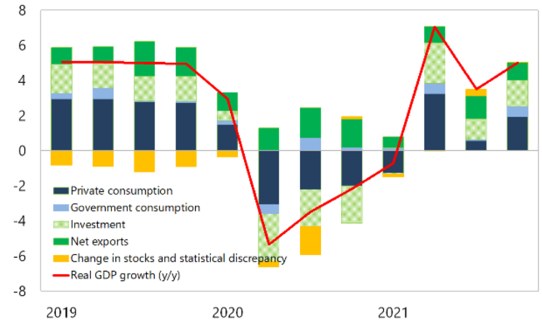
Real GDP Growth
(In percent)



Sources: Indonesian authorities; and IMF staff estimates.

…led by private consumption and investment growth.

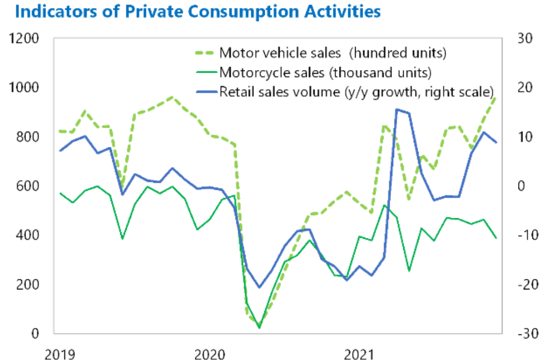
Contribution to Real GDP Growth
(In percent, year-over-year)



Sources: Haver Analytics.; and IMF staff estimates.

Private consumption appears to be recovering…

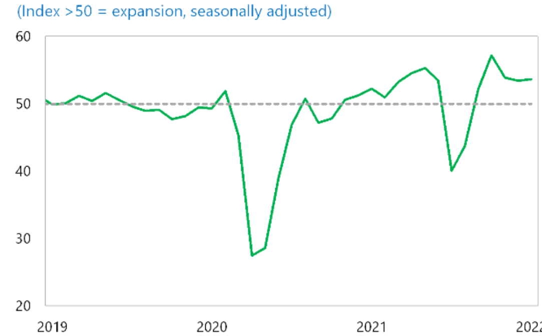
Indicators of Private Consumption Activities



Sources: Haver Analytics; and IMF staff estimates.

… while manufacturing sentiment increased above the pre-pandemic levels.

Manufacturing Purchasing Managers' Index
(Index >50 = expansion, seasonally adjusted)



Source: Haver Analytics.

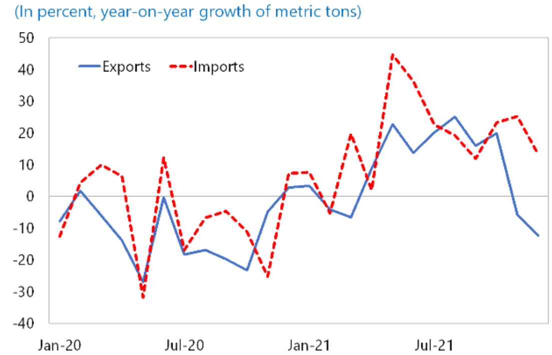
Consumer sentiment has increased…

Consumer Confidence Index
(Index >100= expansion, not seasonally adjusted)

Source: Bank Indonesia via Haver Analytics.

… while the volume of merchandise export has risen well above pre-pandemic levels.

Merchandise Trade Volume
(In percent, year-on-year growth of metric tons)

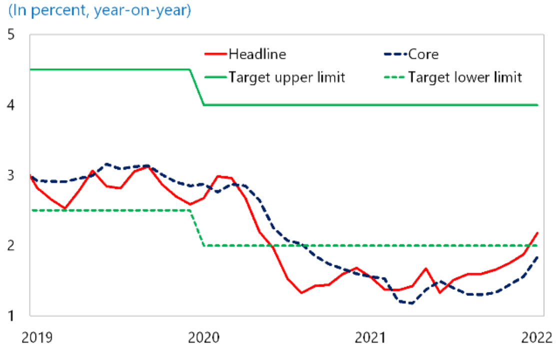


Sources: BPS via CEIC Data Co. Ltd.; and IMF staff estimates.

Figure 3. Inflation Dynamics

Inflation picked up in January and returned to the target band...

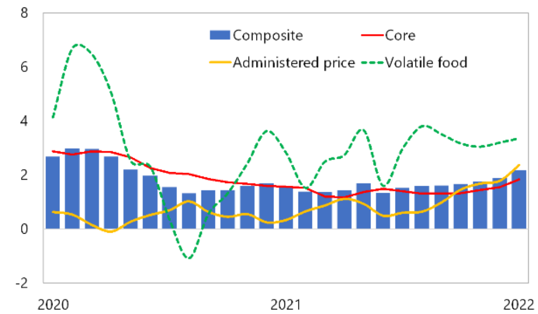
Inflation Developments
(In percent, year-on-year)



Sources: CEIC Data Company Ltd; and IMF staff estimates.

...reflecting increased domestic demand and liquified petroleum gas price increase.

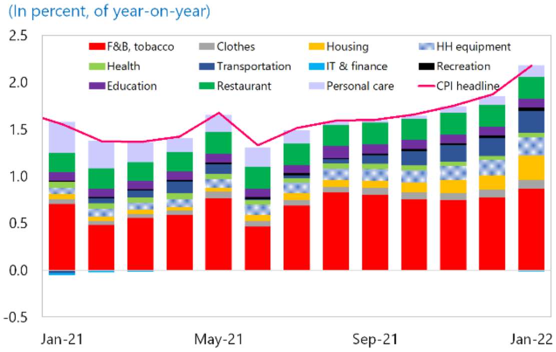
Components of CPI Inflation
(In percent, year-on-year)



Source: Statistics Indonesia (BPS) via Haver Analytics.

Disinflationary pressures in 2021 appear to be broad-based, both across products...

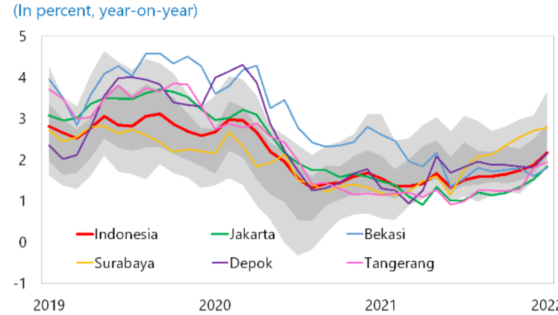
Contribution to Headline Inflation
(In percent, of year-on-year)



Sources: Badan Pusat Statistik via Haver Analytics; IMF staff estimates.

...and across regions.

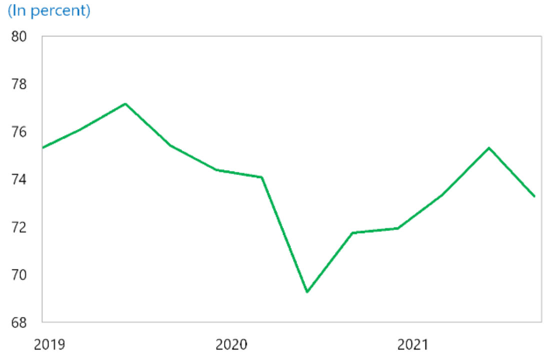
CPI in 90 Cities 1/
(In percent, year-on-year)



Sources: Badan Pusat Statistik; CEIC Data Co. Ltd.; and IMF staff estimates.
1/ Darker shade indicates 25th to 75th percentiles, lighter shade indicates 10th to 25th and 75th to 90th percentiles.

Capacity utilization has increased but is still well below the pre-pandemic levels.

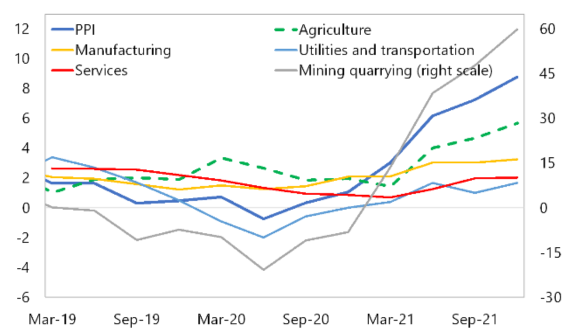
Capacity Utilization
(In percent)



Source: Bank Indonesia via Haver Analytics.

PPI inflation rebounded in 2021, led by mining sector.

Components of PPI Inflation
(In percent, year-on-year)



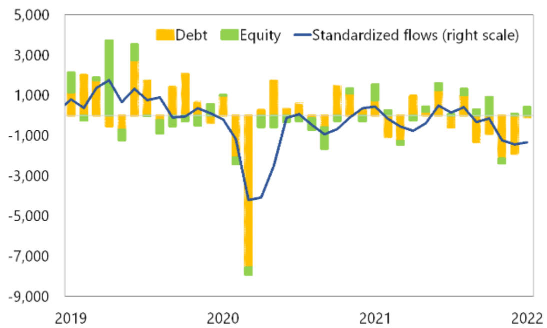
Sources: Badan Pusat Statistik via Haver Analytics; and IMF staff estimates.

Figure 4. Capital Flows and Market Developments

Portfolio investment flows have fluctuated at a low level since last year.

Portfolio Equity and Debt Flows

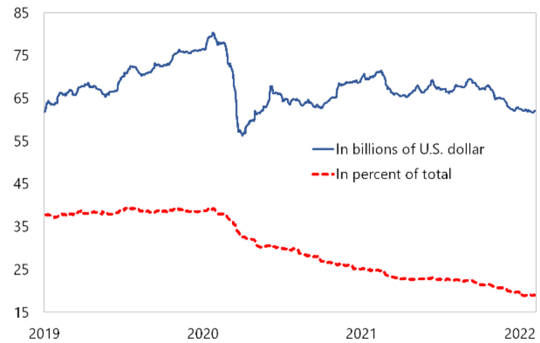
(Left scale, in millions of U.S. dollar; right scale, in standardized values)



Sources: IIF; and IMF staff estimates.

Rupiah government bonds held by foreign investors have stabilized in the US$ but have declined as a percent of stock.

Foreign Ownership of Rupiah Government Bonds

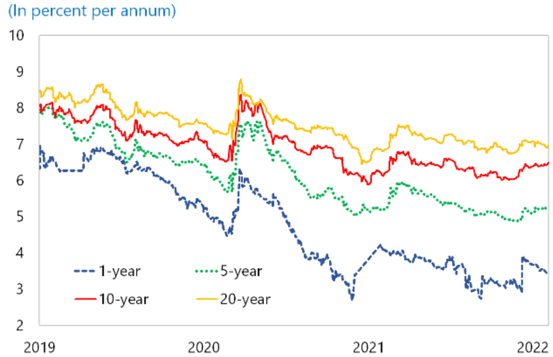


Sources: Bloomberg L.P.; CEIC Data Co., Ltd.; and IMF staff estimates.

Markets interest rates have declined since mid-2020…

Domestic Government Bond Yields

(In percent per annum)

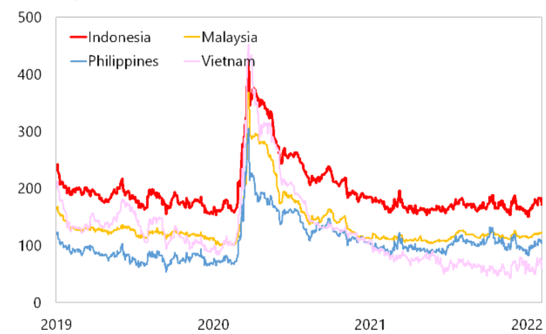


Source: Bloomberg L.P.

…partly reflecting a lower sovereign premium…

Selected Asian Economies: EMBIG Spreads

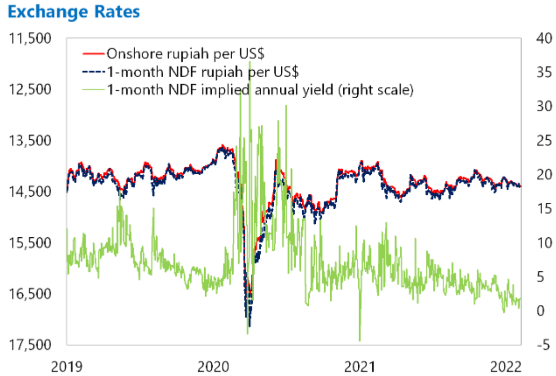
(In basis points)



Source: Bloomberg L.P.

…and exchange rate stability.

Exchange Rates

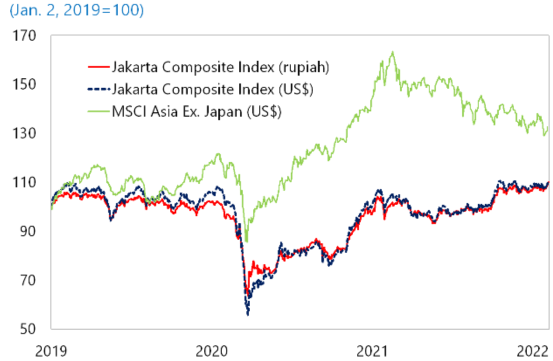


Source: Bloomberg L.P.

Stock prices have increased and reached pre-pandemic levels.

Equity Market Indices

(Jan. 2, 2019=100)

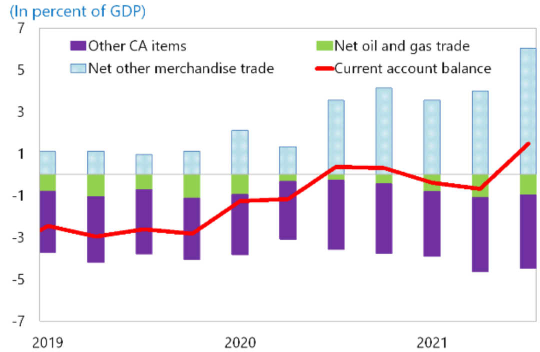


Sources: Bloomberg L.P.; and IMF staff estimates.

Figure 5. External Sector

The current account recorded a surplus in 2021, driven by an increase in the non-oil and gas balance.

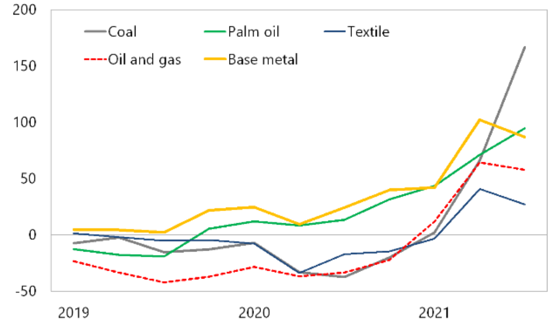
Current Account Balance
(In percent of GDP)



Sources: CEIC Data Co. Ltd.; and IMF staff estimates.

The rebound of exports in 2021 has been broad based.

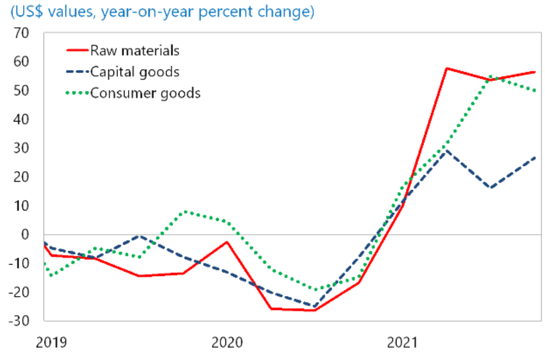
Main Export Commodities Growth
(In percent, year-on-year)



Sources: Haver Analytics; and IMF staff estimates.

Imports increased sharply, particularly consumer goods and raw material, on the back of recovering domestic activity.

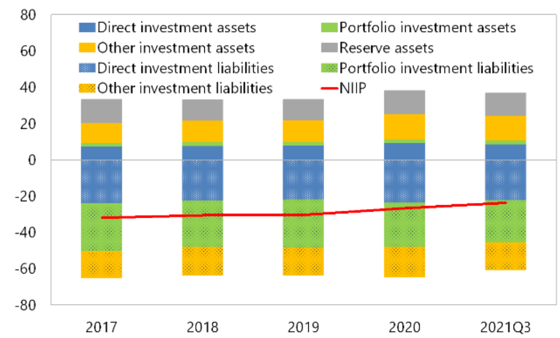
Imports of Goods
(US$ values, year-on-year percent change)



Source: CEIC Data Co. Ltd.

The NIIP improved since end-2019, mainly due to a decline in portfolio liabilities.

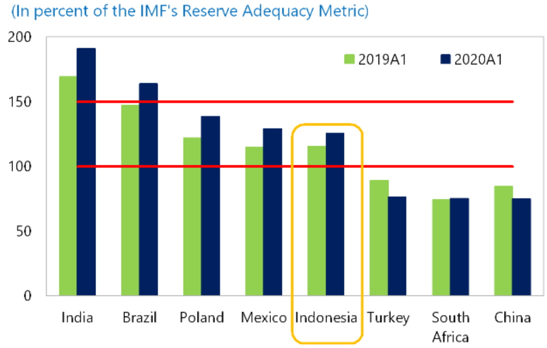
Net International Investment Position
(In percent of GDP)



Sources: CEIC Data Co. Ltd.; and IMF staff estimates.

Indonesia's foreign reserves in 2021 (US$144.9 billion) were at an adequate level.

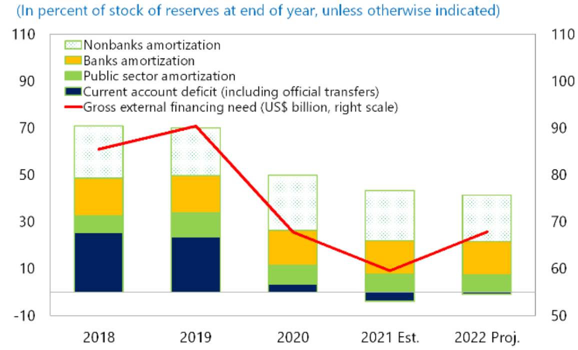
Gross International Reserves
(In percent of the IMF's Reserve Adequacy Metric)



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

External financing needs are projected to increase in 2022 mainly due to a widening of the current account deficit.

Gross External Financing Needs
(In percent of stock of reserves at end of year, unless otherwise indicated)

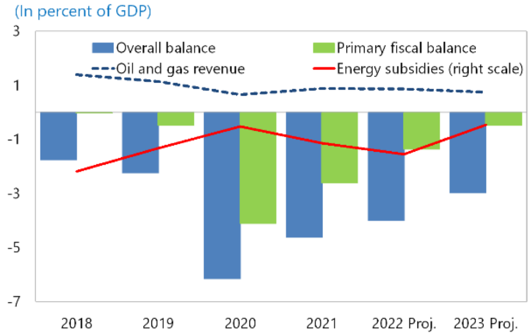


Source: IMF staff estimates.

Figure 6. Fiscal Sector

The primary deficit is projected to narrow in 2021, reflecting stronger than expected revenue performance.

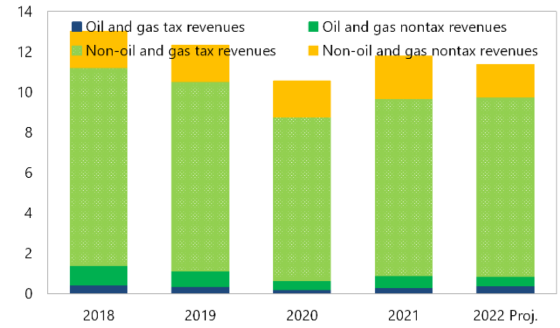
Central Government Indicators
(In percent of GDP)



Sources: Indonesian authorities; and IMF staff estimates and projections.

Total revenue-to-GDP ratio rose, mainly on account of non-tax revenue, but is expected to decline slightly in 2022.

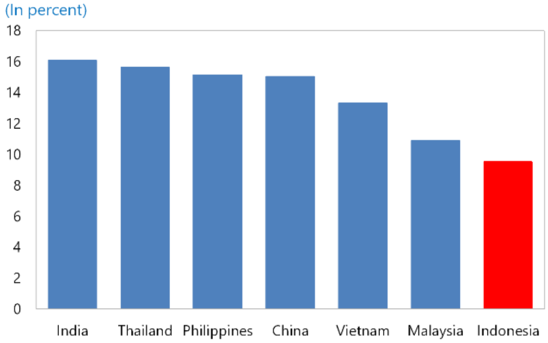
Central Government Revenue
(In percent of GDP)



Sources: Indonesian authorities; and IMF staff estimates and projections.

Indonesia's tax-to-GDP ratio lags behind EM peers in Asia.

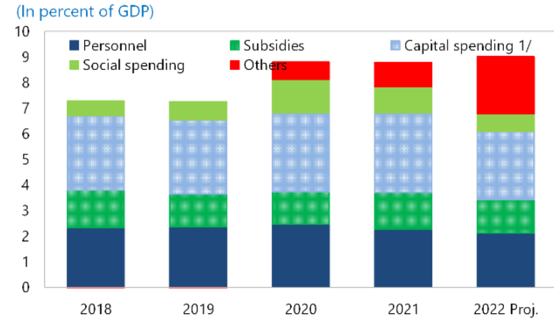
General Government Tax-to-GDP Ratio, 2020
(In percent)



Sources: IMF, *WEO Database*; and authorities' data.

Capital spending is expected to remain high in 2022.

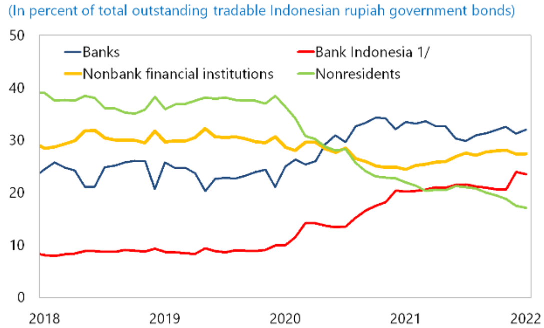
Central Government Expenditure
(In percent of GDP)



Sources: Indonesian authorities; and IMF staff estimates and projections.
1/ Includes transfers to local governments for infrastructure.

Commercial banks and BI increased their shares of rupiah government bond holdings compared to pre-pandemic.

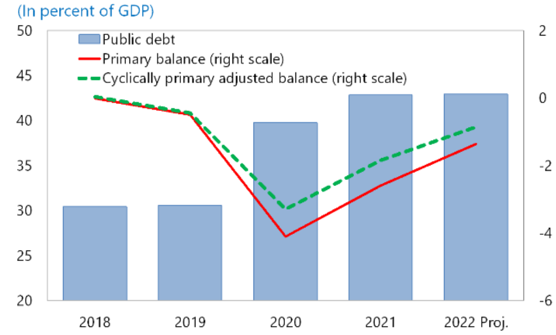
Ownership Share of Indonesian Rupiah Government Bonds 1/
(In percent of total outstanding tradable Indonesian rupiah government bonds)



Sources: Indonesian authorities via Haver Analytics; and IMF staff estimates.
1/ Including government bonds held by Bank Indonesia for monetary operations.

General government debt is expected to remain moderately higher in the medium term compared to recent history.

Public Debt, Primary, and Cyclically Adjusted Balance
(In percent of GDP)

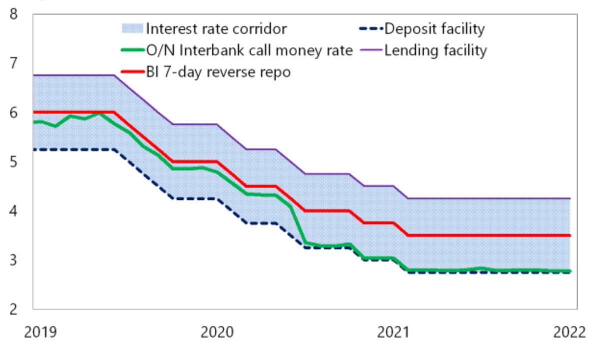


Sources: Indonesian authorities; and IMF staff estimates and projections.

Figure 7. Monetary Sector

BI has kept its policy rate unchanged since February 2021…

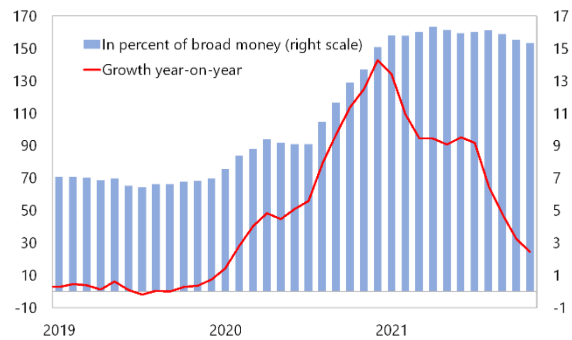
Monetary Policy and Interbank Rates
(In percent)



Sources: CEIC Data Co., Ltd.; and IMF staff estimates.

…and its government bonds purchased to support the national economic recovery program has slowed recently.

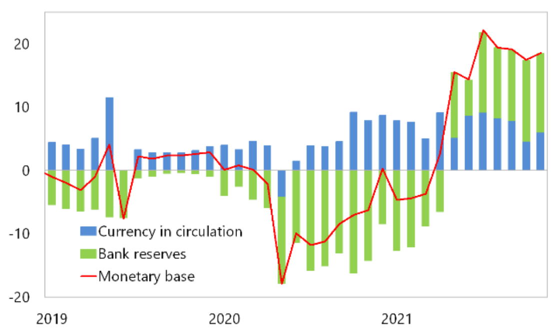
Bank Indonesia Claims on Central Government
(In percent)



Sources: IMF, International Financial Statistics; Haver Analytics; and IMF staff estimates.

Monetary base has increased recently, driven by bank reserves increase…

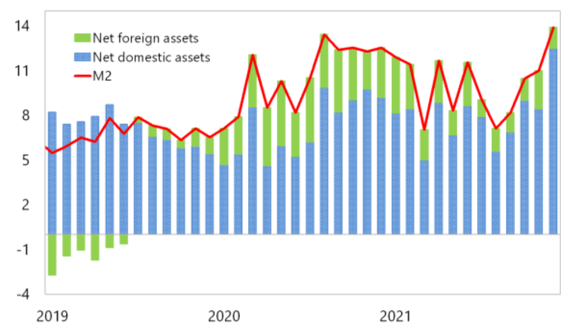
Monetary Base Growth
(In percent year-on-year contribution to growth)



Sources: IMF, International Financial Statistics; and IMF staff estimates.

… while broad money growth has accelerated.

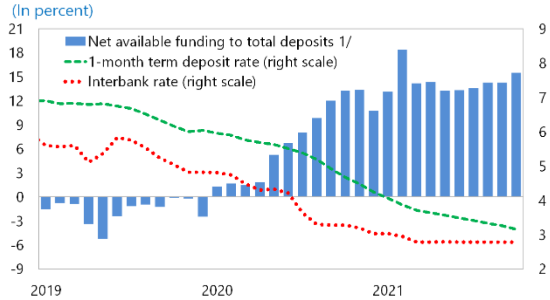
Broad Money Growth
(Contribution to growth, year-on-year)



Sources: CEIC Data Co. Ltd; and IMF staff estimates.

The banking system as a whole has ample liquidity…

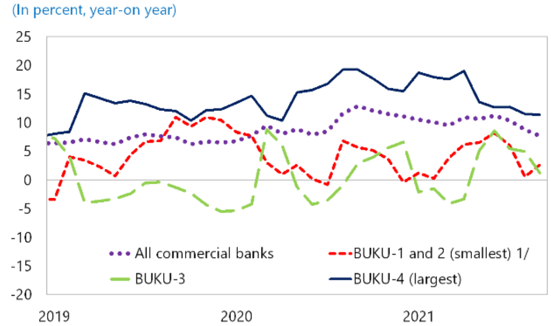
Funding Pressure in the Banking System
(In percent)



Sources: Bank Indonesia; and IMF staff estimates.
1/ Net available funding is defined as third-party funding less third-party credit and statutory reserves.

…although small banks experienced occasional deposit outflows.

Commercial Banks: Deposit Growth by Bank Size
(In percent, year-on year)

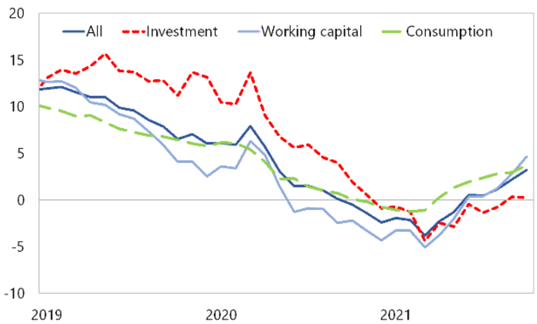


Sources: Indonesia Financial Services Authority; and IMF staff estimates.
1/ No more bank in BUKU-1 category since January 2021.

Figure 8. Macrofinancial Developments

Credit growth, which was slowing down even prior to the pandemic due to high borrowing cost and weak demand, has started to bounce back…

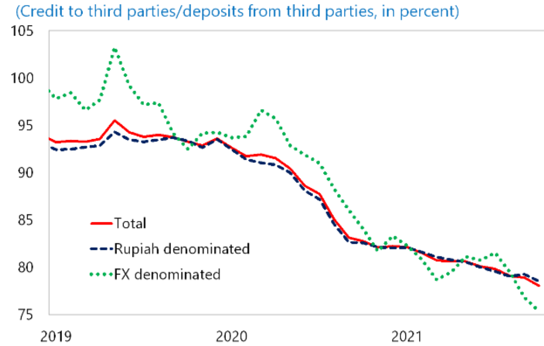
Loan Growth by Type
(In percent, year-on-year)



Sources: Indonesia Financial Service Authority; and IMF staff estimates.

…meanwhile loan-to-deposit ratio still declining.

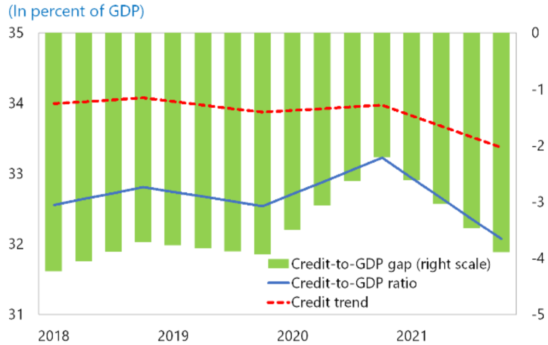
Commercial Bank Loan to Deposit Ratios
(Credit to third parties/deposits from third parties, in percent)



Sources: CEIC Data Co., Ltd.; and IMF staff estimates.

The credit gap has widened in 2021.

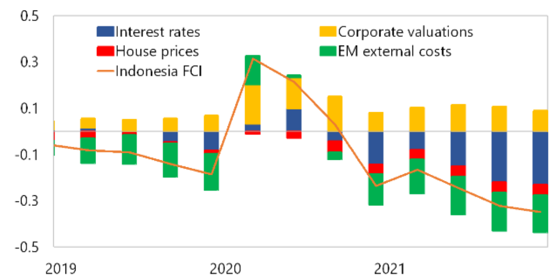
Commercial Bank Credit-to-GDP Ratio and Gap
(In percent of GDP)



Sources: CEIC Co. Ltd.; and IMF staff estimates.

Financial conditions continued to ease.

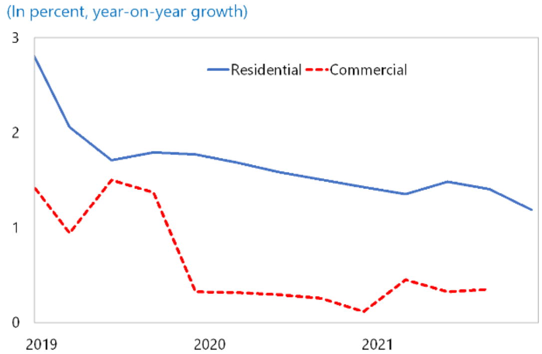
Financial Conditions Index (FCI) 1/
(Standard deviations from mean, 1996-2021:Q2)



Source: IMF staff calculations.
1/ The weights of the sub-components are derived from PCA. Negative values represent financial conditions that are loose relative to the historical average of 1996 or earliest data available through 2020; the interest rates category includes the real short-term rate, the sovereign spread on local currency debt, and the interbank spread; the corporate valuations category includes the equity market price-to-book ratio; and the external costs category includes the sovereign spread and the corporate spread on external debt, and the external debt-weighted exchange rate.

Property prices remain stable…

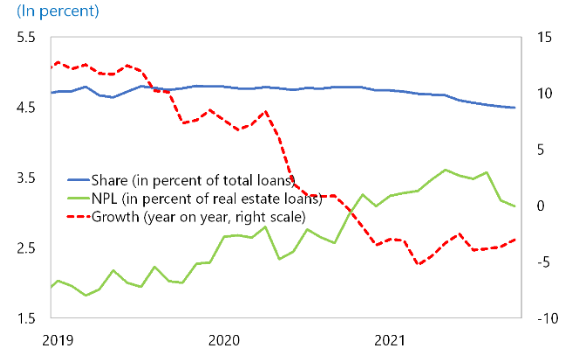
Property Prices
(In percent, year-on-year growth)



Sources: Haver Analytics; and IMF staff estimates.

…and real estate loan growth has stabilized in 2021, but non-performing loans in this credit category increased.

Real Estate Loans
(In percent)

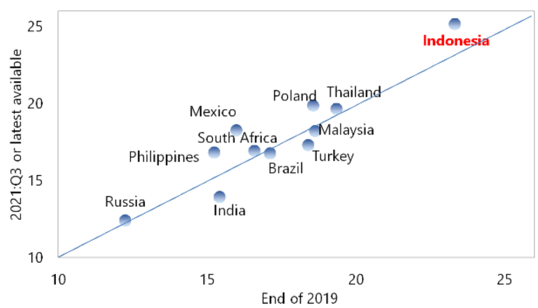


Sources: CEIC Data Co. Ltd.; and IMF staff estimates.

Figure 9. Selected Emerging Market Economies: Financial Soundness Indicators

Indonesia's banking system capital remains adequate and above peers…

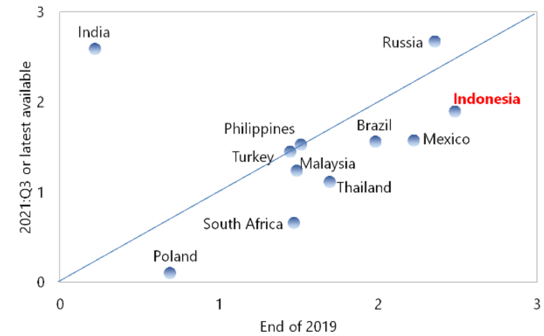
Regulatory Capital to Risk Weighted Assets 1/
(In percent)



Source: IMF, Financial Soundness Indicators.
1/ Includes capital impact of the transition to IFRS9 in January 2020.

…and although declining, profitability remains at a high level in comparison to peers reflecting large interest margins.

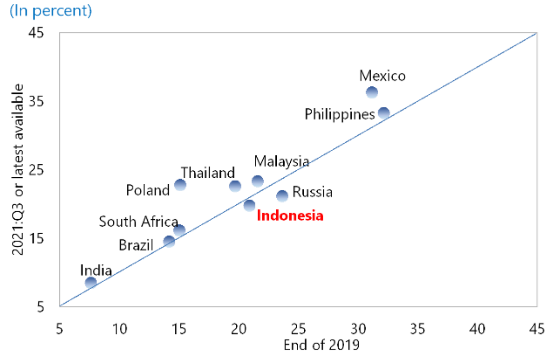
Return on Assets
(In percent)



Source: IMF, Financial Soundness Indicators.

System-wide banks liquidity remains ample and around the median among peers.

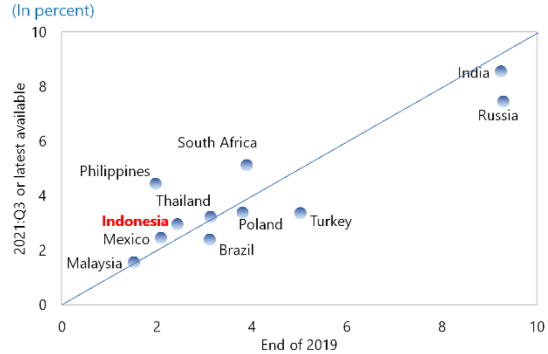
Liquid Assets to Total Assets
(In percent)



Source: IMF, Financial Soundness Indicators.

Nonperforming loans have increased since the pandemic.

Nonperforming Loans to Total Loans
(In percent)



Source: IMF, Financial Soundness Indicators.

Table 1. Indonesia: Selected Economic Indicators, 2018–23

Nominal GDP (2021): Rp 16,971 trillion or US$1,186 billion
Population (2021): 272.2 million
Main exports (percent of total, 2020): palm oil (10.6), base metal (10.2), coal (10.1), textile & textile products (6.5), oil and gas (6.1), electrical apparatus (5.8).
GDP per capita (2021): US$4,357
Unemployment rate (August 2021): 6.49 percent
Poverty headcount ratio at national poverty line (March 2020): 9.78 percent of population

	2018	2019	2020	2021 Est.	2022 Proj.	2023 Proj.
Real GDP (percent change)	5.2	5.0	-2.1	3.7	5.4	6.0
Domestic demand	6.3	4.0	-3.8	2.9	4.7	6.1
Of which:						
Private consumption 1/	5.1	5.2	-2.7	2.0	4.9	5.9
Government consumption	4.8	3.3	2.0	4.2	4.7	4.0
Gross fixed investment	7.9	4.5	-5.0	3.8	5.2	7.1
Change in stocks	0.4	-0.6	-0.7	0.1	-0.2	0.0
Net exports 2/	-1.0	1.4	1.4	1.0	0.9	0.3
Saving and investment (in percent of GDP)						
Gross investment 3/	34.6	33.8	32.4	31.5	31.0	31.3
Gross national saving	31.6	31.1	31.9	31.9	31.0	29.8
Prices (12-month percent change)						
Consumer prices (end period)	3.2	2.6	1.7	1.9	3.5	3.2
Consumer prices (period average)	3.3	2.8	2.0	1.6	2.9	3.3
Public finances (in percent of GDP)						
General government revenue	14.9	14.2	12.5	13.6	13.2	13.2
General government expenditure	16.6	16.4	18.6	18.2	17.1	16.2
Of which : Energy subsidies	1.0	0.9	0.7	0.8	0.9	0.7
General government balance	-1.8	-2.2	-6.1	-4.6	-4.0	-3.0
Primary balance	0.0	-0.5	-4.1	-2.6	-1.3	-0.5
General government debt	30.4	30.6	39.8	42.8	42.9	42.9
Money and credit (12-month percent change; end of period)						
Rupiah M2	6.3	6.5	12.5	13.9	8.4	9.0
Base money	0.2	2.9	0.4	19.3	8.8	4.7
Claims on private sector	10.3	5.8	-0.4	6.1	9.2	9.7
One-month interbank rate (period average)	6.3	6.5	4.5	3.6	…	…
Balance of payments (in billions of U.S. dollars, unless otherwise indicated)						
Current account balance	-30.6	-30.3	-4.5	4.7	-0.8	-20.6
In percent of GDP	-2.9	-2.7	-0.4	0.4	-0.1	-1.5
Trade balance	-0.2	3.5	28.2	43.9	43.3	25.9
Of which : Oil and gas (net)	-11.4	-10.3	-5.4	-9.7	-6.7	-11.5
Inward direct investment	20.6	23.9	18.5	20.2	22.1	24.5
Overall balance	-7.1	4.7	2.6	9.0	14.2	10.8
Terms of trade, percent change (excluding oil)	0.8	-2.3	-5.6	8.9	2.9	-2.8
Gross reserves						
In billions of U.S. dollars (end period)	120.7	129.2	135.9	144.9	159.1	169.9
In months of prospective imports of goods and services	7.1	9.7	7.9	7.4	7.3	7.1
As a percent of short-term debt 4/	201	204	209	213	224	226
Total external debt 5/						
In billions of U.S. dollars	375.4	403.6	417.0	436.8	454.4	488.1
In percent of GDP	36.0	36.0	39.3	36.8	35.4	34.8
Exchange rate						
Rupiah per U.S. dollar (period average)	14,235	14,152	14,529	14,297	…	…
Rupiah per U.S. dollar (end of period)	14,390	13,866	14,050	14,253	…	…
Memorandum items:						
Jakarta Stock Exchange (12-month percentage change, composite index)	-2.5	1.7	-5.1	10.1	…	…
Oil production (thousands of barrels per day)	810	805	806	803	800	797
Nominal GDP (in trillions of rupiah)	14,839	15,833	15,438	16,971	18,471	20,220

Sources: Data provided by the Indonesian authorities; and IMF staff estimates and projections.

1/ Includes NPISH consumption.
2/ Contribution to GDP growth (percentage points).
3/ Includes changes in stocks.
4/ Short-term debt on a remaining maturity basis.
5/ Public and private external debt.

Table 2. Indonesia: Selected Vulnerability Indicators, 2018–22

	2018	2019	2020	2021	2022	Data as of
Key economic and market indicators						
Real GDP growth (in percent)	5.2	5.0	-2.1	3.7	5.4	Proj.
CPI inflation (in percent, end of period, e.o.p.)	3.2	2.6	1.7	1.9	3.5	Proj.
Short-term (ST) interest rate (in percent, e.o.p.) 1/	7.5	5.4	3.8	3.6	3.6	Feb.7
Ten-year government bond yield (in percent, e.o.p.)	8.0	7.1	5.9	6.4	6.5	Feb.7
Indonesia EMBI spread (basis points (bps), e.o.p.)	237	155	186	161	172	Feb.4
Exchange rate (rupiah per U.S. dollar, e.o.p.)	14,390	13,866	14,050	14,253	14,397	Feb.7
External sector						
Current account balance (in percent of GDP)	-2.9	-2.7	-0.4	0.4	-0.1	Proj.
Net FDI inflows (in percent of GDP)	1.2	1.8	1.3	1.3	1.3	Proj.
Exports of goods and nonfactor services (GNFS) (percentage change, in US$ terms)	9.1	-5.6	-10.9	34.3	10.0	Proj.
Real effective exchange rate (average; 2010=100)	71.4	73.9	72.3	72.0	...	
Gross international reserves (in US$ billion)	120.7	129.2	135.9	144.9	159.1	Proj.
In percent of ST debt at remaining maturity (RM)	200.5	204.0	208.8	212.8	224.2	Proj.
Total gross external debt (in percent of exports of GNFS)	177.1	201.7	233.9	182.4	172.5	Proj.
Gross external financing requirement (in US$ billion) 2/	85.5	90.5	67.8	60.4	68.9	Proj.
Public sector (PS) 3/						
Overall balance (in percent of GDP)	-1.7	-2.2	-6.1	-4.6	-4.0	Proj.
Primary balance (in percent of GDP)	0.0	-0.5	-4.1	-2.6	-1.3	Proj.
Gross PS financing requirement (in percent of GDP) 4/	4.0	4.1	8.3	8.1	6.1	Proj.
Public sector gross debt (PSGD) (in percent of GDP)	30.4	30.6	36.6	41.4	42.8	Proj.
Exposed to exchange rate risk (in percent of total PSGD) 5/	41.1	37.5	33.3	33.3	31.9	Proj.
Exposed to interest rate risk (in percent of total PSGD) 6/	1.3	0.9	7.0	5.6	4.9	Proj.
Financial sector (FS)						
Capital to risk-weighted assets (in percent) 7/	23.0	23.4	23.9	25.3	...	Oct.
Nonperforming loans (in percent of total loans)	2.4	2.5	3.1	3.2	...	Oct.
Foreign currency deposits at commercial banks (in percent of total deposits)	14.0	13.7	13.2	14.0	...	Nov.
Foreign currency loans at commercial banks (in percent of total loans)	13.6	12.4	12.0	12.2	...	Nov.
Government debt held by financial system (percent of total financial system assets)	7.8	8.1	14.6	15.8	...	Nov.
Private sector credit of banking system (annual percentage change)	10.3	5.8	-0.4	6.1	9.2	Proj.

Sources: Data provided by the Indonesian authorities; and IMF staff estimates and projections.

1/ One-month Jakarta Interbank offered rate.
2/ Defined as current account deficit, plus amortization on medium- and long-term debt and short-term debt at end of previous period.
3/ Public sector covers central government only.
4/ Overall balance plus debt amortization.
5/ Debt in foreign currency or linked to the exchange rate.
6/ Government securities at variable interest rates.
7/ Includes capital charge for operational risk.

Table 3. Indonesia: Balance of Payments, 2018–23

(In percent of GDP)

	2018	2019	2020	2021 Est	2022 Proj.	2023 Proj.
Current account	-2.9	-2.7	-0.4	0.4	-0.1	-1.5
Goods, net (trade balance)	0.0	0.3	2.7	3.7	3.4	1.8
Exports, f.o.b.	17.3	15.0	15.4	18.7	19.0	17.3
Oil and gas	1.7	1.1	0.8	1.2	1.7	1.1
Non-oil and gas	15.4	13.7	14.1	17.1	17.0	15.9
Agriculture	0.6	0.5	0.6	0.5	0.5	0.4
Manufacturing	12.0	10.8	11.6	12.9	12.7	12.5
Palm oil	1.6	1.3	1.6	2.2	1.9	1.4
Rubber products	0.6	0.5	0.5	0.5	0.5	0.4
Other manufacturing	9.8	9.0	9.5	10.2	10.3	10.6
Mining	2.8	2.2	1.9	3.5	3.7	2.9
Other exports	0.2	0.3	0.5	0.4	0.4	0.4
Imports, f.o.b.	-17.4	-14.7	-12.8	-15.0	-15.7	-15.5
Oil and gas	-2.8	-2.0	-1.3	-2.1	-2.2	-1.9
Non-oil and gas	-14.6	-12.7	-11.4	-13.0	-13.5	-13.6
Consumption	-1.6	-1.4	-1.3	-1.4	-1.4	-1.4
Raw materials	-10.4	-9.0	-8.1	-9.5	-10.1	-10.4
Capital goods	-2.9	-2.6	-2.3	-2.3	-2.2	-2.1
Other	0.4	0.3	0.3	0.0	0.0	0.0
Services, net	-0.6	-0.7	-0.9	-1.0	-1.2	-1.3
Services exports	3.0	2.8	1.4	1.5	1.5	1.9
Services imports	-3.6	-3.5	-2.3	-2.5	-2.7	-3.2
Primary income, net	-3.0	-3.0	-2.7	-2.8	-2.7	-2.5
Secondary income, net	0.7	0.7	0.6	0.5	0.5	0.5
Capital and financial account	2.4	3.3	0.7	0.0	1.2	2.2
Capital account	0.0	0.0	0.0	0.0	0.0	0.0
Financial account	2.4	3.3	0.7	0.0	1.2	2.2
Direct investment, net	1.2	1.8	1.3	1.3	1.3	1.3
Abroad, net	-0.8	-0.3	-0.4	-0.4	-0.4	-0.4
In Indonesia (FDI), net	2.0	2.1	1.7	1.7	1.7	1.7
Portfolio investment, net	0.9	2.0	0.3	0.7	0.8	1.6
Equity, net	-0.5	-0.1	-0.5	-0.5	-0.3	-0.3
Portfolio debt, net	1.4	2.0	0.8	1.1	1.1	1.9
Other investment	0.3	-0.5	-0.9	-1.2	-0.9	-0.6
Assets	-0.8	-1.1	-1.1	-1.7	-1.1	-1.1
Liabilities	1.1	0.5	0.2	0.6	0.2	0.5
Errors and omissions	-0.2	-0.1	-0.1	-0.4	0.0	0.0
Reserves and related items	0.9	-0.8	-0.6	-0.8	-1.1	-0.8
Memorandum items:						
Reserves assets (US$ billions)	121	129	135.9	144.9	159	170
Reserve assets (in percent of ARA)	119	120	121	123	127	129
Reserve assets (in percent of GDP)	11.6	11.5	12.8	12.2	12.4	12.1
Nominal GDP (in billions of U.S. dollars)	1,043	1,120	1,060	1,186	1,282	1,402

Sources: Data provided by Bank Indonesia; and Fund staff estimates.

Table 4. Indonesia: Medium-Term Macroeconomic Framework, 2020–27

	2020	2021 Est.	2022 Proj.	2023 Proj.	2024 Proj.	2025 Proj.	2026 Proj.	2027 Proj.
Real GDP (percent change)	-2.1	3.7	5.4	6.0	5.8	5.4	5.3	5.2
Domestic demand	-3.8	2.9	4.7	6.1	6.0	5.6	5.5	5.4
Of which:								
Private consumption 1/	-2.7	2.0	4.9	5.9	5.8	5.5	5.3	5.2
Government Consumption	2.0	4.2	4.7	4.0	4.0	4.0	4.0	4.0
Gross fixed investment	-5.0	3.8	5.2	7.1	7.0	6.3	6.2	6.0
Net exports 2/	1.4	1.0	0.9	0.3	0.1	0.1	0.1	0.1
Statistical discrepancy 2/	0.2	-0.1	0.0	0.0	0.0	0.0	0.0	0.0
Output gap	-4.8	-4.6	-3.3	-1.9	-0.9	-0.3	0.1	0.2
Saving and investment (in percent of GDP)								
Gross investment 3/	32.4	31.5	31.0	31.3	31.6	31.9	32.1	32.4
Gross national saving	31.9	31.9	31.0	29.8	29.9	30.2	30.6	31.1
Prices (12-month percent change)								
Consumer prices (end period)	1.7	1.9	3.5	3.2	3.0	3.0	3.0	3.0
Consumer prices (period average)	2.0	1.6	2.9	3.3	3.1	3.0	3.0	3.0
Public finances (percent of GDP)								
General government revenue	12.5	13.6	13.2	13.2	13.4	13.7	14.0	14.0
General government expenditure	18.6	18.2	17.1	16.2	16.2	16.3	16.3	16.3
General government balance	-6.1	-4.6	-4.0	-3.0	-2.8	-2.6	-2.4	-2.2
General government primary balance	-4.1	-2.6	-1.3	-0.5	-0.6	-0.5	-0.4	-0.4
General government debt	39.8	42.8	42.9	42.9	42.7	42.3	41.9	41.3
Balance of payments (billions of U.S. dollars)								
Current account balance	-4.5	4.7	-0.8	-20.6	-26.1	-27.5	-27.3	-24.3
In percent of GDP	-0.4	0.4	-0.1	-1.5	-1.7	-1.7	-1.6	-1.3
Trade balance	28.2	43.9	43.3	25.9	22.5	25.5	30.5	38.2
In percent of GDP	2.7	3.7	3.4	1.8	1.5	1.6	1.8	2.1
Oil and gas	-5.4	-9.7	-6.7	-11.5	-11.0	-10.9	-11.1	-11.4
Overall balance	2.6	9.0	14.2	10.8	4.7	-0.1	2.9	10.2
Gross reserves								
In billions of U.S. dollars (end period)	135.9	144.9	159.1	169.9	174.6	174.6	177.4	187.6
In months of prospective imports	7.9	7.4	7.3	7.1	6.8	6.4	6.2	8.0
As a percent of short-term debt 3/	208.8	212.8	224.2	226.2	220.2	209.1	202.0	202.7
Total external debt								
In billions of U.S. dollars	417.0	436.8	454.4	488.1	520.9	549.6	580.8	615.9
In percent of GDP	39.3	36.8	35.4	34.8	34.5	34.0	33.5	33.2
Credit								
Private sector credit growth (percent)	-0.4	6.1	9.2	9.7	9.4	9.1	8.8	8.5
Credit-to-GDP gap (percent) 4/	-2.2	-3.9	-2.6	-1.6	-0.8	-0.1	0.0	0.0
Memorandum items:								
Oil production (thousands of barrels per day)	806	803	800	797	794	791	788	785
Indonesian oil price (period average, in U.S. dollars per barrel)	40.5	67.4	80.3	73.9	69.8	67.2	65.7	65.0
Nominal GDP (trillions of rupiah)	15,438	16,971	18,471	20,220	22,050	23,949	25,978	28,153
Nominal GDP (billions of U.S. dollars)	1,060	1,186	…	…	…	…	…	…

Sources: Data provided by the Indonesian authorities; and IMF staff estimates and projections.

1/ Includes NPISH consumption.
2/ Contribution to GDP growth.
3/ Short-term debt on a remaining maturity basis.
4/ Follows the guidance of the Basel Committee on Banking Supervision.

Table 5. Indonesia: Summary of Central Government Operations, 2018–23

(In trillions of rupiah)

	2018	2019	2020	2021 Proj.	2022 Proj.	2023 Proj.
Revenues and grants	1,942	1,957	1,648	2,003	2,103	2,315
Of which: tax revenues	1,521	1,545	1,285	1,547	1,716	1,926
Oil and gas revenues	208	180	102	151	159	151
Tax revenues	65	59	33	53	70	67
Nontax revenues	143	120	69	98	89	84
Non-oil and gas revenues	1,720	1,771	1,527	1,848	1,943	2,161
Tax revenues	1,457	1,486	1,252	1,494	1,645	1,860
Income tax	687	711	561	644	676	745
VAT	538	533	450	551	614	747
Other	232	242	241	299	355	367
Nontax revenues	264	285	275	354	298	301
Grants	14	7	19	5	1	4
Expenditure and net lending	2,202	2,310	2,595	2,787	2,836	2,912
Current expenditure	1,176	1,205	1,440	1,586	1,742	1,666
Personnel	347	376	381	388	390	408
Subsidies	217	202	196	243	243	207
Of which : energy subsidies	154	137	109	140	168	140
Fuel	97	84	48	62	23	15
Electricity	57	53	61	79	145	125
Interest	258	276	314	343	485	501
Other	354	352	549	612	624	550
Development expenditure	269	303	393	430	413	438
Capital spending	185	190	191	256	284	321
Social assistance spending 1/	84	113	203	174	129	117
Transfers to local governments	758	802	763	771	681	809
Of which : transfers for infrastructure 2/	248	268	284	268	209	255
Overall balance	-260	-353	-948	-784	-733	-597
Financing	260	353	948	784	733	597
Net issuance of government securities	358	1,142	1,133	832	637	663
Program and project loans (net)	63	-34	50	63	5	58
SOE recapitalization and land acquisition	-66	-65	-16	-65	-64	-63
Other	-96	-690	-219	-47	155	-61

Sources: Data provided by the Indonesian authorities; and IMF staff estimates and projections.

1/ Some social assistance spending was reclassified to other expenditure in 2016.
2/ Special purpose transfers (DAK) for physical infrastructure and Village Fund transfers. Starting 2017, 25 percent of general transfer and revenue sharing is included.

Table 6. Indonesia: Summary of Central Government Operations, 2018–23

(In percent of GDP, unless otherwise indicated)

	2018	2019	2020	2021	2022 Proj.	2023 Proj.
Revenues and grants	13.1	12.4	10.7	11.8	11.4	11.5
Of which: tax revenues	10.3	9.8	8.3	9.1	9.3	9.5
Oil and gas revenues	1.4	1.1	0.7	0.9	0.9	0.7
Tax revenues	0.4	0.4	0.2	0.3	0.4	0.3
Nontax revenues	1.0	0.8	0.4	0.6	0.5	0.4
Non-oil and gas revenues	11.6	11.2	9.9	10.9	10.5	10.7
Tax revenues	9.8	9.4	8.1	8.8	8.9	9.2
Income tax	4.6	4.5	3.6	3.8	3.7	3.7
VAT	3.6	3.4	2.9	3.2	3.3	3.7
Other	1.6	1.5	1.6	1.8	1.9	1.8
Nontax revenues	1.8	1.8	1.8	2.1	1.6	1.5
Grants	0.1	0.0	0.1	0.0	0.0	0.0
Expenditure and net lending	14.8	14.6	16.8	16.4	15.4	14.4
Current expenditure	7.9	7.6	9.3	9.3	9.4	8.2
Personnel	2.3	2.4	2.5	2.3	2.1	2.0
Subsidies	1.5	1.3	1.3	1.4	1.3	1.0
Of which : energy subsidies	1.0	0.9	0.7	0.8	0.9	0.7
Fuel	0.7	0.5	0.3	0.4	0.1	0.1
Electricity	0.4	0.3	0.4	0.5	0.8	0.6
Interest	1.7	1.7	2.0	2.0	2.6	2.5
Other	2.4	2.2	3.6	3.6	3.4	2.7
Development expenditure	1.8	1.9	2.5	2.5	2.2	2.2
Capital spending	1.2	1.2	1.2	1.5	1.5	1.6
Social assistance spending 1/	0.6	0.7	1.3	1.0	0.7	0.6
Transfers to local governments	5.1	5.1	4.9	4.5	3.7	4.0
Of which : transfers for infrastructure 2/	1.7	1.7	1.8	1.6	1.1	1.3
Overall balance	-1.7	-2.2	-6.1	-4.6	-4.0	-3.0
Memorandum items:						
Net issuance of government securities	2.4	7.2	7.3	4.9	3.5	3.3
SOE recapitalization and land acquisition	0.4	0.4	0.1	0.4	0.3	0.3
Primary balance (percent of GDP)	0.0	-0.5	-4.1	-2.6	-1.3	-0.5
Cyclically-adjusted primary balance (percent of GDP)	0.0	-0.4	-3.3	-1.8	-0.8	-0.2
Capital spending and transfers (percent of GDP) 3/	2.9	2.9	3.1	3.1	2.7	2.8
General government debt (percent of GDP)	30.4	30.6	39.8	42.8	42.9	42.9
Indonesian crude oil price (US$ per barrel)	67.5	62.4	40.5	67.4	80.3	73.9
Oil production (thousands of barrels per day)	810	805	806	803	800	797
Nominal GDP (in trillions of rupiah)	14,839	15,833	15,438	16,971	18,471	20,220

Sources: Data provided by the Indonesian authorities; and IMF staff estimates and projections.

1/ Some social assistance spending was reclassified to other expenditure in 2016.
2/ Special purpose transfers (DAK) for physical infrastructure and Village Fund transfers. Starting 2017, 25 percent of general transfer and revenue sharing is included.
3/ Sum of capital spending and transfers for infrastructure.

Table 7. Indonesia: Summary of General Government Operations, 2018–23

	2018	2019	2020	2021 Est.	2022 Proj.	2023 Proj.
			(In trillions of rupiah)			
Total revenue and grants	2,208	2,241	1,924	2,307	2,434	2,678
Taxes	1,699	1,735	1,470	1,750	1,937	2,169
Taxes on income, profits, and capital gains	752	770	594	697	746	812
Taxes on goods and services	698	705	627	746	827	966
VAT and luxury taxes	538	533	450	551	614	747
Excise	160	172	176	196	213	219
Taxes on international trade and transactions	46	41	37	73	97	98
Taxes not elsewhere classified	204	219	213	234	267	292
Grants	14	7	19	5	1	4
Other revenue	495	499	435	553	496	505
Total expenditure	2,468	2,594	2,872	3,091	3,167	3,274
Expense	1,938	2,024	2,300	2,403	2,399	2,408
Of which :						
Compensation of employees	796	856	848	902	949	1,020
Purchases/use of goods and services	337	334	422	527	532	531
Interest	258	276	314	343	485	501
Energy subsidies	154	137	109	140	168	140
Social benefit	112	147	238	217	181	179
Net acquisition of nonfinancial assets	530	570	572	688	768	866
Net lending/borrowing	-260	-353	-948	-784	-733	-597
Net acquisition of financial assets	41	755	235	112	-91	124
Of which : policy lending	0	0	0	0	0	0
Net incurrence of liabilities	300	1,108	1,183	896	642	721
			(In percent of GDP)			
Total revenue and grants	14.9	14.2	12.5	13.6	13.2	13.2
Taxes	11.5	11.0	9.5	10.3	10.5	10.7
Taxes on income, profits, and capital gains	5.1	4.9	3.8	4.1	4.0	4.0
Taxes on goods and services	4.7	4.5	4.1	4.4	4.5	4.8
VAT and luxury taxes	3.6	3.4	2.9	3.2	3.3	3.7
Excise	1.1	1.1	1.1	1.2	1.2	1.1
Taxes on international trade and transactions	0.3	0.3	0.2	0.4	0.5	0.5
Taxes not elsewhere classified	1.4	1.4	1.4	1.4	1.4	1.4
Grants	0.1	0.0	0.1	0.0	0.0	0.0
Other revenue	3.3	3.2	2.8	3.3	2.7	2.5
Total expenditure	16.6	16.4	18.6	18.2	17.1	16.2
Expense	13.1	12.8	14.9	14.2	13.0	11.9
Of which :						
Compensation of employees	5.4	5.4	5.5	5.3	5.1	5.0
Purchases/use of goods and services	2.3	2.1	2.7	3.1	2.9	2.6
Interest	1.7	1.7	2.0	2.0	2.6	2.5
Energy subsidies	1.0	0.9	0.7	0.8	0.9	0.7
Social benefit	0.8	0.9	1.5	1.3	1.0	0.9
Net acquisition of nonfinancial assets	3.6	3.6	3.7	4.1	4.2	4.3
Net lending/borrowing	-1.8	-2.2	-6.1	-4.6	-4.0	-3.0
Net acquisition of financial assets	0.3	4.8	1.5	0.7	-0.5	0.6
Of which : policy lending	0.0	0.0	0.0	0.0	0.0	0.0
Net incurrence of liabilities	2.0	7.0	7.7	5.3	3.5	3.6
Memorandum items:						
General government debt (In percent of GDP)	30.4	30.6	39.8	42.8	42.9	42.9
Nominal GDP (In trillions of rupiah)	14,839	15,833	15,438	16,971	18,471	20,220

Sources: Data provided by the Indonesian authorities; and IMF staff estimates and projections.

Table 8. Indonesia: Monetary Survey, 2018–23

	2018	2019	2020	2021 Est.	2022 Proj.	2023 Proj.
			(In trillions of rupiah)			
Net foreign assets	1,442.5	1,506.6	1,711.2	1,737.2	1,911.9	2,100.7
Claims on nonresidents	1,970.6	2,026.3	2,197.6	2,337.3	2,551.1	2,739.9
Central bank	1,748.9	1,797.5	1,918.0	2,067.6	2,281.4	2,470.2
Other depository corporations	221.6	228.8	279.7	269.7	269.7	269.7
Liabilities to nonresidents	-528.1	-519.7	-486.4	-600.1	-639.2	-639.2
Central bank	-40.4	-38.5	-40.5	-40.5	-40.5	-40.5
Other depository corporations	-487.6	-481.2	-446.0	-559.6	-598.7	-598.7
Net domestic assets	4,317.5	4,630.2	5,194.8	6,129.8	6,615.8	7,194.1
Net claims on central government	624.7	714.3	1,676.6	1,890.0	2,017.1	2,104.1
of which: held by Bank Indonesia	223.4	266.8	728.4	1,105.1	1,337.1	1,376.6
Claims on state and local government	5.2	2.4	2.7	2.9	3.2	3.5
Claims on public nonfinancial corporations	480.1	508.6	464.2	510.3	555.4	608.0
Claims on NBFIs	371.3	377.3	344.1	378.3	411.8	450.7
Claims on private sector	4,868.6	5,151.6	5,129.1	5,442.0	5,942.7	6,519.1
Corporates	2,336.3	2,454.8	2,370.2	...	...	...
Households	2,532.3	2,696.8	2,758.9	...	...	...
Capital and Reserves (-)	1,630.2	1,736.1	1,853.4	1,942.7	2,026.8	2,180.6
Other items, net (-, including discrepancy)	402.2	388.0	568.6	151.0	287.5	310.8
Broad money	5,760.0	6,136.8	6,905.9	7,867.1	8,527.7	9,294.8
Currency in circulation	625.4	654.8	760.1	865.9	938.6	1,023.0
Transferable deposits	2,696.8	2,916.2	3,346.3	3,812.0	4,132.1	4,503.8
Other deposits	2,417.3	2,539.8	2,776.3	3,162.7	3,428.3	3,736.6
Securities	20.5	26.0	23.2	26.5	28.7	31.3
Other liabilities	440.4	445.7	428.6	151.0	287.5	310.8
			(Annual percentage change)			
Net foreign assets	-6.4	4.4	13.6	1.5	10.1	9.9
Net domestic assets	11.4	7.2	12.2	18.0	7.9	8.7
Claims on private sector	10.3	5.8	-0.4	6.1	9.2	9.7
Corporates	11.8	5.1	-3.4	...	...	...
Households	9.0	6.5	2.3	...	...	...
Broad money	6.3	6.5	12.5	13.9	8.4	9.0
			(In percent of GDP, end of period)			
Net foreign assets	9.7	9.5	11.1	10.2	10.4	10.4
Net domestic assets	29.1	29.2	33.6	36.1	35.8	35.6
Claims on private sector	32.8	32.5	33.2	32.1	32.2	32.2
Corporates	15.7	15.5	15.4	...	...	... ..
Households	17.1	17.0	17.9	...	...	... ..
Broad money	38.8	38.8	44.7	46.4	46.2	46.0
Memorandum items:						
Base money (annual percentage change)	0.2	2.9	0.4	19.3	8.8	4.7
Velocity (nominal GDP/broad money)	2.6	2.6	2.2	2.2	2.2	2.2
Nominal GDP (in trillions of rupiah)	14,839	15,833	15,438	16,971	18,471	20,220

Sources: IMF, International Financial Statistics; and IMF staff estimates.

Table 9. Indonesia: Financial Soundness Indicators, 2017–21

(In percent, unless otherwise indicated)

	2017	2018	2019	2020	2021	
					Latest observation	
Depository institutions						
Capital adequacy						
Regulatory capital to risk-weighted assets	23.2	23.0	23.4	23.9	25.2	Q3
Core Tier-1 capital to risk-weighted assets	21.5	21.3	21.9	22.2	23.6	Q3
Capital to assets	15.2	15.1	15.6	14.8	15.6	Q3
Large exposures to capital	0.4	0.4	0.4	1.9	1.2	Q3
Asset quality						
Nonperforming loans to total gross loans	2.6	2.3	2.4	2.8	3.0	Q3
Nonperforming loans, net of provisions to capital	5.0	4.4	5.0	3.9	3.9	Q3
Specific provisions to nonperforming loans	55.2	57.6	53.3	68.3	67.9	Q3
Earning and profitability						
Return on assets	2.4	2.5	2.5	1.5	1.9	Q3
Return on equity	15.8	16.7	16.0	10.2	12.7	Q3
Interest margin to gross income	69.3	69.8	65.3	61.0	60.6	Q3
Trading income to gross income	3.8	2.7	4.2	6.6	5.0	Q3
Noninterest expenses to gross income	49.7	48.1	46.3	47.0	42.4	Q3
Personnel expenses to noninterest expenses	40.7	41.9	41.7	40.5	43.8	Q3
Liquidity and funding						
Liquid assets to total assets	21.7	21.9	20.9	19.0	19.8	Q3
Liquid assets to short-term liabilities	31.7	32.0	30.8	27.4	28.9	Q3
Non-interbank loans to customer deposits	96.4	102.2	103.3	96.7	90.1	Q3
Sensitivity to market risk						
Net open position in foreign exchange to capital	1.6	1.7	1.6	0.9	1.2	Q3
Foreign currency denominated loans to total loans	13.2	13.6	12.4	12.0	12.1	Q3
Foreign currency denominated liabilities to total liabilities	19.3	20.0	18.9	18.2	18.8	Q3
Gross asset position in financial derivatives to capital	0.7	1.8	1.6	2.3	1.2	Q3
Gross liability position in financial derivatives to capital	0.6	2.2	1.2	1.8	0.8	Q3
Nonfinancial corporates						
Corporate debt (in percent of GDP)	39.6	41.3	40.5	41.9	40.5	Q3
Leverage						
Total liabilities to total assets	45.2	48.9	48.3	49.2	45.9	Q3
Profitability 1/						
Return on assets	14.3	13.6	11.5	8.0	9.8	Q3
Liquidity 1/						
Current assets to current liabilities	226.6	212.5	205.3	194.3	211.7	Q3
Liquid assets to current liabilities	122.8	124.0	131.1	124.5	144.5	Q3
Debt servicing capacity						
Companies with negative equity (in percent of total assets)	1.7	1.3	0.6	4.0	3.7	Q3
Companies with negative equity (in percent of total firms)	6.4	6.8	6.2	7.5	7.6	Q3
Households						
Household debt (in percent of GDP)	17.0	17.0	17.0	16.9	...	Q2
Real estate markets						
Residential real estate prices (year-on-year percentage change, eop)	3.5	3.0	1.8	1.4	1.4	Q3
Residential real estate loans to total loans	8.5	8.5	8.6	8.5	9.0	Q3
Commercial real estate loans to total loans	8.9	9.1	9.5	9.3	9.4	Q3

Sources: Authorities data; Bloomberg L.P.; IMF, *Financial Soundness Indicators*; Bank for International Settlements; Haver Analytics; CEIC Data Co. Ltd.; and IMF staff estimates.

1/ Based on capitalization-weighted average of listed companies.

Table 10. Indonesia: Key Poverty and Social Indicators

Population	270.2	millions	(2020)
Life expectancy at birth, total	71.7	years	(2019)
Mortality rate, under 5	23.9	per 1,000 live births	(2019)
Secondary school enrollment:			
Total	88.9	percent	(2018)
Female	90.0	percent	(2018)
Male	87.8	percent	(2018)
GINI index	38.1		(2020)
Income share held by highest 20%	45.5	percent	(2019)
Income share held by lowest 20%	6.9	percent	(2019)
Poverty rate	9.8	percent	(2020)
CO2 emissions	2.2	metric tons per capita	(2018)
Population with basic drinking water	92.4	percent	(2020)
Population with basic sanitation	86.5	percent	(2020)
Human development index	0.72		(2019)
Rank	107		
Gender inequality index	0.48		(2019)

Sources: World Bank; Badan Pusat Statistik; and United Nations Development Programme.

Table 11. Indonesia: Key FSAP Recommendations

	Key Recommendations	Authorities' Actions
	Institutional and legal arrangements	
1	Revise OJK Law to give primacy to objective of safeguarding stability, BI Law to include a financial stability and macroprudential policy mandate focused on systemic risk of the financial system, with access to data; and LPS Law to focus objectives on the maintenance of financial stability, continuity of critical functions, protection of insured deposits, and minimization of resolution costs.	A comprehensive financial sector reform focusing on financial regulation, proposed as "Prolegnas" (Priority Law), is currently being discussed by the Government and Parliament. This may trigger the amendment of several laws in the financial sector, including OJK Law, BI Law, and LPS Law.
2	Amend the Insurance Law to specify policyholder protection as principal objective of OJK.	Series of meetings with stakeholders (MoF, OJK, LPS, insurance associations, experts) to discuss the design of policyholders' protection program (PPP) have been conducted. The concept of PPP would be part of the financial sector reform discussion (as above) between the Government and Parliament.
3	Strengthen legal protection of supervisors and officials of all agencies involved in financial oversight and crisis management in line with global standards.	**Completed**. In addition to being regulated under Article 45 of BI Law and Article 48 of PPKSK Law (Law Number 9 of 2016), the legal protection of supervisors and officials of all agencies (MoF, BI, OJK, LPS) has been further strengthened by Article 27 section 2 of Law Number 2 Year 2020 (Government Regulation in Lieu of Law No. 1 Year 2020 on State Financial Policy and Financial System Stability for Handling Covid-19 Pandemic and/or Encounter the Threat to National Economy and/or Stability of Financial Systems). The law provides legal protection to KSSK members, secretariat and members of Secretariat, as well as officials or employees of MOF, BI, OJK, LPS who carry out their functions in good faith and according to prevailing laws and regulations.
	Systemic risk monitoring and prudential policy	
4	Introduce a foreign currency liquidity coverage ratio.	**Completed**. Indonesia has complied with the Basel standards by supervising banks' foreign exchange liquidity position using an additional monitoring tool based on the significance of such foreign exchange to the bank's financial position. OJK has been imposing LCR based on significant currencies as a monitoring tool as stipulated in regulation No.42/POJK.03/2015 concerning Liquidity Coverage Ratio Requirement for Commercial Banks. Article 51 and its elucidation of such regulation requires banks to monitor LCR based on significant currencies.
5	Strengthen BI's capacity for systemic risk analysis and macroprudential stress tests, and OJK's capacity for regulatory stress tests; OJK should do bottom-up stress tests for D-SIBs regularly.	**Completed**. BI and OJK continuously implement Joint Stress Test (JST) regularly once a year (a total of three times since 2017). Due to the pandemic, 2020's JST was completed in early 2021, while preparation for 2021's JST is still under intensive discussion since September 2021. Currently, BI has designed macroeconomic scenarios, namely baseline, adverse I (for severe), and adverse II (for moderate), based on potential medium-term global and domestic economic risks. As the next steps, OJK will coordinate Bottom-Up Stress Test (BUST) for systemic banks (D-SIB) and other large banks, while BI will perform Top-Down Stress Test (TDST) by using those scenarios. To support the implementation of BUST, OJK also has issued internal guidelines (OJK Internal Circular Letter Number 16/SEDK.03/2017). The results of TDST have been regularly reported to the Board Meeting of BI and OJK. In terms of capacity building, during 2019-20, BI continued to improve its stress test (ST) capabilities and framework, with strong TA support from the IMF and other central banks (bilateral cooperation). In March 2019, the IMF provided BI with further TA that focused on macroprudential ST covering banking ST and corporate ST. On banking ST, BI learned how to improve its liquidity ST, using both cash flow-based (CFB) and simplified LCR (sLCR) approaches. On corporate ST, BI learned how to utilize bottom-up default analysis to assess corporate sector resilience. During 2020, BI received two TAs from Bundesbank and Bank of England that focus on solvency ST and Macro ST. BI developed the integrated macroprudential stress test (IMaPST) framework in 2021. The framework strengthens BI ST framework by integrating solvency and liquidity ST, along with calculating systemic risk indicator. Aside from the integration, the framework consists of 7 modules: (1) non-linear macro scenario design; (2) using 2017 FSAP solvency stress test (SST) framework; (3) adjusting liquidity stress test (LST) according to SST; (4) putting two SST and LST interaction modules; (5) incorporating credit crunch module; (6) calibrating contagion stress test (CST); and (7) estimating systemic risk indicators. In addition, in the post-COVID-19 period, OJK with BI held more frequent meetings on the technical level, with at least twice a month to monitor and address any concerns about individual banks.
	Financial sector oversight	
6	Reduce OJK's silo structure, including by revising the OJK Law to remove the responsibilities of individual Commissioners for the supervision of specific sectors.	The proposal to reduce silos in the OJK would be part of the financial sector reform discussion.
7	Strengthen the banking supervisory approach and continue enhancing supervisory practices for financial conglomerates (FCs).	OJK's Committee of Integrated Supervision decided on February 5, 2021 that 14 FCs meet the definition criteria according to OJK Regulation No.45/POJK.03/2020 on FCs (POJK 45). The FCs, through its Lead Entities, have also prepared and submitted their Corporate Charters to OJK as stipulated in Article 5 of POJK 45. Following the implementation of POJK 45, there are 31 FCs that no longer meet the set criteria of FCs as stipulated in Article 2, hereinafter referred to as Financial Groups (FG). In accordance with the transitional article of POJK 45, the FG is required to perform all of its responsibility as FC until the reporting period of December 2020. Thus, the Integrated Supervisor (OJK) assessed 31 FGs integrated risk rating and updated the know your financial conglomerates (KYFC) document until the aforesaid reporting period. Throughout 2020 and until May 2021, OJK has performed 11 coordination meetings between all sectoral supervisors to update on issues pertaining to the financial institutions that they supervise, as well as the supervisory actions taken/to be taken with regards to said issues. Based on the coordination meeting in 2021, it has been agreed that Lead Entity monitoring is carried out by performing certain supervisory action based on issues at hand.
8	Further strengthen the enforcement of credit and risk management regulations.	**Completed**. OJK has issued a number of regulations to strengthen banks' credit and risk management practices, namely: a) OJK Regulation (POJK) No.40/POJK.03/2017 dated July 12, 2017 concerning Credit or Financing to Securities Companies and Credit or Financing with Shares as Collateral b) POJK No.16/POJK.03/2018 dated August 15, 2018 concerning Amendments to the POJK Number 44/POJK.03/2017 concerning Restrictions on the Provision of Credit or Financing by Commercial Banks for Land Procurement and/or Land Processing c) POJK No.20/POJK.03/2019 regarding Quality Assessment of Asset for Commercial Banks d) POJK No.38/POJK.03/2019 dated 19 December 2019 concerning Amendments to POJK Number 32/POJK.03/2018 concerning Maximum Limits for Loans and Provision of Large Funds for Commercial Banks (Large Exposures) e) POJK No.40/POJK.03/2019 dated 19 December 2019 concerning Asset Quality Assessment of Commercial Banks f) POJK No.48/POJK.03/2020 dated December 1, 2020 concerning Amendments to POJK No.11/POJK.03/2020 of 2020 dated March 13, 2020 concerning National Economic Stimulus as a Countercyclical Policy Impact of the Spread of the 2019 Coronavirus Disease g) POJK No.13/POJK.03/2020 dated March 24, 2020 concerning Amendments to OJK Regulation Number 38/POJK.03/2016 concerning the Implementation of Risk Management in the Use of Information Technology by Commercial Banks h) POJK NO. 44/POJK.05/2020 date August 28,2020 concerning the Implementation of Risk Management for Non-Bank Financial Services Institutions OJK is in the process of issuing an updated regulation on Risk-Weighted Assets for Credit Risk and Market Risk which will be implemented by 2023 in line with the target agreed by the Basel Committee on Banking Supervision.
9	Revise the insurance supervisory framework (three strikes-approach) to allow prompt actions.	**Completed**. FSAP recommendation has been implemented through issuance of OJK Regulation Number 17/POJK.05/2017 concerning the imposition of administrative sanctions in the form of revocation of business license without prior imposition of other administrative sanctions in cases where there is a drastic deterioration of financial conditions, shareholders are not cooperative and no way of solving the problems that endanger the interests of policyholders, the insured, or the participants. Furthermore, OJK Regulation Number 28/POJK.05/2020 concerning NBFI Health Level Assessment stipulates that in addition to the imposition of warning sanctions, OJK can also impose a reduction in the results of the company's health level assessment and reassess the main parties. In addition, there is a POJK regarding the status determination and follow-up supervision (POJK exit policy) which regulates follow-up supervision based on the company's supervisory status. In practice, OJK could submit letters of guidance or suggestions for improvement as a follow-up to the results of supervision.

Table 11. Indonesia: Key FSAP Recommendations (Continued)

	Key Recommendations	Authorities' Actions
	Governance of financial conglomerates (FCs)	
10	Strengthen corporate governance practices within the financial system, including the boards of commissioners' (BoC) oversight roles and responsibilities.	OJK has stipulated regulations No.55/POJK.03/2016 on Good Corporate Governance for Commercial Banks and No. 18/POJK.03/2016 on the Implementation of Risk Management for Commercial Banks. The regulations require BoC to conduct active oversight over the bank's activities and to provide advice to the board of directors to improve corporate governance and risk management practice. OJK has stipulated regulations on the corporate governance of FCs: - In the insurance sector, OJK has POJK 73/POJK.05/2016 that regulates good corporate governance for the insurance company by highlighting 5 main principles: transparency, accountability, responsibility, independency, and fairness. - In the capital market sector, OJK has issued several regulations on good corporate governance to Securities Company, namely: (1) OJK Regulation Number 57/POJK.04/2017 concerning Implementation of Good Corporate Governance for Securities company which conduct business activities as underwriter and broker-dealer; (2) OJK regulation number 10/POJK.04/2017 concerning Implementation of Good Corporate Governance for Investment Manager; (3) OJK circular letter number 55/SEOJK.04/2017 concerning a report of Implementation of Good Corporate Governance for Securities company which conduct business activities as underwriter and broker-dealer; (4) OJK circular letter number 19/SEOJK.04/2018 concerning a report of Implementation of Good Corporate Governance for Investment Manager.
11	Introduce legal provisions for licensed non-operating financial holding companies.	OJK established its Regulation Number 45/POJK.03/2020 concerning FCs that defines FC as Financial group of company which has combining assets equal to or larger than IDR100,000,000,000,000 (one hundred trillion Rupiah) and consists of more than 1 (one) type of business activities. The regulation requires the FC to appoint or establish a financial company to be the holder of the financial conglomeration. The type of businesses that can be included in financial conglomerates are banks, insurance, multi-finance companies, and securities. In addition, the discussion of financial sector reform has also included the strengthening of OJK function in supervising financial holding companies, including the appointment of financial entity or establishment of new entity as the controller of the FC.
	Crisis management and resolution, and safety nets	
12	Revise the PPKSK Law to clarify the role of the KSSK as solely a coordination body; limit the involvement of the President to approving public funding.	The Law number 2 of 2020 provides legal foundation for KSSK to hold meetings in person or virtually by utilizing IT to formulate and define the necessary steps of handling the financial stability issues and to establish support scheme by the Government in handling financial institutions and stability issues that endanger national economy through the budget allocation in maintaining financial stability. The role of President in crisis management is necessary and should be conducted with good governance practices and also not intended to dilute the responsibility of the KSSK members in dealing with resolution issues.
13	Adjust the emergency liquidity assistance (ELA) framework to ensure it is effective.	**Completed**. In response to the Covid-19 pandemic, the Government enacted Law No. 2 of 2020 concerning State Financial Policy and Financial System Stability for Handling Covid-19 Pandemic, which included enhancement of BI's mandate and power in crisis conditions. As a follow up, BI amended its crisis management and resolution framework, particularly with regard to BI crisis management protocol and provision of PLJP/PLJPS. The amendment of BI PLJP/PLJPS framework comprises, among others: (i) adjustment of PLJP interest rate, (ii) strengthen OJK responsibility on assessing Bank's solvency and soundness rating eligibility for receiving PLJP; (iii) revision of the collateral eligibility; (iv) enhancement of the application process, including a self-assessment of eligibility prior to application of PLJP, appraisal of the collateral by an independent appraiser and verification by a public accountant; (v) update on the application documents; (vi) enhancement of the post-approval process; and (vi) improvement of the terms of defaults. On the collateral adjustment, (i) land and buildings can be accepted with regard of risk mitigation; and (ii) loans that are restructured during the Covid-19 stimulus period (March 16th, 2020 - March 31st, 2021 and was later extended to March, 2023) may be used as PLJP collateral as long as it meets other qualifying criteria. Furthermore, the Law No.2 of 2020 also addresses a special liquidity assistance, known as Pinjaman Likuiditas Khusus (PLK), which is a facility guaranteed by the government and only accessible to systemic banks. The PLK is not yet in operation as its implementation arrangement is still under discussion.
14	Amend the relevant laws to ensure that resolution powers can be exercised over FCs.	Resolution power over FCs is amongst the topics to be discussed and considered in the amendment of LPS Law under the discussion of financial sector reform.
15	Develop resolution options and implementation guidelines for banks, and resolvability assessment and resolution planning frameworks for D-SIBs.	**Completed**. Indonesian authorities have regulated the recovery plan under the Law Number 9 of 2016 concerning Prevention and Mitigation of Financial System Crisis, which was complemented by issuance of OJK Regulation (POJK) No. 14/POJK.03/2017 concerning Recovery Plan for Systemic Banks require Domestically Sistemic Important Bank to have recovery plan. On the resolution plan, the Indonesia Deposit Insurance Corporation (IDIC) promulgated IDIC Regulation Number 1/2021 on Resolution Plan in March 2021. Under the regulation, DSIBs and selected non-DSIBs must prepare resolution plan starting in 2022. The regulation also stipulates the resolvability assessment requirement.
	Financial integrity	
16	Integrate key money laundering or terrorist financing (ML/TF) risks in the priorities and operations of relevant agencies.	**Completed**. OJK has implemented FATFs' recommendations regarding risk-based AML/CFT, which were adopted as the National Committee of Prevention and Eradication of the Criminal Act of Money Laundering (NCC)s' commitment as stipulated in the National Strategy. This includes risk-based regulation and supervision, and cooperation with related institutions/ministries in the context of information exchange on money laundering offenses. Financial institutions and supervisors have been equipped with National Risk Assessment (NRA) and Sectoral Risk Assessment (SRA) guidelines for the financial services sector as compiled by OJK. Responding to the pandemic, OJK strengthens the regulation that covers the utilization of technological means in implementing AML/CFT programs, including electronic customer due diligence (e-CDD). In addition, OJK provides a letter as a guideline for financial institutions amidst the increased risk of ML/TF during the Covid-19 Pandemic. OJK continuously organizes capacity building and outreach for Officials and Employees responsible for implementing AML/CFT programs in the financial services sector in the forms of dissemination, mentoring workshops, and webinars. Self-assessment of the FATF recommendations has also been carried out by OJK in the preparation of MER (mutual evaluation review). On the payment system, BI's efforts are implemented through: (i) implementing and adopting the national and international standards or principles of AML/CFT; (ii) increasing public and operator awareness of the ML/FT risks; and (iii) increasing coordination/cooperation amongst national and international institutions. Progress is ongoing regarding Indonesia's efforts to become FATF full member, with on-site visit Mutual Evaluation Review FATF was previously scheduled for November 1-17, 2021. However, the visit was postponed per FATF President's letter dated September 22, 2021. During 2021, BI prepared some actions related to MER FATF, including updating technical compliance and immediate outcome assessment, optimizing AML/CFT education and communication through the AML/CFT menu on BI's official website, BI social media, and publication materials related to AML/CFT for the service providers. BI has completed 100% action plans of the National AML/CFT Strategy under its purview in 2021, in collaboration with PPATK and other related authorities. Among the 77 action plans of the National AML/CFT Strategy in 2021 that NCC members must fulfill, 18 action plans are under BI's purview. Furthermore, as fulfillment for one action plan of the National AML/CFT Strategy, BI has completed typology assessment on AML/CFT/WMD for Non-Bank Payment System Service Providers and Non-Bank Money Changer, to provide an overview of the latest typological/mode in order to optimize risk mitigation under AML/CFT/WMD. BI and other NCC members have actively participated in the issuance of 2021 NRA required by MER FATF. BI has completed SRA for Non-Bank Payment System Service Providers and Non-Bank Money Changer. The assessment process involves PPATK, supervisors, and service providers. SRA aims to understand, identify, and measure the risks on four key risks, i.e., geography, customer, product, and delivery channel risks, to optimize risk mitigation under AML/CFT/WMD.

Table 11. Indonesia: Key FSAP Recommendations (Concluded)

	Key Recommendations	Authorities' Actions
		Financial integrity
17	Finalize and implement risk-based AML/CFT supervisory tools.	**Completed**. In accordance with the FATF Recommendation, OJK has carried out AML/CFT risk-based supervision. Based on the results of the MER APG 2018, OJK is considered to have a good understanding of ML/TF risks through the establishment of effective regulations and the implementation of effective risk-based AML/CFT supervision. In the context of risk-based supervision, OJK has prepared and developed risk-based supervision tools as stipulated in the OJK's Commissioner Board Circular Letter on AML/CFT Supervision, developed risk-based supervision infrastructure (SupTech), conducted supervisory capacity building in the form of Mentoring Workshops and in-house trainings, conducted joint audit with Financial Intelligence Unit (FIU/PPATK), and collaborated with relevant ministries and institutions as well as other authorities through the establishment of MoUs and Risk-Based Mentoring Program (Promensisko). OJK has also implemented Risk-Based Assessment Tools (SIGAP System), which our supervisors have used to assess the implementation of AMF/CFT on an annual basis. The result of the assessment (i.e., high, medium, low) will then be used to determine the audit frequency. To strengthen the implementation of AML/CFT supervision for non-bank payment institutions, BI is currently developing a supervisory framework, which includes the use of supervisory technology tools. Those tools enable supervisors to detect suspicious transactions undertaken through financial service providers. BI continues to strengthen the supervision over money processing service provider (PJPUR) by developing the risk-based supervision framework and mechanism for PJPUR. In an effort to strengthen the AML/CFT supervision framework and standardise supervisory activities across BI's regional offices, several new Internal Supervision Guidelines (PADG Intern) have been ratified in 2021, namely the AML/CFT Supervision Guidelines and Licensing and Supervision of Non-Bank Money Changers and Remittance PSPs. In order to strengthen governance and risk management practices in the industry, BI continues its collaboration with PPATK, among others through joint audits over several Remittance Businesses and Non-Bank Money Changers under Bank Indonesia's supervision in 2021. BI also continues to support the National AML/CFT Strategy (Stranas) 2021 by conducting several thematic audits, aim to evaluate: (i) adequacy of AML/CFT and CDD Practices for PEPs, Foreign Trusts, Corporations, and Foundations Customers in Remittance Businesses, and (ii) adequacy of AML/CFT and CDD Practices for Travel Agent Customers in Non-Bank Money Changers. The auditees were selected by sampling of Remittance Businesses and Non-Bank Money Changers across different regional areas.
		Financial deepening and inclusion
18	Develop an integrated roadmap for promoting financial deepening and inclusion.	**Completed**. Financial Deepening. The National Financial Market Development and Deepening Strategy (SN-PPPK) has been reviewed and revised in light of the pandemic and changing global and domestic economic and financial market conditions. Revisions include the time phase, Key Performance Indicators, and Strategic Action Plans. The SN-PPPK period is extended from 2018-24 to 2018-25 with the extension of the Acceleration Phase from 2020-22 to 2020-23. In 2021, the Coordination Forum for Financing Development through Financial Market (FK-PPPK) decided to focus on 7 priority programs under SN-PPPK initiatives: (1) Dissemination of National Economy Recovery Policies and Support to Development Financing; (2) Financial Sector Reform: Interconnection between clearing system and custodian/settlement system to support Straight Through Processing (STP) system for Local Government Bond Market; (3) Development of Repo Market; (4) Development of Retail Investor Base in Indonesia; (5) Harmonization of Tax regulations in the Financial Market; (6) Development of Green & Sustainable Instruments; (7) Assessment on Bullion Bank for Indonesia. The programs are conducted by establishing literature assessment, discussions with market participants and regulators, regulation amendments and harmonization; and dissemination. The financial market deepening is a part of Pillar II "Development of the Financial Services Ecosystem" in The OJK Financial Services Sector Master Plan 2021-2025. In line with the SN-PPPK, OJK and all members of FK-PPPK undertake financial market deepening initiatives, including through: (1) Accelerate market infrastructure development through primary market efficiency in the electronic Initial Public Offering (e-IPO) process. In 2020, OJK issued regulation number 41/POJK.04/2020 concerning the Implementation of Initial Public Offering Activities of Equity Securities, Debt Securities, and/or Sukuk Electronically to support the use of the e-IPO system. To support market liquidity, OJK has developed the Repurchase Agreement market, particularly in aspects (Market standard and Third-Party Repo). To improve trading efficiency, OJK has developed an expansion of the Electronic Trading Platform and the issuance of regulation concerning Alternative Market Operators. (2) Encourage deep and broad development of domestic investors. OJK issued regulation number 18/POJK.04/2019 regarding the Regional Securities Company (Perusahaan Efek Daerah) and the expansion of parties that can market Mutual Funds and other investment products. OJK's regulation number 18/POJK.04/2019 was issued to develop and expand public access to invest in the capital market, especially in the regions. The development and improvement of investor literacy are one of the priority programs of the FK-PPPK consisting of the MoF, BI, OJK, and LPS. (3) Expand the scope of Capital Market products and activities by encouraging the use of co-funding platforms, including the development of equity crowdfunding. In 2020, Equity Crowdfunding was further expanded by OJK and refined into Securities Crowdfunding through OJK's regulation number 57/POJK.04/2020 concerning Securities Offerings Through Information Technology-Based Crowdfunding Services. OJK supports the development of the primary and secondary bond and Sukuk market infrastructure. In November 2020, the Indonesian Stock Exchange launched an electronic trading platform phase 2 (Alternative Market Operator System). In addition, in 2019, KPEI as CCP in the stock exchange market also developed a third-party Repo system to support Repo transactions in the market in the absence of standardized services to support the implementation of Repo transactions in accordance with existing regulations.
		Completed. Financial Inclusion. The Government of Indonesia issued Presidential Regulation No. 114 of 2020 on National Strategy for Financial Inclusion (SNKI) that has provided an impetus to accelerate Indonesia's financial inclusion. BI has developed a new approach to enhance financial inclusion focusing on integrating economic activities and financial inclusion, based on three pillars: (i) Economic empowerment, (ii) Broadening access to finance and literacy, (iii) Policy harmonization and synergy. OJK, together with the Ministry of Home Affairs, issued a Roadmap for the Regional Financial Access Acceleration Team (TPAKD) 2021-2025 in order to encourage financial inclusion in Indonesia. This document was launched on December 10, 2020 at the annual summit (Rakornas TPAKD) activity which was attended by the President of the Republic of Indonesia. The Technical Guidelines of Formation and TPAKD Work Program will be disseminated by the end of June 2021.
19	Enhance bond yield curve by consolidating debt issuance and improving secondary markets.	**Completed**. IDX has launched IGBF (Indonesia Government Bond Futures) products to improve the secondary market as derivative instruments. As of November 2020, IGBF offered two new series available for market players via the Indonesia Stock Exchange Platform. However, the participation of market players and the demand for the above instruments still need to be further improved. Regarding consolidating debt issuance to enhance the government bond yield curve, the government is actively undertaking prudent portfolio management such as issuing benchmark series in the primary market to maintain the bond yield curve. The government also conducts debt switching transactions to smooth out the maturity profile and reduce non-liquid series in the secondary market. A private placement is also available as an option to increase the volume of specific series to create a more active secondary market. In terms of debt switch in 2021, the government has conducted an auction to buy back bonds in the domestic market on June 17, 2021, which obtained bids amount submitted by bidders of IDR 11.5 trillion with the nominal won by the government amounting to IDR 4.98 trillion. The second auction was held on September 23, 2021. The nominal bids submitted by bidders was IDR 11.24 trillion, while the nominal amount won by the government was IDR 7.07 trillion. In the global market, the government announced the successful completion of its inaugural Tender Offer/Liability Management (LM) Exercise launched on eight series of Notes (the Old Bonds) on September 20, 2021. The LM Exercise was well-received by global investors, and the total amount of tender instructions received across all series of Notes reached USD 2.68 Bio. However, the government decided to repurchase a total nominal amount of USD 1.16 bio as part of our general cash management program and a broader plan to manage our external liabilities. To enhance trading activity, the government, in cooperation with Indonesia Stock Exchange, has been developing an electronic trading platform for government bonds to provide more transparency on price discovery under the over-the-counter market. Currently, the Government and IDX have introduced the system and continue to improve infrastructure with the cooperation of government bond primary dealers. It is expected that the program will be launched formally in the first quarter of 2022.

Table 12. Integrating Fund Surveillance and Capacity Development

Area	Surveillance Recommendations	Capacity Development Recent Actions/Plans
Monetary policy and central bank communication	Clear and focused communication on monetary and financial policy is critical, especially during times of financial stress	The Fund provided technical assistance covering communication on monetary policy and financial stability.
Statistics	Use of big data for timely economic monitoring could support prompt policy decision making.	The Fund provided technical assistance on the use of big data to develop an enhanced residential property price index, on developing the integrated sectoral accounts and balance sheets statistics, and on compiling Financial Soundness Indicators. The Fund also provided virtual-format assistance on expanding the coverage of the producer price index to include additional service activities.
Tax policy and administration	Implement a medium-term revenue strategy (MTRS) to raise revenue by at least 3 percent of GDP over five years to finance spending on infrastructure, education, and health.	The Fund provided technical assistance in August 2017 to set a strategy, which includes specific recommendations on tax policy and administration reforms.
Public financial management	Improve fiscal governance, including infrastructure governance and public investment management.	The Fund conducted Indonesia's PIMA in February 2019, which lists priority actions to improve public investment management, and a Public Sector Balance Sheet Analysis in October 2019. The Fund also provided technical assistance and workshops on budget analysis and costing methodologies.
Financial sector	Improve financial oversight, crisis management framework, and the monitoring of corporate vulnerabilities.	The Fund provided technical assistance on financial conglomerate supervision, risk-based supervision, financial crisis management, and on strengthening bank and corporate stress testing frameworks and systemic risk analysis. The Fund also provided a virtual workshop on fintech regulation and supervision, drawing on global practices to identify opportunities to strengthen domestic frameworks.
Financial sector supervision during COVID-19	Preparation and timely implementation of financial regulatory and supervisory response to the pandemic.	The Fund provided virtual workshops on financial supervision, IFRS9 implementation and supervisory treatment under COVID-19.

Appendix I. Policy Measures in Response to COVID-19

Indonesia: Major Fiscal Policy Responses to COVID-19, 2020

List of Measures (Announced or under implementation)	**Expected Size** (Percent of GDP)
Fiscal 1/	
Targeted support to hard-hit industries 2/	0.2
Support to health care to fight COVID-19	0.5
Strengthening of existing social protection programs 3/	1.3
Support to promote restructuring and financing for MSMEs 4/	0.8
Corporate income tax rate reduction 5/	0.1
Tax relief and incentives for firms and low-income households	0.6
Capital injections and loans to state-owned enterprises	0.3
Other support measures through local governments	0.6
Credit guarantees on working capital loans to labor-intensive industries	0.6

1/ The table shows the initial plans. Many of these measures were subsequently integrated into the PEN
2/ For tourism and other labor-intensive industries.
3/ These include food aid, cash transfers, electricity subsidies, and unemployment benefits.
4/ These include interest subsidies, credit guarantees, and loan restructuring funds.
5/ From 25 percent to 22 percent for 2020-2021 and to 20 percent starting in 2022.

Indonesia: Major Monetary and Financial Policy Responses to COVID-19, 2020-21

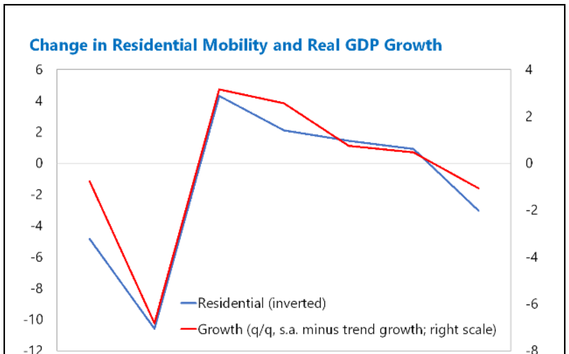
List of Measures (Announced or under implementation)	**Expiration Date**
Monetary	
Policy rate reduction (150 bps, from 5 to 3.5 percent)	
"Triple intervention" to stabilize domestic financial markets	
Cuts in the FX and domestic reserve requirement ratios for banks	
Macroprudential liquidity buffer ratio for banks raised by 200 bps	
Enhanced liquidity support targeted to banks 1/	
Relaxed the macroprudential intermediation ratio	
Liquidity provision to banks and firms through term-repo transactions	
Provision of funding to LPS for handling of bank solvency problems	
BI purchases of government bonds under burden sharing agreement 2/	End-2020
BI purchases of government bonds under BI-MOF coordination agreement 2/	End-2022
BI to act as buyer of last resort for local-currency government bonds 2/	End-2022
Financial	
Relaxed loan classification and loan restructuring procedures	Mar. 2023
Measures aimed to mitigate stock market volatility 3/	
Delayed the implementation of the Basel III reform standards	Jan. 2023
Postponement of mark-to-market valuation of securities for six months	Sep. 2020
Allowance to use the Capital Conservation Buffer	Mar. 2022
Relaxed LCR and NSFR requirements for banks 4/	Mar. 2022
Relaxed rules on credit cards to support cashless transactions 5/	
Lower down payment requirements for environment-friendly vehicles	

1/ These include: introducing daily repo auctions; increasing the max duration for repo and reverse repo transactions; and increasing the frequency of FX swap auctions.
2/ See Appendix VII for details.
3/ These include prohibition of short selling and allowing listed firms to buy back their shares without a prior shareholders' meeting.
4/ LCR and NSFR stand for Liquidity Coverage Ratio and Net Stable Funding Ratio, respectively.
5/ Lowered the credit card interest rates, minimum credit card payment, and late payment penalty.

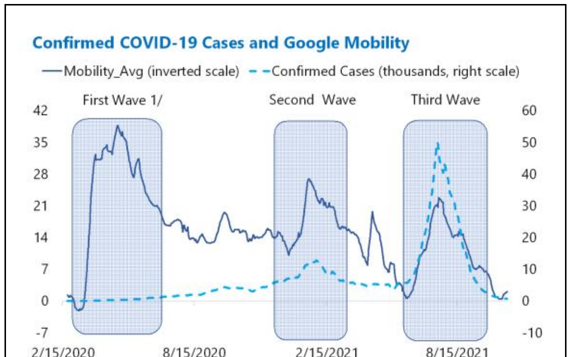
Appendix II. Growth and Mobility During the Pandemic[1]

The COVID-19 pandemic has severely disrupted economic activity in Indonesia, resulting in lower and very volatile growth over the past two years. The analysis presented in this annex shows that cell phone-based mobility indicators can effectively help to gauge output dynamics in real-time during the pandemic. Moreover, mobility indicators are found to have significant predictive content for output growth even when controlling for a broad range of other pertinent indicators, including pre-pandemic conditions, pandemic-related infections, and deaths as well as sectoral and time fixed effects.

1. **During the pandemic, cell phone-based mobility indicators have been closely correlated with both real GDP growth at the national level (left chart) and surges of infections, hospitalizations, and deaths** (right chart). This makes mobility indicators a promising tool for tracking and forecasting economic activity amid the rapidly changing circumstances of the pandemic. Through a simple model to nowcast growth using Google's mobility data, we find that residential mobility contains the most predictive content with respect to real GDP growth, indicating that output tends to decline when individuals stay home (and vice versa).[2] The strong predictive content of this "stay-at-home" effect is likely due to the combined effect on people's behavior of social restrictions imposed by the authorities and adaptive responses of individuals to changing health and economic conditions.



Sources: Google Community Mobility Report; Indonesia Statistics; and IMF staff estimates.



Sources: Google Community Mobility Report; Our World in Data; IMF staff calculations.
1/ COVID-19 testing was limited during the first wave, leading to undercounting of infections.

A Simple Aggregate Model to Nowcast Growth

2. **In order to develop a basic tracking model, a simple OLS equation is estimated by regressing real GDP growth (q/q, s.a.) on mobility subcomponents and a constant term during the period 2020Q1-2021Q3**.

$$Y_t = \alpha + \beta_i \cdot M_{it} + \varepsilon \qquad (1)$$

[1] Prepared by Robin Koepke and Rani Setyodewanti (both APD).

[2] The strong predictive content of residential mobility is consistent with the findings of Cali and Ryandiansyah (2020), which focuses on the first two quarters of the pandemic.

Where Y is real GDP growth, α is a constant term, M is the mobility indicator, i is the subscript for the six mobility subcomponents, t is the time subscript, and ε is an error term. To avoid distortions in seasonal factors during the pandemic, the data are seasonally adjusted using pre-pandemic seasonal factors by applying the X12 method to data for 2010 through 2019Q4. M corresponds to national data from Google's Community Mobility Report for the period 2020Q1 to 2021Q3, using quarterly averages of daily data for each of the six subcomponents (retail & recreation, grocery & pharmacy, parks, transit stations, workplaces, and residential).

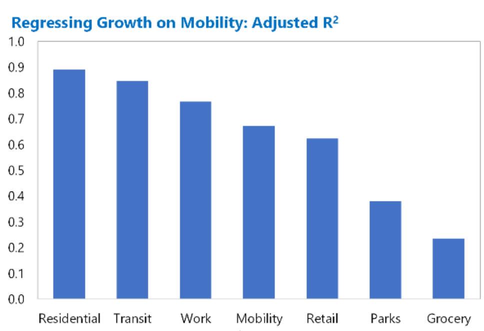
3. **The estimation results are summarized in the table below**. Most mobility subcomponents exhibit a strong statistical relationship with real GDP growth at the national level with the exception of mobility related to groceries. Residential mobility bears the strongest relationship as measured by the significance level and the adjusted R^2 of the regression (see left chart below). The estimated elasticities of growth with respect to mobility range between 0.15 and 0.28 for all mobility subcomponents except residential mobility, which has an estimated elasticity of −0.61. As expected, the sign of the coefficient on residential mobility is negative, reflecting the above-mentioned stay-at-home effect. The coefficient estimate suggests that a 10 percentage point increase in residential mobility is associated with reduced growth of 6.1 percent q/q, s.a.

Table 1. Indonesia: Summary of Estimation Results: Regressing Growth on Mobility

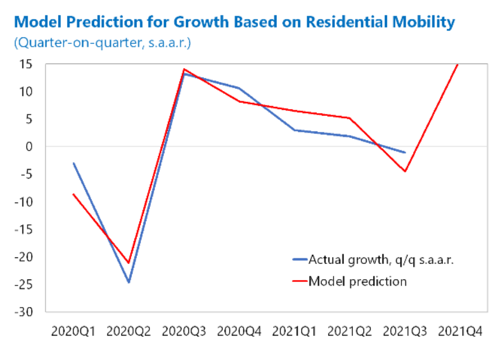
	Mobility Avg	Retail	Grocery	Parks	Transit	Work	Residential
Adjusted R2	0.67	0.62	0.24	0.38	0.85	0.77	0.89
Estimated elasticity	0.24	0.19	0.18	0.15	0.16	0.28	-0.61
T-statistic	3.66	3.31	1.69	2.16	5.88	4.55	-7.07
Prob.	0.015	0.021	0.152	0.083	0.002	0.006	0.001

Source: IMF staff estimates.

4. **Based on data available through late November, the model with residential mobility as predictor points to growth of about 15 percent q/q, s.a.a.r., in 2021Q4** (right chart below). This strong predicted growth rate reflects the rebound from the surge of the Delta variant in 2021Q3,



Source: IMF staff estimates.



Sources: Indonesia Statistics and IMF staff estimates.

which saw a jump in residential mobility amid tight social restrictions across Indonesia. Subsequently, infections dropped sharply, and residential mobility eased to a pandemic-era low point, indicating a normalization of people's economic behavior.

Does Mobility also Predict Growth at the Sectoral and Provincial Level?

5. **The simple aggregate model suggests a very good fit, but there are only seven observations for exploring the statistical relationship between growth and mobility during the pandemic**. Is the aggregate relationship also present at the sectoral and provincial level? We use granular data at the provincial and sectoral level to answer this question and to provide a robustness check to the aggregate relationship. A three-dimensional panel is constructed with quarterly GDP growth (available at the sector/province level) and Google mobility data (available at the province level). The panel setup allows for the inclusion of fixed effects across time and cross-sections. In addition, pandemic related indicators (COVID-19 infections and deaths) and a set of pre-pandemic variables are included as control variables.

6. **In particular, employment data in 17 sectors across 34 provinces from the Central Statistical Agency (BPS) are expressed as a share of the population of each province**. Labor force participation in 34 provinces represents the number of individuals in the labor force as a share of the working age population in each province. For both variables the pre-pandemic data point is based on the observation from February 2020. Meanwhile, the percentage of workers in informal sectors in 34 provinces is based on 2019 data. The model also incorporates COVID-19 infections and deaths for the period 2020Q1 to 2021Q3, using the quarterly changes per 1,000 population in each province.

The estimated equation is:

$$Y_{jlt} = \alpha + \beta_{ij} \cdot M_{ijt} + \gamma_{ijl} + \delta_j + \vartheta_t + \varepsilon \quad (2)$$

Where Y is real GDP growth, α is a constant term, M is the mobility indicator, γ is a vector of pandemic and pre-pandemic variables, δ captures fixed effects at the sectoral level, ϑ captures fixed effects for each pandemic quarter, i is the subscript for the six mobility subcomponents, j is the sectoral subscript, l is the subscript for Indonesia's provinces, t is the time subscript, and ε is an error term.

7. **Results for residential mobility are shown in the table below**. In the first specification, only sectoral and time fixed effects and a constant term are included, with mobility still highly statistically significant. In the second specification, the three pre-pandemic variables are included (sectoral employment by province, labor force participation and the share of informal workers) in order to capture differences across provinces. The regressions in the next three columns can be interpreted as a "horse race" between mobility and the pandemic indicators of COVID-19 infections and deaths. The mobility indicator remains highly statistically significant and clearly outperforms the other two indicators.

Table 2. Indonesia: Panel Estimation Results for Real GDP Growth and Mobility

	(1)	(2)	(3)	(4)	(5)
Constant	0.007	0.044	0.046	0.045	0.046
	(0.007)	(0.031)	(0.033)	(0.031)	(0.033)
Change in residential mobility	-0.0023 **	-0.0020 **	-0.0020 **	-0.0020 **	-0.0020 **
	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010
Pre-pandemic level of employment		-0.0003	-0.0003	-0.0003	-0.0003
		(0.0007)	(0.0007)	(0.0007)	(0.0007)
Pre-pandemic level of labor force participation		-0.0008 *	-0.0007 *	-0.0007 *	-0.0007 *
		-0.0004	-0.0004	-0.0004	-0.0004
Pre-pandemic level of informal workers		0.0003	0.0003	0.0003	0.0003
		-0.0002	-0.0003	-0.0003	-0.0003
COVID-19 infections			-0.0002		-0.0002
			-0.0006		-0.0008
COVID-19 deaths				-0.004	0.002
				(0.015)	(0.018)
Sectoral fixed effects included?	Yes	Yes	Yes	Yes	Yes
Time fixed effects included?	Yes	Yes	Yes	Yes	Yes
Adjusted R^2	0.12	0.12	0.12	0.12	0.12
Number of Observations	4,046	3,983	3,983	3,983	3,983
Standard Error of Regression	0.10	0.10	0.10	0.10	0.10

Source: IMF staff estimates

8. **This, both provincial and sectoral analysis, confirms that the close statistical relationship between mobility and growth observed at the national level is also present at a disaggregated level**. This is reassuring not only conceptually but also from a statistical point of view given that the panel estimation provides many more observations.

9. **Overall, the analysis shows that mobility data are a valuable resource for understanding shifts in economic momentum amid the disruptions from COVID-19, providing a useful tool for policymakers and private sector agents to inform their decisions**. These findings are consistent with the recent literature on mobility and growth during the pandemic. For example, Putra and Arini (2020) study the initial phase of the pandemic in Indonesia, finding a strong positive correlation between the changes in mobility and economic growth across the 34 provinces. Sampi and Jooste (2020) conclude that Google's mobility index as is a good predictor of industrial production. A study by Gamtkitsulashvili and Plekhanov (2021) suggests that, globally, a 10 percent decline in mobility is associated with 2 percentage point slower GDP growth, with the elasticity of value added with respect of mobility decreasing as mobility returns to a more normal level.

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Appendix III. Risk Assessment Matrix[1]

	Source of Risks	Likelihood	Expected Impact	Policy Recommendation
Global	**Outbreaks of lethal and highly contagious COVID-19 variants lead to subpar/volatile growth, with increased divergence across countries** 1/	High	High. Larger economic scarring effects (e.g., higher structural unemployment and persistent underinvestment); a decline in capital inflows, leading to currency depreciation and tighter domestic credit conditions; higher poverty rate.	Increase spending on health and social protection. Monetary and macroprudential policies should be loosened. The exchange rate should remain flexible and market driven.
	De-anchoring of inflation expectations in the U.S. and/or advanced European economies 2/	Medium	Medium-High. Lower GDP growth; larger economic scarring effects; a decline in capital inflows, leading to currency depreciation and further tightening of domestic credit conditions.	The pace of fiscal consolidation should be slower if the growth impact is substantial. If spillovers from Fed tightening become disruptive or the exchange rate acts as a shock amplifier, further monetary policy tightening and FX intervention to counter disorderly market conditions could be warranted.
	Abrupt growth slowdown in China 3/	Medium	Medium. Weaker exports; reduced FDI inflows; increased uncertainty leading to weaker investment.	Use exchange rate flexibility to mitigate the impacts from weaker terms of trade (TOT). Use fiscal and monetary policies to soften the demand impact from the TOT adjustment. Accelerate structural reforms aimed at promoting competition and financial deepening. Augment trade liberalization efforts.
Domestic	**Faster containment of COVID-19** 4/	Low to Medium	Medium-High. Investment and employment recover; capital inflows resume, leading to currency appreciation and easier domestic credit conditions.	Accelerate the implementation of the MTRS. Increase infrastructure investment and social spending. Monetary policy should be on hold or gradually tightened in line with the inflation outlook. Regulatory relief measures should be let expire.
	Sharper deterioration in banks' asset quality and funding positions 5/	Medium to High	High. Lower GDP growth; larger economic scarring effects; a decline in capital inflows, leading to currency depreciation and further tightening of domestic credit conditions.	Solvency and capital adequacy issues should be recognized and addressed upfront. Banks should actively provision against credit losses even under the relaxed loan standards, which will be critical for banks' ability to weather the deterioration in asset quality.
	Natural disasters related to climate change 6/	Medium	Low. Disruption in economic activity in the affected region; slower economic growth accompanied by a decline in portfolio inflows.	Prioritize expenditure to the affected region. If the economy slows significantly, ease monetary and macroprudential policies, provide support to banks, and monitor corporate borrowers at risk.

[1] Rapidly increasing hospitalizations and deaths, due to low vaccination rates or caused by vaccine-resistant variants, force lockdowns and increased uncertainty about the course of the pandemic. Policies to cushion the economic impact are prematurely withdrawn or for many EMDEs, constrained by lack of space. In addition to declines in external demand, a reassessment of growth prospects triggers capital outflows, financial tightening, currency depreciations, and debt distress in some EMDEs, with spillovers to AEs, leading to growing divergence of economic recovery paths.
[2] A fast recovery in demand amid a lagging supply-side response leads to a rapid de-anchoring of inflation expectations, which prompts central banks to tighten policies abruptly. The resulting sharp tightening of global financial conditions and spiking risk premia lead to currency depreciations, asset market selloffs, bankruptcies, sovereign defaults, and knock-on effects (e.g., lower commodity prices and possible contagion across EMDEs).
[3] A combination of a sharper-than-expected slowdown in the property sector, more frequent COVID-19 outbreaks, and inadequate policy responses result in a sharp slowdown of economic activity, with spillovers affecting other countries through financial, trade, and commodity-price channels.
[4] COVID-19 is contained faster than expected due to rapid vaccination and effective containment measures, boosting confidence and economic activity.
[5] Provision of credit is significantly impaired by larger-than-expected COVID-19-related credit losses and the expected weakening of nonfinancial firms' debt service capacity.
[6] Higher frequency of natural disasters cause severe economic damage to smaller vulnerable economies and accelerate emigration. Severe events in large economies reduce global GDP, cause further supply chain disruptions and inflationary pressures, and prompt a recalculation of risk and growth prospects. Disasters hitting key infrastructure or disrupting trade raise commodity price levels and volatility.

[1] The Risk Assessment Matrix (RAM) shows events that could materially alter the baseline path (the scenario most likely to materialize in the view of IMF staff). 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.

Appendix IV. External Balance Assessment

Overall Assessment: *The external position in 2021 was broadly in line with the level implied by medium-term fundamentals and desirable policies.* Exchange rate flexibility and structural policies should help contain the CA deficit over the medium term. External financing needs appear sustainable. However, they are sizable, and with a large share of foreign portfolio investment, they expose the economy to fluctuations in global financial conditions. This assessment is preliminary, however, given the lack of full-year data for 2021 in some categories, and subject to considerable uncertainty, given the COVID-19 crisis. More complete analysis will be provided in the 2022 *External Sector Report*.

Potential Policy Responses: The projected effect of fiscal consolidation on the CA would be more than offset by the projected pickup in economic activity as the impact of the pandemic unwinds. Therefore, maintaining external balance will require structural reforms to boost competitiveness and facilitate post-COVID-19 sectoral adjustment. Reforms should include higher infrastructure and social spending aimed at fostering human capital development (while maintaining fiscal sustainability through revenue mobilization), fewer restrictions on FDI and external trade (nontariff trade barriers), and greater labor market flexibility (for example, streamlining stringent job protection, improving job placement services). Flexibility of the exchange rate should continue to support external stability with the ongoing structural transformation of the Indonesian economy.

Foreign Asset and Liability Position and Trajectory	**Background.** At the end of 2020, Indonesia's net international investment position (NIIP) was −26.4 percent of GDP, improving from −30.2 percent at the end of 2019. The improvement in the NIIP was mainly explained by an increase of 4.7 percentage points of GDP in assets (i.e., reserves, FDI, and deposits). As of September 2021, the NIIP increased to −23.3 percent of GDP, mainly reflecting a strong rebound in nominal GDP, but also lower holdings of IDR government bond yields by nonresident investors. Gross external assets reached 36.4 percent of GDP (one-third of which were reserve assets) and gross external liabilities stood at 59.7 percent of GDP. Indonesia's gross external debt was moderate at 35.7 percent of GDP at end-September 2021 (from 39.3 percent of GDP at end-2020). At end-2020, 16 percent of external debt (amounting to 6 percent of GDP) had a remaining maturity of less than one year. **Assessment.** The level and composition of the NIIP and gross external debt indicate that Indonesia's external position is sustainable and subject to limited roll-over risk. The share of nonresident holdings of rupiah denominated government bonds declined from 25 percent of the total stock at the end of 2020 to 19 percent (or 5.3 percent of GDP) at end-2021 but remains sizeable, making Indonesia vulnerable to global financial volatility, higher U.S. interest rates, and a stronger U.S. dollar. The NIIP as a percent of GDP is projected to strengthen in the medium term, reflecting small current account deficits and strong nominal GDP growth.
September 2021 (% GDP)	NIIP: −23.3 | Gross Assets: 36.4 | Res. Assets: 12.4 | Gross Liab.: 59.7 | Debt Liab.: 35.7
Current Account	**Background.** The current account balance is expected to record a modest surplus of around 0.4 percent of GDP in 2021 compared to a deficit of 0.4 percent of GDP in 2020. While domestic demand and imports picked up with economic recovery, exports grew at a higher rate than imports, reflecting higher international commodity prices and export volumes. On the saving-investment side, the positive impact on national savings of the higher commodity terms of trade and related higher government revenue was broadly offset by lower private savings and investment, likely reflecting the impact of financial constraints and uncertainty on the private sector. Structural policies are expected to help limit the current account deficit in the medium-term. **Assessment.** Staff estimates a CA gap of 0.5 percent for 2021, consistent with an estimated cyclically adjusted CA deficit of −1.0 percent of GDP, a staff-assessed norm of −0.5 percent of GDP, and a staff adjustor of 0.9 for demographics. The estimated effects of the COVID-19 crisis are 0.1 percent.[1] Considering uncertainties in the estimation of the norm, the CA gap for 2020 is in the range of −1.0 percent to 2.0 percent of GDP.[2] Maintaining external balance will require structural reforms, including strengthening revenue mobilization, and increasing public expenditure on health education, and infrastructure.
2021 (% GDP)	CA: 0.4 | Cycl. Adj. CA: −1.0 | EBA Norm: −0.5 | EBA Gap: −0.5 | COVID-19 Adj.: 0.1 | Other Adj.: 0.9 | Staff Gap: 0.5
Real Exchange Rate	**Background.** In 2020, the average REER depreciated by 1.3 percent relative to the 2019 average. Within the year, Indonesia experienced exchange rate overshooting in response to the COVID-19 shock, with the REER depreciating by about 10 percent between February and April before settling about 6.3 percent below the February level. In 2021, the REER depreciated by 1.4 percent compared to the 2020 average, fluctuating within a narrow band. **Assessment.** The staff CA gap estimate of 0.5 percent of GDP implies an REER gap of −2.9 percent with standard elasticities.[3] The REER index and level REER models point to 2021 REER gaps of about −1.1 percent to −13.9 percent respectively, with a downward shift in the range of the estimated gaps compared to 2020. In staff's assessment, the EBA Index and CA models are most relevant for Indonesia. Considering all inputs as well as the moderate REER depreciation in 2021, staff assesses the REER gap in the −7.0 to 3.0 percent range, with a midpoint of −2.0 percent.[4]
Capital and Financial Accounts: Flows and Policy Measures	**Background.** Net financial inflows stabilized at 0.8 percent of GDP in 2021 after a decline to 0.7 percent of GDP in 2020 (from 3.3 percent in 2019) in the context of large volatility at the onset of the pandemic. Portfolio inflows into equity and corporate debt increased compared to the previous year. However, with markets anticipating monetary policy normalization in advanced economies, inflows into rupiah government securities remained volatile, with the share of nonresident holdings declining to 19 percent at end-2021, from 25 percent at end-2020. Overall, net portfolio inflows rose to 0.7 percent of GDP in 2021 compared to 0.3 percent in 2020, while net FDI inflows were flat relative to 2020 at 1.3 percent of GDP. **Assessment.** Net and gross financial flows continue to be prone to periods of volatility. The broadly contained current account deficit and strengthened policy frameworks, including exchange rate flexibility since mid-2013 have helped reduce capital flow volatility. Continued strong policies, focused on safeguarding the fiscal position, keeping inflation in check, advancing financial deepening, and easing obstacles to investment through structural reforms would help sustain capital inflows in the medium term.
FX Intervention and Reserves Level	**Background.** Since mid-2013, Indonesia has had a more flexible exchange rate policy framework. At end-2020, reserves were US$135.9 billion, compared with US$129.2 billion at end-2019. The reserve accumulation reflects mainly the net capital inflows and foreign exchange receipts from oil/gas and other sectors. In addition, contingencies and swap lines amounting to about US$95 billion are in place. International reserves increased to US$145 billion at end-2021 from US$136 billion in December 2020. At times of increased market volatility, Bank Indonesia has intervened in the spot and forward FX markets, often in tandem with secondary market purchases of rupiah government securities for sterilization purposes. **Assessment.** The current level of reserves (equal to 12.2 percent of GDP, about 123 percent of the IMF's reserve adequacy metric, and about 7.4 months of prospective imports of goods and services) should provide sufficient buffer against a wide range of possible external shocks, with predetermined drains also manageable. Exchange rate flexibility should continue to play its role as a shock absorber. If external pressures result in disorderly market conditions in the foreign exchange market, the use of FXI can be appropriate to mitigate the negative impact on balance sheet exposures.

[1]The 2021 assessment includes an adjustment for travel services (including tourism), as well as the global shift in the composition of household consumption from services toward consumer goods. For Indonesia, these adjustors are 0.3 and −0.25 percentage point of GDP, respectively, leading to an estimated effect of 0.1 percentage point of GDP. As Indonesia is among the few outlier countries regarding adult mortality rates, the demographic indicators are adjusted to account for the younger average prime age and workforce exit age (this results in an adjustor of 0.9 percentage point).

[2]A range of ±1.5 percent is added to reflect the fact that the EBA regression estimates are subject to uncertainty (the standard error of the EBA norm is 1.4 percent).

[3]The semi-elasticity of the CA-to-GDP ratio with respect to the REER is estimated to be –0.17 for Indonesia.

[4]The midpoint of the REER range is calculated by taking the average of the estimated gap from the EBA index model (that is, −1.1 percent) and the REER gap implied by the IMF staff CA gap estimate of 0.5 percent of GDP (that is, −2.9 percent). To obtain the width of the range for the REER gap, the standard ±5 percent interval was applied to the midpoint of −2.0 percent, leading to a range of –7.0 to 3.0 percent.

Appendix V. The 2021 Revenue Tax Reform[1]

1. **The tax reform bill recently passed by Indonesia's House of Representatives and enacted by the government on October 29, 2021 is a significant step forward**.[2] The new law aims to improve revenue mobilization while fostering growth and promoting tax equity. This Appendix takes stock of the main measures in the bill, assesses them against past IMF recommendations, and identifies areas where further reforms are needed to close the gap in Indonesia's tax-to-GDP ratio compared to other emerging market or ASEAN peers.

2. **The Law on the Harmonization of Tax Regulations introduces several tax administration and policy measures**, many of which are consistent with those identified by earlier analyses, especially in the context of the formulation of a Medium-Term Revenue Strategy (MTRS).[3] Table 1 summarizes the main measures of the law, as promulgated by the President of Indonesia.

3. **Measures that are in line with the MTRS include**: (i) the introduction of an additional bracket of 35 percent to the Personal Income Tax (PIT) and the extension of its base to include fringe benefits; (ii) the gradual increase of the Value-Added Tax (VAT) rate to 11 percent in 2022 and to 12 percent no later than 2025; (iii) the streamlining of the list of VAT exemptions; (iv) the cancellation of the permanent reduction of the Corporate Income Tax (CIT) rate from 22 percent to 20 percent, as previously envisaged in Perppu No. 1/2020; (v) the broadening of the excise tax base to include plastic products; and (vi) the introduction of a carbon tax.

4. **The reform also enacts several tax administration measures that are aligned with previous proposals to simplify and enhance tax compliance**. For instance, the appointment of third parties for tax collection (income tax, VAT, and electronic transaction tax), and the easing and simplification of VAT filing could improve tax compliance in a world where the shares of online transactions and e-commerce activities are increasing. The use of the Population Identity Number (NIK) as a tax identifier for individuals also has the potential to facilitate compliance and to deter, detect, and address noncompliance, especially among the self-employed and informal sector workers.

5. **Some features of the new law are likely to have unintended adverse effects**. Among those is the amnesty, labelled Taxpayer Compliance Improvement program, allowing taxpayers to disclose undeclared assets subject to tax rates between 6 to 11 percent (12 to 18 percent) on assets accumulated before 2015 (between 2016 and 2020). The bill imposes a somewhat higher tax rate compared to previous amnesties and could generate some short-term, one-off revenue. But in

[1] This note is not a comprehensive assessment of all the measures introduced by the 2021 Law on the Harmonization of Tax Regulations. It rather provides a summary of its key measures.

[2] The bill on the Harmonization of Tax Regulations Law "Undang-undang Harmonisasi Peraturan Perpajakan/UU HPP" - Law No. 7/2021 was passed by the House of Representatives (DPR) on October 7, 2021.

[3] The MTRS was a joint work by Indonesia authorities and the IMF that identified reform areas encompassing a combination of tax policy, administration, and legal measures to increase tax revenue by 5 percent of GDP over the medium-term, promote inclusive growth and enhance the resilience of the economy to future shocks.

practice, tax amnesties often reduce voluntary compliance, as they create expectations of future amnesties, resulting in long-term losses that more than offset the short-term gains. This concern is in particular valid in countries such as Indonesia that have offered tax amnesties before (most recently in 2016 and 2008), especially if the amnesty is not accompanied by strong and credible measures to enhance tax enforcement.[4]

6. **The increase of the upper-bound of the bottom PIT bracket from IDR 50 million to IDR 60 million is likely to further reduce the tax burden on the middle class**. Further progressivity could have been achieved by lowering the income levels to which the two top rates apply to. The four-year tax holiday for skilled workers also seems undesirable. Likewise, the provision to exempt dividends invested in Indonesia introduced in the income tax law will be distortionary, as the same incentive is not provided to other types of income used for the same investment purpose.

7. **The revenue reform could have been an opportunity to introduce other important measures to broaden the tax base identified in earlier work on the MTRS**. Harmonizing the various special regimes in the CIT system into one, would broaden the tax base and reduce distortions across sectors. A lower basic PIT exemption threshold, combined with a shift of the tax unit to an individual base (rather than a family base), would allow for greater capture of the growing middle class and improve the efficiency of the PIT. Similarly, a lowering of the turnover threshold below which businesses qualify for the small business tax regime to IDR 600 million would also have broadened the tax base. Aligning the VAT registration threshold with this small business threshold would simplify the VAT system and improve its efficiency. Combining the carbon tax with fuel and vehicles excises would enhance its environmental benefits and improve revenue mobilization, especially if accompanied by a gradual phasing-out of energy subsidies.

8. **The revenue reform was also a missed opportunity to introduce measures to limit tax avoidance and improve compliance**. The Alternative Minimum Tax and the General Anti Avoidance Rule—GAAR provisions were included in the initial draft of the reform—and could have strengthened taxpayer compliance. In addition, the current reform still lacks some necessary measures to enhance the compliance of specific taxpayer segments, especially professional services providers and high-wealth individuals. Another reform to be considered would be an increase in the recurrent property tax rate in conjunction with a reduction in the property transaction tax rate from 5 to 2 percent, for a more efficient tax regime in the sector.

9. **The law enhances the scope for the government to specify important tax parameters by the means of regulations without a change to the primary legislation**, including for adjustments or modifications of the tax code, provision of exemptions, and changes to the catalog of excisable goods. To maximize the revenue gain from the new law, the Ministry of Finance should

[4] Indonesia has reported on the new Voluntary Tax Compliance scheme in keeping with the Asia Pacific Group (APG) policy and FATF requirements. The new scheme seems to be quite similar in terms to the one in 2016/17. The APG is in the process of going through it and sharing the preliminary analysis with Indonesia for feedback and further information before going through the decision process with the GC/membership.

ensure that the regulations implementing the tax reform are well-designed to avoid creating additional loopholes or introducing new distortions in the tax system.

10. Overall, the 2021 Law on the Harmonization of Tax Regulations is a significant step forward. Still, further reforms are needed to achieve the long-standing objective of improving revenue mobilization by several percentage points of GDP. In staff's assessment, the reform could yield revenue increases of at least 1 percentage points by 2026 and by 1 to 1½ percentage points in the medium term.[5] These gains would be below the revenue increases required to finance high priority and productive spending, critical to unlock Indonesia's growth potential and build fiscal buffer against future shocks. The measures in the new bill are also unlikely to fully close the gap between Indonesia's tax-to-GDP ratio and those of other emerging market or ASEAN peers.

[5] Around 0.6 to 0.8 percent of GDP from VAT, 0.5 percent of GDP from IT and other administrative measures, and 0.2 percent of GDP from the reversal of the permanent reduction in CIT rate from 22 percent to 20 percent initially planned for 2022.

<table>
<tr><th colspan="2">Table 1. Indonesia: Summary of The Key Measures Introduced by of the 2021 Revenue Reform</th></tr>
<tr><th>Tax Administration</th><th>Income Tax</th></tr>
<tr><td rowspan="8">• Provisions to provide (and/or request) tax collection assistance to (from) partner countries or jurisdictions (Art No. 20A).
• Provisions to enhance equality in the imposition of sanctions in legal remedies (Art No. 27).
• Provisions to allow parties to apply for a Mutual Agreement Procedures (MAP) and simultaneously submit an objection or appeal. The MAP negotiations are allowed to continue as long as the object submitted by the MAP is not appealed or reviewed by the taxpayer (Art No. 27C).
• Appointment of other parties to collect Income Tax, VAT, and Electronic Transaction Tax (Art No. 32A).
• Taxpayer Compliance Improvement Program. Provisions to allow taxpayers to report or disclose tax assets that have not been fulfilled voluntarily. Assets obtained from 1985 to 2015 (2016−2020) subject to 11 percent (18 percent) tax rate, 8 percent (14 percent) if assets are repatriated, and 6 percent (12 percent) if they are invested in government securities. (Art No. 37B−37I).
• Enforcement of tax criminal law by prioritizing ultimum remedium. Provisions to allow taxpayers to compensate for losses on state income plus sanctions even though the tax crime is in the process of being prosecuted. (Art No. 44A and 44B).
• Introduction of the use of Population Identity Number (nomor induk kependudukan-NIK) as Tax Identity Number (Nomor Pokok Wajib Pajak-NPWP) Art. 2 (10).</td>
<td>• Inclusion of fringe benefits and exclusion of some dividends from the PIT tax base (Art No. 4, 6, and 9).
• Addition of a bracket of 35 percent tax rate on taxable income above IDR 5 billion annually for individual taxpayers, and the reduction of the upper-bound of the bottom bracket from IDR 50 million to IDR 60 million (Art No. 17).
• Exemption from the 0.5 taxation on turnover is granted for up to IDR 500 million/year (Art No. 7).</td></tr>
<tr><th>VAT and Luxury Goods Sale Tax</th></tr>
<tr><td>• Increase of VAT rate to 11 percent in 2022 and 12 percent no later than 2025 (Art. 7 (1)).
• Reducing VAT exemptions and Facilities (Art No. 4a and 16).
• Easing and simplifying VAT (final VAT/GST) (Art. No. 8A and 9A).</td></tr>
<tr><th>Plastic Excise</th></tr>
<tr><td>• Adding plastic products as excisable goods.</td></tr>
<tr><th>Carbon Tax</th></tr>
<tr><td>• Introduction of a carbon tax at a rate of IDR 75 per CO2e</td></tr>
</table>

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Appendix VI. Debt Sustainability Analysis

Indonesia's external and public debt remain moderate and sustainable. However, potentially weaker-than-expected revenue, contingent liabilities from state-owned enterprises (SOEs) and public-private partnerships (PPPs) should be carefully monitored. The reduction in nonresident participation in the local currency bonds markets has contributed to a reduction of vulnerabilities, but the reliance on foreign investors remains sizable.

External Debt Sustainability

1. **Indonesia's external debt has increased amid the pandemic**. External debt reached 39 percent of GDP in 2020, up three percentage points from its pre-pandemic level. General government external debt accounted for about half of the increase, rising to 19.5 percent of GDP. External debt is estimated to have edged down to 36.8 percent of GDP by end-2021 (Figure 1 and Table 1), driven mainly by an improvement in the current account balance, which is projected to have posted a small surplus in 2021.

2. **External debt is projected to stabilize around 34 percent of GDP in the medium term**. In the baseline scenario, strong projected growth in nominal GDP broadly offsets rising external financing needs as the current account turns back into deficit, thus keeping external debt little changed as share of GDP.

3. **External debt sustainability is robust to interest rate, current account and growth shocks, but is sensitive to exchange rate shocks** (Figure 2). A widening of the current account deficit above and beyond the projected levels would cause external debt to rise moderately (a one standard deviation shock would increase external debt to 36.5 percent of GDP by 2027). Exchange rate depreciation would have the largest impact—a 30 percent depreciation in 2022 would raise external debt to 49 percent of GDP in 2023 and it would remain around that level throughout the forecast horizon.

Public Debt Sustainability

4. **Indonesia's public sector debt remains low**. General government debt is estimated to have reached 42.8 percent of GDP in 2021 from 30.6 percent in 2019, owing to the exceptional fiscal measures deployed in 2020 and 2021 to fight the pandemic that drive the overall deficit above the fiscal rule ceiling.[1] On the composition of debt, foreign-currency denominated debt is estimated to have declined to about 33 percent in 2021. Dependence on foreign investors has declined recently but remains significant, with nonresidents holding around 47 percent of general government debt in 2021 from 58 percent in 2019.

[1] The rules cap general government deficit at 3 percent of GDP and debt at 60 percent.

5. **Public sector debt is projected to stabilize at around 41 percent of GDP over the medium term** (Figure 3). The fiscal rule is suspended for 2020−22. The baseline scenario envisages the general government deficit to narrow to about 4 percent in 2022 before declining to 2.2 percent of GDP over the medium term. The primary deficit is projected to reach 1.3 percent of GDP in 2022, and thereafter converge to 0.4 percent over the medium term. Public debt is projected to decline from 42.8 percent in 2021 to around 41.3 percent of GDP in 2027, mainly driven by declining primary deficits and a negative cumulative interest rate-growth differential (of around −7 percent) over the medium term. Gross financing needs are expected to remain moderate, gradually falling from 6.6 percent of GDP in 2021 to around 3.8 percent of GDP in 2027.

6. **Public debt dynamics are robust to both standard shocks and stress tests** (Figures 4 and 5). Even under the most severe scenario with a combined macro-fiscal shock, total government debt would stabilize at around 51 percent of GDP or 364 percent of revenue by 2027, while gross financing needs would gradually decline to around 5.4 percent of GDP. Nonetheless, fiscal risks arising from potentially weaker-than-expected revenue, expanding balance sheets of SOEs, and PPPs, will need to be managed carefully, especially as the recovery could be slower than projected in the baseline.

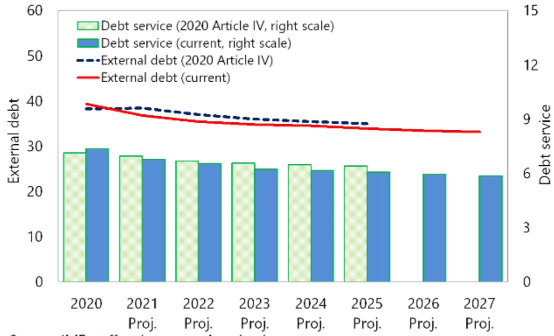
Authorities' Views

7. **The authorities agreed with the external and public debt sustainability analysis**.

Figure 1. Indonesia: External Debt and Debt Service

Indonesia: External Debt Projections, 2020-27

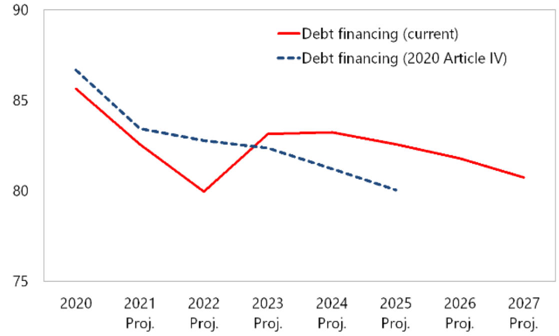
(In percent of GDP)



Source: IMF staff estimates and projections.

Indonesia: Debt Financing, 2020-27

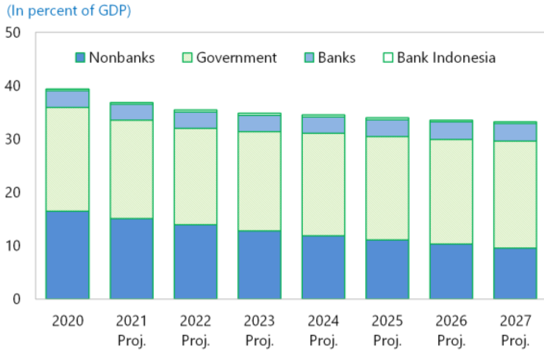
(In percent of the gross external financing requirement)



Source: IMF staff estimates and projections.

Indonesia: Composition of External Debt, 2020-27

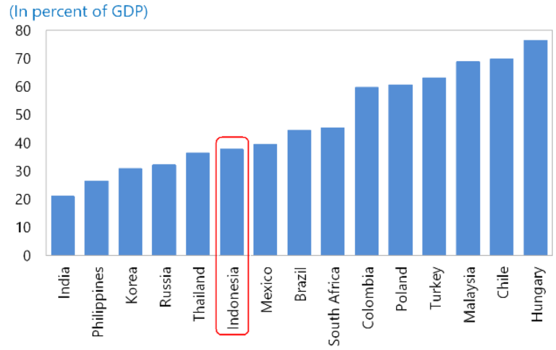
(In percent of GDP)



Source: IMF staff estimates and projections.

External Debt, 2020

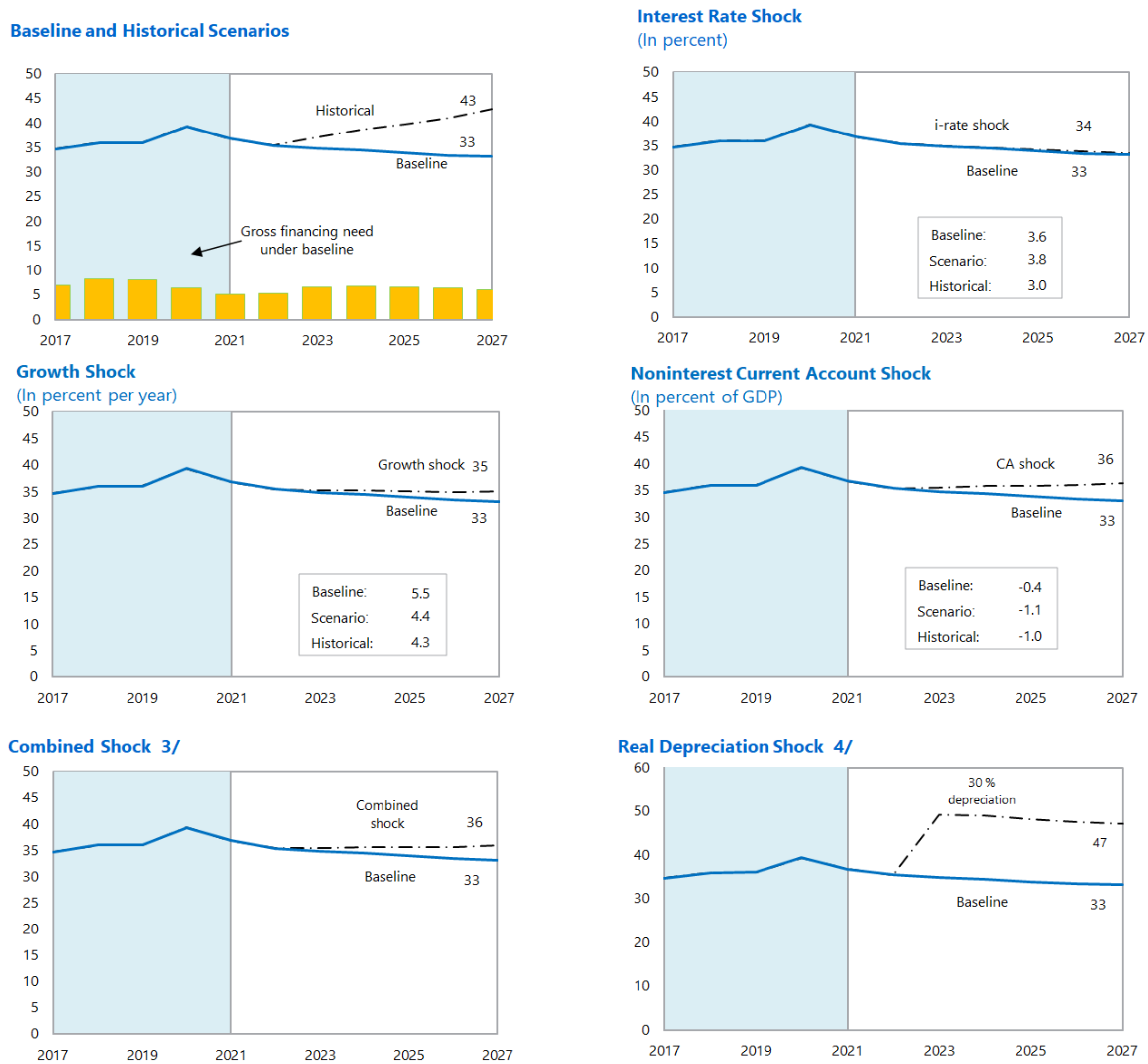
(In percent of GDP)



Source: IMF, *World Economic Outlook*.

Figure 2. Indonesia: External Debt Sustainability: Bound Tests 1/ 2/

(External debt in percent of GDP)



Sources: International Monetary Fund, Country desk data; and staff estimates.

1/ Shaded areas represent actual data. Individual shocks are permanent one-half standard deviation shocks. Figures in the boxes represent average projections for the respective variables in the baseline and scenario being presented. Ten-year historical average for the variable is also shown.
2/ For historical scenarios, the historical averages are calculated over the ten-year period, and the information is used to project debt dynamics five years ahead.
3/ Permanent 1/4 standard deviation shocks applied to real interest rate, growth rate, and current account balance.
4/ One-time real depreciation of 30 percent occurs in 2021.

Table 1. Indonesia: External Debt Sustainability Framework, 2017–2027

(In percent of GDP, unless otherwise indicated)

	Actual							Projections						
	2017	2018	2019	2020	2021			2022	2023	2024	2025	2026	2027	Debt-stabilizing non-interest current account 6/
1 Baseline: External debt	34.7	36.0	36.0	39.3	36.8			35.4	34.8	34.5	33.9	33.5	33.2	-2.3
2 Change in external debt	0.4	1.3	0.0	3.3	-2.5			-1.4	-0.6	-0.3	-0.6	-0.5	-0.3	
3 Identified external debt-creating flows (4+8+9)	-2.8	0.8	-1.5	1.3	-5.4			-2.9	-1.6	-1.3	-1.2	-1.3	-1.5	
4 Current account deficit, excluding interest payments	0.6	1.9	1.6	-0.9	-1.7			-1.2	0.3	0.6	0.5	0.4	0.2	
5 Deficit in balance of goods and services	1.1	-0.6	-0.4	1.7	2.7			2.1	0.6	0.4	0.5	0.6	0.9	
6 Exports	19.1	20.3	17.9	16.8	20.2			20.5	19.2	19.3	19.5	19.5	19.5	
7 Imports	-18.0	-21.0	-18.2	-15.1	-17.5			-18.4	-18.6	-18.9	-19.0	-18.9	-18.5	
8 Net nondebt creating capital inflows (negative)	-1.6	-0.8	-1.8	-0.9	-0.9			-1.1	-1.1	-1.1	-1.1	-1.2	-1.2	
9 Automatic debt dynamics 1/	-1.9	-0.2	-1.3	3.2	-2.8			-0.6	-0.8	-0.7	-0.6	-0.5	-0.5	
10 Contribution from nominal interest rate	0.9	1.1	1.1	1.4	1.3			1.2	1.2	1.2	1.2	1.1	1.1	
11 Contribution from real GDP growth	-1.6	-1.7	-1.7	0.8	-1.3			-1.8	-1.9	-1.9	-1.7	-1.7	-1.6	
12 Contribution from price and exchange rate changes 2/	-1.3	0.5	-0.8	1.0	-2.8			...	...	...	...	...	...	
13 Residual, including change in gross foreign assets (2-3) 3/	3.2	0.5	1.6	2.0	2.8			1.5	1.0	1.0	0.6	0.8	1.2	
External debt-to-exports ratio (in percent)	181.5	177.1	201.7	233.9	182.4			172.5	181.2	179.1	174.4	171.8	170.6	
Gross external financing need (in billions of U.S. dollars) 4/	70.9	85.5	90.5	67.8	60.4			68.9	91.5	101.3	106.8	110.7	112.1	
In percent of GDP	7.0	8.2	8.1	6.4	5.1			5.4	6.5	6.7	6.6	6.4	6.0	
Scenario with key variables at their historical averages 5/						10-Year Historical Average	10-Year Standard Deviation	35.4	37.2	38.6	39.6	40.9	42.8	-1.5
Key Macroeconomic Assumptions Underlying Baseline														
Real GDP growth (in percent)	5.1	5.2	5.0	-2.1	3.7	4.3	2.3	5.4	6.0	5.8	5.4	5.3	5.2	
GDP deflator in U.S. dollars (change in percent)	3.7	-2.4	2.3	-3.4	7.9	-1.2	5.3	2.6	3.1	1.8	1.8	1.8	1.8	
Nominal external interest rate (in percent)	3.0	3.2	3.4	3.6	3.6	3.0	0.5	3.6	3.6	3.6	3.6	3.6	3.6	
Growth of exports (U.S. dollar terms, in percent)	15.7	9.1	-5.6	-10.9	34.3	2.0	14.3	10.0	2.2	8.0	8.3	7.3	6.8	
Growth of imports (U.S. dollar terms, in percent)	14.5	19.6	-6.6	-21.7	29.8	2.1	16.6	13.8	10.7	9.3	7.8	6.4	5.0	
Current account balance, excluding interest payments	-0.6	-1.9	-1.6	0.9	1.7	-1.0	1.4	1.2	-0.3	-0.6	-0.5	-0.4	-0.2	
Net nondebt creating capital inflows	1.6	0.8	1.8	0.9	0.9	1.4	0.5	1.1	1.1	1.1	1.1	1.2	1.2	

1/ Derived as [r - g - r(1+g) + ea(1+r)]/(1+g+r+gr) times previous period debt stock, with r = nominal effective interest rate on external debt; r = change in domestic GDP deflator in U.S. dollar terms, g = real GDP growth rate, e = nominal appreciation (increase in dollar value of domestic currency), and a = share of domestic-currency denominated debt in total external debt.
2/ The contribution from price and exchange rate changes is defined as [-r(1+g) + ea(1+r)]/(1+g+r+gr) times previous period debt stock. r increases with an appreciating domestic currency (e > 0) and rising inflation (based on GDP deflator).
3/ For projection, line includes the impact of price and exchange rate changes.
4/ Defined as current account deficit, plus amortization on medium- and long-term debt, plus short-term debt at end of previous period.
5/ The key variables include real GDP growth; nominal interest rate; dollar deflator growth; and both non-interest current account and non-debt inflows in percent of GDP.
6/ Long-run, constant balance that stabilizes the debt ratio assuming that key variables (real GDP growth, nominal interest rate, dollar deflator growth, and non-debt inflows in percent of GDP) remain at their levels of the last projection year.

Figure 3. Indonesia: Public Sector Debt Sustainability Analysis (DSA)—Baseline Scenario

(In percent of GDP unless otherwise indicated)

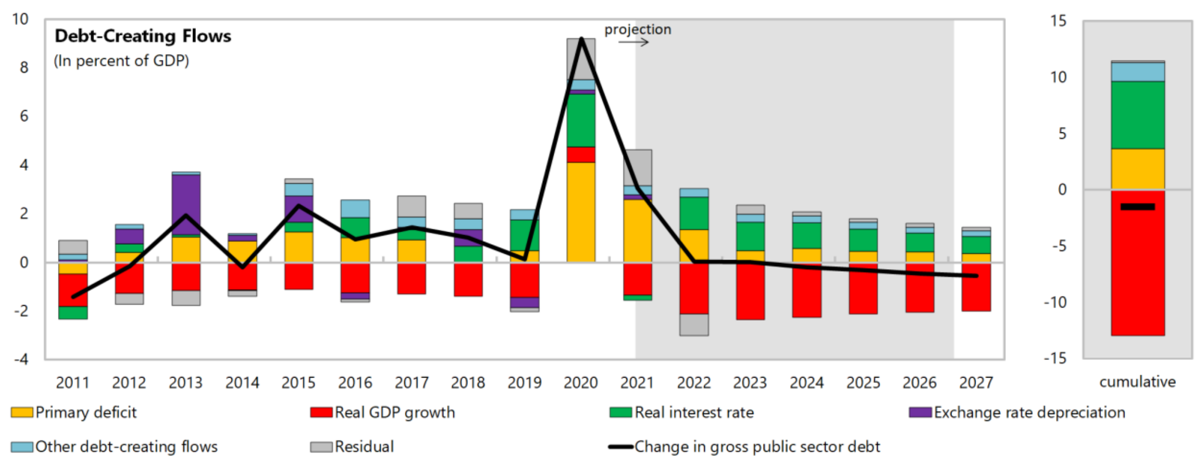
Debt, Economic and Market Indicators [1]

	Actual			Projections					
	2011-2019 [2]	2020	2021	2022	2023	2024	2025	2026	2027
Nominal gross public debt	26.8	39.8	42.8	42.9	42.9	42.7	42.3	41.9	41.3
Public gross financing needs	4.0	9.4	6.6	6.6	4.7	4.6	5.3	4.5	3.8
Real GDP growth (in percent)	5.3	-2.1	3.7	5.4	6.0	5.8	5.4	5.3	5.2
Inflation (GDP deflator, in percent)	4.2	-0.4	6.0	3.3	3.3	3.1	3.0	3.0	3.0
Nominal GDP growth (in percent)	9.7	-2.5	9.9	8.8	9.5	9.1	8.6	8.5	8.4
Effective interest rate (in percent) [4]	5.9	6.5	5.6	6.8	6.5	6.0	5.5	5.2	5.0

As of February 04, 2022		
Sovereign Spreads		
EMBIG (bp) 3/		172
5Y CDS (bp)		92
Ratings	Foreign	Local
Moody's	Baa2	Baa2
S&Ps	BBB	BBB
Fitch	BBB	BBB

Contribution to Changes in Public Debt

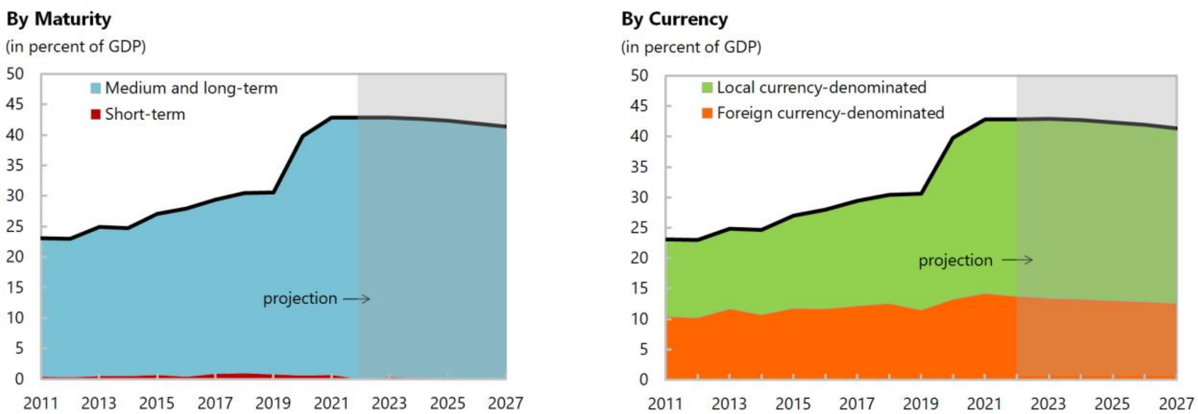
	Actual			Projections							
	2011-2019	2020	2021	2022	2023	2024	2025	2026	2027	cumulative	debt-stabilizing
Change in gross public sector debt	0.7	9.2	3.1	0.0	0.0	-0.2	-0.3	-0.5	-0.6	-1.5	primary
Identified debt-creating flows	0.6	7.5	1.6	0.9	-0.4	-0.4	-0.5	-0.6	-0.7	-1.6	balance [9]
Primary deficit	0.6	4.1	2.6	1.3	0.5	0.6	0.5	0.4	0.4	3.6	-1.1
Primary (noninterest) revenue and grants	15.5	12.5	13.6	13.2	13.2	13.4	13.7	14.0	14.0	81.5	
Primary (noninterest) expenditure	16.2	16.6	16.2	14.5	13.7	13.9	14.2	14.4	14.4	85.2	
Automatic debt dynamics [5]	-0.4	3.0	-1.4	-0.8	-1.2	-1.2	-1.2	-1.3	-1.3	-7.0	
Interest rate/growth differential [6]	-0.9	2.8	-1.6	-0.8	-1.2	-1.2	-1.2	-1.3	-1.3	-7.0	
Of which: real interest rate	0.4	2.2	-0.2	1.3	1.2	1.1	0.9	0.8	0.7	6.0	
Of which: real GDP growth	-1.3	0.6	-1.3	-2.1	-2.3	-2.3	-2.1	-2.1	-2.0	-12.9	
Exchange rate depreciation [7]	0.5	0.2	0.2	...	...	...	...	...	...	...	
Other identified debt-creating flows	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.2	1.7	
Contingent liabilities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
SOE recapitalization and land acquisition	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.2	1.7	
Residual, including asset changes [8]	0.1	1.7	1.5	-0.9	0.4	0.2	0.2	0.2	0.2	0.1	



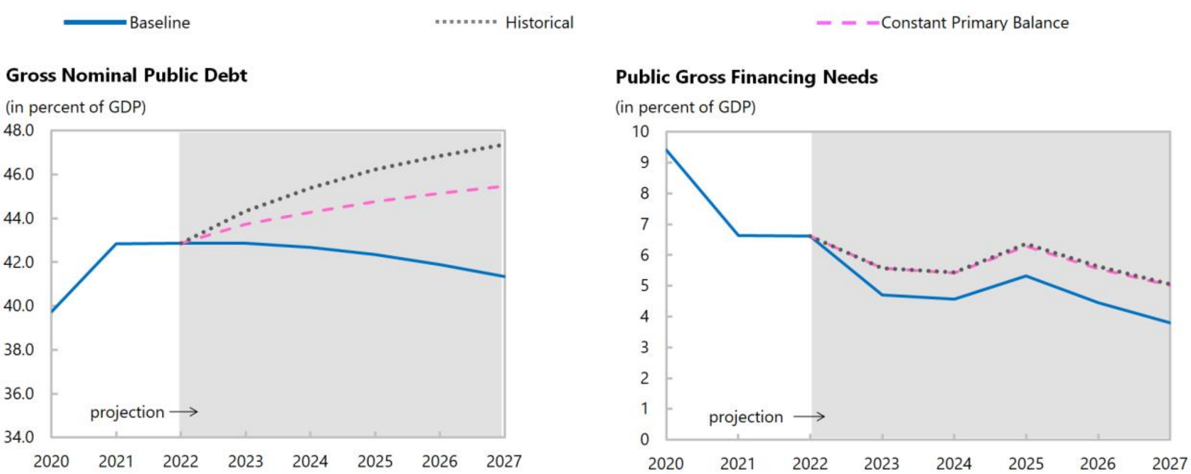
Source: IMF staff.
1/ Public sector is defined as general government.
2/ Based on available data.
3/ EMBIG.
4/ Defined as interest payments divided by debt stock (excluding guarantees) at the end of previous year.
5/ Derived as [(r - π(1+g) - g + ae(1+r)]/(1+g+π+gπ)) times previous period debt ratio, 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 4. Indonesia: Public DSA—Composition of Public Debt and Alternative Scenarios

Composition of Public Debt



Alternative Scenarios



Underlying Assumptions
(in percent)

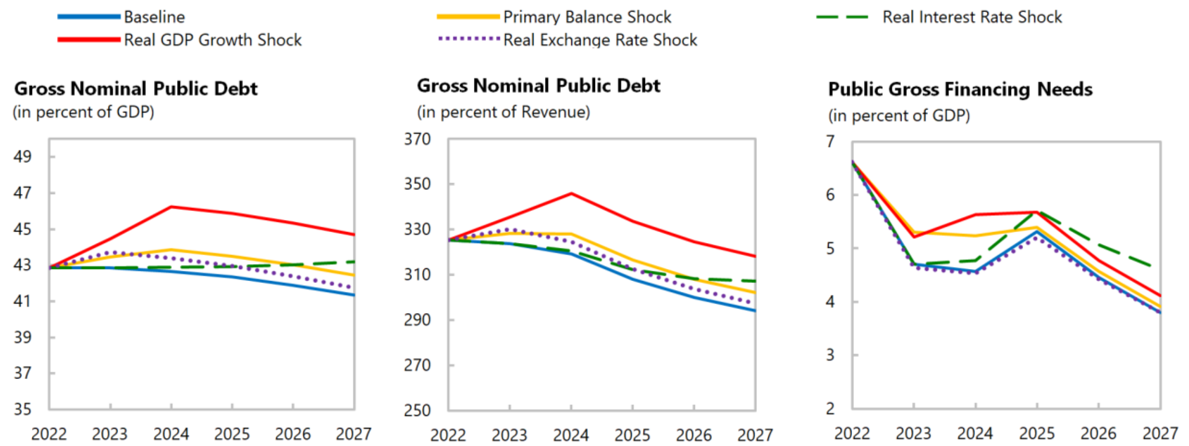
Baseline Scenario	2022	2023	2024	2025	2026	2027
Real GDP growth	5.4	6.0	5.8	5.4	5.3	5.2
Inflation	3.3	3.3	3.1	3.0	3.0	3.0
Primary Balance	-1.3	-0.5	-0.6	-0.5	-0.4	-0.4
Effective interest rate	6.8	6.5	6.0	5.5	5.2	5.0
Constant Primary Balance Scenario						
Real GDP growth	5.4	6.0	5.8	5.4	5.3	5.2
Inflation	3.3	3.3	3.1	3.0	3.0	3.0
Primary Balance	-1.3	-1.3	-1.3	-1.3	-1.3	-1.3
Effective interest rate	6.8	6.5	5.9	5.5	5.1	5.0

Historical Scenario	2022	2023	2024	2025	2026	2027
Real GDP growth	5.4	4.3	4.3	4.3	4.3	4.3
Inflation	3.3	3.3	3.1	3.0	3.0	3.0
Primary Balance	-1.3	-1.3	-1.3	-1.3	-1.3	-1.3
Effective interest rate	6.8	6.5	5.9	5.4	5.0	4.9

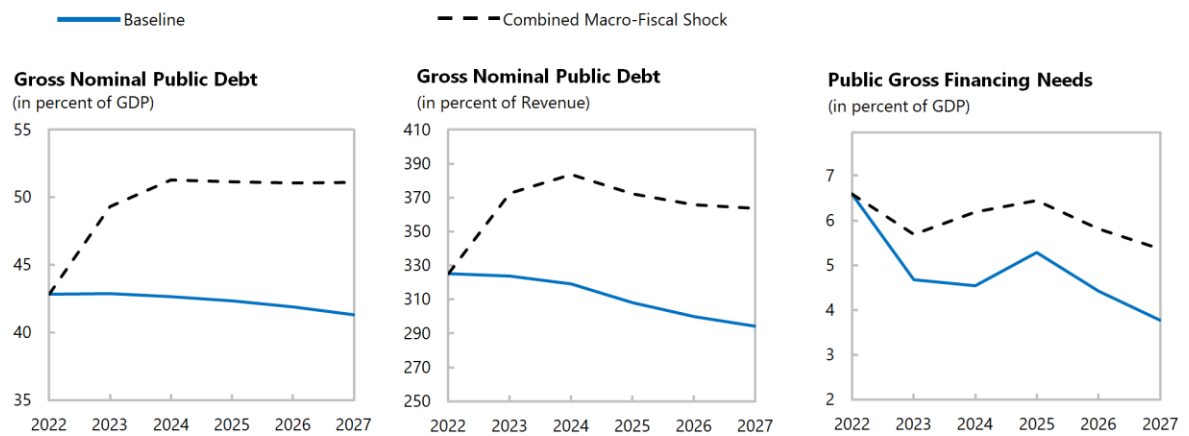
Source: IMF staff.

Figure 5. Indonesia: 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	5.4	6.0	5.8	5.4	5.3	5.2
Inflation	3.3	3.3	3.1	3.0	3.0	3.0
Primary balance	-1.3	-1.1	-1.2	-0.5	-0.4	-0.4
Effective interest rate	6.8	6.5	6.0	5.5	5.2	5.0
Real Interest Rate Shock						
Real GDP growth	5.4	6.0	5.8	5.4	5.3	5.2
Inflation	3.3	3.3	3.1	3.0	3.0	3.0
Primary balance	-1.3	-0.5	-0.6	-0.5	-0.4	-0.4
Effective interest rate	6.8	6.5	6.5	6.5	6.6	6.8
Combined Shock						
Real GDP growth	5.4	3.7	3.4	5.4	5.3	5.2
Inflation	3.3	2.7	2.5	3.0	3.0	3.0
Primary balance	-1.3	-1.1	-1.4	-0.5	-0.4	-0.4
Effective interest rate	6.8	6.8	6.1	6.2	6.4	6.7

	2022	2023	2024	2025	2026	2027
Real GDP Growth Shock						
Real GDP growth	5.4	3.7	3.4	5.4	5.3	5.2
Inflation	3.3	2.7	2.5	3.0	3.0	3.0
Primary balance	-1.3	-0.9	-1.4	-0.5	-0.4	-0.4
Effective interest rate	6.8	6.5	6.0	5.5	5.2	5.0
Real Exchange Rate Shock						
Real GDP growth	5.4	6.0	5.8	5.4	5.3	5.2
Inflation	3.3	12.0	3.1	3.0	3.0	3.0
Primary balance	-1.3	-0.5	-0.6	-0.5	-0.4	-0.4
Effective interest rate	6.8	6.8	5.6	5.3	4.9	4.8

Source: IMF staff.

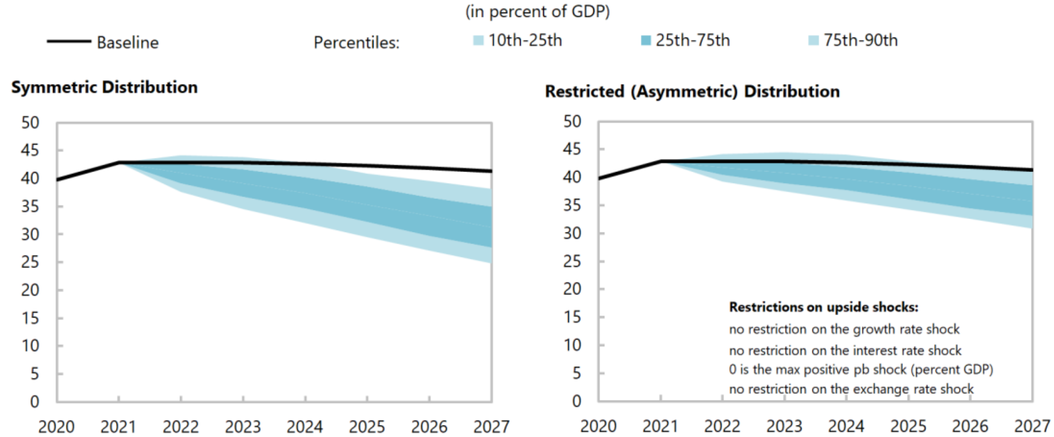
Figure 6. Indonesia: Public DSA—Risk Assessment

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

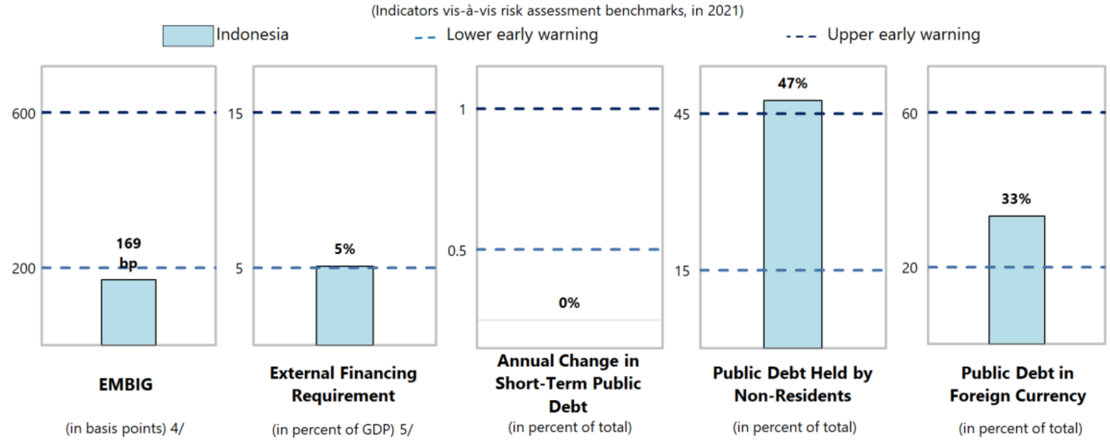
Evolution of Predictive Densities of Gross Nominal Public Debt

(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/ EMBIG, an average over the last 3 months, 06-Nov-21 through 04-Feb-22.

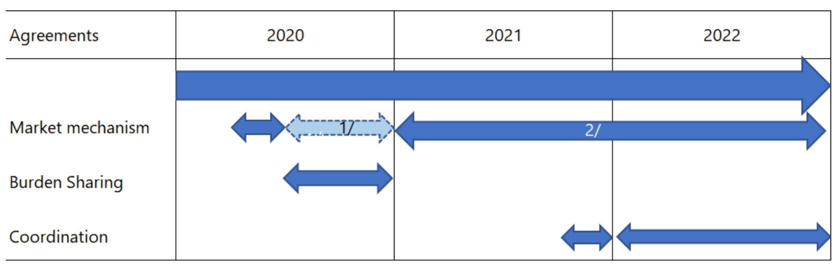
5/ External financing requirement is defined as the sum of current account deficit, amortization of medium and long-term total external debt, and short-term total external debt at the end of previous period.

Appendix VII. The Experience with Temporary Monetary Budget Financing in Indonesia

1. **In 2020, Indonesia resorted to temporary monetary budget financing as part of the exceptional policy response to the COVID-19 shock**. As part of the policy response, Law No. 2 of 2020 authorized Bank Indonesia (BI) to purchase rupiah-denominated government bonds directly in the primary market, on a temporary basis through end-2022.[1]

2. **The monetary budget financing has involved three different joint decrees**. These include the (i) Market Mechanism, established for 2020 under a joint decree issued in April 2020 by the Minister of Finance and the BI Governor and subsequently extended through end-December 2022; (ii) 2020 Burden Sharing Agreement announced in early July 2020; and (iii) a Coordination Agreement between BI and the Ministry of Finance announced in August 2021. The objectives and modalities for each arrangement differ. The text figure below summarizes the timeline for the arrangements.

Timeline of Monetary Financing Arrangements



1/ Subsumed under the Burden Sharing Agreement in this period.
2/ Market Mechanism, established for 2020 under a joint decree issued in April 2020, was subsequently extended through end-December 2022.

- ***The Market Mechanism is designed for BI to participate in budget financing***. It considers four main principles, namely: (i) prioritizing market mechanisms; (ii) considering the impact on inflation; (iii) purchasing tradable government bonds; and (iv) acting as a last resort when market capacity could not absorb the government's auction target. BI is a noncompetitive, stand-by bidder in the primary bond market auction, with the maximum bid amount capped in terms of the issuance target.[2] However, in the event that an auction target has not been met through the main primary auction, the government may conduct additional primary auctions ("green shoe" option). If the auction target has not been achieved through the main and additional primary auctions, the government may conduct a private placement with BI. Purchases under the market mechanism amounted to IDR 76 trillion in 2020 and to IDR 143 trillion in 2021, amounting to

[1] The same law also authorized the suspension of the budget deficit ceiling of 3 percent of GDP for the national government for the same time window.

[2] The cap is at 30 percent for sharia bond and 25 percent for conventional bonds.

0.5 and 0.9 percent of 2020 GDP, respectively, and to 6.3 and 11,9 percent of the end-2019 monetary base.

- ***The Burden Sharing Agreement aimed to finance COVID-19 related expenditure and tap BI revenue***. The arrangement involves pre-defined amounts of bond purchases by tranche. Each tranche is associated with specific expenditure categories under the National Economic Recovery (PEN) program (see text table below). The revenue ("seignorage") sharing modalities differ by tranche.

Ministry of Finance and Bank Indonesia 2020 Burden Sharing Agreement

In early July, a burden sharing agreement between the Minister of Finance and the Governor of Bank Indonesia was announced. The agreement sets out a three-tranche approach for government bond purchases by Bank Indonesia, delineated along the type of additional spending in 2020 relative to the original budget. Some tranches entail BI profit ("seignorage") transfers to the budget to reduce effective interest costs to the budget.

Tranche	Expenditure	Amounts	Terms	Seignorage
First	Priority spending on public goods such as health and social protection	IDR 398 trillion (2.5 percent of 2020 GDP)	Variable rate bonds with rates at reverse repo rate	BI transfers all interest receipt on these bonds to the Ministry of Finance.
Second	Spending on SME and other business support	IDR 177 billion (1.1 percent of 2020 GDP)	Long-term bonds at market rates	On each bond, BI transfers the difference between the bond coupon and a coupon based on the reverse repo rate (minus 1 percent) to the Ministry of Finance.
Third	Other PEN spending	As needed on a last resort basis, under the market mechanism	Long-term bonds at market rates	None

- ***The Coordination Agreement aims to finance humanitarian expenditure and also BI revenue***. It also involves pre-defined amounts of bond purchases. The amounts are defined by year, 2021 and 2022. The revenue sharing is also defined on the basis of purchase amounts (see text table below).

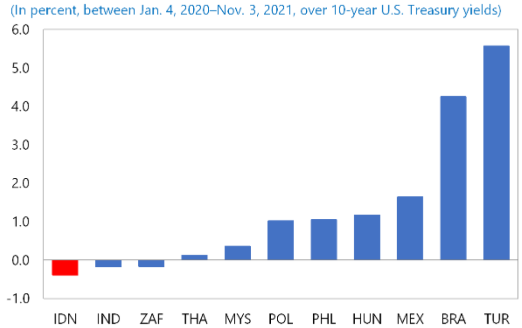
Bank Indonesia and Ministry of Finance Coordination Agreement, 2021-22

In August 2021, a coordination agreement between the Minister of Finance and the Governor of Bank Indonesia was announced. The agreement defines the amount of government bond purchases by Bank Indonesia, and revenue sharing modalities, that is, transfers to the budget to reduce effective interest costs to the budget.

Year	Amounts	Terms	Seignorage
2021	IDR 215 trillion (1.4 percent of 2020 GDP)	5- to 8-year variable rate bonds with rates at reverse repo rate	BI transfers interest receipt on IDR 58 trillion of these bonds to the Ministry of Finance.
2022	IDR 224 billion (1.4 percent of 2020 GDP)	5- to 8-year variable rate bonds with rates at reverse repo rate	BI transfers interest receipt on IDR 40 trillion of these bonds to the Ministry of Finance.

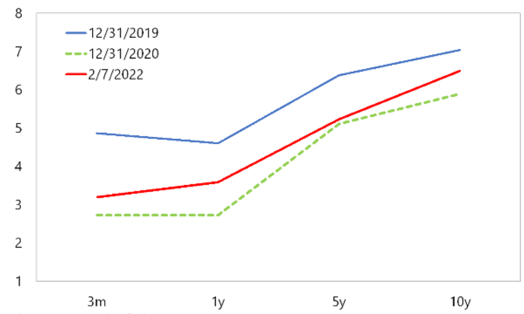
3. Among emerging market economies with asset purchase programs, the BI's program has been in effect longer than in many others. Most purchases in EM central bank asset purchase programs in response to the pandemic took place in the early months of the pandemic. This pattern reflected the focus on bond market stabilization or the stabilization of broader financial conditions. In Indonesia, however, the goals of the program have extended beyond bond market stabilization in times of market turmoil. The primary market purchases by BI have amounted to direct monetary budget financing. They have been a tool to achieve monetary policy easing in support of the fiscal policy response to the pandemic. The purchases by BI have, in relative terms, reduced the amount of the rupiah bonds held by the public and have coincided with lower domestic bond yields in 2020, especially after the initial period of global market turmoil in March and early April 2020, and a broadly stable rupiah government yield curve in 2021.

Select EMs: Change in 10-Year LC Government Bond Spread
(In percent, between Jan. 4, 2020–Nov. 3, 2021, over 10-year U.S. Treasury yields)



Sources: Haver Analytics; and IMF staff estimates.

Sovereign Bond Yield Curve
(In percent per year)

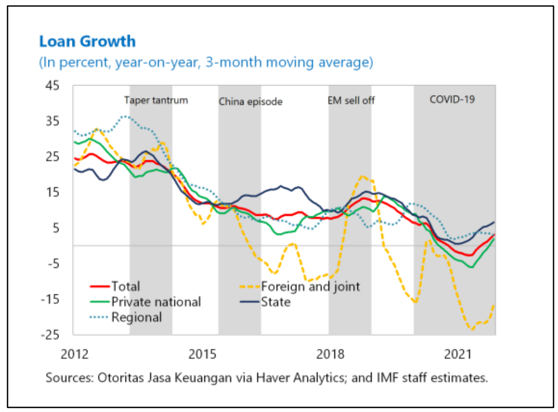


Source: Haver Analytics.

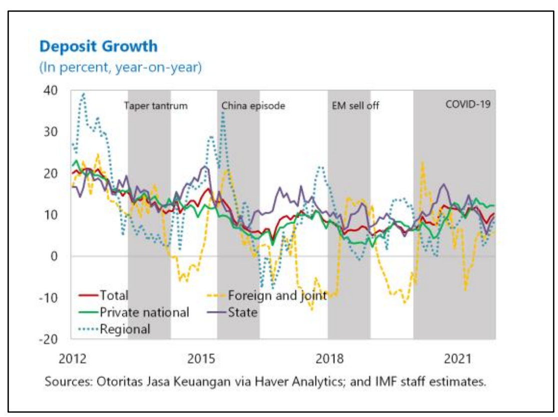
Appendix VIII. Public Banks in the Credit Recovery

The nascent bank credit recovery in Indonesia is being led by public banks. Their lending has recovered earlier and more strongly than that of private and foreign banks. This behavior seems not driven by liquidity differentials, but as happened during previous crisis in Indonesia and other countries, due to intrinsic characteristics of public banks that often play a stabilizing lending role in downturns. While helpful, this role could also entail quasi-fiscal risk and costs if credit risk is not effectively managed.

1. Credit has recently recovered after declining in the early stages of the pandemic. The credit recovery is being led by large banks, especially the four large state-owned banks—Bank Mandiri, Bank Rakyat Indonesia (BRI), Bank Negara Indonesia (BNI), and Bank Tabungan Negara (BTN). These large public banks reported increasing credit growth in January 2021, after registering declines in December 2020 (year-on-year changes in percent). Their credit further recovered in recent months, growing at 7½ percent in November 2021. Regional banks, which are much smaller and owned by provincial governments, have been performing similarly, with lending growth of around 6 percent in 2021. On the other hand, the recovery in credit of private national banks started a few months later, around March 2021, and it is growing at 3 percent in November 2021. Foreign and joint banks have performed worse, registering declines in their credit of more than 20 percent, which could be related to their specialization in trade financing, among other segments. The current modest growth of about 4½ percent in total lending of the banking system captures the differences in the credit recovery across the different types of banks.

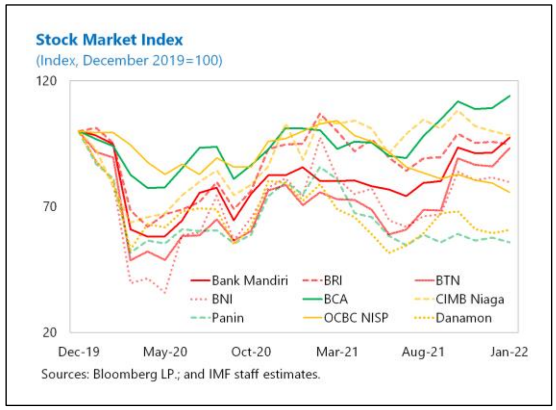


2. The slow credit recovery in Indonesia is not related to bank liquidity issues, but instead to credit demand considerations as well as differences in bank behavior after crises. As in other countries, the pandemic triggered an increase in deposits in the banks—which was broadly similar across large public banks, regional banks, and private banks (see chart)—reflecting depositors' precautionary motives as well as government measures to lower the impact of the pandemic. BI provided liquidity to the financial system through conventional tools (e.g., through lower reserve requirements) as well as indirectly via monetary budget financing. Low credit demand—linked with the sharp impact of the pandemic on economic activity—was one factor contributing to the credit slowdown, especially in early 2020. Nonetheless, the relative lack of demand cannot explain the differences across public and private banks. The



increase in lending across public banks since early 2021 was seen in all four state banks, each of which tends to cater to a very wide range of sectors. Public banks were also leading credit recovery in earlier episodes of distress, in Indonesia (Kinda and Isnawangsih, 2020) as well as in other emerging markets (e.g., Bosshardt and Cerutti, 2020). Public banks lent more relative to private banks during global financial crisis because of different objectives that led them to pursue a stabilizing role.

3. The willingness of public banks to lead the credit rebound has not been penalized by markets. The large four state-owned banks in Indonesia float part of their shares in the stock market. Price developments in these stocks have been in line with those of both domestic private and foreign-owned subsidiaries (see chart, public banks are shown in red). Recent credit ratings of the largest Indonesian banks are also similar to those of the other banks.



4. While public banks can play a stabilizing role in distress, this role could involve fiscal risk and costs that need to be effectively managed (IMF 2020). In particular, public banks need to continue to carefully monitor and properly assess a potential high volume of new credit to clients that are difficult to assess during crises.

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