



# AMRO Annual Consultation Report

## The Philippines - 2021

ASEAN+3 Macroeconomic Research Office (AMRO)

July 2022

## Acknowledgments

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1. This Annual Consultation Report on the Philippines has been prepared in accordance with the functions of AMRO to monitor and assess the macroeconomic status and financial soundness of its members; identify relevant risks and vulnerabilities; report these to member authorities; and if requested, assist them in mitigating these risks through the timely formulation of policy recommendations. This is being done in accordance with Article 3 (a) and (b) of the AMRO Agreement.
2. This Report is drafted on the basis of the Annual Consultation Visit of AMRO to the Philippines from 18 February to 8 March 2022 (Article 5 (b) of the AMRO Agreement). The AMRO Mission team was headed by Dr Siu Fung Matthew Yiu. Members include Dr Zhiwen Jiao, Desk Economist on the Philippines; Dr Heung Chun Andrew Tsang, Backup Economist; Dr Byunghoon Nam, Fiscal Specialist; Dr Siang Leng Wong, Senior Financial Specialist; Mr Vu Hiep Nguyen and Mr Hoai Viet LE, Associate. AMRO Director Dr Toshinori Doi and Chief Economist Dr Hoe Ee Khor also participated in key policy meetings with the authorities. This AMRO Annual Consultation Report on the Philippines for 2021 was peer reviewed by Dr Jae Young Lee, Group Head and Lead Economist, and Ms Diana del Rosario, Senior Economist; format-reviewed by Dr Tanyasorn Ekapirak, Associate Economist and approved by Dr Hoe Ee Khor, AMRO Chief Economist.
3. The analysis in this Report is based on information available up to 23 June 2022.
4. By making any designation of or reference to a particular territory or geographical area, or by using the term “member” or “country” in this Report, AMRO does not intend to make any judgments as to the legal or other status of any territory or area.
5. On behalf of AMRO, the Mission team wishes to thank the Philippine authorities for their comments on this Report, as well as their excellent meeting arrangements and hospitality during our visit.

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## Executive Summary

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**1. Economic recovery in the Philippines has remained on track despite recurrent waves of COVID-19 infections.** GDP growth rebounded by 5.7 percent in 2021 from a contraction of 9.5 percent in 2020. The recovery was mainly driven by improvements in investments and household consumption. A strong rebound in exports of goods led by electronics also contributed to the recovery, whereas exports of services remained weak, notwithstanding robust exports of business services. AMRO forecasts GDP growth to accelerate to 6.9 percent in 2022 and moderate slightly to 6.5 percent in 2023 on the back of continued government support and a stronger private sector.

**2. The labor market has improved on several fronts, but challenges remain.** The market has basically regained all the jobs lost since the onset of the pandemic in 2020. However, the quality of employment has deteriorated, as indicated by the elevated underemployment rate and a concentration of the employment increase in elementary jobs.

**3. Average inflation in 2021 was at 3.9 percent, near the upper bound of the 2-4 percent target range for the year.** Inflationary pressures were mainly driven by temporary supply-side factors. Going forward, inflation is expected to stay above its target range in 2022. AMRO projects the headline CPI inflation to be 4.4 percent in 2022 and to decline to 3.8 percent in 2023. However, oil prices may spike further due to geopolitical conflicts, posing an upside risk to inflation in 2022.

**4. The current account shifted back into deficit in 2021, while the financial account continued to record net inflows.** The current account registered a deficit of USD6.9 billion in 2021, equivalent to 1.8 percent of GDP, mainly because of a widening deficit in the goods trade. At the same time, the financial account experienced USD6.9 billion of net inflows. The peso exchange rate depreciated, reflecting a weakening in the current account and a stronger U.S. dollar.

**5. Liquidity remained ample in the banking system and loan growth has started to pick up, albeit still low, and uneven across sectors.** Growth in loans to the nonfinancial sector turned positive in August 2021 and continued to rise to 5.7 percent in March 2022. The recovery was primarily in loans to companies, while loans to consumers continued to contract, although the situation has stopped worsening.

**6. The banking system generally remained resilient amid the pandemic, owing to policy support and prudent management.** The past due ratio and nonperforming loan (NPL) ratio of the banking sector declined to 4.8 percent and 4.1 percent respectively in March 2022. Although this indicates that the deterioration in the quality of banking assets may have hit a trough, the credit risk remains high. Nonetheless, the overall banking sector maintained a strong capital adequacy ratio of 16.7 percent on a solo basis as of December 2021, which is well above the minimum regulatory requirement

**7. Fiscal revenue generally remained stable, while fiscal expenditure increased.** As a share of GDP, fiscal revenue declined slightly to 15.5 percent in 2021 from 15.9 percent in 2020. Government spending increased to 24.1 percent of GDP from 23.5 percent in 2020, primarily due to the authorities' infrastructure drive. As a result, the fiscal deficit widened to 8.6 percent of GDP in 2021, pushing government debt to 60.4 percent of GDP in the same year.

**8. Government expenditure for 2022 remains large, focusing on building resilience and sustaining the recovery momentum.** The 2022 National Budget increased by 11.5 percent from the 2021 National Budget to PHP5.0 trillion, equivalent to 23.1 percent of GDP.

**9. The Philippine economy continues to face several risks and challenges.** A potential resurgence of more vaccine-resistant COVID-19 infections remains a major threat to the recovery in the short term, and the impairment of firms' balance sheets continues to pose a risk to the banking sector's financial health. The significance of these two risks may have abated somewhat; however, capital flow volatility is expected to rise in 2022 as global financial conditions are set to tighten. In addition, scarring effects caused by the pandemic have become clearer, raising the urgency to take action to build resilient, sustainable, and inclusive long-term growth.

**10. The overall fiscal policy stance is assessed to remain broadly neutral in 2022 under the current National Budget.** While fiscal expenditure continues to be large, revenue will also increase as the economy recovers and the government further strengthens its revenue collection efforts. After taking into account these cyclical factors, the fiscal stance is estimated to be slightly expansionary in 2022, albeit less so than in 2021, but it will shift to be contractionary in 2023. This policy stance is appropriate as private-sector recovery is gaining strength and expected to be more self-sustaining going forward.

**11. The fiscal consolidation plan should enhance fiscal sustainability without undermining economic recovery.** The current consolidation plan of the government focuses mostly on expenditure, particularly on cuts in current expenditure as spending related to COVID-19 is pared down, while fiscal revenue will improve moderately. The gradual reduction of the fiscal deficit is deemed reasonable as the growth momentum is still moderate in the near term. However, in view of concerns over the narrowed fiscal policy space and limited buffers to address future shocks, the pace of fiscal consolidation should be expedited once private-sector growth becomes self-sustaining.

**12. The authorities should improve the efficiency of public spending programs while enhancing revenue collection.** More economically viable infrastructure projects should be implemented, while nonessential and ineffective fiscal programs should be revamped or terminated, with the resources redirected to national development priorities. The government needs to continue strengthening its revenue-enhancing measures, including broadening the tax base, especially for value-added tax (VAT), and improving the efficiency of tax administration. Raising excise tax rates and introducing new taxes on digital services could also be considered.

**13. The government should carefully manage risks to the efficiency and effectiveness of budget implementation at local government units (LGUs).** Starting in 2022, LGUs will have a higher share of fiscal resources. This increase will be accompanied by a devolution of functions from the national government to the local authorities. The transition process should be carefully managed to ensure that the LGUs' capacity is commensurate with their increased responsibility, to avoid spending inefficiency and a worsening quality of public services. The government's three-year transition plan for LGUs will help minimize potential wastage and inefficiency of spending.

**14. Given the large fiscal deficit, the government should manage its financing carefully to maintain orderly functioning of the markets.** The financing of the deficit is manageable in the near term as the government can continue to borrow from domestic banks, which have ample liquidity, and other savings institutions. However, as the recovery gains momentum, private-sector demand for bank credit will rise. Moreover, higher global interest rates arising from the U.S. Fed's tightening of monetary policy may lead to capital outflows and increases in domestic interest rates, adding to debt-servicing costs. To avoid financing stress, the government should diversify the investor base for government securities, such as by attracting more retail and institutional investors, while narrowing the fiscal deficit according to the fiscal consolidation plan.

**15. The government could avoid borrowing from the central bank.** Short-term borrowing from the Bangko Sentral ng Pilipinas (BSP) was an important part of government financing in the last two years, to meet the temporary revenue shortfall and to avoid stressing the domestic bond market, particularly in 2020. However, as the bond market has grown and deepened, and as fiscal revenue has recovered along with the economy, the short-term borrowing has become unnecessary. Putting an end to the provisional advance will therefore alleviate market concerns of the central bank directly financing the deficit. The full repayment of the provisional advance of PHP300 billion in May is therefore welcome.

**16. The central bank should consider normalizing its policy stance as the inflationary pressure rises, the recovery gains traction, and global interest rates rise further.** The accommodative monetary policy stance was appropriate in 2021, warranted by the large negative output gap, heightened growth risks, and well-anchored inflation expectations. Going into 2022, the negative output gap is estimated to have closed in Q1 due to strong economic rebound, while the supply-led inflation has risen rapidly and global interest rates have increased. Therefore, the central bank's decision to raise of the policy rate in May and June is welcome. Looking forward, the BSP could further normalize the policy stance, taking into account the degree of inflationary pressure and the pace of economic recovery. Nevertheless, the BSP should be more cautious in policy tightening if the recovery were to weaken.

**17. The economic recovery has reduced the need for most regulatory relief measures, but the BSP should be mindful that many businesses have yet to fully recover.** Regulatory relief measures have provided critical support for the resilience of the financial sector in the past two years, and some are in place until end-2022. The central bank needs to monitor how well banks adjust to a normalized regulatory regime in 2022, as some banks may face difficulties without the regulatory support. The BSP's approach to unwind the relief measure in tandem with the pace of economic recovery is welcome. If necessary, a transition period may be considered for banks with weaker loan portfolios, as some sectors have not fully recovered. Moreover, the BSP is working closely with other government agencies on the full implementation of the Financial Institutions Strategic Transfer (FIST) Act. In particular, BSP's efforts can be directed to reducing the costs and increasing the ease of business liquidation and restructuring.

**18. Both public and private efforts are needed to mitigate the scarring effects from the pandemic and address structural challenges for a more resilient and sustainable long-term growth.** The whole-of-government approach in the National Employment Recovery Strategy should help address scarring in the labor market and improve the competitiveness of the workforce. The focus should gradually shift to upgrading and enhancing job skills to embrace a more technology-driven economy in the longer term. Considering the reduced fiscal space, it has become more important to incentivize the private sector for its participation. The government needs to further improve the environment of doing business and the policy framework.

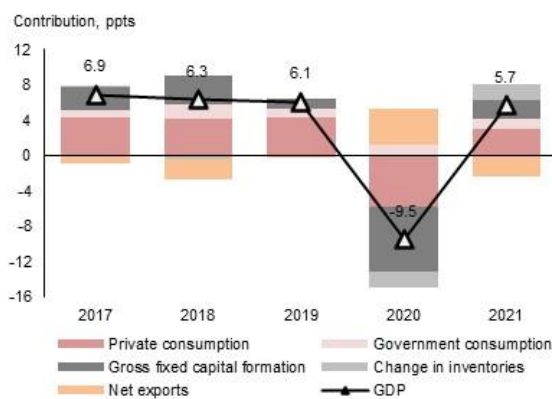
**19. The government should remain proactive in managing natural disaster risks by allocating the necessary fiscal resources in the medium term to combat climate change through mitigation and adaptation.** The country has actively participated in global action on climate change. The government's plan to reduce greenhouse gas emissions by 75 percent against a projected business-as-usual cumulative economy-wide emission from 2020 to 2030 is welcome. It intends to use much cleaner energy, such as volcanic heat, ocean waves, natural gas, hydropower, and nuclear power, instead of coal and oil. Besides its own fiscal resources, the government can leverage the resources of the private sector through private partnership projects (PPP) and issuances of green bonds. The concrete efforts of the government to enhance the resilience of the economy against natural disasters are commendable.

## A. Recent Developments and Outlook

### A.1 Real Sector Developments and Outlook

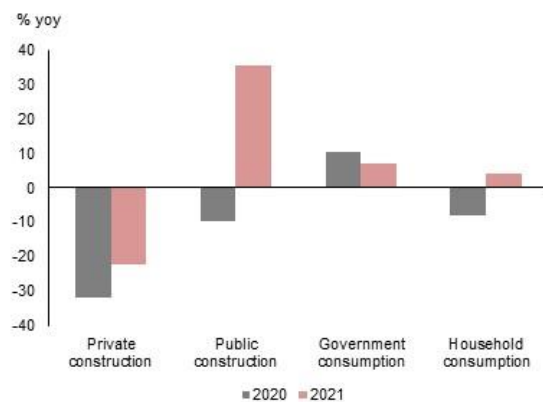
**1. Economic recovery has remained on track despite recurrent waves of COVID-19 infections.** A fresh resurgence of the disease starting in March 2021 interrupted economic recovery; however, growth regained momentum in Q3 amid a second wave of COVID-19 cases, as targeted containment measures reduced the severity of the impacts from mobility restrictions. Overall, GDP growth rebounded by 5.7 percent in 2021 from a contraction of 9.5 percent in 2020 (Figure 1).

Figure 1. Real GDP Growth by Expenditure



Source: Philippine Statistics Authority (PSA), AMRO staff calculations

Figure 2. Demand: Public vs Private



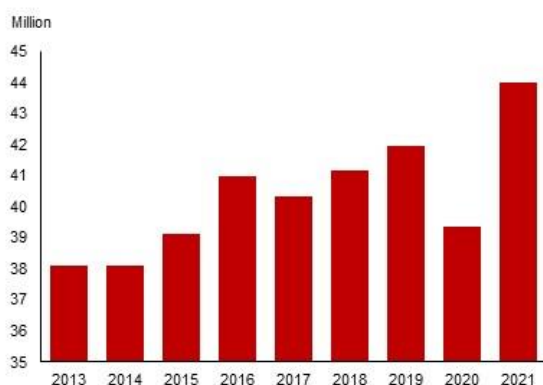
Source: PSA, AMRO staff calculations

**2. The recovery in GDP growth was mainly contributed by investments and household consumptions on the expenditure side, while the services sector was the main driver on the production side.** Rebound in investments was mainly driven by public investment in construction, supported by government infrastructure programs, while private investment in construction continued its contraction (Figure 2). The rebound in durable goods investment, of which a large share came from the private sector, was to a large extent the result of a low base effect in 2020. Private consumption grew by 4.2 percent in 2021, although it was still lower than pre-COVID levels. Government consumption continued to grow, albeit at a slower pace compared to 2020. There was a strong rebound in exports of goods led by electronics, however, net exports contributed negatively to GDP growth in 2021, as exports of services remained weak, notwithstanding robust export of business services. On the production side, the main driver of GDP recovery was the services sector, particularly wholesale and retail trade.

**3. Growth is expected to accelerate in 2022 on the back of continued government support and a stronger private sector.** Specifically, GDP grew significantly at 8.3 percent in Q1 2022. Continued relaxation of the mobility restrictions will pave the way for stronger economic recovery. Government investment will continue to be a main driver of growth in 2022, while private investment may only improve moderately, in part due to impaired balance sheets. Private consumption recovery will gain momentum, supported by better income and job prospects, and by presidential election-related spending. AMRO forecasts GDP growth to rise to 6.9 percent in 2022, and to moderate slightly to 6.5 percent in 2023.

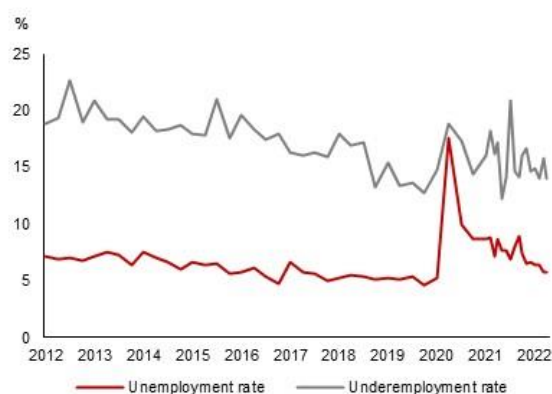
**4. The labor market has improved on several fronts, but challenges remain.** The market has basically regained all the jobs lost since the onset of the pandemic in 2020 (Figure 3). Both the level of employment and labor force participation rate have surpassed pre-COVID levels. However, the full-year unemployment rate remains elevated at 7.8 percent in 2021, owing partly to rapid growth in the workforce (Figure 4). Over the past two years, 942,916 overseas Filipino workers had been repatriated, and while a large number of them have been redeployed overseas, those remaining in the country could also have contributed to the elevated unemployment rate.<sup>1</sup> Meanwhile, the quality of employment has deteriorated. Most of the increase in employment is concentrated in elementary jobs associated with low pay. The full-year 2021 underemployment rate was 15.9 percent, indicating that a large portion of employed workers still cannot work full time, likely a result of many companies operating below capacity.

Figure 3. Employment



Source: PSA, AMRO staff calculations

Figure 4. Unemployment and Underemployment



Source: PSA, AMRO staff calculations

**5. Average inflation in 2021 was at 3.9 percent, near the upper bound of the 2-4 percent target range for the year.** Headline CPI inflation was above 4 percent until October 2021, when it started to trend downward, bringing inflation (12-month average) to 3.9 percent in 2021 from 2.4 percent in 2020 (Figure 5). Core CPI inflation,<sup>2</sup> excluding food and energy items, has hovered around 3.3 percent, suggesting that the inflationary pressures are mainly driven by temporary supply-side factors. Domestically, African swine fever outbreaks and weather disturbances led to higher prices of pork, fish, and vegetables. Externally, the steep rise in global energy prices has fueled high electricity tariffs and increased the transportation costs in the Philippines (Figure 6). The high inflation has prompted the government to roll out non-monetary measures, including a temporary price freeze and increased importation of certain food items, to temper the increase in price pressures.

**6. Going forward, inflation is expected to stay slightly above its target range.** The pressure from rising oil and food prices has started to manifest in inflation. Headline CPI rose from 3.0 percent in January to 5.4 percent in May 2022. Going forward, AMRO projects the headline CPI inflation to rise to 4.4 percent in 2022, and then decline to 3.8 percent in 2023.

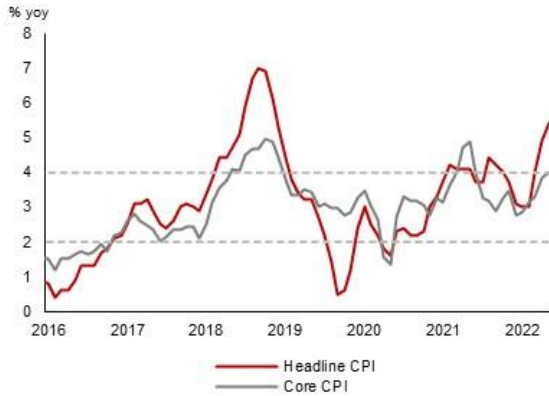
<sup>1</sup> More than 670,000 overseas Filipino workers (OFWs) were deployed abroad from January to November 2021, according to the Philippine Overseas Employment Administration (POEA). The figure is higher than the 560,300 land and sea-based OFWs deployed in 2020.

<sup>2</sup> The core CPI inflation is calculated by Haver based on the weights in the CPI basket using 2018 as the base year.



Oil prices, which may spike further due to geopolitical conflicts, continue to pose an upside risk to inflation in 2022.

Figure 5. Headline CPI and Core CPI



Source: PSA, Haver, AMRO staff calculations  
Note: The inflation data use 2018 as the base year.

Figure 6. CPI: Transportation Fuel and Electricity



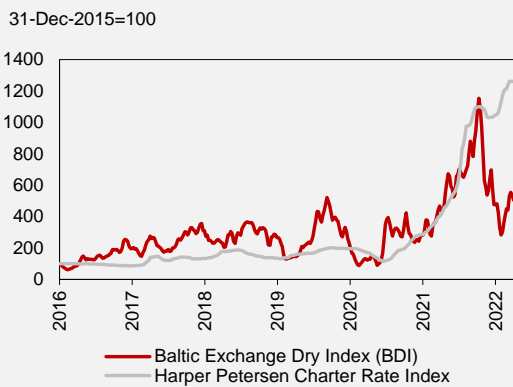
Source: PSA, Haver, AMRO staff calculations

**Box A. Impacts of Supply Chain Disruptions on the Philippine Economy<sup>3</sup>**

The supply chain disruptions have adversely affected the global economy since the onset of the COVID-19 pandemic in early 2020, which slowed down economic activities and pushed up inflation from the supply side. The pandemic placed supply chains under stress amid the shutdown of logistic facilities and the absence of workers due to the spread of COVID-19 infections and related movement restrictions. Specifically, the local supply chain disruptions due to the domestic lockdown policies swiftly spilled over to international logistics and caused global supply chain disruptions.

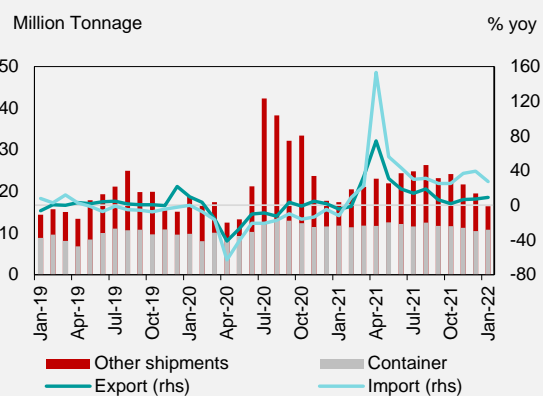
Reflecting the global supply chain disruptions, international freight costs have surged since the outbreak of the COVID-19 pandemic in 2020. In particular, the cost of container ships, proxied by the Harper Index, soared over the last two years, while the Baltic Dry Index, representing the average prices paid for the transport of dry bulk materials, e.g., coal and steel, eased significantly in late 2021. However, the freight costs have increased again due to the Russia-Ukraine conflict (Figure A1).

Figure A1. International Freight Costs



Source: Baltic Exchange, Harper Petersen

Figure A2. Port Usages and Trade



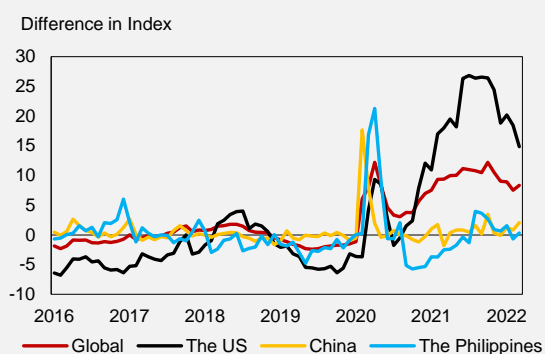
Source: PSA, Marine Traffic, AMRO staff calculations  
Note: Port usage is the sum of container tonnage and other shipments at all the ports in the Philippines during the month.

<sup>3</sup> This box was prepared by Andrew Tsang, Economist, and Hoai Viet Le, Seconded.

**Nevertheless, except for the first half of 2020, the impact of global supply chain disruptions on the country's economy was limited.** According to statistics on port usages and trade statistics (Figure A2), a quick and robust recovery in the external trade was observed in the second half of 2020. During the early stage of the pandemic, Philippine businesses faced shortages in the foreign supply of raw materials and drop in orders due to the disruptions in the global value chains.<sup>4</sup> However, given that the Philippine economy mainly depends on the services sector, the impact of the global supply chain disruption on growth are limited. The supply chain disruption index, constructed using PMI figures, also indicates that the Philippines' supply chains were tight in the first half of 2020, but the disruptions eased quickly in the second half of 2020.

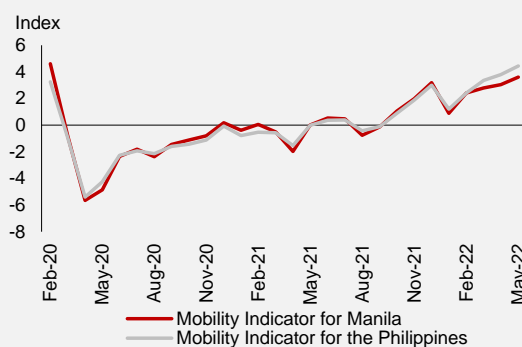
**That said, until late 2021, the country's local movement restriction policy had adversely affected the services sector, particularly the tourism industry.** Specifically, total tourism expenditure dropped significantly from 59.5 percent of GDP in 2019 to 11.9 percent in 2020. On a positive note, Google mobility statistics shows that community movement has gradually improved after the first wave of the pandemic in 2020. Domestic mobility has been close to the pre-pandemic level since late 2021, supporting the recent strength in the economic recovery (Figure A4).

**Figure A3. Supply Chain Disruption Index**



Source: II Markit and AMRO staff calculations.  
Note: Supply chain disruptions are calculated as the difference between the supply delivery times subindex in the purchasing managers' index (PMI) and a counterfactual, cyclical measure of supply delivery times based on the manufacturing output subindex in the PMI (HP trend of the output subindex). A higher index means larger disruptions.

**Figure A4. Mobility Indicators**

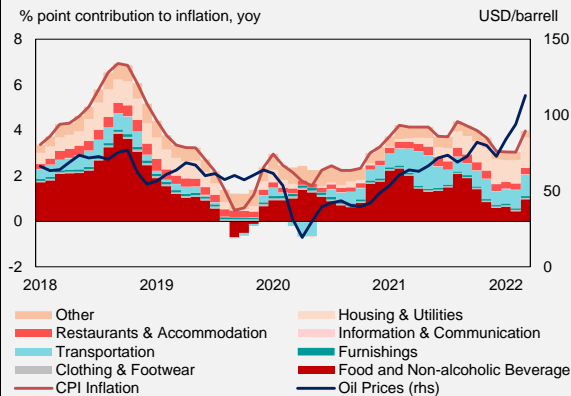


Source: Google and AMRO staff calculations.  
Note: The mobility indicator for Manila (the Philippines) is the first principal component of six Google community mobility trend series for Manila (the Philippines). Google community mobility trend series indicate that the level of activities in six places during the pandemic deviated from their baseline (median during the 5-week period of 3 Jan – 6 Feb 2020). The six places were groceries and pharmacies, parks, transit stations, retail and recreational outlets, residential property and workplaces. A lower index indicates lower community mobility, and the "zero" of index means the average level during the sample period (Feb 2020 – May 2022).

**While the impact on international trade was limited, the supply chain disruptions have had a more pronounced effect on Philippine inflation, which drifted higher from 2020 to late 2021.** Global supply chain disruptions constrained the domestic supply of food and other commodities as global energy and food commodity prices also spiked up (Figure A5). As a result, food prices became the main driver of Philippine inflation from 2020 to mid-2021, while the surge in crude oil prices, which has affected local transportation and utility costs, has dominated the inflationary pressure in recent months. On the other hand, COVID-19 containment measures severely affected livelihoods and the ability of households to buy food. The pandemic and COVID-19 containment measures have severely affected domestic supply chains, especially the supply of goods.

<sup>4</sup> Major exports in the Philippines are electronic products (42.0 percent) and agricultural products (39.2 percent), both of which were deeply affected by the shortage of the raw materials.

**Figure A5. Prices and Inflation**



Source: PSA and AMRO staff calculations.  
Note: The oil price is the average of WTI, Brent, and Dubai Fatec.

**Table A1. Weights of Major Components in CPI**

Components	Weight
Food & Non-alcoholic Beverage	37.75
Clothing & Footwear	3.14
Furnishings	3.22
Transportation	9.03
Information & Communications	3.41
Restaurants & Accommodation	9.62
Housing & Utilities	21.38
Others	12.46

Source: PSA.  
Note: Base year = 2018.

**An empirical study is conducted to assess and verify the impact of global and local supply chain disruptions on the Philippine economy.** Specifically, this study regresses selected macroeconomic variables, including exports, imports, industrial production (IP), and CPI inflation, on indicators of supply chain disruptions (e.g., local and global supply chain disruption indices, freight rate, port usage, mobility indicator, and oil prices). The results are summarized in Tables A2 and A3.

**The regression results confirm that the Philippine economy was mainly affected by the local supply chain condition instead of the global situation during the COVID-19 pandemic.** Table A2 presents the estimation results of the real activities. The results show that the domestic supply chain disruptions have a significant negative effect on exports, imports, and industrial production, while the impact of the global supply chain disruptions is insignificant across these real variables. Meanwhile, both exports and imports are significantly affected by the congestion (lower number of port usage = congestion) in domestic ports due to the shutdown of logistic facilities and the absence of workers, while the shipment cost is not significant. Finally, the study finds that the domestic community mobility did not affect the trade and production output.

**Table A2. Estimation Results for Economic Activities**

	$\Delta \ln(\text{Exports})$	$\Delta \ln(\text{Imports})$	$\Delta \ln(\text{IP})$
Philippine supply chain disruption index	-0.0114 ** (0.0044)	-0.0161 ** (0.0065)	-0.0328 * (0.0166)
Global supply chain disruption index	0.0043 (0.0045)	0.0068 (0.0078)	-0.0148 (0.0352)
Lagged log-differenced Baltic Dry Index	-0.1202 (0.0864)	-0.1802 (0.1469)	
Log-differenced Port Usage	0.2073 ** (0.0941)	0.5155 * (0.2676)	-0.4279 (0.4199)
Mobility Indicator for Manila	-0.0165 (0.0166)	-0.0165 (0.0247)	-0.0155 (0.0442)
Constant	-0.0219 (0.0301)	-0.0322 (0.0554)	0.1492 (0.2733)
R-squared	0.44	0.42	0.22
Adjusted R-squared	0.28	0.25	0.05
Sample: Feb 2020 - Jan 2022			

Source: PSA, Google, Marine Traffic, Baltic Exchange, IHS Markit, AMRO staff calculations

Note: The results are estimated using the OLS method. \*\*\*, \*\*, and \* indicate significance at the 1%, 5% and 10% levels, respectively. Standard errors are given in parenthesis beneath the coefficient estimates. The definition of mobility indicator is stated in the footnote of Figure A4. A dummy for the Russia-Ukraine conflict (Mar 2022) is included in the estimation for the CPI equation (Table A3).

**Table A3. Estimation Results for CPI Inflation**

	$\Delta \ln(\text{CPI})$
Philippine supply chain disruption index	-0.0001 (0.0001)
Lagged Global supply chain disruption index	-1.78*10 <sup>6</sup> (0.0001)
Lagged log-differenced Port Usage	-0.0089 *** (0.0026)
Lagged log-differenced international oil prices	0.0075 ** (0.0026)
Mobility Indicator for Manila	-0.0004 ** (0.0002)
Constant	0.0027 ** (0.0012)
R-squared	0.60
Adjusted R-squared	0.47
Sample: Feb 2020 - Mar 2022	

The CPI inflation is significantly affected by (i) the congestion in domestic ports; (ii) the surge in international oil prices; and (iii) the restrictive domestic community mobility, according to the results shown in Table A3. Meanwhile, the domestic and global supply chain disruption indices are insignificant.

**The Philippine economic activities (exports, imports and IP) were mainly affected by the local supply chain condition, while the port congestion and surge in international oil price, partly due to the global supply chain disruptions, have impacted inflation in the Philippines.** As the movement restriction policies have been removed, it is expected that economic recovery will continue at a strong pace in 2022. However, the rising inflationary pressures due to the global supply chain

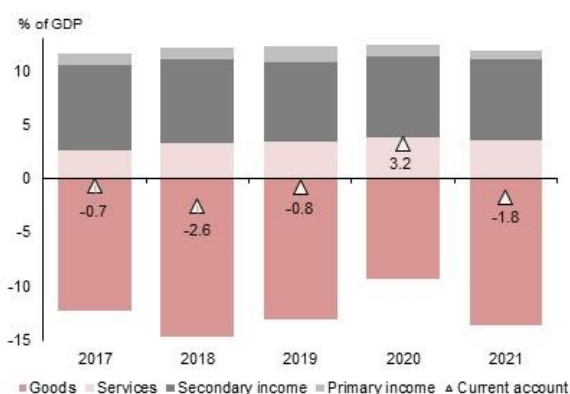
disruptions and the international oil price hikes have raised the risk of the country's inflation. Given that the accommodative monetary policy should be maintained for supporting the economic recovery and taking into account the limited effect of the monetary policy on the supply push inflation, the authorities could consider implementing social protection measures to alleviate the impact of rising crude oil prices on vulnerable sectors and continue to implement their food import program. In addition, the authorities could also consider introducing some measures to mitigate the impact of port congestions.

### Authorities' View

7. The Philippine authorities expect economic growth in 2022 to 2023 to be supported by the implementation of the Corporate Recovery and Tax Incentives for Enterprises (CREATE) Law and Financial Institutions Strategic Transfer (FIST) Act, and by improvements in external demand. The CREATE Law is anticipated to raise domestic investments and business activity as the corporate income tax (CIT) rate was reduced by 5.0 percentage points to 25.0 percent in 2020. Meanwhile, the FIST Act provides support to financial institutions in offloading nonperforming assets (NPAs) to Financial Institution Strategic Transfer Corporations (FISTCs), thereby allowing banks to resume credit activity, especially to micro, small and medium-sized enterprises (MSMEs). In addition, the BSP will continue to monitor the banking system's asset quality and financial performance as risks remain material amid the tightening monetary policy and unwinding of key relief measures that remain in place until end-2022.

### A.2 External Sector and the Balance of Payments

Figure 7. Current Account



Source: PSA, BSP, AMRO staff calculations

Figure 8. Overseas Workers' Remittances

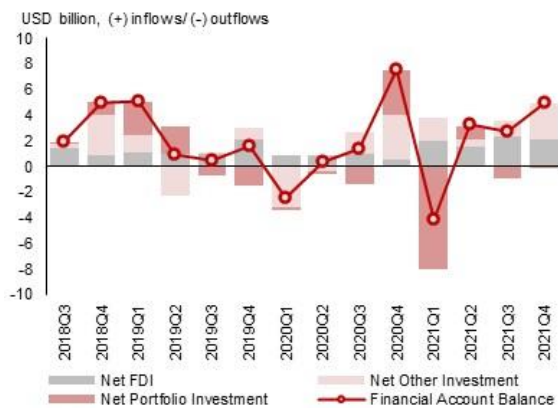


Source: BSP, AMRO staff calculations

8. **The current account shifted back into deficit in 2021.** The current account recorded a deficit of USD6.9 billion in 2021, equivalent to 1.8 percent of GDP (Figure 7). It was mainly driven by a widening deficit in goods trade as recovering business activities and rising commodity prices sharply raised goods imports. The goods trade deficit grew from USD33.8 billion in 2020 to USD53.8 billion in 2021. Services trade and the secondary income account received higher inflows, supported by business process outsourcing (BPO) and overseas remittances respectively (Figure 8); however, the primary income account recorded lower receipts. In total, inflows into these three accounts amounted to USD46.9 billion, but the funds were insufficient to offset the widening trade deficit.

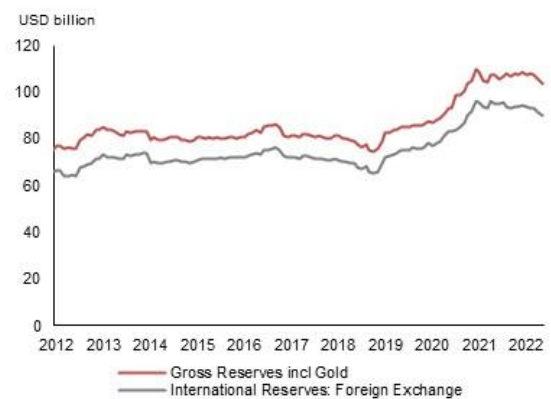
**9. The financial account reversed to a net inflow from Q2 2021.** After experiencing an outflow of USD4.1 billion in Q1, the financial account recorded net inflows of USD11.0 billion in Q2-Q4, resulting in USD6.9 billion of net inflows in 2021 (Figure 9). Foreign direct investment contributed USD8.1 billion as more foreign companies increased their business operations in the country. Other investments contributed USD6.3 billion, reflecting mainly an increase in special drawing rights and government borrowing. In contrast, portfolio investments experienced an outflow of USD8.0 billion,<sup>5</sup> offsetting a large portion of the inflows. Gross international reserves fluctuated at around USD107 billion in 2021 (Figure 10) and stood at around USD105 billion at end-April 2022, which is more than sufficient to cover the country's short-term external funding needs.

**Figure 9. Financial Account**



Source: BSP, AMRO staff calculations

**Figure 10. International Reserves**

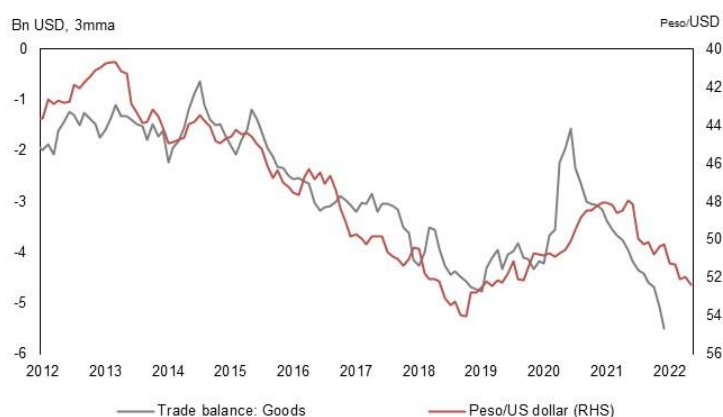


Source: BSP, AMRO staff calculations

**10. The peso exchange rate depreciated,** reflecting a weakening in the current account and a stronger U.S. dollar. The peso depreciated by 5.9 percent from around 48 pesos per dollar in early 2021 to 51 pesos per dollar at end-2021, reflecting in part the weakening in the current account balance. Between January and May 2022, the peso exchange rate averaged 51.8 pesos per dollar (Figure 11).

<sup>5</sup> A large portion of the outflows from portfolio investments is due to the BSP's diversification of its reserve assets in 2021.

**Figure 11. Peso Exchange Rate and Trade Balance**

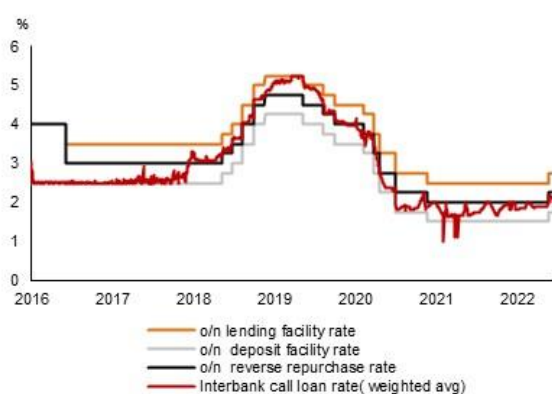


Source: BSP, AMRO staff calculations

### A.3 Monetary Conditions and the Financial Sector

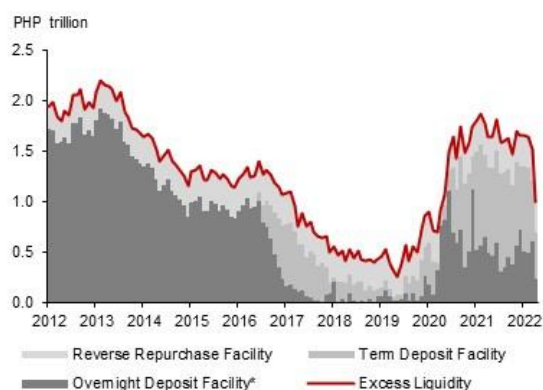
**11. Liquidity remained ample in the banking system.** The weighted interbank call loan rate rose from a low of 1.3 percent in February 2021 to 1.9 percent in March 2022, slightly below the central bank policy rate (Figure 12). Volume indicators for excess reserves including term deposit facilities (TDFs), remained at elevated levels (Figure 13). The ample liquidity was supported by the BSP’s record-low policy rate and injections of liquidity through its purchase of government securities in the secondary bond market, albeit substantially reduced compared to 2020.<sup>6</sup> At a broader level, M1 grew strongly by 14.9 percent as of April 2022, underpinned by an increase in reserve money and demand deposits, while M2 growth was more moderate due to subdued loan extension (Figure 14).

**Figure 12. Interest Rates**



Source: BSP, AMRO staff calculations

**Figure 13. Liquidity of the Banking Sector**



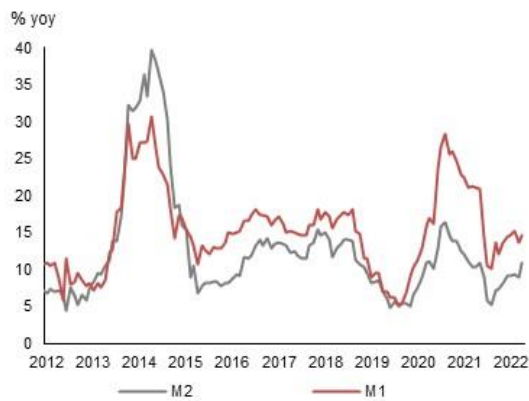
Source: BSP, AMRO staff calculations

**12. Loan growth has started to pick up, albeit still low, and the recovery is uneven across sectors.** The growth of loans to the nonfinancial sector turned positive in August 2021 and continued to rise to 5.7 percent in March 2022 (Figure 15). The recovery was primarily in loans to companies, while loans to consumers continued to contract till January 2022, although

<sup>6</sup> Since the outbreak of COVID-19 pandemic, there was only a one-off cut in RRR by 200 bps in 2020, and no further cut in RRR in 2021 and early 2022.

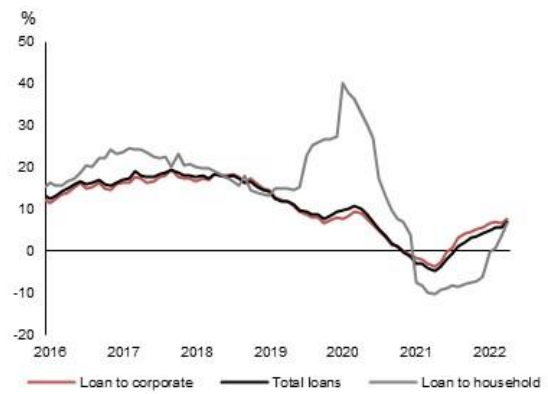
the situation has stopped worsening. The pickup in loan growth reflects a recovery in economic activities, lower risk aversion, and a conducive policy environment. Sectors that are less affected by the pandemic have experienced stronger recovery in loan growth, including information and communication, finance and insurance, and transportation and storage. Loan growth in sectors that were hard hit by the pandemic, including retail and wholesale, have lagged behind.

**Figure 14. Money Aggregate Growth**



Source: BSP, AMRO staff calculations

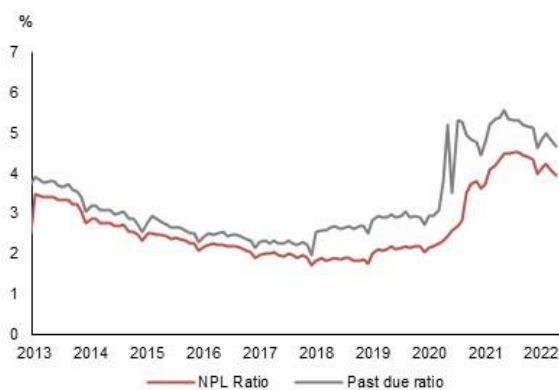
**Figure 15. Bank Loan Growth**



Source: BSP, AMRO staff calculations  
Note: The loans are outstanding loans net of reverse repurchases (RRP) placements with the BSP.

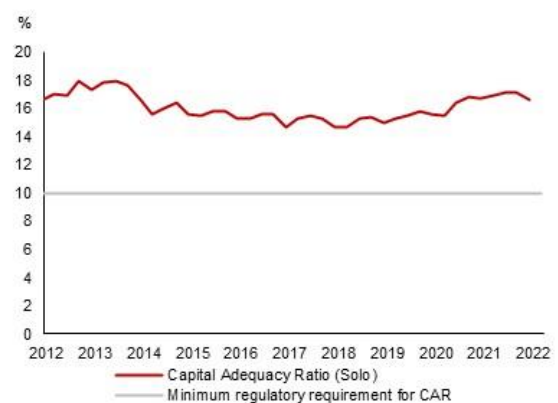
**13. The banking system generally remained resilient amid the pandemic, owing to policy support and prudent management.** The past due ratio and NPL ratio of the banking sector peaked at 5.6 percent in May 2021 and 4.5 percent in August 2021, respectively, then declined to 4.8 percent and 4.1 percent in March 2022 (Figure 16). Although this indicates that the deterioration in banking asset quality may have hit a trough, credit risks remain high. The NPL coverage ratio was 88.4 percent in March 2022. Apart from their early recognition of provisions for credit losses in 2020, banks have been found to exercise sound credit underwriting practices and to utilize credit risk mitigants on their exposures, such as collateral/security and guarantees. Banks have also been active in adopting credit workout and remedial measures to manage risks on their loan portfolios. The overall banking sector maintained a strong capital adequacy ratio of 16.7 percent on a solo basis as of December 2021, which is well above the minimum regulatory requirement of 10 percent (Figure 17).

**Figure 16. NPL and Past Due Ratios**



Source: BSP, AMRO staff calculations

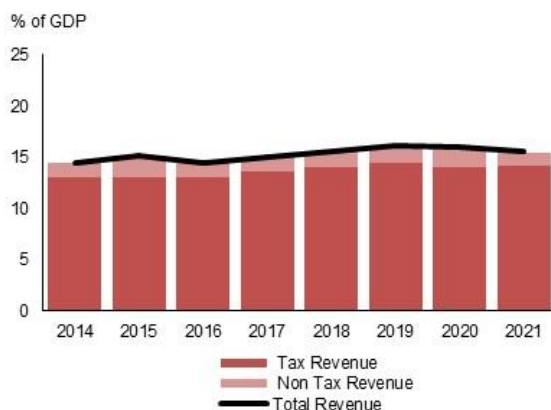
**Figure 17. Capital Adequacy Ratio**



Source: BSP, AMRO staff calculations

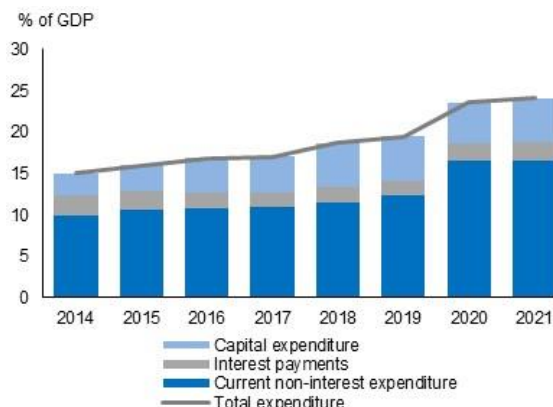
## A.4 Fiscal Sector

Figure 18. Fiscal Revenue



Source: BTr, PSA, AMRO staff calculations

Figure 19. Fiscal Expenditure



Source: BTr, PSA, AMRO staff calculations

**14. Fiscal revenue generally remained stable.** As a share of GDP, fiscal revenue declined slightly to 15.5 percent in 2021 from 15.9 percent in 2020 (Figure 18). The decline in revenue's share of GDP was due to a lower collection of nontax revenue as the high dividend receipt recorded in 2020 was a one-off. Tax revenue's share of GDP increased slightly from 14.0 percent in 2020 to 14.1 percent in 2021. This increase was mainly contributed by the higher amount of import duties generated from the rebound in trade activities.

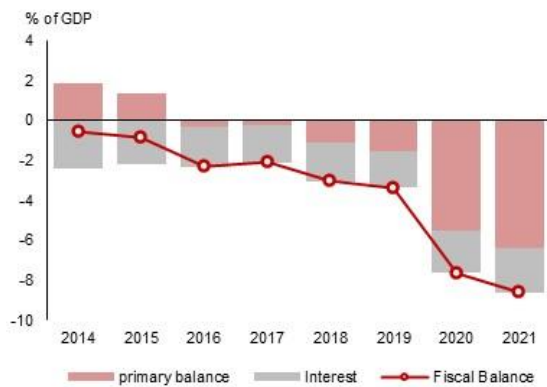
**15. Fiscal expenditure accelerated as the government stepped up efforts to revive the economy and mitigate the impacts of the pandemic.** Government spending increased from 23.5 percent of GDP in 2020 to 24.1 percent in 2021, a historical high (Figure 19).<sup>7</sup> The increase was primarily supported by government capital spending, which rose from 4.9 percent of GDP in 2020 to 6.0 percent in 2021.<sup>8</sup> Government current spending declined relatively from 18.5 percent of GDP in 2020 to 18.0 percent in 2021 as the authorities prioritized public investment as a main lever of economic recovery. Nevertheless, government spending was buoyed by expenditures related to COVID-19, such as social assistance to households and companies.

<sup>7</sup> In absolute value, the expenditure increased by 11.3 percent in 2020 and 10.6 percent in 2021. A jump in expenditure in percent of GDP in 2020 was partly attributable to the contraction of nominal GDP.

<sup>8</sup> Total Infrastructure spending, composed of disbursements from NG-implemented infrastructure and the infrastructure component of transfers to LGUs and support to GOCCs, reached 5.8 percent of GDP, up from 4.8 percent of GDP in 2020.

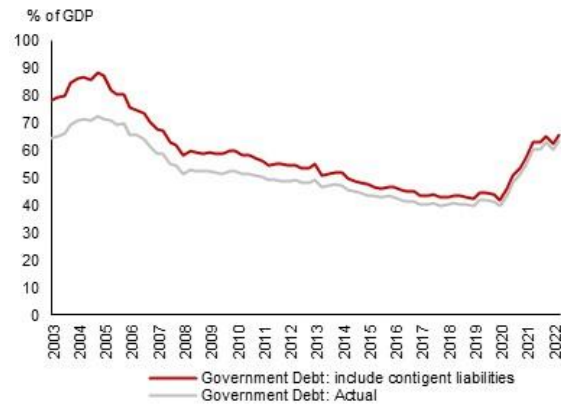


Figure 20. Fiscal Deficit



Source: BTr, PSA, AMRO staff calculations

Figure 21. Government Debt



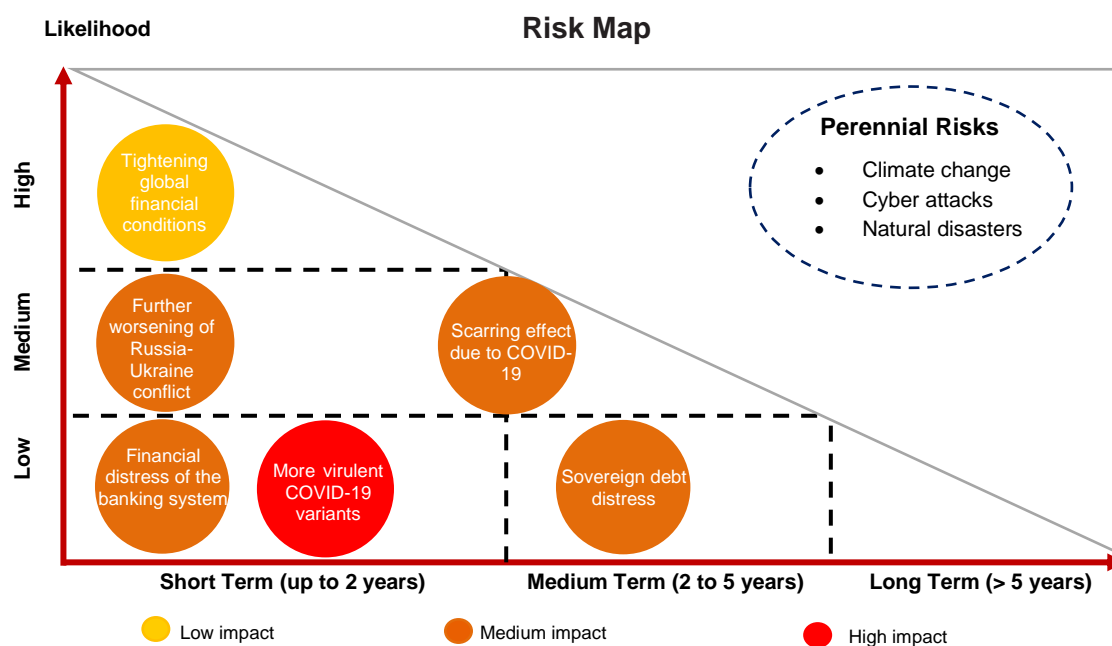
Source: BTr, PSA, AMRO staff calculations

**16. The fiscal deficit has widened further, pushing government debt higher.** As a result of the higher fiscal spending amid anemic revenue collection, the fiscal deficit widened to 8.6 percent of GDP in 2021 from 7.6 percent in 2020 (Figure 20). The government continued to borrow from the domestic bond market, the central bank, and external sources to fund the large deficit. The government has raised PHP2.3 trillion, of which 85.3 percent came from domestic creditors and 14.7 percent from external creditors, including global investors and development partners. Consequently, government debt increased to 60.4 percent of GDP in 2021 from 54.6 percent in 2020 (Figure 21).

**17. Government expenditure for 2022 remains large, focusing on building resilience and sustaining the recovery momentum.** The 2022 National Budget increased by 11.5 percent from the 2021 National Budget to PHP5.0 trillion, equivalent to 23.1 percent of GDP. To enhance resilience amid recurrent pandemic infections, more resources – amounting to PHP1.9 trillion, or 38.5 percent of the 2022 National Budget – have been allocated for social services to fund health-related projects and provide cash subsidies for the hardest-hit sectors. At the same time, the government will continue to implement the “Build, Build, Build” program to sustain the recovery momentum, with an eye to improving long-term growth potential. For 2022, the “Build, Build, Build” program will receive about PHP1.18 trillion, or 23.5 percent of the National Budget. In addition, the unused budget in 2021 will be available for spending the following year.

## B. Risks, Vulnerabilities and Challenges

**18. The Philippine economy continues to face several risks and challenges.** A potential outbreak of more virulent COVID-19 variants remains a threat to recovery in the short term, and the impairment of firms' balance sheets continues to pose a risk to the banking sector's financial health. The significance of these two risks may have somewhat abated. However, capital flow volatility is expected to rise in 2022 as global financial conditions are set to tighten significantly. In addition, scarring effects caused by the pandemic have become clearer, raising the urgency to take action to build resilient, sustainable, and inclusive long-term growth.

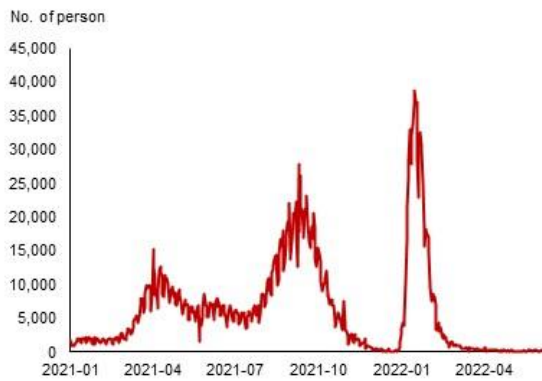


Source: AMRO staff compilation.

### B.1 Near-term Risks to the Macro Outlook

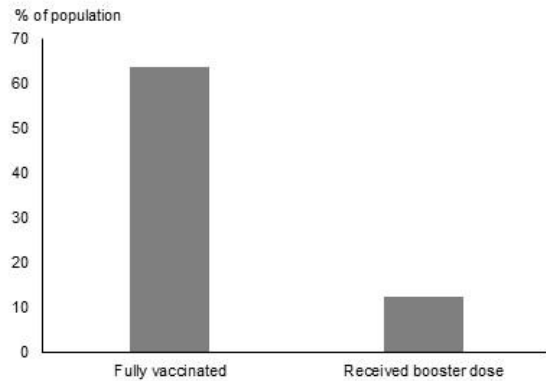
**19. The Philippines has made substantial progress in containing the spread of COVID-19 since Q4 2021.** The number of daily infections dropped from about 21,000 cases in mid-September 2021 to around 200 in early June (Figure 22). The sharp drop was likely due to the higher vaccination rate, as the government significantly ramped up its vaccination efforts in H2 2021. As of 29 May 2022, the share of the population that had been fully vaccinated had reached 63.5 percent respectively, while 12.6 percent had received a booster dose (Figure 23). This has allowed the government to target its containment measures at only areas with high infections and to reopen the economy in places with low infections, which has helped to hasten the recovery.

**Figure 22. Daily New COVID-19 Cases in the Philippines**



Source: Our World in Data, AMRO staff calculations  
Note: Data is as of 7 June 2022.

**Figure 23. COVID-19 Vaccination Rate in the Philippines**



Source: Department of Health, AMRO staff calculations  
Note: Data is as of 29 May 2022.

**20. However, the Omicron variant and its subvariants, and potentially other more infectious new variants, continue to pose a threat.** The Omicron variant led to a new wave of infections in the Philippines in January 2022 (Figure 22), which prompted the government to raise the level of alert, reimpose mobility restrictions, and delay the scheduled reopening of the economy. Fortunately, the symptoms were quite mild, thanks to the high vaccination rate, and the government has eased the restrictions as the infection rate started subsiding in February. It would seem that the Philippines is well protected against any future outbreak of the COVID-19 variants unless the variant is more virulent and resistant to the vaccines.

**21. The economic recovery has reduced the severity of potential financial risks to the banking system, but the financial health of banks still needs monitoring.** Financial soundness indicators have shown nascent signs of improvement in recent months, indicating that financial risks to the banking sector have stopped worsening. Despite these encouraging developments, however, risks facing the banking sector remain a concern. The prevailing past due ratio and NPL ratio are almost twice the levels before the pandemic, implying that banks may yet incur significant losses. A World Bank survey in May 2021 found a significant share of firms reporting acute liquidity constraints, including insufficient cash, late payments from clients and adjustments in loan terms.<sup>9</sup> Until the economic recovery is more entrenched, solvency and liquidity risks stemming from businesses and households could continue to exert pressure on the quality of bank assets. Moreover, the risks are unevenly distributed across different banks and sectors, and the disposal of these NPLs would take time. Although the BSP has extended to end-December 2022 some of its regulatory forbearance measures, including those that leverage flexibilities available in the accounting standards and Basel capital framework, the development of risks should be closely monitored.

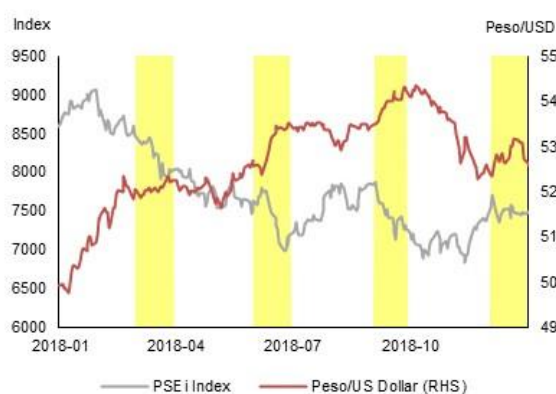
**22. The Russia-Ukraine conflict could pose both inflation and growth risks to the Philippine economy if the situation escalates and becomes protracted.** The conflict has already led to higher financial market volatilities and commodity prices. A further worsening of the situation could exacerbate inflationary pressure and drag down global growth. Direct impacts on the Philippine economy may be limited due to the country's modest exposure to Russia and Ukraine. However, indirect impacts through inflation and external demand will be

<sup>9</sup> The World Bank's survey on monitoring COVID-19 impacts on families and firms in the Philippines. <https://thedocs.worldbank.org/en/doc/470bd69ba34a869f7a87568b2be917d7-0090062021/original/Survey-Results-Impacts-of-COVID-19-on-Firms-in-the-Philippines-Survey-Round-3.pdf>.

more significant, especially if European countries were to go into a recession. External demand could weaken as a result and weigh on the economic recovery of the Philippines. At the same time, prolonged increases in commodity prices can feed through to a broader range of consumer items, pushing up inflation, and potentially disrupting the recovery. In addition to the Russia-Ukraine conflict, another risk to the economic recovery momentum in the Philippines is the slowdown of China's economic growth, which affects the economic performance in the region. However, the direct impact on the Philippines has been relatively limited thus far given that the Philippine economy depends more on the services sector even though its exposure to China in trade and tourism is quite significant. However, if China's slowdown is accompanied by a global slowdown, the spillover effects on the Philippines could be quite significant.

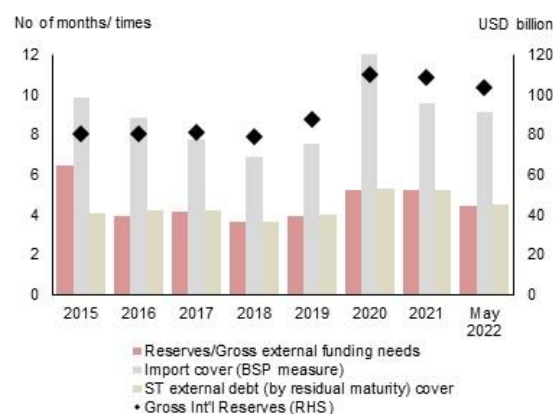
**23. Capital flow volatility will likely rise as central banks in advanced economies start to taper their easy monetary policies and raise interest rates in 2022.** Several central banks in advanced economies, including the Bank of England, have already started increasing policy rates since December 2021 due to high inflationary pressures. A few of them have indicated that this is just the beginning of a hiking cycle. At the same time, the U.S. Federal Reserve (Fed) has been reducing the monthly pace of its net asset purchases of Treasury securities and agency mortgage-backed securities since November 2021, and raised the policy rate in March and again in May of 2022, signaling the start of balance sheet reductions and a faster pace of tightening ahead. However, an even faster and sharper-than-expected tightening of Fed policy will tighten global financial conditions, leading to higher interest rates and financial market volatilities in emerging markets. The spillover to the Philippines could be significant, as it was during the episode of risk aversion in 2018 (Figure 24).

**Figure 24. Equity and FX Markets in the Philippines during 2018 Episode of Tightening Global Financial Conditions**



Source: Haver, AMRO staff calculations  
Note: Months with hikes in Fed Fund Target Rate are shaded in yellow.

**Figure 25. International Reserves Adequacy**



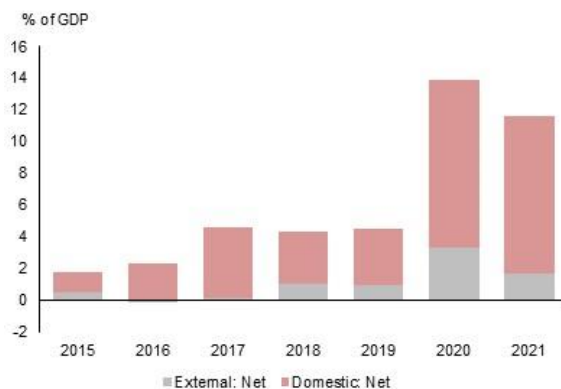
Source: BSP, AMRO staff calculations

**24. The Philippine economy is well positioned to weather the adverse impacts, but tighter global financial conditions and heightened financial volatilities could add depreciation pressure on the peso.** The tightening of global financial conditions could be less disruptive this time for three reasons. The rate hikes of central banks in advanced economies are meant to normalize ultra-easy policy rates, and the central banks have been more transparent and clearer in their communication and implementation. To a large extent, global financial markets have already priced in the prospect of rate hikes from major central banks such as the Fed. Barring a major change in the expected policy rate path of major advanced economies, the impact on financial markets should not be overly disruptive. The

capital market in the Philippines may turn volatile, but the impact on capital outflows will likely be contained due to the low foreign presence in the domestic bond market. Moreover, the Philippine economy has ample international reserves to buffer potential capital outflows (Figure 25). That said, interest rates will likely rise, increasing the debt-servicing burden of businesses and the government.

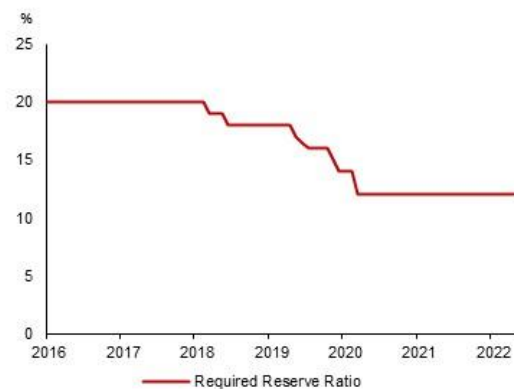
**25. The likelihood of the government falling into debt distress is still low.** First, the interest rate on government debt is at a moderate level, while the weighted average interest rate on government bonds is generally below the real growth rate. Second, the government has financed its borrowing predominantly from domestic savings in banks, insurance companies, and mutual funds (Figure 26). The required reserve ratio is still relatively high at 12 percent (Figure 27) and about PHP1.6 trillion of excess liquidity is invested in short-term instruments of the BSP, including the TDF and repos, which can be reinvested in government bonds. Third, the share of nonresident holdings of government securities is less than 2 percent, which makes the domestic bond market less vulnerable to a sell-off by foreign investors. Lastly, the government is mindful of potential fiscal risks from rising debt levels and continues to exercise prudence in debt management and fiscal policies.

Figure 26. Government Financing



Source: BTr, AMRO staff calculations

Figure 27. Required Reserve Ratio



Source: BSP, AMRO staff calculations

## B.2 Longer-term Challenges and Vulnerabilities

**26. Some lasting scarring effects of the pandemic have become increasingly visible, the reversal of which could prove to be difficult in the post-pandemic era.**

**27. The most serious impact comes from adverse effects on human capital.** With unemployment staying elevated for more than two years, much of the skills and know-how of the retrenched and the unemployed have likely been eroded. Meanwhile, the protracted income losses have led to a marked increase in the poverty rate. The incidence of poverty in the Philippines rose to 23.7 percent in H1 2021 from 21.1 percent in the same period in 2018, which translates into 3.9 million more Filipinos living in poverty. Thus, the adverse effects manifest heavily towards the downside of the income distribution. This has resulted in a higher incidence of malnutrition and a lower school enrollment among the disadvantaged sectors, hence, amplify inequity. Moreover, the quality of learning was not as good due to repeated disruptions during the pandemic.

**28. The damage to physical capital could also be substantial** as many firms have closed and many others are struggling with impaired balance sheets.<sup>10</sup> A job-rich recovery will become more difficult to achieve with digitalization, which is more technology and capital intensive. The World Bank estimates that the pandemic could lower the Philippines' long-term growth potential from above 6.0 percent pre-pandemic to an average of 5.7 percent in 2020-2029.

**29. While the digital transformation will entail new growth opportunities, it also poses demanding challenges.** The Philippine authorities have become more proactive in promoting the digitalization of the economy and good progress has been made in several areas. However, the economy may need to overcome several bottlenecks to fully integrate into the newly transformed landscape. Domestically, there is some evidence of stalling in the digitalization trend, and the number of firms that are adopting digital solutions in response to the pandemic remains low. A lack of financial resources continues to be identified as the main challenge to further adoption of new digital solutions. The inability to accommodate digital transformation is more prevalent among smaller firms. Better infrastructure and more IT expertise are also needed in order to harness more advanced technologies.

**30. A low level of readiness in adopting digital technology may prove to be a weakness in attracting investment from multinational companies (MNCs),** which can provide the much-needed financial resources, experience, and technologies. Recently, the authorities have put a lot of effort to increase the digital readiness of the economy to improve its attraction to MNCs. For instance, the share of digital payments to total financial transactions rose to 20.1 percent in 2020 from 14.0 percent in 2019. Nevertheless, the window of opportunity for attracting the MNCs may exist for only a few years, as these companies accelerate the restructuring of their supply chains and global and regional operations to enhance resilience and digital capacity. Seizing these opportunities and avoiding a potential digital divide will therefore require concerted action from the government, businesses, and other stakeholders.

**31. Climate change and natural disasters continue to pose a serious risk.** The Philippines is one of the most natural disaster-prone countries in the world. The social and economic costs of natural disasters in the country are increasing due to population growth, changes in land-use patterns, migration, unplanned urbanization, environmental degradation, and global climate change. As recently as 2021, Typhoon Rai ravaged the southern and central regions of the archipelago, causing numerous deaths and huge damages. Reducing the risk of disasters continues to be a major task in achieving the government's long-term development goals. In 2021, the government committed to reduce the country's greenhouse gas emissions by 75 percent against a projected business-as-usual cumulative economy-wide emission from 2020 to 2030, which was the target submitted under the Paris Agreement and the United Nations Framework Convention on Climate Change.<sup>11</sup>

### **Authorities' View**

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<sup>10</sup> The World Bank's *Impacts of COVID-19 on firms in the Philippines (May 2021)* survey shows that nearly 10 percent of firms in the Philippines have closed and do not expect to reopen in the short term, while a further 15 percent have closed but expect to reopen in some capacity.

<sup>11</sup> Of the 75-percent target, 72.29 percent is "conditional" or contingent upon the support of climate finance, technologies, and capacity development, which shall be provided by developed countries, as prescribed by the Paris Agreement. The remaining 2.71 percent is "unconditional" or shall be implemented mainly through domestic resources. This commitment is referenced against a projected business-as-usual cumulative economy-wide emission of 3,340.3 metric tons (MT) of carbon dioxide equivalent (MtCO<sub>2e</sub>) over the 2020-2030 period. See <https://unfccc.int/sites/default/files/NDC/2022-06/Philippines%20-%20NDC.pdf>

**32.** The Philippines authorities see the tightening monetary policy stance among advanced economies' central banks as potentially amplifying the still-impaired asset quality of banks. Although there are already improvements in NPL ratios and lower provisioning due to lower expected credit losses, the real threat to the economic recovery and the overall financial health of the banking sector is the cascading effect of higher interest rates. With the growth of consumer and household loans still in negative territory, higher rates may further increase aversion to taking out loans, while concerns over income loss will keep banks on the sidelines in terms of lending. On the other hand, rising interest rate and repricing risks from property loans in a tightening environment may keep NPLs and credit losses elevated in 2022 and beyond. The recently enacted Financial Institutions Strategic Transfer (FIST) Act is expected to help banks clean their balance sheets and effectively provide support to the banking industry in managing non-performing loans and credit losses. Moreover, the authorities recognize the needs to normalize the monetary policy stance to avoid unanchored secondary markets because secondary markets are moving in response to rise in global interest rates due to the Fed's policy tightening.

**33.** The authorities also see the tightening of global financial conditions as highly likely within the next two years. Moreover, supply-side risks such as oil should not be underestimated. The Russia-Ukraine conflict was not the catalyst of this risk, but a subsequent event which exacerbated it. The indirect impact of the war might not be insignificant if one considers how Ukraine has affected the United States, Japan, the United Kingdom, France, and Germany. The feedback loop to the Philippines can be coursed through airlines, telcos, infrastructure firms and banks.

**34.** While the authorities acknowledge the challenges facing the country's digital transformation, they also highlight the accelerated use of digital/electronic payment, especially at the height of the pandemic, as a strong indication of the country's readiness to improve its digital financial ecosystem. The recently signed Foreign Investments Act will also bolster competitiveness in the telecommunications sector as well as improve digital infrastructure and internet connections in the country. In addition, the amendments to the Public Service Act (PSA)<sup>12</sup> remove restrictions in key sectors such as telecommunication and transportation services to lower the costs and improve the delivery of basic services. Finally, the authorities noted that the current situation in oil markets has added significant headwinds to the goal of achieving the net zero target in 2050 and the timeline of transitioning to renewable energy given the absence of readily available substitutes of fossil fuels.

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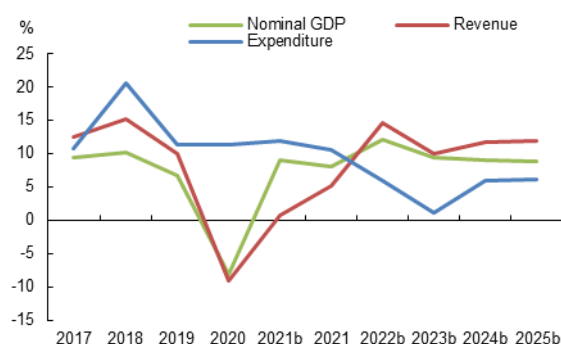
<sup>12</sup> An Act Amending Commonwealth Act No. 146, or RA No. 11659, which was enacted on March 21, 2022. Otherwise known as the Public Service Act, as amended.

## C. Policy Discussions and Recommendations

### C.1 Sound Fiscal Policy to Ensure Short-term Recovery and Long-term Sustainability

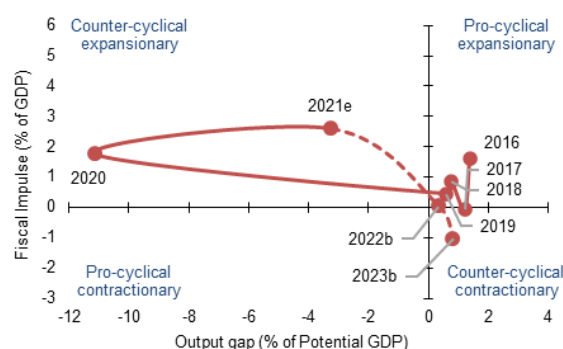
**35. The overall fiscal policy stance is assessed to remain broadly neutral in 2022 under the current National Budget (Figure 29).** While fiscal expenditure continues to be large, revenue will also increase as the economy recovers and the government further strengthens its revenue collection efforts (Figure 28). Taking into account these cyclical factors, we estimate the fiscal stance to be slightly expansionary in 2022, albeit less so than 2021, but it will turn contractionary in 2023 (Figure 29). This policy stance is appropriate as private-sector recovery is expected to become more self-sustaining going forward.

Figure 28. Revenue and Expenditure



Source: DBM; AMRO staff estimates

Figure 29. Fiscal Policy Stance



Source: BTr; DBM; AMRO staff estimates

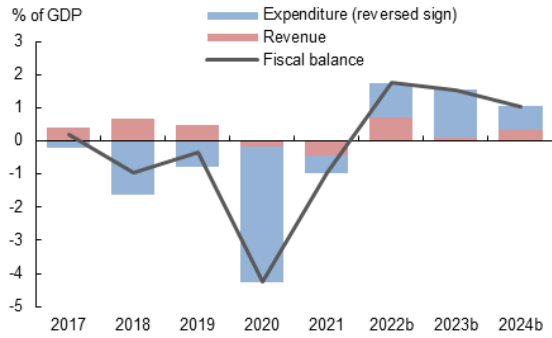
**36. The fiscal consolidation plan should enhance fiscal sustainability without undermining economic recovery.** The government is planning to reduce the fiscal deficit gradually from 8.6 percent of GDP in 2021 to 4.1 percent by 2025 (Figure 30). AMRO forecasts the debt-to-GDP ratio will peak at 64.6 percent in 2023 and then slowly decline in the following years (Figure 31). The current consolidation plan focuses mostly on expenditure, particularly on cuts in current expenditure as spending related to COVID-19 is pared down, while fiscal revenue will improve moderately. The level of capital expenditure will be maintained to support the recovery and enhance long-term growth potential.<sup>13</sup> The gradual reduction of the fiscal deficit is deemed reasonable as the growth momentum would remain moderate in the near term and thus would need continued reinforcement. However, in view of concerns over the narrowed fiscal policy space and the limited buffers to address future shocks, the pace of fiscal consolidation should be expedited once private-sector growth becomes self-sustaining. Fiscal consolidation can be achieved by improving spending efficiency and enhancing revenue collection.

Figure 30. Change in Fiscal Balance According to the Government's Fiscal Plan

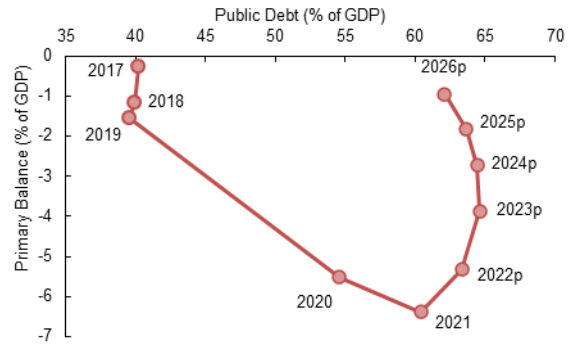
Figure 31. AMRO's Primary Balance and Debt Projection

<sup>13</sup> Infrastructure disbursements, including infrastructure components of subsidy and equity to government corporations and transfers to LGUs, are projected to remain above 5.0 percent of GDP over the medium-term, averaging 5.4 percent





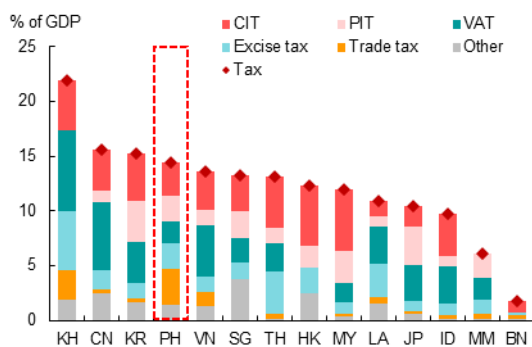
Source: DBM; AMRO staff estimates  
Note: The figure shows the contribution of each factor to the change in fiscal balance.



Source: BTr; DBM; AMRO staff estimates

**37. The authorities should make public spending programs more efficient while enhancing revenue collection.** Given the needs for fiscal consolidation, the efficiency of fiscal programs should be improved to ensure the provision of essential public services while supporting development needs. More economically viable infrastructure projects should be selected by rigorous feasibility studies to maximize the economic and social benefits.<sup>14</sup> Non-essential and ineffective fiscal programs should be revamped or terminated through zero-based reviews, and the resources redirected to the national development priorities. On the revenue side, the implementation of the Corporate Recovery and Tax Incentives for Enterprises (CREATE) law will encourage more investment from the private sector, but it will also continue to constrain corporate income tax revenue in the next few years. Nonetheless, the government needs to continue strengthening revenue-enhancing measures (Figure 32), including broadening the tax base, especially for VAT, and improving the efficiency of tax administration including digitalization of tax and customs duty collection (Figure 33). Raising excise tax rates and introducing new taxes on digital services could also be considered.

Figure 32. Tax Revenue Structure



Source: National authorities; AMRO staff estimates  
Note: (1) CIT (corporate income tax), PIT (personal income tax), VAT (value-added tax); (2) Tax revenue structures in 2019 are compared to rule out the impact of the pandemic.

Figure 33. VAT C-efficiency



Source: National authorities; AMRO staff estimates  
Note: (1) VAT C-efficiency = actual VAT revenue / (statutory VAT rate x Consumption) x 100; (2) VAT C-efficiencies refers to the 2019 are period to rule out the impact of the pandemic; (3) Without available consumption data for Lao PDR, the World Bank's estimate of consumption's share of GDP in 2016 is used to estimate consumption in 2019.

<sup>14</sup> Currently, the large-scale projects of the government (PHP2.5 billion and above) undergo a review/evaluation with respect to the technical, financial, economic, social, and institutional development as well as the feasibility aspects by the Investment Coordination Committee (ICC).

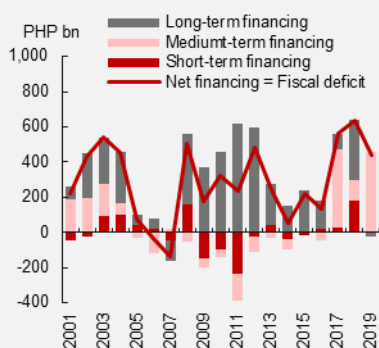
**38. The government should carefully manage risks to the efficiency and effectiveness of budget implementation at local government units (LGUs).** Starting in 2022, LGUs will have a higher share from national tax collections. The national tax allotment to LGUs will increase from PHP695.5 billion in 2021 to PHP959.0 billion in 2022. The increase in fiscal resources will be accompanied by the scaling down, phasing out or abolition of devolved functions currently being performed by the national government.<sup>15</sup> This transition process should be carefully managed to ensure that the LGUs' capacity is commensurate with their increased responsibility, to avoid spending inefficiency and a worsening quality of public services. The government's three-year transition plan for LGUs will help minimize potential wastage and inefficiency of spending.

**39. Given the large fiscal deficit, the government should manage the financing carefully to maintain orderly functioning of the markets.** The financing of the deficit is manageable in the near term as the government can continue to borrow from domestic banks which have ample liquidity and other savings institutions. However, as the recovery gains momentum, private-sector demand for bank credit will rise. Moreover, higher global interest rates arising from the Fed's tightening of monetary policy may lead to capital outflows and increases in domestic interest rates, raising debt-servicing costs. To avoid financing stress, the authorities should diversify the investor base for government securities, such as by attracting more retail and institutional investors, while reducing the fiscal deficit according to the fiscal consolidation plan.

**Box B. Government Short-term Financing in the Philippines<sup>16</sup>**

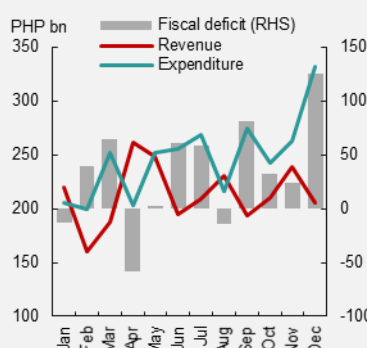
**The Philippine government has financed its fiscal deficit mainly by medium- to long-term financing, while addressing the revenue-expenditure mismatch by short-term financing.**<sup>17</sup> Prior to the pandemic, most of the fiscal deficits had been financed by medium- to long-term funding (Figure B1). Consequently, the share of medium- to long-term debt in total government debt reached 93.6 percent, while that of short-term debt was only 6.4 percent as of the end-2019. Meanwhile, the revenue-expenditure mismatch has existed due to gaps between tax collection and spending disbursement schedules (Figure B2). Given the fiscal deficit, expenditure has been generally higher than revenue, especially in March, June, July, September, and December. However, revenue has been higher than expenditure in April when annual income tax filing is due. Treasury bills with a maturity of less than one year have been issued to address the temporary revenue gap, especially in the first half of the year, but repaid in the second half of the year (Figure B3).

**Figure B1. Government Net Financing by Maturity**



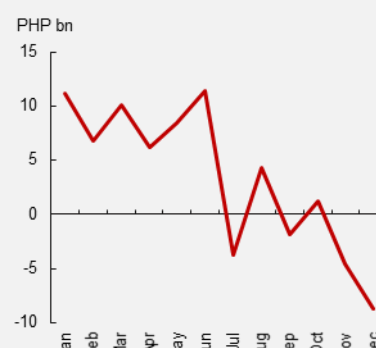
Source: BTr; AMRO staff estimates

**Figure B2. Monthly Pattern of Revenue and Expenditure**



Source: BTr; AMRO staff estimates

**Figure B3. Monthly pattern of Net Issuance of Treasury Bill**



Source: BTr; AMRO staff estimates

<sup>15</sup> This will be done during the 3-year transition period.

<sup>16</sup> This box was prepared by Byunghoon Nam.

<sup>17</sup> In addition, Bond Sinking Fund (BSF) provides cash to offset temporary revenue gaps in redeeming the government bonds at maturities. The total size of BSF was PHP640 billion as of the end-2020.

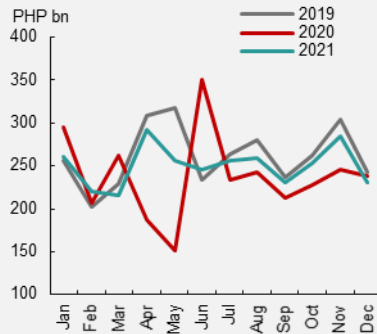
Note: Net financing is computed as the change in government debt.

Note: The figure shows the average monthly revenue, expenditure, and fiscal deficit from 2015 to 2019.

Note: The figure shows the average monthly net issuance of treasury bills from 2015 to 2019.

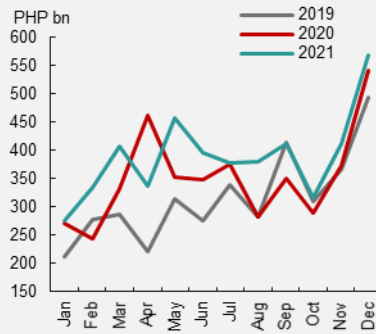
**During the pandemic, the widened revenue gap and adverse financial market conditions increased the short-term financing needs.** At the onset of the pandemic in 2020, the revenue fell sharply due to a severe economic contraction and the extension of income tax filing from April to May. At the same time, expenditure increased substantially to address the health crisis, leading to substantial fiscal deficits to be financed (Figures B4, B5, and B6). In addition, weak market sentiment for the government bond at the beginning of the pandemic led to a stronger reliance on short-term financing.<sup>18</sup> In 2021, the financing needs remained high as revenue recovered moderately and expenditure continued to support the economic recovery.

**Figure B4. Monthly Revenue**



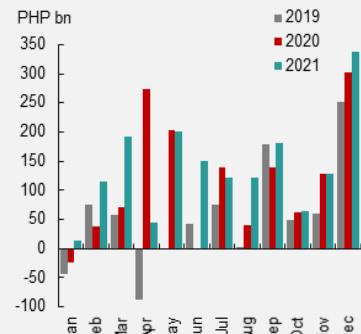
Source: BTr; AMRO staff estimates

**Figure B5. Monthly Expenditure**



Source: BTr; AMRO staff estimates

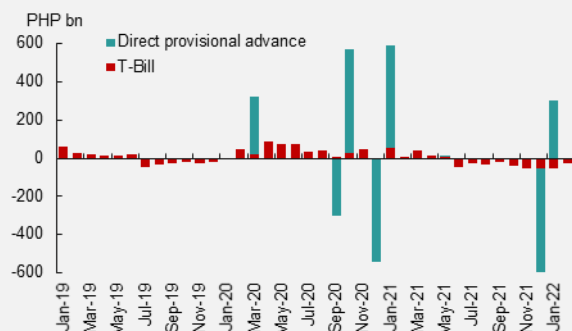
**Figure B6. Monthly Fiscal Deficit**



Source: JP Morgan via Haver

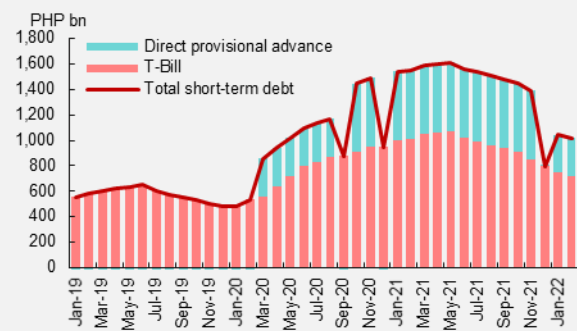
**The government met the short-term financing needs by issuing treasury bills and accessing the direct provisional advances from the BSP (Figure B7 and B8).**<sup>19</sup> In 2020, the government relied on its short-term financing both on treasury bills and direct provisional advances. The net issuance of treasury bills in 2020 amounted to PHP462 billion, which was a historical high. At the same time, the government borrowed PHP300 billion of direct provisional advance from the BSP in March and extended it for another 3 months. In October, it increased the borrowing to PHP540 billion and repaid it in December. On the contrary, in 2021, the government depended mainly on direct provisional advances. PHP540 billion provisional advances were accessed in January, repaid in July, and re-accessed in July and finally repaid in December. On the other hand, treasury bills outstanding started to decline from June 2021, recording net repayment of PHP153 billion. Consequently, the share of short-term debt in total government debt fell to 6.8 percent in 2021 from 9.8 percent in 2020.

**Figure B7. Government's Short-term Net Financing**



Source: BTr; AMRO staff estimates

**Figure B8. Government's Short-term Debt Outstanding**



Source: BTr; AMRO staff estimates

<sup>18</sup> For example, EMBI Global spread surged to as high as 306 bp on 23 March 2020 from 67 bp at the end of 2019.

<sup>19</sup> According to Central Bank Act (Republic Act 7653), The BSP may make direct provisional advances with or without interest to the National Government to finance expenditures authorized in its annual appropriation. The advances shall be repaid before the end of 3 months extendible by another three months and shall not, in their aggregate, exceed 20% of the average annual income of the borrower for the last 3 preceding fiscal years. Since 2020, the government has accessed the direct provisional advances without interest.

**Going forward, the government should continue to rely more on medium- to long-term financing, while reducing the direct provisional advance from the BSP.** The short-term financing tools, including both treasury bills and provisional advances, have played a critical role in the government financing during the pandemic to meet the extraordinary revenue shortfalls without stressing the domestic bond market. However, as the revenue recovers and the bond market functions well along with a fiscal consolidation plan, the share of short-term financing should be reduced to avoid the rollover risk under still high uncertainties. The direct provisional advance should also be gradually reduced as it may undermine the central bank's operational autonomy to fulfill its policy objectives.<sup>20</sup> The government has already reduced the provisional advance to PHP300 billion in 2022 and repaid it fully in May, ahead of its early June 2022 maturity.

**40. The government could avoid borrowing from the BSP.** The short-term borrowing of PHP540 billion from the BSP was an important part of government financing in the last two years, to meet the temporary revenue shortfall and to avoid stressing the domestic bond market, particularly in 2020.<sup>21</sup> However, as the bond market has grown and become deeper, and fiscal revenue has recovered along with the economy, the short-term borrowing has become unnecessary. Ending the use of the provisional advance will therefore alleviate market concerns of the central bank direct financing the deficit. The full repayment of the provisional advance of PHP300 billion in May is therefore welcome.

### C.2 Unwinding Accommodative Monetary Policy to partly Absorb the Rising Inflationary Pressure

**41. Although the accommodative monetary policy has supported the recovery in 2021 through H1 2022, the BSP should consider normalizing its policy stance as inflationary pressure has risen, the recovery has gained traction and global interest rates have spiked up.** The accommodative monetary policy stance was appropriate in 2021, warranted by the large negative output gap, heightened growth risks, and well-anchored inflation expectations. Going into 2022, the negative output gap is estimated to have closed in Q1 with strong economic recovery, while the supply-led inflation has risen rapidly and global interest rates have spiked up. Therefore, the BSP's decision to raise the policy rate in May and June is welcome. Looking forward, the BSP could further normalize the policy stance, taking into account the degree of inflationary pressure and the pace of economic recovery. Nevertheless, the BSP should be cautious in policy tightening if the recovery were to weaken. In addition, to mitigate the impact of rising inflation, the authorities may consider enhancing the existing non-monetary measures, for example, encouraging food imports and providing subsidies to the lower income groups, especially if the fiscal revenue is stronger than expected.

### C.3 Prudent Regulatory and Supervisory Policy to Guard against Financial Risk

**42. The economic recovery has reduced the need for most regulatory relief measures, but the BSP should be mindful that many businesses have yet to fully recover.** The regulatory relief measures have provided critical support for the resilience of the financial sector in the past two years and some of them are in place until end-2022. The central bank needs to monitor how well banks adjust to a normalized regulatory regime in 2022, as some banks may face difficulties without the regulatory support. The BSP's approach to unwind the relief measures in tandem with the pace of economic recovery is welcome. If necessary, a transition period may be considered for banks with weaker loan portfolios, as some sectors

<sup>20</sup> For general recommendations for the central bank credit to the government, see Jácome, L. I., Matamoros-Indorf, M., Sharma, M., and Townsend, S. 2012. "Central Bank Credit to the Government: What Can We Learn from International Practices?" IMF working paper.

<sup>21</sup>In 2022, the Philippines government has reduced the borrowing from the central bank from PHP540 billion to PHP300 billion.

have not fully recovered. Moreover, the BSP is working closely with other government agencies on the full implementation of the Financial Institutions Strategic Transfer (FIST) Act.<sup>22</sup> In particular, BSP's efforts can be directed to reducing the costs and increasing the ease of business liquidation and restructuring.

#### C.4 Proactive Structural Policy for Long-term Resilience

**43. Both public and private efforts are needed to mitigate scarring effects from the pandemic and address structural challenges for a more resilient and sustainable long-term growth.** The whole-of-government approach in the National Employment Recovery Strategy should help address the scarring in the labor market and improve the competitiveness of the workforce. The focus should gradually shift to upgrading and upskilling the workforce to embrace a more technology-driven economy in the longer term. Considering the reduced fiscal space, it has become more important to incentivize the private sector's participation. The government urgently needs to further improve the doing business environment and the policy framework, to be able to capitalize on the ongoing restructuring of global supply chains. Further policy efforts could target reducing the restrictiveness of regulations, enhancing market competition, easing market entry, and lowering the administrative burden on business operations. To these ends, the country's legislative efforts are welcome, including the passage of amendments to the Retail Trade Liberalization Act, the Public Service Act, and the Foreign Investments Act. In addition, the recently approved Executive Order No. 166<sup>23</sup> that directs the adoption of the Ten-Point Policy Agenda to sustain and accelerate economic recovery amidst the ongoing COVID-19 pandemic and limit its long-term adverse effects to the country is welcome.

**44. The government should remain proactive in managing natural disaster risks by allocating the necessary fiscal resources in the medium term to combat climate change through mitigation and adaptation.** The country has actively participated in the global action on climate change. The government's plan to reduce greenhouse gas emissions by 75 percent against a projected business-as-usual cumulative economy-wide emissions from 2020 to 2030 is welcome. The government intends to use much cleaner energy, such as volcanic heat, ocean waves, natural gas, hydropower, and nuclear power, instead of coal and oil. Recently the government established its sustainable finance framework<sup>24</sup> which sets out how it intends to raise funding through sustainable financing instruments (SFIs) to achieve its sustainable development and climate change commitments. The BSP has encouraged the financial sector's incentive to provide funding for green investment through promoting sustainability principles. The BSP has also issued regulations requiring banks to incorporate such principles into their operations. In addition, it can also provide incentives to the private sector to support green investments, including the adoption of solar power by businesses and households. Besides its own fiscal resources, the government can leverage the resources of the private sector through public private-partnership projects (PPP) as well as green bond issuances. The concrete efforts of the government to enhance the country's natural disaster resilience are commendable.

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<sup>22</sup> The FIST Act serves as a standby facility for banks to dispose of NPLs if these sharply increase. This mechanism will also help increase the financial system's risk-bearing capacity and ability to expand their investment and lending activities.

<sup>23</sup> Executive Order No. 166, s. 2022 ("Adopting the Ten-Point Policy Agenda to Accelerate and Sustain Economic Recovery from the COVID-19 Pandemic and Directing a Whole-Of-Government Approach to Align All Economic Recovery Programs and Measures of the National Government") was approved on March 21, 2022.

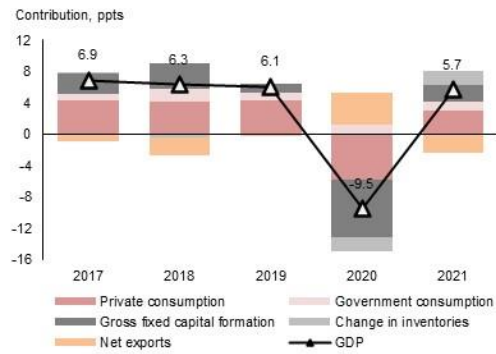
<sup>24</sup> For more details on the sustainable finance framework, please see the following: <https://www.dof.gov.ph/the-republic-of-the-philippines-launches-inaugural-sustainable-finance-framework/>

## Appendices

### Appendix 1. Selected Figures for Major Economic Indicators

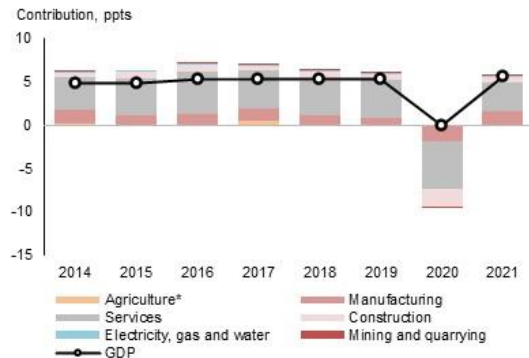
**Figure 1.1 Real Sector**

The Philippine economic recovery remained firm amid resurgent waves of COVID-19 infections in 2021.



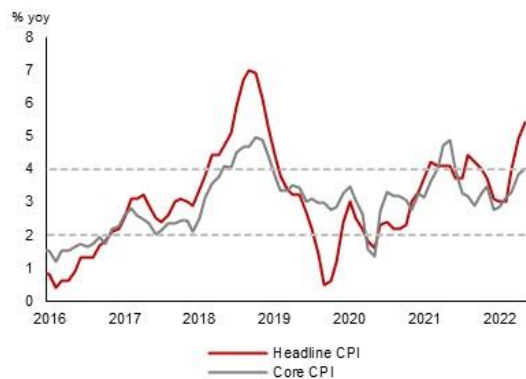
Source: PSA; AMRO staff calculations

The recovery was led by manufacturing and services that relied less on close physical contact.



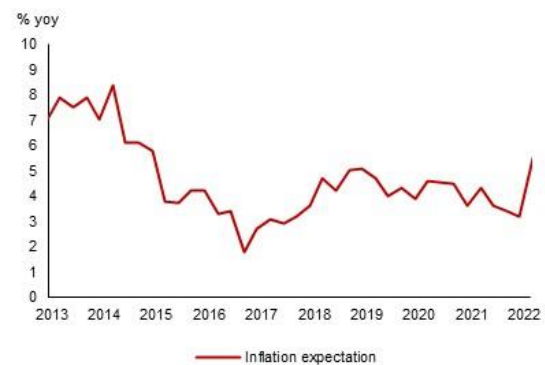
Source: PSA; AMRO staff calculations

Inflation rose above the target range again in 2022, due to supply-side factors.



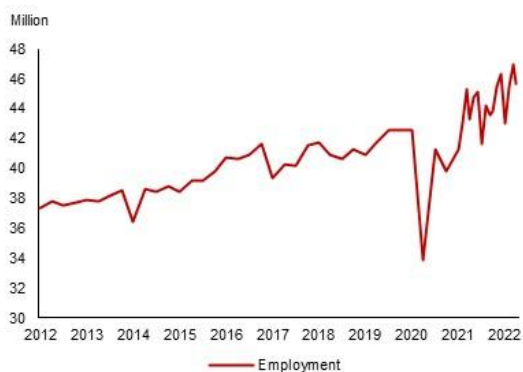
Source: PSA, Haver

Inflation expectation remained anchored.



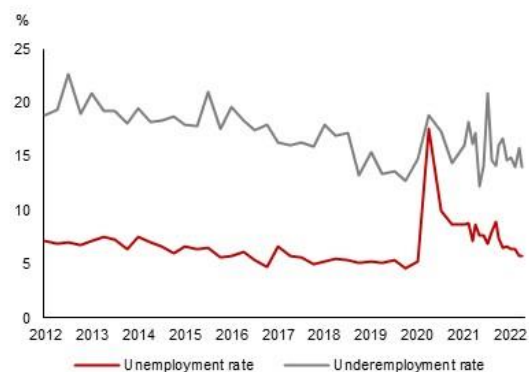
Source: BSP

Employment has returned to pre-COVID levels...



Source: PSA

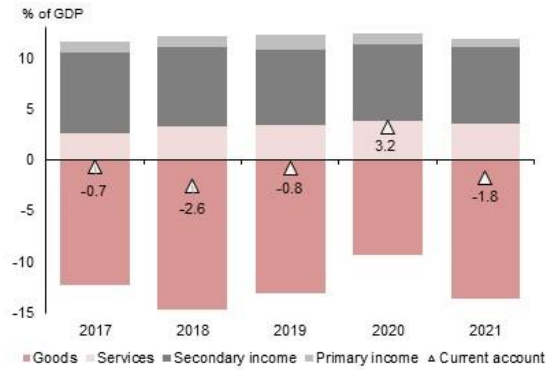
...but the unemployment and underemployment rates remained elevated.



Source: PSA

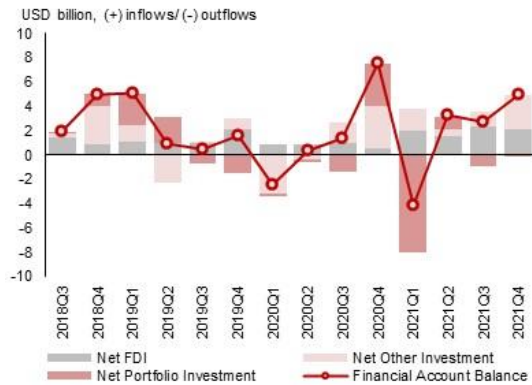
**Figure 1.2 External Sector**

The current account went into deficit in 2021 owing to the wider trade-in-goods deficit.



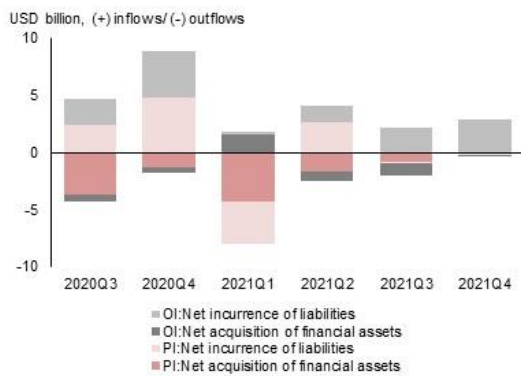
Source: BSP, AMRO staff calculations

The financial account witnessed moderate capital inflows



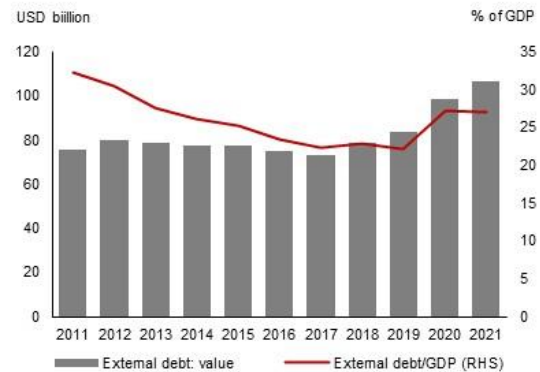
Source: BSP

Portfolio investments experienced outflows.



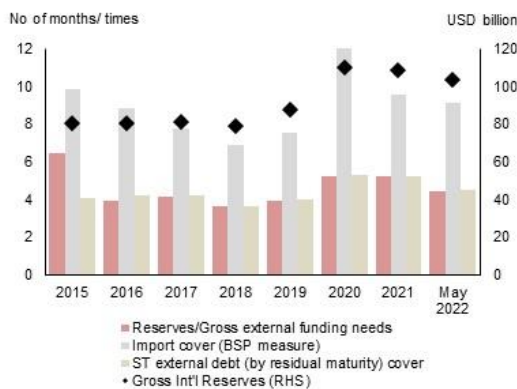
Source: BSP, AMRO staff calculations

External debt level seems stabilized



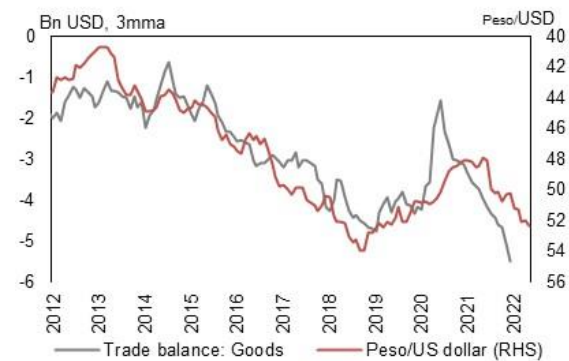
Source: BSP

International reserves adequacy remained high.



Source: BSP, AMRO staff calculations  
Note: Import cover refers to the number of months of average imports of goods and payment of services and primary income.

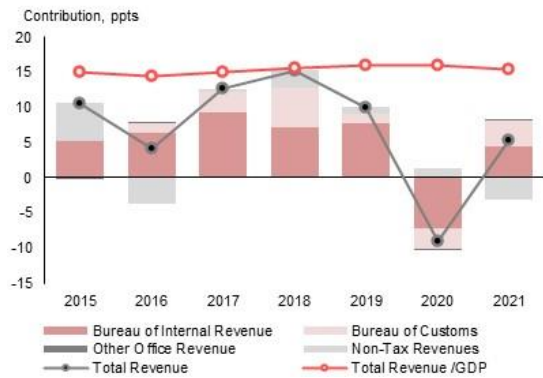
The peso depreciated against the U.S. dollar.



Source: BSP, AMRO staff calculations

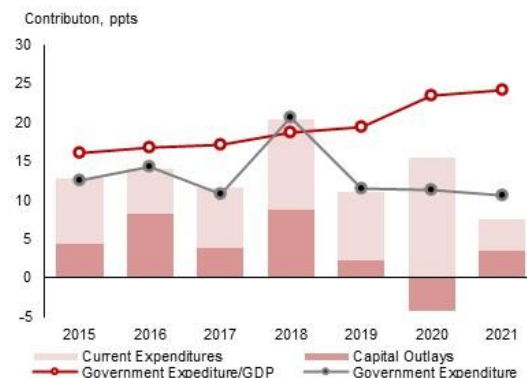
**Figure 1.3 Fiscal Sector**

Fiscal revenue as a percentage of GDP weakened slightly in 2021...



Source: BTr, AMRO staff calculations

...while capital outlays by the government accelerated to support recovery



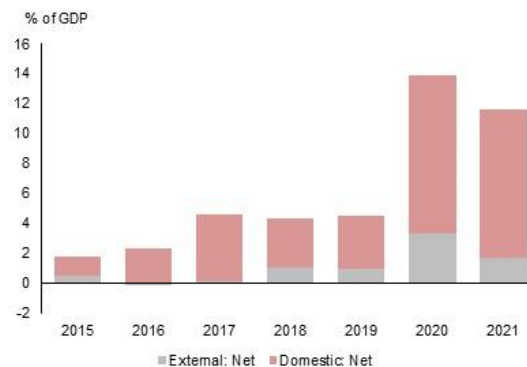
Source: BTr, AMRO staff calculations

On balance, the fiscal deficit as a percentage of GDP widened in 2021.



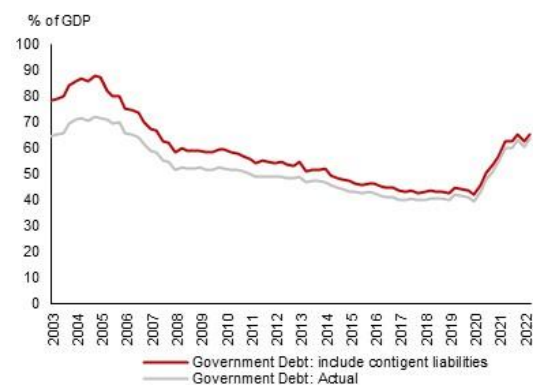
Source: BTr, AMRO staff calculations

The government continued to finance the deficit, mainly through domestic market.



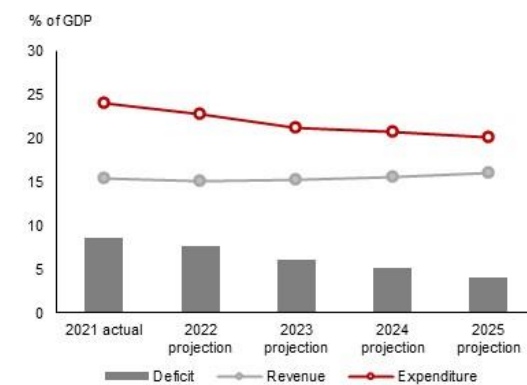
Source: BTr, AMRO staff calculations

Accordingly, the government debt ratio increased further in 2021.



Source: BTr, AMRO staff calculations

The government plans a fiscal consolidation beginning 2022

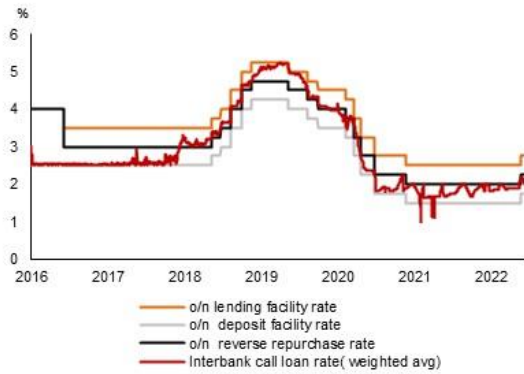


Source: Development Budget Coordination Committee (DBCC)



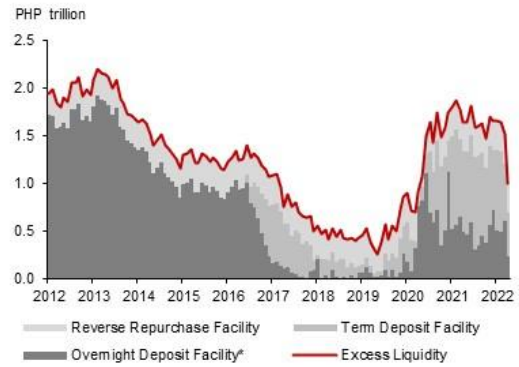
**Figure 1.4 Monetary and Financial Conditions**

The BSP started to raise policy rate in May 2022



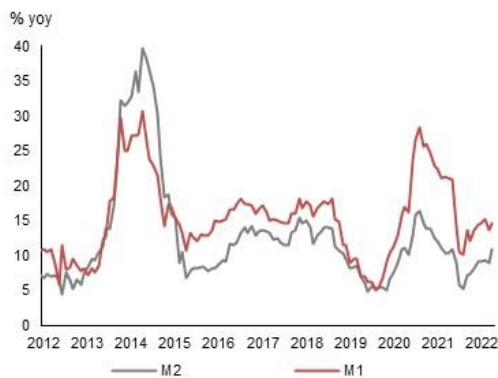
Source: BSP

Liquidity was ample in the interbank market...



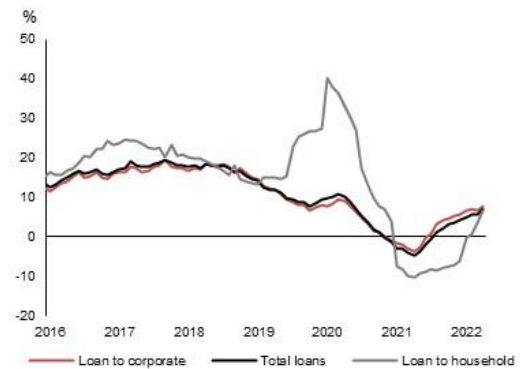
Source: BSP

...and in the banking system as a whole.



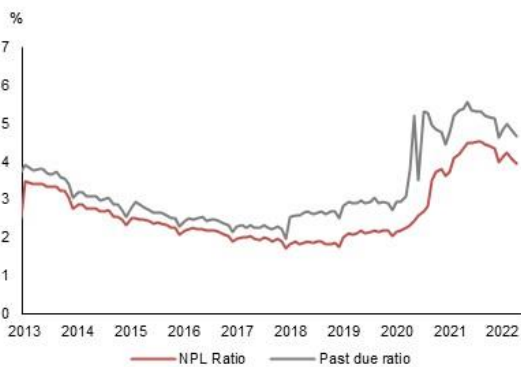
Source: BSP

Bank loan growth has started to pick up on the back of corporate loans.



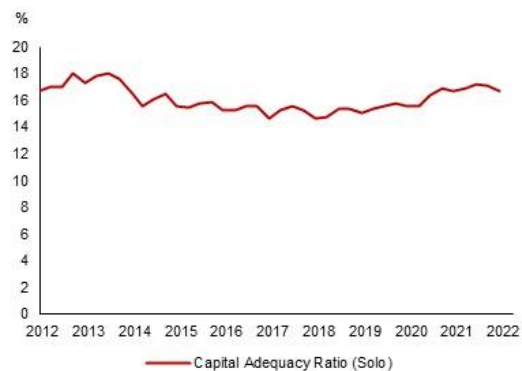
Source: BSP

The worsening of banks' asset quality seems to have stabilized.



Source: BSP

The banking sector's capital position strengthened moderately in 2021.



Source: BSP

## Appendix 2. Selected Economic Indicators for the Philippines

	2019	2020	2021	Projection	
				2022	2023
<b>Real sector and prices</b>	(in percent change, unless specified)				
Real GDP	6.1	-9.5	5.7	6.9	6.5
Private consumption	5.9	-8.0	4.2	6.3	5.8
Government consumption	9.1	10.5	7.1	9.0	7.6
Gross fixed capital formation	3.9	-27.3	9.9	12.5	10.6
Exports of goods and services	2.6	-16.1	8.0	8.2	8.4
Imports of goods and services	2.3	-21.6	13.0	12.1	10.2
Prices					
Consumer price inflation (period average 2018=100)	2.4	2.4	3.9	4.4	3.8
GDP deflator	0.7	1.7	2.3	2.8	2.5
<b>External sector</b>	(in billions of U.S. dollars, unless specified)				
Current account balance	-3.0	11.6	-6.9	-11.1	-10.2
(in percent of GDP)	-0.8	3.2	-1.8	-2.7	-2.3
Goods trade balance	-49.3	-33.8	-53.8	-60.8	-62.6
Services trade balance	13.0	13.9	14.2	15.4	16.9
Primary income, net	5.3	4.1	3.2	3.9	4.3
Secondary income, net	27.9	27.4	29.5	30.3	31.2
Financial account balance	-8.0	-6.9	-6.9	-2.2	-6.1
Direct investment, net	-5.3	-3.3	-8.1	-5.0	-5.3
Portfolio investment, net	-2.5	-1.7	8.0	4.3	-1.4
Financial derivatives, net	0.2	0.2	0.6	0.1	0.3
Other investment, net	-0.1	-1.8	-6.3	-1.3	1.0
Error and omission	2.7	-2.5	0.8	0.0	0.0
Overall balance	7.8	16.0	1.3	-5.4	-0.4
Gross international reserves (end-period)	87.8	110.1	108.8	103.4	102.9
Total external debt (percent of GDP)	22.2	27.2	27.7	26.5	27.4
Short-term external debt (percent of total)	20.6	14.4	11.7	12.1	12.4
<b>Fiscal sector (National Government)</b>	(in percent of GDP)				
Government revenue	16.1	15.9	15.5	15.5	15.6
Government expenditure	19.5	23.5	24.1	23.2	22.0
Fiscal balance	-3.4	-7.6	-8.6	-7.7	-6.4
Primary balance	-1.5	-5.5	-6.4	-5.3	-3.9
Government debt	39.6	54.6	60.4	63.4	64.6
<b>Monetary sector</b>	(in percent change, end-period unless specified)				
Domestic credit	10.7	4.7	8.2	-	-
Of which: Private sector	7.8	-0.2	3.8	-	-
Broad money (M4)	9.8	8.7	8.0	-	-
M1	15.7	21.2	13.4	-	-
<b>Memorandum items:</b>					
Exchange rate (peso per USD, average)	51.8	49.6	49.3	51.8	52.9
Exchange rate (peso per USD, eop)	50.7	48.0	50.8	52.7	53.5
Gross domestic product at current price (In trillions of pesos)	19.5	18.0	19.4	21.2	23.0
Gross domestic product at current price (In billions of U.S. dollar)	376.8	361.8	394.1	408.2	434.2
GDP per capita (in U.S. dollar)	3,515.1	3,325.8	3,576.1	3,627.8	3,809.7

Source: Philippine authorities, AMRO staff estimates

## Appendix 3. Balance of Payments

	2017	2018	2019	2020	2021
	(in millions of U.S. Dollars, unless specified)				
<b>Current Account (I)</b>	-2,143	-8,877	-3,047	11,578	-6,922
Goods	-40,215	-50,972	-49,312	-33,775	-53,781
Exports	51,814	51,977	53,477	48,212	54,169
Imports	92,029	102,949	102,788	81,987	107,950
Services	8,693	11,608	13,039	13,866	14,174
Exports	34,832	38,397	41,264	31,822	33,627
Imports	26,139	26,789	28,225	17,956	19,453
Primary Income	3,226	3,669	5,276	4,101	3,225
Receipts	10,583	11,999	13,402	11,594	11,983
Payments	7,357	8,330	8,125	7,492	8,758
Secondary Income	26,153	26,818	27,949	27,386	29,461
Receipts	26,897	27,607	28,746	28,240	30,411
Payments	745	788	797	854	950
<b>Capital Account (II)</b>	69	65	127	63	80
Receipts	103	103	147	88	99
Payments	34	38	20	25	19
<b>Financial Account (III)(+ indicates inflows)</b>	2,798	9,332	8,034	6,906	6,942
Net Acquisition of Financial Assets	-6,717	-7,522	-7,297	-13,286	-8,271
Net Incurrence of Liabilities	9,515	16,855	15,331	20,192	15,213
Direct Investment	6,952	5,833	5,320	3,260	8,116
Net Acquisition of Financial Assets	-3,305	-4,116	-3,351	-3,562	-2,402
Net Incurrence of Liabilities	10,256	9,949	8,671	6,822	10,518
Portfolio Investment	-2,454	-1,448	2,474	1,680	-8,046
PI:Net Acquisition of Financial Assets	-1,658	-4,740	-2,402	-6,567	-6,599
PI:Net Incurrence of Liabilities	-796	3,292	4,876	8,246	-1,448
Financial Derivatives	51	53	173	199	603
Net Acquisition of Financial Assets	503	679	874	796	1,105
Net Incurrence of Liabilities	-453	-626	-701	-596	-502
Other Investment	-1,750	4,894	67	1,767	6,268
OI:Net Acquisition of Financial Assets	-2,257	654	-2,417	-3,953	-376
OI:Net Incurrence of Liabilities	508	4,240	2,484	5,720	6,644
Net unclassified items (V)	-1,588	-2,826	2,729	-2,526	1,245
<b>Overall BOP (I+II+III+V)</b>	-863	-2,306	7,843	16,022	1,345
<b>Change in Reserve Assets</b>	-862	-2,305	7,843	16,020	1,345
<b>Memorandum items:</b>					
Current Account (% GDP)	-0.7	-2.6	-0.8	3.2	-1.8
Gross International Reserves	81,570	79,193	87,840	110,117	108,794
In months of imports of goods and services	8.3	7.3	8.0	13.2	10.2
Changes in gross reserves	-1,617	-2,377	8,646	22,278	-1,323
Nominal GDP (USD billion)	328	347	377	362	394

Source: Philippine authorities, AMRO staff calculations

#### Appendix 4. Statement of National Government Operations

	2017	2018	2019	2020	2021
	(In percent of GDP, unless specified)				
<b>Government Revenue</b>	14.9	15.6	16.1	15.9	15.5
Tax Revenue	13.6	14.0	14.5	14.0	14.1
Bureau of Internal Revenue (BIR)	10.7	10.7	11.1	10.9	10.7
Net Income & Profits	6.2	5.7	5.9	5.8	5.5
Excise Tax	1.3	1.6	1.6	1.6	1.6
Sales Taxes & Licenses	2.7	2.6	2.7	2.6	2.7
Others	0.6	0.9	0.9	0.8	1.0
Bureau of Customs (BOC)	2.8	3.2	3.2	3.0	3.3
Other Offices	0.1	0.1	0.1	0.1	0.1
Non Tax & Grant	1.3	1.6	1.6	2.0	1.4
<b>Government Expenditure</b>	17.1	18.7	19.5	23.5	24.1
Current Operating Expenditures	12.8	13.4	14.0	18.5	18.0
Personal Services	4.9	5.4	5.7	6.6	6.6
Maintenance and Other Operating	2.8	2.9	2.9	4.9	4.5
Subsidy	0.8	0.7	1.0	1.3	1.0
Allotment to LGUs	2.4	2.3	2.4	3.5	3.5
Interest Payments	1.9	1.9	1.8	2.1	2.2
Tax Expenditure	0.1	0.1	0.1	0.2	0.2
Capital Outlays	4.3	5.3	5.3	4.9	6.0
Infrastructure & Other Capital Outlays	3.4	4.4	4.5	3.8	4.6
Equity	0.0	0.0	0.0	0.1	0.2
Capital Transfers to LGUs	0.8	0.9	0.8	1.0	1.1
Net Lending	0.0	0.0	0.1	0.1	0.1
<b>Government Balance</b>	- 2.1	- 3.1	- 3.4	- 7.6	- 8.6
primary balance	- 0.2	- 1.1	- 1.5	- 5.5	- 6.4
<b>Government Financing</b>	4.6	4.3	4.5	13.9	11.6
<b>External: Net</b>	0.2	1.0	0.9	3.3	1.7
External: Gross	1.0	1.7	1.6	4.1	2.9
Project Loan	0.2	0.2	0.3	0.3	0.6
Program Loans	0.2	0.4	0.4	2.1	0.9
Global Bonds	0.6	0.6	0.4	1.4	0.8
Amortization	0.8	0.6	0.7	0.8	1.2
<b>Domestic: Net</b>	4.4	3.2	3.5	10.6	9.9
Domestic: Gross	4.4	3.3	3.6	11.1	10.4
Treasury Bills: Net	0.2	1.0	0.0	2.6	- 0.8
Retail Treasury Bonds	2.6	0.7	1.2	4.6	4.2
Fixed Rate Treasury Bonds	1.6	1.6	2.4	3.9	6.5
Amortization	1.4	1.5	1.8	2.5	2.8
<b>Memorandum items:</b>					
Government Debt	40.2	39.9	39.6	54.6	60.4
Domestic	26.8	26.2	26.3	37.3	42.1
Foreign	13.4	13.8	13.3	17.3	18.3
Short-term ( % of Total)	4.7	6.8	6.4	9.8	6.8
Medium-term ( % of Total)	12.0	12.6	17.8	23.0	26.6
Long-term ( % of Total)	83.3	79.8	75.9	67.3	66.6
Nominal GDP (Trillion, PHP)	16.6	18.3	19.5	18.0	19.4

Source: Philippine authorities, AMRO staff calculations

Appendix 5. Data Adequacy for Surveillance Purposes: a Preliminary Assessment

Surveillance Areas	Data Availability <sup>(i)</sup>	Reporting Frequency/Timeliness <sup>(ii)</sup>	Data Quality <sup>(iii)</sup>	Consistency <sup>(iv)</sup>	Others, if Any <sup>(v)</sup>
National Accounts	Available	Quarterly data for the expenditure and production approaches is available with a normal time lag of two months after the reference quarter	-	-	-
Balance of Payments (BoP) and External Position	Available	BoP data is available quarterly with a normal time lag of two months and three weeks after the reference month. External debt data is available with a normal time lag of two months and three weeks after the reference quarter	-	-	-
State Budget and Government/ External Debt	Available	Central government budget and public finance data is available on a monthly basis with a normal time lag of one to two months after the reference month. Date for central government domestic and foreign debt outstanding is available monthly with a normal time lag of one month after the reference month	-	-	-
Money Supply and Credit Growth	Available	Money supply data is available on a monthly basis with a normal time lag of one month after the reference month. Bank loan data is available quarterly with a normal time lag of two-and-a-half to three months after the reference quarter	-	-	-
Financial Sector Soundness Indicators	Available	Quarterly indicators are available with a time lag of one quarter	-	-	-
SOE Statistics	SOE statistics have yet to be made available on a frequent basis	-	-	-	-

Notes:

- (i) Data availability refers to whether the official data is available for public access by any means.
- (ii) Reporting frequency refers to the time interval between the publishing of the available data. Timeliness refers to how up to date the published data is relative to the publication date.
- (iii) Data quality refers to the accuracy and reliability of the available data after taking into account the data methodologies.
- (iv) Consistency refers to both internal consistency within the data series itself and its horizontal consistency with other data series of either the same or different categories.
- (v) Other criteria might apply, if relevant. Examples include but are not limited to potential areas of improvement for data adequacy.

Source: AMRO staff compilation. This preliminary assessment will form the "Supplementary Data Adequacy Assessment" in the EPRD Matrix.

## Annexes: Selected Issues

### 1. Stress Testing the Resilience of Selected Banks in the Philippines<sup>25</sup>

#### **Background**

**1. The financial soundness of the Philippine banking sector is a concern of policymakers after more than two years of the COVID-19 pandemic.** In particular, the non-performing loans (NPLs) of the Philippine banks increased significantly in 2020, the first year of the COVID-19 pandemic, while their total capital adequacy ratios (CARs) and Tier 1 capital ratios remained above the minimum regulatory requirements (10 percent for CAR and 7.5 percent for Tier 1 capital ratio) and were able to absorb the higher credit losses (Table A1.2). Although the financial soundness of Philippine banks has improved with the recent economic recovery, the banking sector could face challenges if any economic or financial risks materialize.

**2. This study applies the forward-looking stress test to examine whether the Philippine banks have sufficient capacity to absorb potential credit losses.** Specifically, the stress test uses the IMF Stress Tester template developed by Cihak (2012)<sup>26</sup>, which is a balance sheet approach (see the Appendix for details on methodology), to examine the resilience of banks against the minimum regulatory requirements for CARs and Tier 1 capital ratios under hypothetical baseline and stressed scenarios. In addition, the credit losses under different scenarios are projected by using a macro-financial model based on the methodology used in Wezel, Canta, and Luy (2012). The sample of this stress test contains 17 banks in the Philippines, covering 75 percent of the assets of the Philippine banking sector assets, where 57 percent of these banks' assets are loans.<sup>27</sup> The sample period for the estimation is from 2005 to 2020, and annual data is used.<sup>28</sup> Table A1.1 lists the selected banks in this study, while the characteristics of selected banks are summarized in Table A1.2.

**Table A1.1. List of Selected Banks**

4 big banks	8 medium banks	5 small banks
<ul style="list-style-type: none"> <li>-BDO Unibank</li> <li>-Bank of the Philippine Islands</li> <li>-Metropolitan Bank &amp; Trust Co.</li> <li>-Philippine National Bank</li> </ul>	<ul style="list-style-type: none"> <li>-Asia United Bank Corp.</li> <li>-Bank of Commerce</li> <li>-China Banking Corp.</li> <li>-East West Banking Corp.</li> <li>-Philippine Savings Bank</li> <li>-Rizal Commercial Banking Corp.</li> <li>-Security Bank Corp.</li> <li>-Union Bank of the Philippines</li> </ul>	<ul style="list-style-type: none"> <li>-CTBC Bank (Philippines) Corp.</li> <li>-Philippine Bank of Communications</li> <li>-Philippine Business Bank</li> <li>-Sterling Bank of Asia</li> <li>-The Robinsons Bank Corp.</li> </ul>

<sup>25</sup> This selected issue was prepared by Andrew Tsang, Economist.

<sup>26</sup> The template was originally introduced by Cihak (2007), and updated in Cihak (2012).

<sup>27</sup> The sample of banks is drawn from BankFocus. "Big banks" are those whose total assets are equal to or greater than 5 percent of GDP; "medium banks" have total assets of between 1 and 5 percent of GDP; and "small banks" have total assets that are equal to or lower than 1 percent of GDP.

<sup>28</sup> In this study, the source of the bank data is BankFocus (Bureau van Dijk), and the macro-financial data is downloaded from CEIC.

Table A1.2. Summary Statistics of Selected Banks

	All banks	Big banks	Medium Banks	Small Banks
Number	17	4	8	5
Bank assets (as a percentage of banking system assets)	75	47	26	2
Total loans (as a percentage of bank assets)	57	58	54	62
NPL ratio	4.34	4.08	4.91	4.55
Pre-pandemic NPL ratio (2019)	1.91	1.57	2.62	2.68
CAR	16.59	16.46	16.76	17.48
Tier 1 capital ratio	15.54	15.58	15.44	15.69

Source: BankFocus and AMRO staff calculations.

Note: The figures in the table refer to 2020 data, unless otherwise stated. The ratios are calculated by using the aggregate data of the banks in the sample and subsamples.

### Credit Loss Model and Scenarios

**3. This study constructs a macro-financial model to project credit losses for individual banks under different scenarios.** The model is estimated by dynamic panel logistic regression, in which the determinants include nominal GDP growth, the short-term interest rate, and the growth rate of the loans of individual banks. The GDP growth and loan growth are expected to be negatively related to credit losses, while the relationship with interest rate is positive. The estimation coefficients are consistent with expectations. The estimated model is as follows<sup>29</sup>:

$$Y_{it} = \alpha_i - 3.32GDP_t + 4.19ir_t - 0.31Loan_{it} + 0.69Y_{it-1} + \varepsilon_{it} \quad (A1.1)$$

(0.73)      (3.00)      (0.30)      (0.09)

$$R^2 = 0.64, \text{ Adjusted } R^2 = 0.59$$

where  $Y_{it} = -\ln\left(\frac{1-NPL_{it}}{NPL_{it}}\right)$ ,

$NPL_{it}$  is the non-performing loan ratio for bank  $i$  at year  $t$

$GDP_t$  is the nominal GDP growth rate at year  $t$

$ir_t$  is the average 3-month Treasury Bill yield at year  $t$

$Loan_{it}$  is the growth rate of the total loan for bank  $i$  at year  $t$

$\alpha_i$  is the fixed effect to capture the idiosyncratic characteristics of bank  $i$

$\varepsilon_{it}$  is the error term.

(Figures in parentheses are standard errors.)

**4. The baseline scenario of the stress test uses AMRO's baseline forecasts for 2022, while the three adverse scenarios are based on different assumptions about the macroeconomic outlook.** The time horizon for the stress testing is the whole year of 2022<sup>30</sup>, and different scenarios on the macro-financial variables in Equation A1.1 are assumed. In the baseline scenario, nominal GDP growth is assumed to grow by 9.9 percent in 2022 (the corresponding real GDP growth is 6.9 percent), increasing from 8.1 percent in 2021 (real GDP growth is 5.7 percent). In addition, the local short-term interest rate is assumed to follow the

<sup>29</sup> The dependent variable ( $Y_{it}$ ) is defined as multiplying with -1 for easier interpretation, with the higher value of  $Y_{it}$  representing higher level of the NPL ratio.

<sup>30</sup> The NPLs are projected in 2021 (using actual macro-financial data) and 2022 (using different scenarios on macro-financial variables). NPLs in 2022 are used for the current stress testing exercise.

U.S. Fed Fund Target rate changes, which is expected to increase by 100 basis points in 2022. Finally, the growth of loans of individual banks is projected by using the forecast of the banking sector's loan growth<sup>31</sup> and lagged individual bank loan growth. The three stressed scenarios are designed as follows:

- Scenario 1 (Recession shock) assumes the nominal GDP growth is 2 standard deviations below the baseline in 2022 (0.6 percent, 9.3 percentage points below the baseline).
- Scenario 2 (Interest rate shock) assumes short-term interest rate increases 2 standard deviations above the baseline in 2022 (increases by another 253 basis points, i.e., 353 basis points).
- Scenario 3 (Combined shock) combines Scenario 1 & Scenario 2.

## Results

**5. The credit losses rise significantly under the recession shock and the combined shock and increase moderately under the interest rate hike shock.** Due to the economic recovery, the aggregate NPL ratio for the selected banks is expected to improve to 2.93 percent in 2022 (Table A1.3), from 4.34 percent in 2020 (Table A1.2) under the baseline scenario. The NPL ratio increases significantly by more than one percentage point to 4.04 percent in response to the recession shock (Scenario 1). In the combined shock (Scenario 3), the NPL ratio increases by another 42 basis points to 4.46 percent. By comparison, the impact of the interest rate shock is milder, and the NPL ratio rises by only 31 basis points to 3.24 percent under Scenario 2, compared with the Baseline Scenario. The results suggest that the credit quality of Philippine banks is more sensitive to economic growth.

**Table A1.3. Stress test results for selected banks**

	NPL ratio	CAR	No. of failed banks (CAR<10%)	Tier 1 Ratio	No. of failed banks (T1<7.5%)
Baseline	2.93	16.56	0	15.51	0
Scenario 1	4.04	16.05	0	15.03	1
Scenario 2	3.24	16.40	0	15.39	0
Scenario 3	4.46	15.85	0	14.83	1

Source: BankFocus and AMRO staff calculations.

Note: The ratios are calculated by using the aggregate data of the banks in the sample.

**6. Regarding asset quality, the Philippine banking sector is resilient to the shocks, and only one small-and-medium-sized bank needs to raise capital under some of the scenarios.** As shown in the forward-looking stress test results, all the selected banks are able to maintain their CARs above the minimum regulatory requirement of 10 percent. The post-

<sup>31</sup> The banking sector's loan growth is projected by using the forecasts of nominal GDP growth under different scenarios.



shock CAR is above 15 percent for all the selected banks at the aggregate level. For the Tier 1 ratio, only one small-and-medium-sized bank needs to increase Tier 1 capital to meet the minimum requirement of 7.5 percent under scenarios assuming economic recession (scenarios 1 and 3). In contrast, the aggregate Tier 1 capital ratio of all the selected banks is still above 14 percent under shocks. The results confirm the resilience of Philippine banking system, because the sector as a whole could maintain stable CAR amid the pandemic, despite a few small and medium-sized banks being vulnerable.

**7. The stress test in this selected issue comes with caveats.** First, this study does not directly incorporate positive effects arising from the regulatory forbearance measures, although these positive effects may affect the results of this stress testing exercise. Specifically, the projected NPL ratios may have been underestimated, as certain regulatory forbearance measures during the pandemic have delayed and masked the actual deterioration in the underlying NPL situation in 2020, which is the year with the latest available data.<sup>32</sup> Second, this study examines only the overall credit loss due to data limitations, without evaluating the sectoral credit risks. However, the borrowers' repayment ability could be a lot worse some vulnerable sectors of the economy, such as trade or tourism sectors and in specific groups of borrowers, such as medium-sized corporations, during or after the pandemic. Those banks with a higher share of their loan portfolios in these sectors or groups of borrowers, could be more vulnerable to post-pandemic shocks.

### ***Policy Discussions***

**8. The BSP can strengthen the resilience of medium and small banks in addition to its supervision of systemically important banks.** Although the Philippine banking system was quite resilient during the COVID pandemic, a few small and medium-sized banks may have less buffers to withstand shocks, given their lower capital adequacy ratios (CAR or Tier 1 capital ratio). In particular, some medium and small banks are more concentrated on some specific sectors, such as trade or tourism sectors and specific groups of borrowers, like medium-sized corporations, and these banks are more vulnerable to shocks. Currently, the BSP closely monitors and provides guidelines to systemically important banks<sup>33</sup> to mitigate any systemic risk in the Philippine banking sector. However, these large banks generally have more capital buffer, while small-and-medium-sized banks have less buffers and are less resilient to shocks. Therefore, the BSP can consider strengthening the resilience of small and medium-sized banks by providing guidelines and support for their recovery and potential resolution.<sup>34</sup> This measure would minimize risks posed by any bank to the financial system, given that there might be a few small and medium-sized banks with relatively vulnerable balance sheets.

**9. In addition, the BSP can provide guidance to all banks on formulating a forward-looking risk assessment and risk management scheme.** The scheme would allow banks to identify vulnerable borrowers early and deal with potential credit losses. Specifically, given

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<sup>32</sup> Banks' published statistics used in this analysis are based on actual values and do not reflect the impact of regulatory forbearance. Nevertheless, the authorities have suggested that the impact should not be severe. Although some regulatory forbearance measures, including credit limit and risk weight requirements, continue to be in effect until the end of 2022, the authorities pointed out that the impact of these measures, including relaxations of asset classification and provisioning requirements and some prudential regulations has faded by 2021.

<sup>33</sup> For example, "Implementing Guidelines on the Framework for Dealing with Domestic Systemically Important Banks under Basel III" (Circular No. 856) and "Guidelines on Recovery Plan of a Domestic Systematically Important Bank (DSIB)" (Circular No. 904).

<sup>34</sup> The support mainly offers help in designing a recovery and resolution plan for small and medium-sized banks. In addition, the BSP could provide support on liquidity and new financial tools for these banks. The BSP can also combine the green finance scheme with the provision of new financial tools to support these banks and green finance. See BIS (2021).

that a few banks have higher problem loans but lower provisions, the BSP can develop and strengthen pre-emptive, risk-based provisioning guidelines to absorb potential bank losses and require banks to provide sufficient provisioning. Moreover, to deal with potential credit losses, the BSP can stand ready to enforce regulations on those banks, such as by increasing retained earnings and restricting dividend distribution, so as to maintain a higher capital ratio until pandemic-related uncertainties dissipate.

**10. Furthermore, the BSP can enlarge the regulatory policy space to mitigate adverse effects of the potential shocks.** Although the Philippines' economic recovery is expected to proceed at a solid pace in 2022, the economic growth is still clouded by the resurgence of COVID-19 pandemic and the risk of a faster-than-expected U.S. interest rate hike. Even though the economy started to recover in the second half of 2021, some COVID-19 related regulatory forbearance measures continue to be effective until end- 2022. Once these bank relief measures expire at the end of the year, the regulatory policy space should be enlarged to accommodate any future potential shocks to the banking system. Therefore, unless there is any new shock, the central bank should consider not to extend these measures.

**11. Finally, strengthening the role of the credit bureau that consolidates the loan information of borrowers would enhance banks' ability to conduct a comprehensive assessment of leverage.** In particular, banks can assess the quality of borrowers in specific sectors and groups so as to reduce credit risks. In the Philippines, the Credit Information Corporation (CIC) plays the role of a credit bureau, which "*has the powers and functions to receive and consolidate basic credit data, to act as a central registry or central repository of credit information, and to provide access to reliable, standardized information on credit history and financial condition of borrowers*" (CIC, 2021). The CIC opened its credit database for paid access in July 2019. However, the usage of the database still has room for improvement. According to the latest CIC performance evaluation, only 36 percent of the CIC's targets was achieved in the second half of 2019.<sup>35</sup> Therefore, the authorities can enhance the role of the CIC and the usage of its credit database.

## References

Bank for International Settlements (BIS). 2021. "How are central banks helping to make the recovery from the Covid-19 pandemic more sustainable and inclusive?" Bank for International Settlements, Basel. <https://www.bis.org/speeches/sp210416.pdf>

Cihak, Martin. 2007. "Introduction to Applied Stress Testing." *IMF Working Paper 07/59*, International Monetary Fund, Washington, DC.

Cihak, Martin. 2012. "Chapter 3: Stress Tester: A Toolkit for Bank-by-Bank Analysis with Accounting Data." in Ong, Li Lian (ed.), *A Guide to IMF Stress Testing: Methods and Models*. International Monetary Fund, Washington, DC.

Credit Information Corporation (CIC). 2021. "*CIC 2020 Annual Report: Building a Resilient Public Credit Registry Toward National Recovery*." Credit Information Corporation, Manila.

Wezel, Torsten, Michel Canta and Manuel Luy. 2012. "Chapter 30: A Practical Example of the Non-performing loans Projection Approach to Stress Testing." in Ong, Li Lian (ed.), *A Guide to IMF Stress Testing: Methods and Models*. International Monetary Fund, Washington, DC.

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<sup>35</sup> The percentage is calculated by summing up the percentage of achievement in different targets with multiplying the corresponding weights. Different weights are assigned to different targets.

## Appendix

The stress test in this study applies the IMF Stress Tester template developed by Cihak (2012). This study assumes the impact of the shock on NPLs is fully reflected in bank capital, and additional provisions are assumed to be topped up to ensure that the loans remain fully provisioned. Additional provisions in response to increases in NPLs would decrease the capital ratio by lowering capital, while write-offs would reduce risk-weighted assets (RWA). The provisioning rate is set at 56.7 percent, an average of 20 percent for substandard loans, 50 percent for doubtful loans, and 100 percent for loss loans. The impact of credit losses on a bank's CAR after a shock, in which the bank needs additional provisions to absorb the credit losses, is calculated by the following formula:

$$CAR_{t,postshock} = \frac{Capital_t - Additional Provisions_t}{RWA_t - (Additional Provisions_t \times \%Impact\ on\ RWA)}$$

in which:

$$Additional\ Provisions_t = Additional\ NPL_t \times Provisioning\ Rate_t$$

and

$$Additional\ NPL_t = Non-Performing\ Loans_t \times \% \Delta NPL_t$$

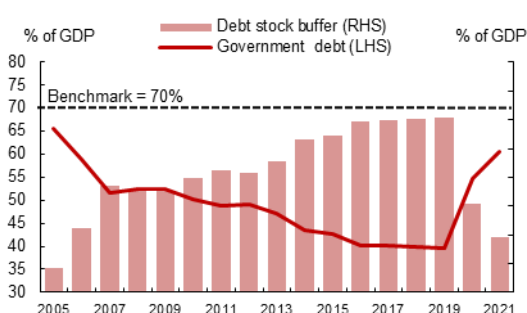
$\%Impact\ on\ RWA$  is assumed as 100 percent, and  $Provisioning\ Rate_t$  is 56.7 percent.  $\% \Delta NPL_t$  is an implied increase in the NPL ratio under different scenarios, in which the NPL ratio is projected using the macro-financial model (Equation A1.1). The same formula is also applied to the Tier 1 capital ratio calculation.

## 2. Government Debt Forecast Error in the Philippines <sup>36</sup>

### Background

**1. The Philippine government plans to implement fiscal consolidation in the medium term.** The sufficient fiscal policy space helped the Philippines weather the COVID-19 pandemic through fiscal stimuli in 2020 and 2021. However, consequently the fiscal buffer has narrowed substantially and needs to be restored to prepare for unforeseen future risks as the economy starts to return to normal (Figure A2.1). To maintain fiscal sustainability and rebuild the fiscal buffer, the government aims to reduce the fiscal deficit and contain the debt-to-GDP ratio at around 60 percent in the medium term (Figure A2.2).

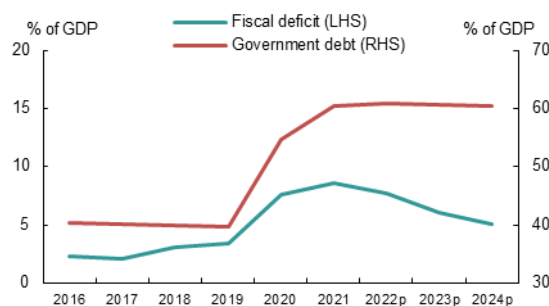
Figure A2.1. Public Debt and Debt Buffer



Source: DBM; BTr; AMRO staff estimates

Note: Debt stock buffer is defined as the difference between the actual government debt and the benchmark of 70 percent of GDP.

Figure A2.2. Government's Fiscal Position and Debt Projections



Source: DBM; BTr

Note: Fiscal balance and government debt are based on the government's projections, not AMRO's.

**2. One of the key fiscal consolidation targets is the government debt-to-GDP ratio, which is projected using underlying macroeconomic forecasts and fiscal plans.** The debt dynamics equation demonstrates that the evolution of the government debt-to-GDP ratio is determined by a set of parameters, including real GDP growth, GDP deflator inflation, effective interest rate, exchange rate change, primary balance, and other flows (Equation A2.1). Therefore, realistic macroeconomic forecasts and feasible fiscal plans are critical in setting achievable government debt-to-GDP ratio targets.

$$d_{t+1} = \left( \frac{1+i_{t+1}^w + \varepsilon_{t+1} \alpha_t (1+i_{t+1}^f)}{(1+g_{t+1})(1+\pi_{t+1})} \right) d_t - pb_{t+1} + o_{t+1} \quad (\text{Equation A2.1})^{37}$$

**3. Significant government debt forecast errors may hamper the credibility of fiscal plans and cause market sentiment to falter.** Literature highlights that the actual debt ratio has been higher than the projected ratio across advanced and emerging countries, reflecting persistent optimism bias (see Flores and others, 2021, for the literature review). As history has shown, if fiscal space narrows due to optimistic debt projections, market sentiment can change swiftly, leading to abrupt changes in financing costs (Flores and others, 2021). Against this backdrop, this annex aims to assess the government debt forecast errors in the Philippines by using the forecasts of official budget documents from 2009 to 2021, to identify the sources that led to the forecast errors and to draw policy implications.

<sup>36</sup> Prepared by Byunghoon Nam, Senior Economist

<sup>37</sup>  $d_t = \frac{D_t}{P_t Y_t}$ ,  $pb_t = \frac{PB_t}{P_t Y_t}$ ,  $o_t = \frac{O_t}{P_t Y_t}$ ,  $i_t^w = (1 - \alpha_{t-1})i_t^d + \alpha_{t-1}i_t^f$ ,  $\alpha_{t-1} = \frac{e_{t-1}D_{t-1}^f}{D_{t-1}}$ ,  $\varepsilon_t = \frac{e_t - e_{t-1}}{e_{t-1}}$ , where  $D_t$ : government debt,  $PB_t$ : primary balance,  $Y_t$ : real GDP,  $P_t$ : GDP deflator,  $O_t$ : other flows,  $g_t$ : real GDP growth,  $\pi_t$ : GDP deflator change,  $i_t$ : nominal effective interest rate,  $e_t$ : exchange rate (PHP/USD),  $\alpha_t$ : share of external debt,  $\varepsilon_t$ : exchange rate change. The superscripts  $w$ ,  $f$ ,  $d$  denote weighted, foreign, and domestic, respectively.

*Definition and Decomposition of Government Debt Forecast Error*

**4. The government debt forecast error is defined as the actual minus the forecasted debt-to-GDP ratio.**<sup>38</sup> Due to data availability, we focus on a projection of one year ahead rather than a multi-year projection.<sup>39</sup> Specifically, the forecast error for the debt-to-GDP ratio in “*t+1 year*” projected in “*t year*” is defined as:

$$fe_{t+1} = d_{t+1}^A - d_{t+1}^B = \Delta d_{t+1}^A - \Delta d_{t+1}^B \quad (\text{Equation A2.2})$$

where  $\Delta d_{t+1}^A = d_{t+1}^A - d_t^A$ ,  $\Delta d_{t+1}^B = d_{t+1}^B - d_t^B$  and *A*: actual, *B*: budget

There also exists a forecast error for the debt-to-GDP ratio in “*t year*” projected in “*t year*” as the government estimates government debt and macroeconomic parameters for “*t year*” in the middle of the year.<sup>40</sup> This same-year forecast error is similarly defined as:

$$fe_t = d_t^A - d_t^B = \Delta d_t^A - \Delta d_t^B \quad (\text{Equation A2.3})$$

By plugging in Equation A2.1 and using the definition in Equations A2.2-A2.3, the government debt forecast error equation can be expressed as:

$$fe_{t+1} = (\varphi_{t+1}^A - \varphi_{t+1}^B)d_t^A - (pb_{t+1}^A - pb_{t+1}^B) + (o_{t+1}^A - o_{t+1}^B) + (1 + \varphi_{t+1}^B)fe_t \quad (\text{Equation A2.4})$$

$$\text{where } \varphi_{t+1} = \frac{i_{t+1}^w - \pi_{t+1}(1+g_{t+1}) - g_{t+1} + \varepsilon_{t+1}\alpha_t(1+i_{t+1}^f)}{(1+g_{t+1})(1+\pi_{t+1})}; \text{ automatic debt dynamics}$$

**5. By decomposing the debt forecast error equation, the sources of error can be identified.** The debt forecast error could originate from errors in projecting automatic debt dynamics (including the nominal interest rate, GDP deflator inflation, real GDP growth and exchange rate), the primary balance (including revenue and non-interest expenditure), other flows, and the debt-to-GDP ratio in the same year (Table A2.1).

**Table A2.1. Sources of Government Debt Forecast Error**

Sources	Measure of the Contribution
Primary deficit	$-(pb_{t+1}^A - pb_{t+1}^B)$
Revenue	$-(revenue_{t+1}^A - revenue_{t+1}^B)$
Non-interest expenditure	$(expenditure - interest)_{t+1}^A - (expenditure - interest)_{t+1}^B$
Real interest rate	
Nominal interest rate	$\left[ \frac{i_{t+1}^w{}^A}{(1+g_{t+1}^A)(1+\pi_{t+1}^A)} - \frac{i_{t+1}^w{}^B}{(1+g_{t+1}^B)(1+\pi_{t+1}^B)} \right] d_t^A$
GDP deflator inflation	$-\left[ \frac{\pi_{t+1}^A(1+g_{t+1}^A)}{(1+g_{t+1}^A)(1+\pi_{t+1}^A)} - \frac{\pi_{t+1}^B(1+g_{t+1}^B)}{(1+g_{t+1}^B)(1+\pi_{t+1}^B)} \right] d_t^A$
Real GDP growth	$-\left[ \frac{g_{t+1}^A}{(1+g_{t+1}^A)(1+\pi_{t+1}^A)} - \frac{g_{t+1}^B}{(1+g_{t+1}^B)(1+\pi_{t+1}^B)} \right] d_t^A$
Exchange rate change	$\left[ \frac{\varepsilon_{t+1}^A \alpha_t^A (1+i_{t+1}^f)}{(1+g_{t+1}^A)(1+\pi_{t+1}^A)} - \frac{\varepsilon_{t+1}^B \alpha_t^B (1+i_{t+1}^f)}{(1+g_{t+1}^B)(1+\pi_{t+1}^B)} \right] d_t^A$
Other flows	$o_{t+1}^A - o_{t+1}^B$
In-year forecast error	$(1 + \varphi_{t+1}^B)fe_t$

Source: AMRO

<sup>38</sup> We compute the forecasted debt-to-GDP ratio by using the outstanding debt of the national government and macroeconomic parameters articulated in the Budget of Expenditures and Source of Financing (BESF) for each year’s proposed budget.

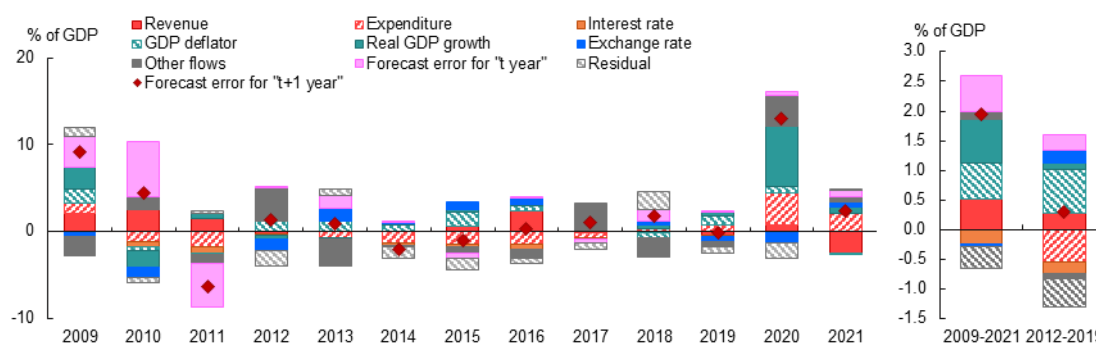
<sup>39</sup> The magnitude of the forecast error in debt-to-GDP ratio projections tends to increase with the forecast horizon. For example, see Flores and others (2021).

<sup>40</sup> The macroeconomic parameters are based on assumptions and targets adopted by the Philippines’ Development Budget Coordination Committee (DBCC) in July.

### Government Debt Forecast Error in the Philippines and its Sources

**6. The forecast error in debt-to-GDP ratio projections was quite sizable** (Figure A2.3). From 2009 to 2021, the actual debt-to-GDP ratio was higher than the projected debt-to-GDP ratio in nine years and lower in the other four years. On average, the actual debt ratio was 1.9 percent of GDP higher than the forecast. Obviously, the exceptionally large forecast errors, of up to 13.1 percent of GDP, were made during the global financial crisis (GFC) and the recent COVID-19 pandemic.<sup>41</sup> Excluding these crisis years and subsequent periods of rebound, the average magnitude of the positive forecast errors from 2012 to 2019 significantly went down to 0.3 percent of GDP. However, the range of the debt forecast error in the individual years was -2.0 percent to 1.8 percent of GDP, a marked dispersion which cannot be ignored in projections of one year ahead.

**Figure A2.3. Decomposition of Government Debt Forecast Error**



Source: DBM; BTr; AMRO staff estimates

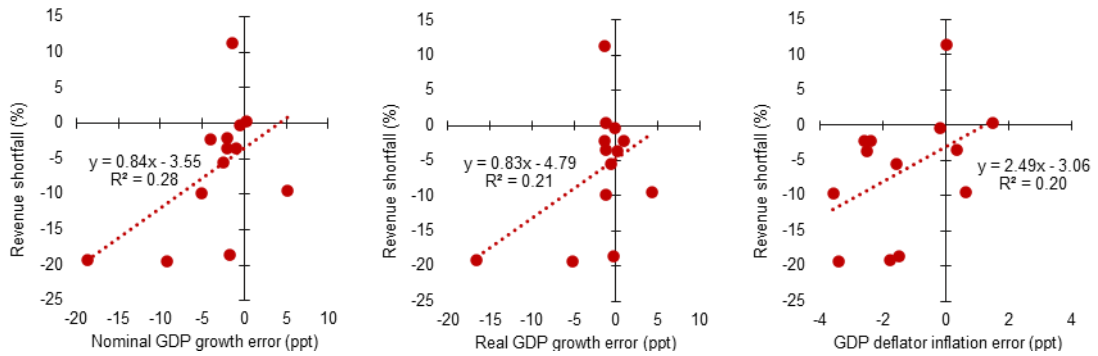
**7. Real GDP growth and GDP deflator forecasts as well as revenue estimates were the main contributors to the forecast error in the sample period.** The decomposition results can be summarized as follows:

- GDP deflator inflation has been consistently and significantly over-forecasted, on average by 1.3 percentage points, while the real GDP growth forecast error has been sizable during the crises.
- The actual revenue collection has been lower than the budget, on average by 6.3 percent. It should be noted that the revenue shortfall might have stemmed from both optimistic growth projections and slippages in revenue collection. The forecast error of growth was closely correlated to revenue shortfall, suggesting a strong macroeconomic impact on revenue collection (Figure A2.4).
- The expenditure has been underspent, except during the crisis years, confirming a structural problem of weak spending capacity. Between 2012 and 2019, actual expenditure was on average 7.3 percent lower than the budget.
- Interest payments have been consistently over-budgeted, attributable to sufficient budget allocation, perhaps because of uncertainties in government financing and market conditions.
- Unpredictable currency movements contributed to the forecast error in some of the years.

<sup>41</sup> The large debt forecast error during the crises was partly due to the revised budget, which incorporated the fiscal stimulus to address the adverse impacts of the shocks.

- The error in the same-year forecast was large in the early years of the sample period, but substantially declined in recent years.
- Unidentified residuals significantly contributed to the negative forecast errors, suggesting that off-budget transactions reduced the actual debt-to-GDP ratio.<sup>42</sup>

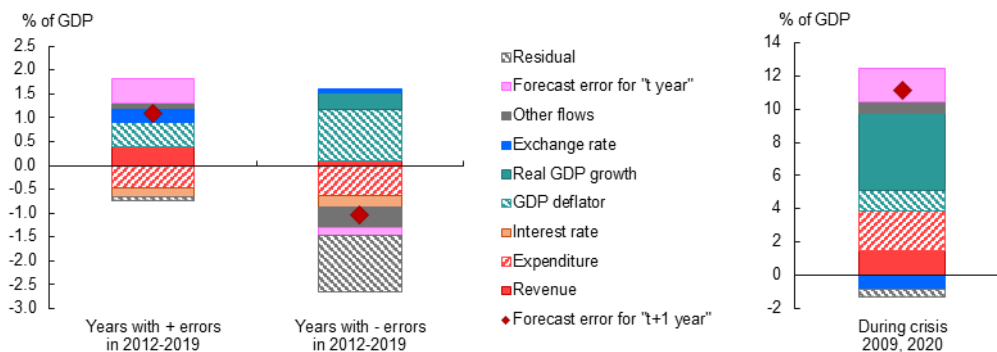
**Figure A2.4. Correlation between Growth Forecast Error and Revenue Shortfall**



Source: DBM; BTr; AMRO staff estimates

**8. The major sources of government debt forecast error differ between the positive and negative forecast errors** (Figure A2.4). We further investigate which factors have contributed more to the debt forecast error in the years with positive and negative errors. When the actual debt ratio was higher than the projected ratio, over-forecasted GDP deflator inflation contributed the most to the debt forecast error, followed by the same-year forecast error, revenue shortfall, and larger-than-expected currency depreciation. On the other hand, unidentified residuals, identified other flows, and expenditure underspending led to the negative debt forecast errors. It is noteworthy that revenue shortfall, expenditure underspending, over-forecasted GDP deflator inflation, and an over-budgeted interest rate are all observed, regardless of the direction of the forecast error. Meanwhile, during the crises in 2009 and 2020, real GDP contraction, stimulus spending, and revenue shortfall produced a large difference between the actual and projected debt-to-GDP ratios.

**Figure A2.4. Decomposition of Positive and Negative Government Debt Forecast Errors**



Source: DBM; BTr; AMRO staff estimates

<sup>42</sup> Off-budget debt repayment may reflect the redemption of government debt from the Bond Sinking Fund.

### *Policy Discussions*

**9. Realistic macroeconomic forecasts and fiscal plans are critical for a credible fiscal consolidation in the aftermath of the COVID-19 pandemic.** Our analysis demonstrates the presence of sizable projection errors of macroeconomic and fiscal indicators that have led to government debt forecast errors in the past. Particularly, large forecast errors committed in the years after the GFC suggest that the authorities should be careful in establishing achievable fiscal consolidation targets after the pandemic.

**10. Real GDP growth and GDP deflator inflation forecasts should be improved.** Optimistic projections of real GDP growth and GDP deflator inflation not only undermine the debt-to-GDP ratio directly, but also inflates the revenue projection indirectly, as nominal GDP is the key underlying factor determining revenue projections. In particular, given that the over-projected GDP deflator inflation has consistently generated a substantial positive debt forecast error, more efforts should be made to improve the realism of GDP deflator inflation projections.

**11. Revenue collection and expenditure disbursement should be enhanced.** Considering that the gap between budgeted and actual revenue is affected by the growth forecast error and revenue collection activities, tax administration and systems should also be strengthened in addition to improving the growth forecasts. Although expenditure underspending lowers the actual debt-to-GDP ratio compared to the projected ratio, expenditure implementation capacity should be enhanced substantially to achieve the intended policy objectives.

### **References**

Estefania Flores, J., Furceri, D., Kothari, S., and Ostry, J. D. 2021. "Worse Than You Think: Public Debt Forecast Errors in Advanced and Developing Economies."



### 3. Debt Sustainability Analysis<sup>43</sup>

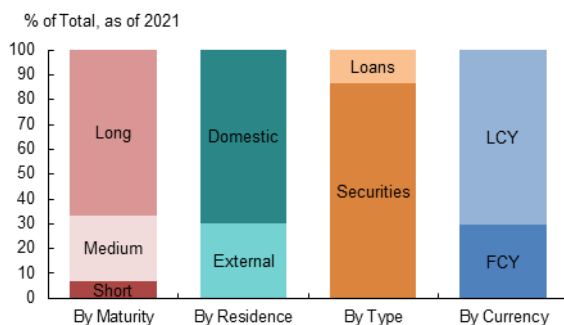
#### Background

**1. The Philippines' public debt-to-GDP ratio increased from 54.6 percent in 2020 to 60.4 percent in 2021.**<sup>44</sup> After having declined to the lowest level of 39.6 percent of GDP in 2019, the public debt increased sharply by 21 percent of GDP in the last two years during the pandemic. The increase in public debt in 2021 originated from the widened fiscal deficit under subdued revenue collection and supportive fiscal spending, especially in infrastructure programs.

**2. Gross financing needs (GFNs) in percent of GDP also jumped from 4.1 percent in 2019 to 9.0 percent in 2020, and further to 10.3 percent in 2021.** Large primary deficits continued to pose sizable deficit financing needs, while interest payments also increased gradually to 2.2 percent of GDP, 14.3 percent of revenue, and 9.2 percent of expenditure, owing to the accumulated government debt.

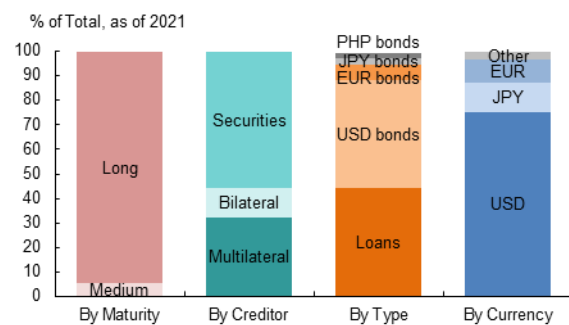
**3. Public debt relies mainly on domestic debt with long-term maturity.** As of end-2021, domestic and long-term debt accounted for 69.7 percent and 66.6 percent, respectively. Among the public external debt, 94.5 percent was long-term debt, 55.8 percent comprised securities, and 75.3 percent was denominated in USD.

Figure A3.1. Public Debt Structure



Source: BTr; AMRO staff estimates

Figure A3.2. Public External Debt Structure



Source: BTr; AMRO staff estimates

#### Macroeconomic and Fiscal Projections

**4. Baseline projections of public debt are made based on the growth rebound in 2022, and projections of macroeconomic performance in the medium term** (Table A3.1). The projected average economic growth rate of 6.6 percent during 2022-2026 is higher than the 2.9 percent recorded during 2016-2021, but similar to the pre-pandemic level of 6.6 percent during 2015-2019 as the economy is expected to be back on track after rebounding from the pandemic. We assume a moderate increase in the interest rate in the next five years, given the normalization of monetary policy domestically and globally.

<sup>43</sup> Prepared by Byunghoon Nam, Senior Economist.

<sup>44</sup> Public DSA for the Philippines covers national government debt, which includes the national government debt held by local government units (LGUs) and social security institutions (SSIs), and debt created by the Bond Sinking Fund (BSF). The consolidated general government debt is lower than the national government debt as the intra-sector debt holdings and BSF are sizable, while LGUs hold a small amount of debt and SSIs do not have any debt. In 2020, general government debt recorded 48.1 percent of GDP, while national government debt was 54.6 percent of GDP.

## 5. Moderate fiscal consolidation efforts in the medium term are assumed (Table A3.1).<sup>45</sup>

The Philippine authorities are committed to gradually reducing the fiscal deficit in the medium term after peaking in 2021.<sup>46</sup> Considering that the average primary balance during 2015-2019 was -0.4 percent of GDP, the assumed primary balance deficits in the next five years are deemed moderate but achievable.

**Table A3.1. Macroeconomic and Fiscal Indicators**

	2017	2018	2019	2020	2021	2022p	2023p	2024p	2025p	2026p
<b>Macroeconomic indicators (Percent)</b>										
Real GDP growth	6.9	6.3	6.1	-9.5	5.7	6.9	6.5	6.5	6.5	6.5
GDP deflator	2.3	3.7	0.7	1.7	2.3	2.8	2.5	2.0	2.0	2.0
Effective interest rate	5.1	5.2	4.9	4.9	4.4	4.3	4.4	4.4	4.5	4.6
<b>Fiscal indicators (Percent of GDP)</b>										
Revenue	14.9	15.6	16.1	15.9	15.5	15.5	15.6	16.1	16.5	16.9
Expenditure	17.1	18.7	19.5	23.5	24.1	23.2	22.0	21.5	21.0	20.5
Fiscal balance	-2.1	-3.1	-3.4	-7.6	-8.6	-7.7	-6.4	-5.4	-4.5	-3.7
Primary balance	-0.2	-1.1	-1.5	-5.5	-6.4	-5.3	-3.9	-2.7	-1.8	-0.9

Source: PSA; Department of Finance; AMRO staff estimates

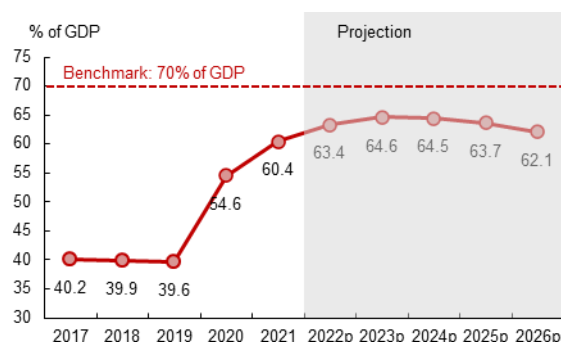
Note: The macroeconomic and fiscal indicators for 2022-2026 are based on AMRO staff projections.

### Baseline Debt and GFN Projections

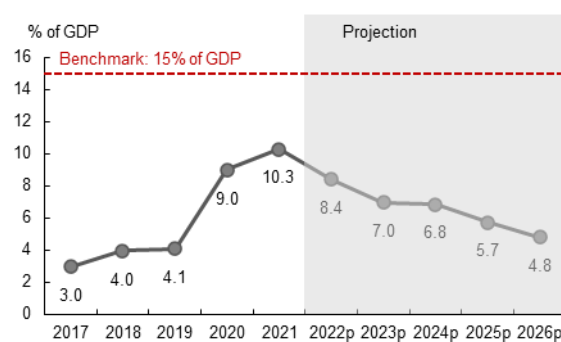
**6. The public debt-to-GDP ratio is projected to rise to 64.6 percent in 2023, still below the typical threshold for emerging market economies, and to start declining after 2024 (Figure A3.3).<sup>47</sup>** Developments of the primary balance and real GDP growth will be the main drivers of the debt dynamics, while the interest rate will make a relatively modest and stable contribution to the debt movements (Figure A3.5).

**7. GFNs are expected to fall significantly in 2022 and continue to remain below the threshold (Figure A3.4).<sup>48</sup>** Domestic amortization will decline in 2022 as the government refinanced matured short-term treasury bills with longer-term treasury bonds in 2021 (Figure A3.6). However, GFNs will remain higher than the pre-pandemic levels due to the moderate pace of fiscal consolidation.

**Figure A3.3. Public Debt**



**Figure A3.4. Gross Financing Needs**



<sup>45</sup> We assume that tax elasticity with respect to nominal GDP will return to the pre-pandemic level of 1.3. Despite continued cuts in the corporate income tax rate after 2022, other revenue-enhancing measures are expected to compensate for the loss of corporate income tax revenue. Capital expenditure is expected to be around 5-6 percent of GDP to support growth, while current non-interest expenditure is assumed to grow slowly.

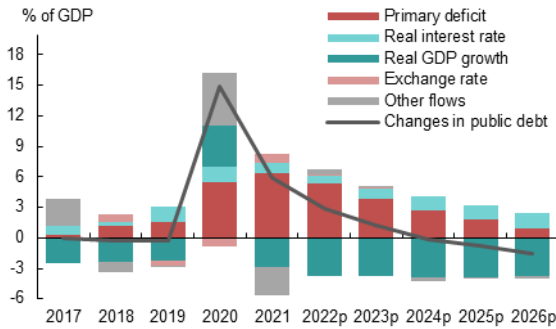
<sup>46</sup> According to DBCC held in December 2021, the fiscal deficit in percent of GDP is projected to decline from 8.6 percent in 2021 to 7.7 percent in 2022, 6.1 percent in 2023, and 5.1 percent in 2024. We assume a similar pace of fiscal consolidation until 2026.

<sup>47</sup> According to IMF-WB DSA in MAC (2013), the threshold for the public debt-to-GDP ratio for the emerging market is 70 percent.

<sup>48</sup> According to IMF-WB DSA in MAC (2013), the threshold for the GFN in percent of GDP for the emerging market is 15 percent.

Source: Department of Finance; AMRO staff estimates

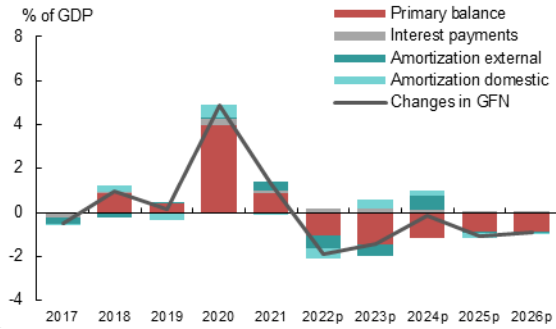
Figure A3.5. Debt Dynamics



Source: Department of Finance; AMRO staff estimates

Source: Department of Finance; AMRO staff estimates

Figure A3.6. Changes in GFN



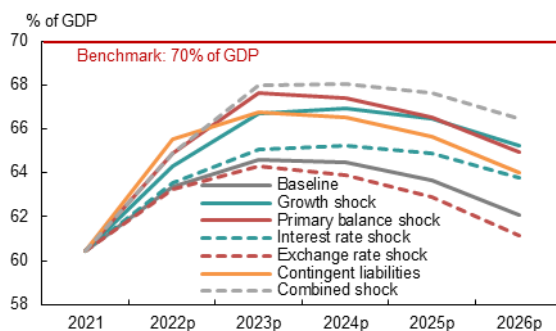
Source: Department of Finance; AMRO staff estimates

**Macro-fiscal Risks – Stress Tests**

**8. Stress test results suggest that public debt is susceptible to growth and primary balance shocks** (Figure A3.7).<sup>49</sup> Economic growth may slow down due to the resurgence of new more virulent variants of COVID-19 leading to tightening of containment measures and disruptions in economic activities. The primary balance could deteriorate due to either revenue shortfalls from setbacks in tax reforms or spending needs to support the economy. Meanwhile, the one-time realization of contingent liabilities will shift the public debt trajectory in the year of recognition. In all scenarios, the debt-to-GDP ratio stays below the threshold of 70 percent.

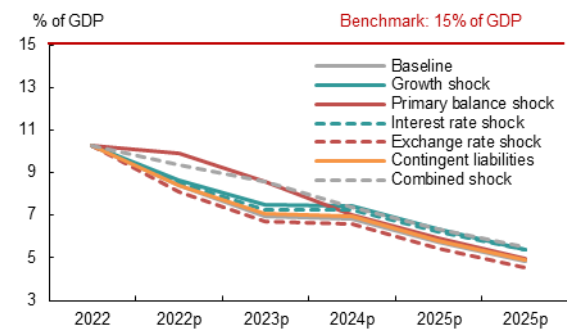
**9. The GFNs are sensitive to the primary balance shock** (Figure A3.8). The primary balance shock directly affects financing needs, while other shocks indirectly affect financing needs through the primary balance, interest payments, and amortization over time. Nevertheless, the GFN-to-GDP ratio remains below the benchmark of 15 percent despite the shocks.

Figure A3.7. Public Debt



Source: Department of Finance; AMRO staff estimates

Figure A3.8. Gross Financing Needs



Source: Department of Finance; AMRO staff estimates

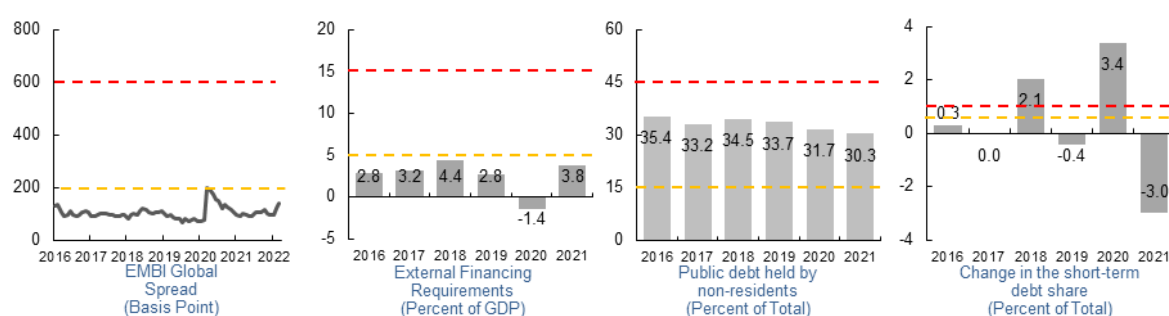
<sup>49</sup> The scenarios for the stress test are as follows: 1) Real GDP growth shock: one standard deviation or –1.0 percentage points shock to 2022 and 2023; 2) Primary balance shock: one standard deviation or –1.5 percent of GDP shock to 2022 and 2023; 3) Interest rate shock: +2 percentage points shock from 2022; 4) Exchange rate shock: one-time +5 percentage points shock in 2022; 5) Contingent liability shock: one-time 2.2 percent of GDP shock in 2022, by recognizing the accumulated contingent liabilities as of end-2021; 6) Combined shock: combination of growth (half size), primary balance (half size), interest rate, exchange rate shocks.

### Debt Profile Vulnerabilities – Early Warning

**10. Market perception of sovereign risk has remained low.** The EMBI Global spread, which reflects the market perception of risk, has remained below 200bp despite the pandemic and recent conflict between Russia and Ukraine (left panel in Figure A3.9). Low market perception of risk can be confirmed by the CDS spread, which showed similar movements to the EMBI Global spread. The Philippines has also succeeded in maintaining the investment grade of sovereign credit ratings by major credit agencies.

**11. Debt structure characteristics have been broadly sound** (three right panels of Figure A3.9). External financing requirements have stayed low, attributable to the stable amortization schedule of external public and private debt. The share of debt held by nonresidents is between lower and upper early warning thresholds, which implies moderate vulnerability to rollover and interest rate risks. However, this share has been on a downward trend as the authorities have relied more on domestic financing.<sup>50</sup> The annual change in the share of short-term debt in 2021 has turned negative.

Figure A3.9. Debt Profile Vulnerabilities



Source: Haver; Department of Finance; AMRO staff estimates

Note: 1) — — Lower early warning (25 percent of the benchmark), - - - Upper early warning (75 percent of the benchmark). See IMF (2013) for a detailed discussion; 2) EMBI global spreads are computed by monthly average of daily spreads; 3) External financing requirements = current account deficit + amortization of public external debt + amortization of private external debt; 4) Public debt held by nonresidents is based on the jurisdiction of issuance; 4) Short-term debt is based on the original maturity.

### Overall Assessment

**12. The standard DSA results reveal the overall risk of public debt sustainability to be low** (Figure A3.10). The public debt-to-GDP ratio and the GFNs in percent of GDP have remained below their corresponding thresholds in the past five years and are projected to be below the thresholds in the baseline and all the stress test scenarios over the projection period. Moreover, market perception of sovereign risk is low and the debt structure is broadly sound.

**13. However, careful macroeconomic and fiscal management is required to maintain debt sustainability.** Given that the public debt-to-GDP ratio is close to the threshold and sensitive to growth and primary balance shocks, the materialization of tail risks, such as a resurgence of a more virulent pandemic and tighter-than-expected global financial conditions, may push up the ratio, raising concerns about debt sustainability.<sup>51</sup> In addition, the elevated

<sup>50</sup> The authorities financed from domestic and external sources by 78:22 in 2021, and plan the ratio of 75:25 in the medium term.

<sup>51</sup> The stress tests for two standard deviation shocks of growth or primary balance (2 percent and 3 percent of GDP, respectively), instead of one standard deviation shock as in the standard stress test, result in the breach of the threshold.

debt-to-GDP ratio may persist without a swift reduction of the primary deficit.<sup>52</sup> On the financing side, although the GFNs are expected to remain moderate, a sudden shift in market sentiment and/or a rapid rise of financing costs may cause financing stress. Therefore, it is recommended that fiscal consolidation should be expedited if the economic recovery becomes self-sustaining.

**Figure A3.10. Heatmap of Public Debt Sustainability**

		2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Public Debt												
Gross Financing Needs												
Debt Profile	Market Perception of Sovereign Risk											
	External Financing Requirement											
	Public Debt Held by Non-residents											
	Change in Short-term Debt Share											

Sources: AMRO staff estimates.

Note: 1) For Public Debt and Gross Financing Needs, the cell is highlighted in green if the benchmark is not exceeded under all shocks or baseline, yellow if exceeded under any specific shock but not baseline, red if the benchmark is exceeded under baseline; 2) For Debt Profile, the cell is highlighted in green if the country value is less than the lower early warning benchmark, red if the country value exceeds the upper early warning benchmark, yellow if the country value is between the lower and upper early warning benchmarks.

## References

International Monetary Fund (2013). “Staff Guidance Note for Public Debt Sustainability Analysis in Market-Access Countries.” International Monetary Fund, Washington, DC.

<sup>52</sup> According to the baseline projection, the debt-to-GDP ratio is projected to rise further until 2023 as the primary deficit is expected to be higher than the debt-stabilizing primary deficit, which is estimated to be 2 to 3 percent of GDP.



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