AMRO Annual Consultation Report

The Philippines - 2020

ASEAN+3 Macroeconomic Research Office (AMRO)

June 2021

Acknowledgments

1. This Annual Consultation Report on the Philippines has been prepared in accordance with the functions of AMRO to monitor, assess and report its members' macroeconomic status and financial soundness, to identify relevant risks and vulnerabilities, and to assist them in the timely formulation of policy to mitigate such risks (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 January 15 to 26, 2021 (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 Ruperto Majuca, Senior Economist; Dr Byunghoon Nam, Senior Economist; and Dr Anne Oeking, Economist. 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 2020 was peer reviewed by Dr Chaipat Poonpatpibul, Group Head and Lead Economist and Mr Paolo Hernando, Senior Economist; format reviewed by Dr Nguyen Thi Kim Cuc and approved by Dr Hoe Ee Khor, AMRO Chief Economist.
3. The analysis in this Report is based on information available up to 25 May 2021.
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.

Disclaimer: The findings, interpretations and conclusion expressed in this Report represent the views of the staff of ASEAN+3 Macroeconomic Research Office (AMRO) and are not necessarily those of its members. Neither AMRO nor its members shall be held responsible for any consequence of the use of the information contained herein.

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Executive Summary

1. The Philippine economy plunged into a recession in 2020 as a result of the crucial measures implemented to contain the COVID-19 pandemic. The economy contracted by 9.6 percent in 2020, largely owing to the impact of extended lockdown measures introduced to contain the recurrent and persistently high number of infections. As a result, about 2.6 million jobs were lost in 2020, almost reversing all the gains in employment since 2016.

2. The economy has started recovering as the restrictive measures were gradually relaxed beginning in Q2 2020, but further recovery will likely be moderate. After an initial rebound in Q3 2020, the recovery momentum will depend on the pace of further reopening the economy, the restoration of confidence, and the strength of policy support. A quick rollout of vaccination will help boost consumer and business confidence. Until a critical mass of the population gets vaccinated, targeted restrictive and social distancing measures may still need to be kept in place. Businesses will also likely remain cautious during the process of adjusting to the new environment. As a result, the pace of economic recovery will be constrained.

3. Inflation remained relatively low and stable for most of 2020, then began to pick up in late 2020 and breached the 2-4 percent target range in early 2021. The inflationary pressure comes mainly from rising food and oil prices. Although transitory in nature, it will likely persist for a few months, as food supplies such as pork take time to return to normal and the low base effect from oil prices will persist in the first half of 2021. As food supply gradually normalizes and government efforts to dampen food prices take effect, inflation will subside in line with more subdued demand conditions. On average, inflation may stay above the target range in 2021 before falling within the range again in 2022.

4. The external position improved markedly with international reserves rising to record high levels. The current account shifted to a surplus of USD13.0 billion in 2020, or 3.6 percent of GDP, as collapsing domestic demand sharply narrowed the goods trade deficit. Capital flows became more balanced following a large outflow in Q1 and started to increase thereafter, in part supported by the government's large external borrowings, mainly from multilateral development banks (MDBs). Continued improvements in the overall balance of payment pushed international reserves to USD105.2 billion as of February 2021, which is more than sufficient to cover the country's short term external funding needs. The exchange rate of the Philippine peso against the U.S. dollar has appreciated markedly.

5. Liquidity was quite ample and financial market dislocations in early 2020 were quickly corrected due to the Bangko Sentral ng Pilipinas' (BSP) unprecedented policy responses. However, loan growth continued to decelerate, because of subdued demand and tightened lending standards. The growth rate of total loans (net of BSP reverse repurchase agreements) declined from 9.3 percent in December 2019 to a negative 4.2 percent in March 2021. Looking ahead, loan growth may gradually stabilize and turn positive as the economy recovers and banks become less risk averse.

6. Fiscal expenditure was reprioritized to address the health crisis in 2020. The Bayanihan I law, enacted in response to COVID-19, provided the President with the emergency power to realign budget priorities. The budget related to pandemic containment and mitigation of its adverse impacts was significantly increased, providing critical liquidity and income support to businesses and households during the economic lockdown. However, the reallocation of budget resources was done mostly at the expense of capital spending.

7. Government borrowing was increased sharply to meet revenue shortfalls. The Philippine government raised both domestic and external borrowing to cover its large fiscal deficit. As of end-2020, total government debt increased by 26.7 percent to PHP9.8 trillion, equivalent to 54.5 percent of GDP. Domestically, the government mainly increased the issuance of government securities in the bond market, supplemented by short-term borrowing from the BSP. Externally, the government sourced most of the funds from MDBs.

8. The Philippine economy continues to face multiple risks and challenges on the recovery path. Most of the risks are to the downside, including prolonged and recurrent waves of COVID-19 infection, potential financial distress in the business sector with the withdrawal of regulatory forbearance, and lower potential growth owing to the scaring effect of COVID-19 in the medium to long-term.

9. The government's four-pillar strategy has provided critical support for containing the pandemic, mitigating the adverse impacts, and reviving the economy. The fiscal deficit widened from 3.4 percent of GDP in 2019 to 7.6 percent in 2020, however, the size of fiscal stimulus was relatively modest compared with regional peers. Fiscal policy in 2021 is expansionary and supportive of recovery. Considering that the recovery is still nascent, further fiscal support would be critical if the growth momentum is weaker than expected and if the economy were to falter. In addition, the government's effort to enhance the implementation capacity of line agencies should continue.

10. Monetary and regulatory policy responses have been swift and effective in easing monetary conditions and ensuring ample liquidity in the financial system, but less successful in stimulating credit growth. To better support the recovery, more efforts should be placed on enhancing the effectiveness of monetary transmission and supporting credit expansion. The BSP's effort to allow banks' increased lending to MSMEs to qualify as alternative compliance of the reserve requirement, and to apply zero risk weights for loans covered by government guarantee programs are important measures. The BSP should collaborate with other government agencies to offer banks greater incentives to lend more to the business sector, especially MSMEs.

11. The development of financial risks should be closely monitored, while the intervention and resolution framework should continue to be strengthened. The withdrawal of regulatory forbearance should be based on a comprehensive assessment of the prevailing economic and financial situations. Although the economy has entered the recovery phase, the asset quality could continue to deteriorate for a while. The typical inverted U-shaped trajectory of non-performing loans (NPLs) indicates that efforts to resolve the problem assets can stretch beyond the current policy cycle. It is important for the BSP to coordinate closely with its stakeholders and other government agencies when deciding on the extension or withdrawal of relief measures to avoid a cliff effect.

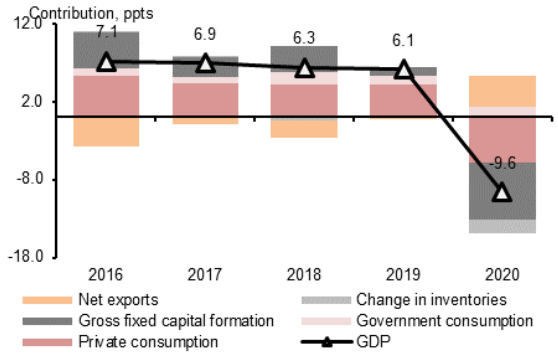
12. Structural policies and reforms are needed to enhance the resilience of the economy and facilitate the transition to the post-pandemic new normal. More efforts should be directed to addressing vulnerabilities and weaknesses revealed by the COVID-19 pandemic, including weaknesses in the current configuration of supply-chains, inadequate healthcare and social security systems, low financial inclusiveness, and infrastructure gaps. The government's efforts to promote digitalization, invest in infrastructure, and improve the "doing business" environment, will help facilitate the process.

A. Recent Developments and Outlook

A.1 Real Sector Developments and Outlook

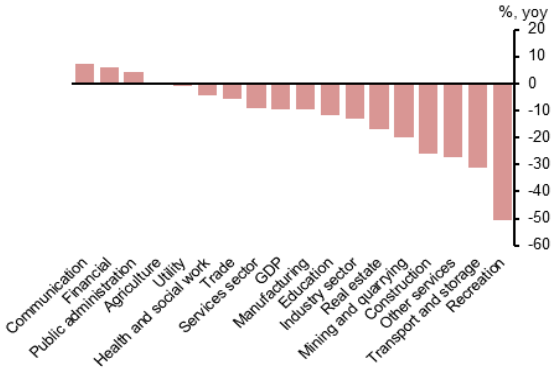
1. The Philippine economy plunged into a recession as a result of the necessary measures taken to contain the COVID19 pandemic in 2020. The economy contracted by 9.6 percent (Figure 1), largely owing to the impacts of extended lockdown measures[1] to contain the persistent and relatively high number of infections. The collapse of domestic demand was broad-based and particularly acute in the sectors needing physical contact and close engagement, including most of the service sub-sectors (Figure 2). The recreation[2], transport and storage, construction, mining and quarrying, and real estate sectors recorded a contraction of 16 to 50 percent. Consequently, imports contracted sharply, exacerbated by the government's scaling back of investment spending to leave more resources for combating the pandemic.

Figure 1. Real GDP Growth by Expenditure



Source: PSA, AMRO staff calculations.

Figure 2. GDP Growth by Sector in 2020

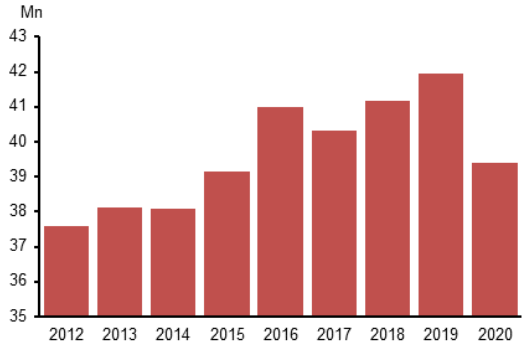


Source: PSA, AMRO staff calculations.

2. The labor market has suffered huge loss of jobs, particularly in the hardest hit sectors. Overall, the labor market lost 2.6 million jobs in 2020, almost reversing all the gains in employment in the past four years, with employment declining to the levels last seen in 2015 (Figure 3). As the government relaxed the social distancing measures and businesses adapted their operations to the new environment, some short-term disruptions to the labor market were partially resolved. Labor participation rate briefly bounced back from a low of 55.7 percent in April to the pre-pandemic levels of 61.9 percent in July then declined to 58.7 percent in October. Meanwhile, the unemployment rate declined from the peak of 17.6 percent in April 2020 to 7.1 percent in March 2021, while the underemployment rate fell from 18.9 percent to 16.2 percent in the same period (Figure 4). Despite these improvements, the levels of unemployment and underemployment rates are still much higher than the pre-COVID levels, indicating a significant slack in the labor market. The large number of returning overseas Filipino workers (OFWs) has further exacerbated the situation.

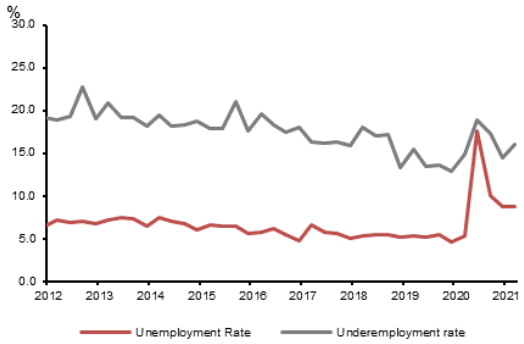
[1] The Philippine government has deployed a wide array of measures to contain the pandemic, arguably the most stringent and the longest lockdowns. The Philippine government was one of the earliest to introduce lockdown measures in March 2020. Since mid-March, the lockdown policies have been refined and adjusted several times into a more targeted, multilayered community quarantine framework. Although the government had started lifting restrictions since early June, the quarantine measures have never been fully lifted. General Community Quarantine measures for the National Capital Region was further extended in April 2021 along with some other cities showing clusters of high infections. While these restrictive measures are necessary to bring the infections to manageable levels, they also inevitably have caused significant losses to the economy.
[2] Recreation refers to recreational, cultural and sporting activities; real estate refers to real estate, renting and business activities.

Figure 3. Employment



Source: PSA, AMRO staff calculations.

Figure 4. Unemployment and Underemployment



Source: PSA, AMRO staff calculations.

3. The economy has started recovering as restrictive measures were gradually relaxed, but further recovery will likely be moderate. After the initial bounce back in 2020, the recovery momentum will depend on the pace of further reopening of the economy, restoration of confidence, and the strength of policy support. A quick rollout of vaccination will accelerate the reopening process and help boost consumer and business confidence. The government has set a target vaccinating about 70 percent of the population in 2021 and the rest in 2022, but might not be able to secure sufficient quantity and timely delivery of the vaccines in 2021. Until a critical mass of the population gets vaccinated, targeted restrictive and social distancing measures may still need to be kept in place. Businesses will also likely remain cautious in the process of adjusting to the new environment. Taking the planned fiscal stimulus and government's vaccination target in 2021 into account, the economy is estimated to grow by 6.4 and 6.8 percent in 2021 and 2022 respectively.

Authorities View

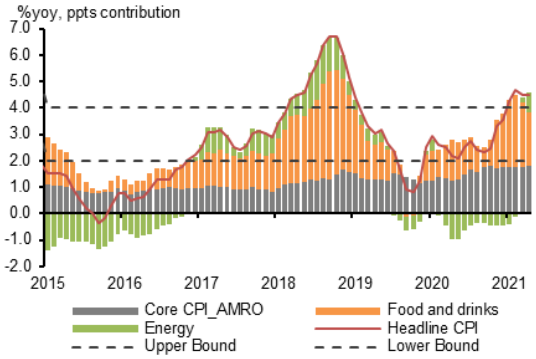
4. *The authorities generally agreed that consumer and business sentiment could remain subdued until a vaccine becomes available for mass use, but highlighted that recent improvements in mobility indicators could indicate that firms and households are beginning to adjust to the post-pandemic operating environment, which could support resurgence in economic activity in the near term.*

5. Inflation remained generally low and stable for most of 2020, but has started to pick up since late 2020 as a result of supply disruptions. The COVID-19 pandemic and a series of strong typhoons in Q4 2020 have caused transitory inflationary pressures on some goods and services, such as food. Rising food prices has pushed inflation to trend higher since November 2020. Consequently, headline CPI has risen from below 3 percent to 3.5 percent in December 2020, and has increased further to 4.7 percent in February 2021, before settling at 4.5 percent in March and April. On average, headline inflation edged up slightly from 2.5 percent in 2019 to 2.6 percent in 2020, while core CPI (excluding selected food and energy items) declined from 3.3 percent to 3.1 percent.

6. The inflationary pressure could persist for some time, annual inflation will likely stay above the 2-4 percent target range in 2021. Food supply, such as pork and vegetables will take some time to normalize, hence, the current shortage could sustain price pressure in the short term. Besides, the low base effect of oil price in early 2020 also contribute to higher headline numbers in the first half of 2021. The surge in commodities prices in the past several

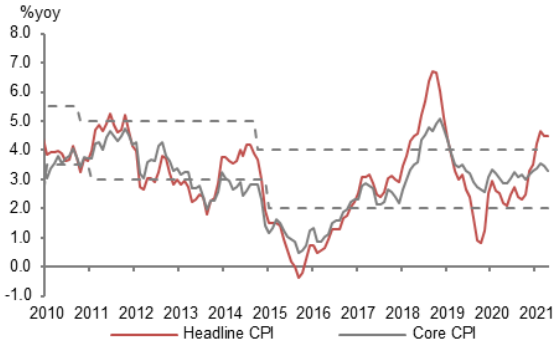
months indicates that supply side inflationary pressure could persist longer-than-expected. Although the introduction of a 60 day price freeze on pork and chicken in Metro Manila by the government in February and temporary lowering of import tariff on rice and pork in May will help to dampen food price inflation, inflation may stay relatively high and headline CPI is projected to average 4.3 percent in 2021. However, because of the transitory nature of inflationary pressure and the still large output gap, annual inflation will return to within the target range in 2022.

Figure 5. Inflation by Items



Source: PSA, AMRO staff calculations.
Note: Inflation data are 2012 based. Here core inflation is calculated by AMRO to exclude all food and energy related components.

Figure 6. Headline CPI and Core CPI

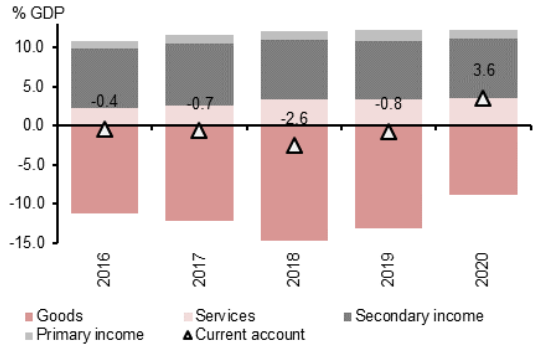


Source: PSA, AMRO staff calculations.
Note: Core CPI in this chart is from PSA, which excludes only selected food and energy items.

A.2 External Sector and the Balance of Payments

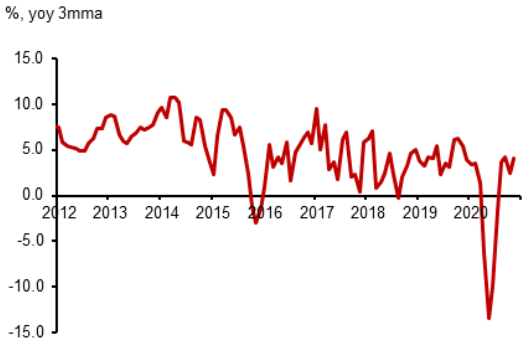
7. The current account shifted to a large surplus in 2020, largely because of a sharp contraction in domestic demand. The current account recorded a surplus of USD 13.0 billion in 2020, or 3.6 percent of GDP, reflecting a sharp narrowing of goods trade deficit as collapsing domestic demand sharply reduced goods imports (Figure 7). The goods trade deficit narrowed from USD49.3 billion in 2019 (or by 35.5 percent) to USD31.8 billion in 2020. At the same time, FX receipts from primary and secondary income accounts also declined somewhat, while trade-in services posted a slight increase.

Figure 7. Current Account



Source: PSA, BSP, AMRO staff calculations.

Figure 8. Overseas Workers' Remittances



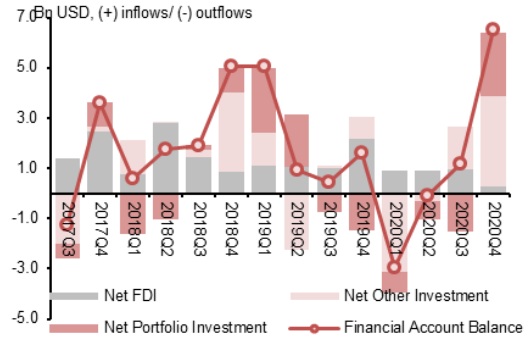
Source: BSP, AMRO staff calculations.

8. Overseas workers' remittances remained quite resilient. Although overseas remittances slumped at the height of the global pandemic in Q2 2020, it rebounded quite quickly to positive growth starting in June 2020. As a result, overseas workers' remittances declined only 0.8 percent in 2020 (Figure 8). By region, remittances from Asia and America

continued to grow, while remittances from the Middle East and Europe dropped sharply. (For a more detailed discussion of remittances, please refer to Selected Issue 1 in the Annex)

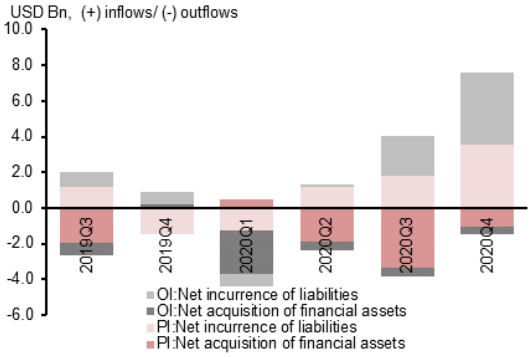
9. Capital flows reversed from an outflow in H1 2020 to a strong inflow in H2 2020, in part supported by the government's large external borrowings. In Q1 2020, financial account recorded an outflow of USD2.9 billion, mostly through portfolio and other investments (Figure 9). The outflows stemmed largely from a spike in risk-aversion as a result of global financial market turbulence in March 2020 and the outbreak of COVID-19 pandemic. Cross border capital flows became more or less balanced in Q2 2020 and started to increase thereafter, as foreign investors gradually returned to the Philippine markets and the government increased external borrowing significantly (Figure 10). At the same time, the financial account received USD3.0 billion through direct investment in 2020. Overall, the financial account recorded a net inflow of USD4.6 billion in 2020.

Figure 9. Financial Account



Source: BSP, AMRO staff calculations.

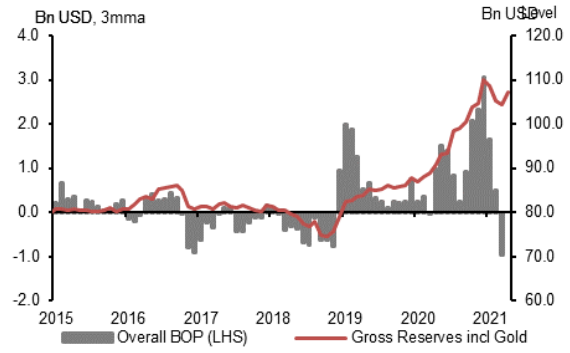
Figure 10. Portfolio and Other Investments



Source: BSP, AMRO staff calculations.

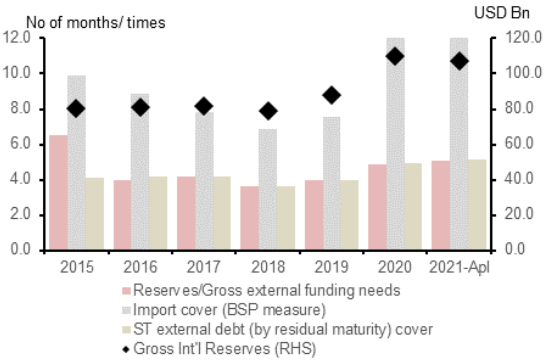
10. As a result, the overall BOP recorded a large surplus and international reserves rose to record high levels. The gross international reserves rose to USD110.1 billion as of December 2020 then dipped to USD107.7 billion as of April 2021. The level of international reserves is equivalent to 12.3 months' worth of imports of goods and payments of services and primary income, and about 5.2 times the country's short-term external debt based on residual maturity.

Figure 11. Gross International Reserves



Source: BSP, AMRO staff calculations.

Figure 12. Adequacy of International Reserves

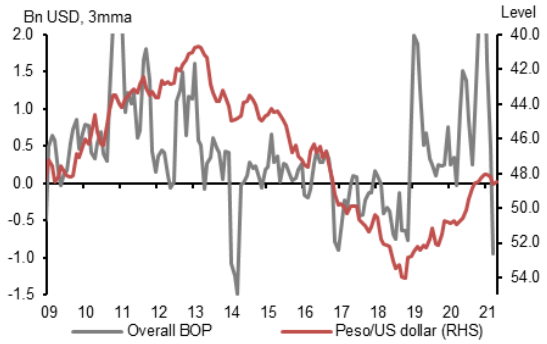


Source: BSP, AMRO staff calculations.

11. The peso exchange rate has strengthened markedly in 2020, becoming one of the strongest currencies in the region. The exchange rate of peso against the US dollar appreciated markedly from late March to August 2020. It stabilized thereafter at slightly above

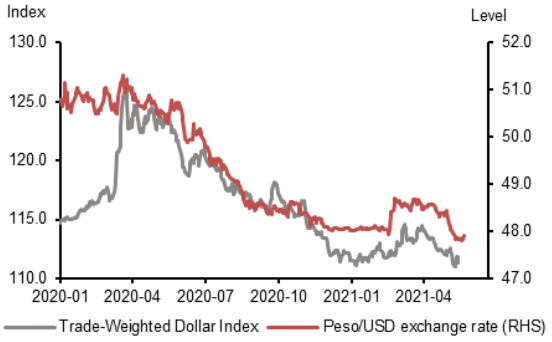
48. Overall, the peso exchange rate against the US dollar appreciated by 5.4 percent in 2020. The strengthening of peso exchange rate was attributable to two factors. First, it was driven by the improvements in the BOP (Figure 13). Second, it was also supported by the weakening of the US dollar during the March to December period (Figure 14). In early 2021, the exchange rate of the peso against the US dollar further strengthened to slightly above 47.

Figure 13. BOP and Peso Exchange Rate



Source: BSP, AMRO staff calculations.

Figure 14. Peso and US Dollar Exchange Rate in 2020

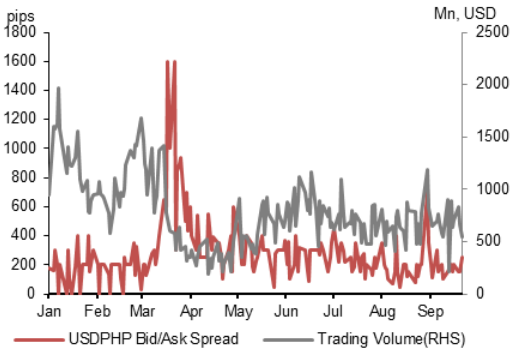


Source: BSP, Fed, AMRO staff calculations.

A.3 Monetary Condition and Financial Sector

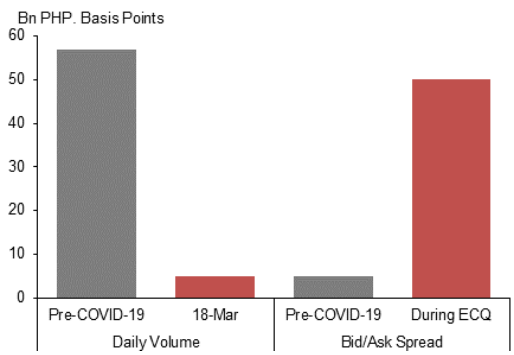
12. Financial markets have generally returned to normal after some dislocations in early 2020. In March 2020, particularly during the turbulence in global financial markets, the functioning of the FX market and bond market was severely impaired. The dislocations in the financial markets manifested itself in several ways, including very low trading volume, abnormally high bid/ask spread and low demand for new issuances of government securities. In the FX market, the bid/ask spread for the peso against the US dollar spiked from 200 pips to above 1000 pips when lockdown measure was introduced. The daily trading volume of peso declined from USD800-1000 million to only USD200-400 million during the period of enhanced community quarantine (ECQ) (Figure 15). The government bond market was in a similar situation. The lack of buying interest caused bid/ask spreads to widen to 50 basis points during the ECQ period, ten times more than the 5 basis points in the first two months of 2020 (Figure 16). Market functioning was quickly restored after the BSP deployed a series of liquidity support and relief measures.

Figure 15. FX Market Conditions in 2020



Source: Bloomberg, AMRO staff calculations.

Figure 16. Government Bond Market Conditions

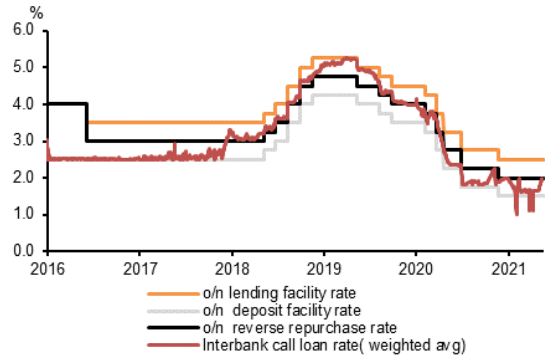


Source: BSP, AMRO staff calculations.

13. Liquidity was quite ample, because of the BSP's policy operations. The BSP's successive policy rate cuts of 200 basis points, and a reserve requirement ratio (RRR) cut of

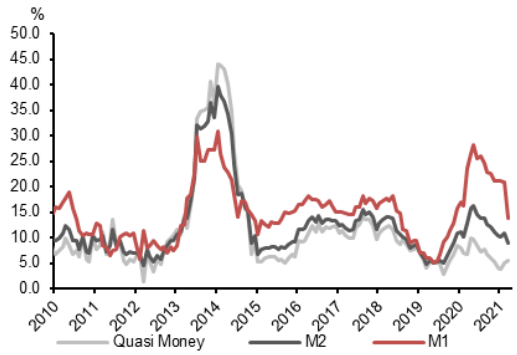
200 basis points, together with other open market operations and regulatory relief measures, have greatly increased the liquidity in the banking system and financial markets. The weighted interbank call loan rate registered a steeper decline than the policy rate cuts, from around 4.0 percent at end-2019 to close to the 1.5 percent lower bound of the interest rate corridor (Figure 17). Volume indicators also improved significantly including M2 (Figure 18). The ampleness of liquidity was also reflected in banks' oversubscriptions to the Term Deposit Facility (TDF) offered by the BSP.

Figure 17. Policy Interest Rate



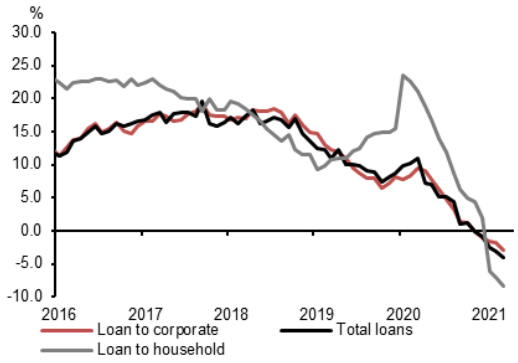
Source: BSP, AMRO staff calculations.

Figure 18. Money Aggregate Growth



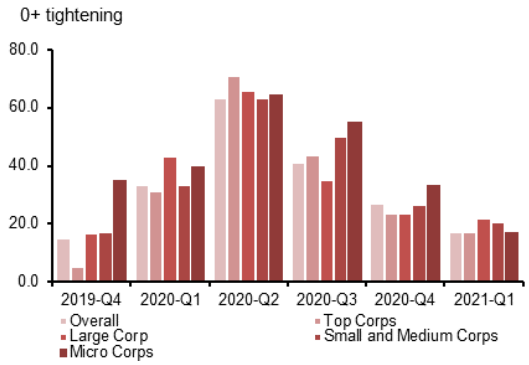
Source: BSP, AMRO staff calculations.

Figure 19. Bank Loan Growth



Source: BSP, AMRO staff calculations.

Figure 20. Bank Lending Standards



Source: BSP, AMRO staff calculations.

14. However, loan growth continued to decelerate, due to subdued demand and tightened lending standards. Total loan[3] (net of interbank loans and reverse repurchase transactions) growth declined from 9.3 percent in 2019 to a negative 4.6 percent in April2021 (Figure 19). While the slowdown in loan growth was broad-based, the administrative services, financial services, construction, utilities[4] and agriculture recorded the steepest decline in loan growth. Meanwhile, loan growth to households also registered a sharp slowdown and started to contract in 2021. Looking ahead, loan growth will gradually stabilize and start to moderately recover as the economy recovers and banks become less conservative about lending. The BSP's Senior Bank Loan Officers Survey showed that the degree of tightening of lending standards in Q1 2021 has further lessened (Figure 20).

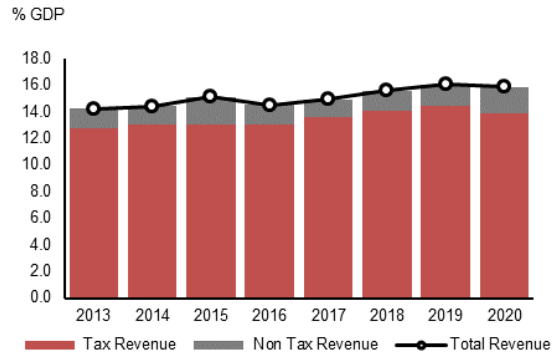
A.4 Fiscal Sector

15. Fiscal revenue was hard hit by the economic downturn. Tax revenue dropped by 11.4 percent in 2020, reflecting the steep economic downturn. However, because of the

[3] Total loan to both residents and nonresidents of the whole banking sector.
[4] Here utility refers to water supply, sewerage, waste management and remediation.

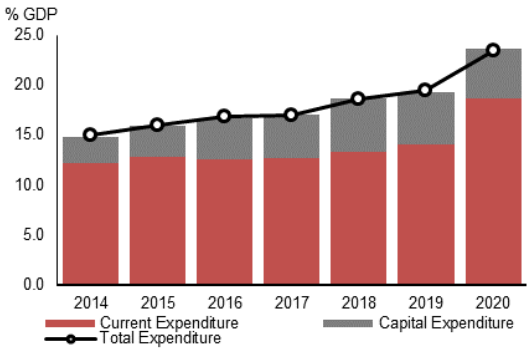
government's strenuous efforts to mobilize resources, the non-tax revenue rose by 13.5 percent. As a result, the overall fiscal revenue managed to register a smaller decline of 9.0 percent in the same period. As percentage of GDP, fiscal revenue was steady at 15.9 percent in 2020 with an increase in non-tax revenue offsetting most of the decline in tax revenue.(Figure 21)

Figure 21. Fiscal Revenue



Source: Bureau of Treasury, PSA, AMRO staff calculations.

Figure 22. Fiscal Expenditure



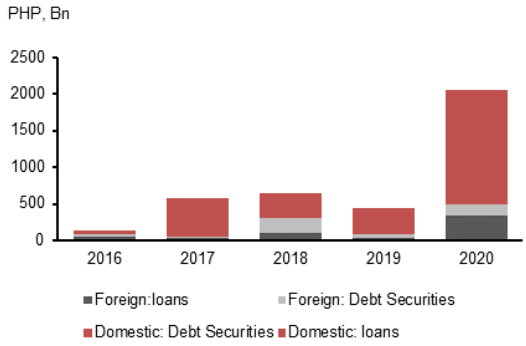
Source: Bureau of Treasury, PSA, AMRO staff calculations.

16. Fiscal expenditure was reprioritized to address the health crisis. The Bayanihan I law[5] provides the President with the emergency power to realign budget priorities. The budget related to pandemic containment and mitigation of its adverse impacts was significantly increased, providing critical liquidity and income support to businesses and households during the economic lockdown. However, the reallocation of the budget was mostly at the expense of capital spending[6]. As a result, current spending increased sharply from 14.0 percent of GDP in 2019 to18.5 percent of GDP in 2020, whereas capital spending declined from 5.3 percent of GDP to 4.9 percent of GDP (Figure 22). Consequently, fiscal expenditure increased from 19.5 percent of GDP in 2019 to 23.6 percent of GDP in 2020.

17. Government borrowing increased significantly to meet the revenue shortfalls in 2020. The Philippine government raised both domestic and external borrowing in 2020, with the aim of achieving a split of 75:25. As of end December, total government debt increased by PHP2.1trillion to PHP9.8 trillion, from 39.6 percent of GDP in 2019 to 54.6 percent of GDP in 2020 (Figure 23-24). In domestic borrowing, the government mainly increased issuance in the local bond market and borrowed directly from the BSP. The BSP's purchase of government securities in the secondary market also indirectly helped the market to absorb the government securities issuance in 2020 (see Box A for details). As for external borrowing, the government borrowed mostly from multilateral development banks. The government also issued US dollar bonds in the international bond market[7].

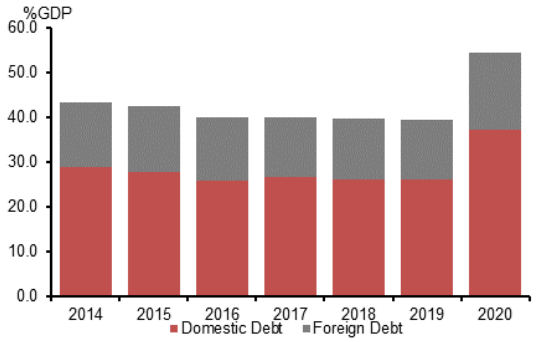
[5] Bayanihan law refers to the Bayanihan to Heal as One Act, commonly known as Bayanihan I and the Bayanihan to Recover as One Act, commonly known as Bayanihan II.
[6] Although reallocations from capital spending were made in 2020 to fund COVID-19 emergency measures, these came from the less priority areas which can no longer be implemented nor completed during the year because of the pandemic pursuant to Bayanihan I. It may be noted that while capital spending was down by 22.8 percent year-on-year5 (from P881.7 billion in 2019 to P681.1 billion in 2020), it exceeded the revised target of P609.3 billion6 by P71.8 billion or 11.8 percent. This is primarily attributed to the acceleration of public works towards the end of second semester with the gradual reopening of the economy and lifting of COVID-19 restrictions. Efficiency measures were also conducted with the issuance of National Budget Circular7 on the adoption of economy measures to save costs from overhead expenses and channel them to COVID-19 expenditures, thereby softening the realignment from other priority sectors.
[7]. In April, 2020, the government issued USD 2.35 billion of 10-year and 25-year U.S. dollar-denominated bonds. In December, 2020, the government issued another USD 2.75 billion of 10.5-year and 25-year U.S. dollar-denominated bonds.

Figure 23. Government Net Borrowing



Source: Bureau of Treasury, PSA, AMRO staff calculations.

Figure 24. Government Debt

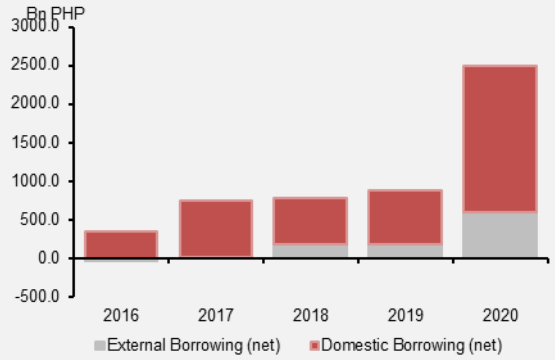


Source: Bureau of Treasury, PSA, AMRO staff calculations.

Box A. Government Financing and Central Bank Support[8]

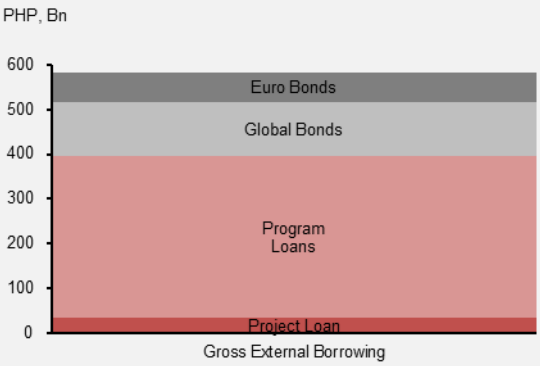
The Philippine government ramped up borrowing significantly in 2020 to meet the revenue shortfalls for combating adverse impacts of the pandemic. Overall, government net borrowing more than tripled from PHP876.3 billion in 2019 to PHP2499.2 billion in 2020 (Figure A1.1). Despite the sharp increase in borrowing, the government has maintained a healthy split between domestic and external borrowing. In 2020, PHP1898.4 billion or 76 percent of the fund was sourced domestically, while external borrowing accounted for 24 percent.

Figure A1.1 Government Financing



Source: Bureau of Treasury, AMRO staff calculations.

Figure A1.2 Government External Borrowing in 2020



Source: Bureau of Treasury, AMRO staff calculations.
Note: Global Bonds refer to USD-denominated bonds.

Externally, the government sourced most of the fund from development partners. In 2020, the government borrowed PHP448.9 billion in the form of project and program loans from development partners, including the World Bank and Asian Development Bank (Figure A1.2). These loans accounted for 68.1 percent of gross external financing in 2020. Meanwhile, the government also accessed the global bond market by issuing US dollar and euro-denominated bonds. The government issued foreign currency denominated bonds three times in 2020. In January, the government issued USD1.32 billion (EUR1.2 billion) euro denominated bonds. In April and December, the government issued USD2.35 billion and USD2.75 billion of 10.5-year and 25-year US dollar denominated bonds respectively[9].

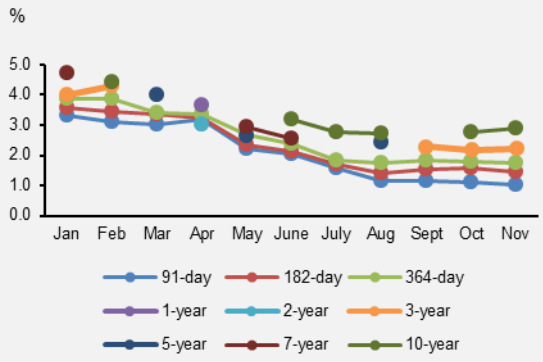
[8] Prepared by Zhiwen Jiao.
[9] These bonds were offered in January, April and December 2020, but the transaction were settled in February, May and December.

Domestically, the government borrowed mostly by issuing government securities in the local bond market. In 2020, PHP3.2 trillion of government securities was issued in the domestic bond market, 91.2 percent higher than in 2019. Of the large amount of issuance, PHP1705.8 billion was treasury bills, accounting for 52.6 percent. PHP606.7 billion was conventional treasury bonds, accounting for 18.7 percent. Besides, the government also issued PHP827.2 billion of retail bonds, which made up 25.5 percent of total issuance.

Meanwhile, the government also borrowed directly from the Bangko Sentral ng Pilipinas (BSP). Legally the central bank is not allowed to directly finance government deficit, however, the Central Bank Act allows the BSP to make temporary advances to the government of up to 20 percent of the government's average revenue in the past three years. Moreover, the Bayanihan II law allows the BSP to extend credit worth an additional 10 per cent of the government's average revenue in the past three years for up to two years. Under these laws, the government chose to borrow PHP300 billion in the form of repurchase agreement for three months in March 2020 and extended it for another three months in June. After the agreement expired in September, the government increased its borrowing to PHP540 billion for three months and repaid it in December 2020 and borrowed it again in January 2021.

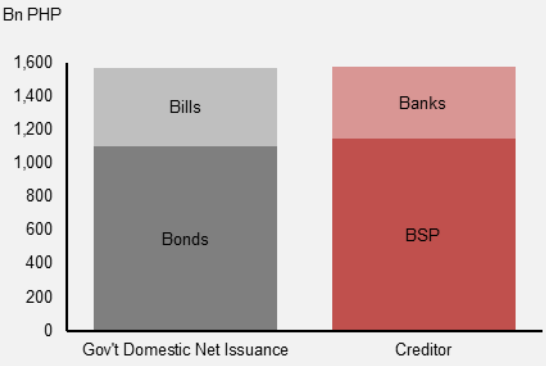
Aside from the direct financing support, the BSP has also provided considerable support indirectly. First, the ample liquidity in the market and banking system engineered by the BSP's timely and forceful policy actions has provided a very low cost environment for government funding (Figure A1.3). Second, the BSP's strong commitment to maintain smooth bond market function by providing liquidity for trading illiquid securities in the secondary market greatly improved market confidence and participation. More importantly, the BSP's commitment to an open-ended purchase of government securities in the secondary market effectively allows market players to unload illiquid old government securities to the central bank and take in those newly auctioned in the primary market. This was confirmed by an increase in claims on the government in the central bank's balance sheet. In 2020, excluding the PHP540 billion direct lending, the BSP's claims on the government increased sharply by PHP1,151.6 billion, while commercial banks' claims on the government only increased by PHP427.6 billion (Figure A1.4).

Figure A1.3 Government Securities Yields at Issuance in 2020



Source: Bureau of Treasury, AMRO staff calculations.

Figure A1.4 Government Net Issuance and its Main Creditors in 2020

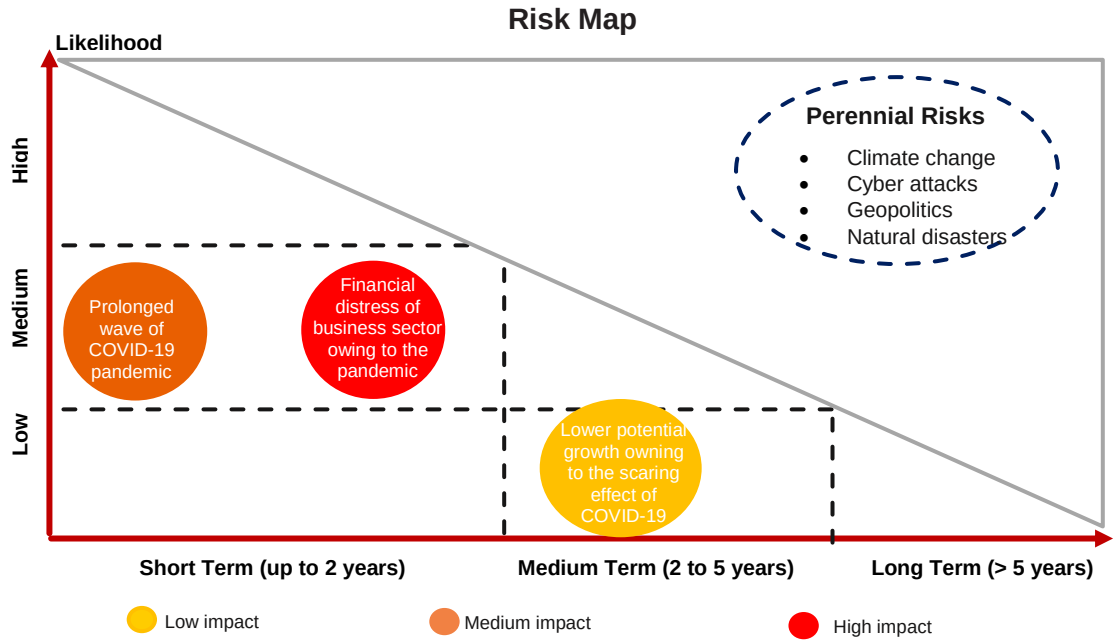


Source: Bureau of Treasury, BSP, AMRO staff calculations.

The central bank's support for government financing remains necessary in the short term. The sharp increase in borrowing in 2020 and the need to provide fiscal support for a robust economic recovery imply that the financing needs of government will remain relatively large for a few years. As the government commits to borrowing mainly from the domestic market, it will pose challenges to domestic financial institutions to absorb the large amount of issuance on their own. Thus, the BSP's financing support still seems indispensable in the short term to ensure smooth government securities issuance at reasonably low costs.

B. Risks, Vulnerabilities and Challenges

18. The Philippine economy continues to face multiple risks and challenges on the recovery path. Risks to recovery may come from another prolonged wave of COVID-19 infections, potential financial distress of businesses in the short-term, and possibly lower potential growth owing to the scarring effects of the pandemic in the medium- to long-term. Mitigation of these risks mainly hinge on the effective containment of COVID-19 infections, a calibrated reopening of the economy and speedy passage and implementation of key reforms.



Source: AMRO.

B.1 Near-term Risks to the Macro Outlook

19. The successful development of several COVID-19 vaccines with high efficacy rates have raised the hope of ultimately overcoming the pandemic and removing all the restrictive measures, but significant challenges and uncertainties remain. These include the availability and procurement of vaccines, the timing of approval of the vaccines, the distribution and logistical challenges of rolling out the vaccines, the financial cost, people's willingness to be vaccinated and the efficacies of the vaccines. The Philippines seems to be having a slow start in vaccination[10]. Although the government may have secured enough orders of vaccine in the pipeline[11], their delivery remain uncertain. Moreover, the entry and spread of new variants could pose risks to the efficacy of vaccines and capacity of healthcare system. Meanwhile, the number of new infection cases is still quite high in early 2021, delaying the reopening the economy[12]. Before a sufficiently large number of people get vaccinated, the risk of a resurgence of new infections will continue to linger on. Thus, certain movement restrictions and social distancing practice may still need to be in place. Consequently, the economy cannot fully return to normal, hindering its recovery.

20. The downside risk from external demand has been reduced as result of a stronger global economic recovery due to large fiscal stimulus in the US and continued

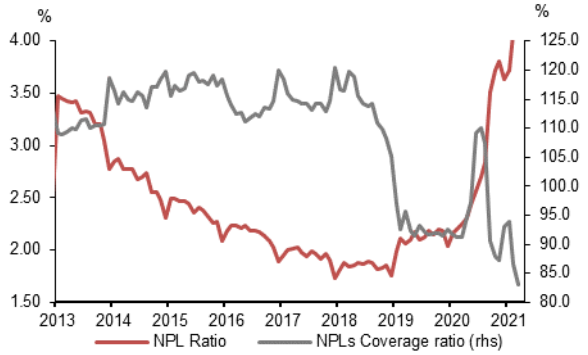
[10] https://newsinfo.inquirer.net/1397910/vaccine-czar-apologizes-duterte-gets-impatient.
[11] https://www.bloomberg.com/news/articles/2021-02-16/philippines-says-covid-vaccine-orders-enough-to-hit-2021-goal.
[12] The Philippine government decided to extend GCQ for Metra Manila to end-March, 2021, which has put the capital region in lockdown for more than a year.

vaccination efforts in Europe. However, the benefit to the Philippine economy may be limited. First, the lower integration of the Philippine economy into the global economy constrains the extent the country can benefit from a stronger global recovery**.** Second, the very uneven progress on vaccination in different economies requires restrictive measures to be in place for quite some time, which will continue to constrain a service-dominant economy in the Philippines. For example, it is difficult to fully open the country for tourism. The resurgence of a new wave of infection globally since March 2021**,** the new virus strains, and inefficient vaccination in many countries, have raised the possibility that the current pandemic can persist at a dangerous level for much longer than expected. Thus, even though the downside risk has diminished, external uncertainty remains high.

21. A faster recovery in the advanced economies supported by their massive fiscal stimuli could lead to capital outflows, but this is more like a tail risk in 2021. Although the Fed has been communicating with the market that it has no intention to change the current easy monetary policy stance any time soon, the market has started to price in an earlier taper than the one implied by the Fed dot plot. If the Fed were to tighten earlier than currently expected, global financial conditions could tighten leading to capital outflows from emerging markets. However, the Philippine economy should be able to weather this risk. The relatively small presence of foreign investors in domestic financial markets would limit the magnitude of outflows, while a flexible exchange rate, the improved macro prudential policy framework, and high international reserves would provide a sufficient buffer to any potential outflow.

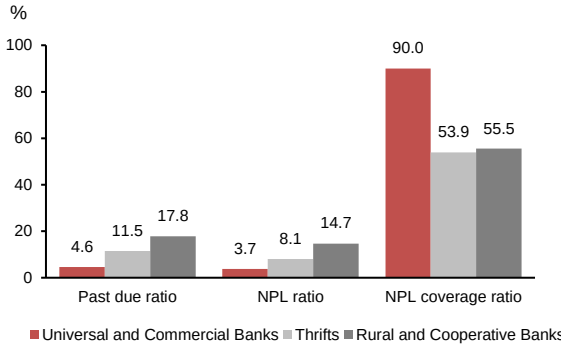
22. Overall financial risk of the banking sector remains manageable in the short-term, but some banks may face financial difficulties. Although the economy has started to recover, the quality of banking assets could continue to deteriorate for a while until the economy regains sufficient strength to support normal business activities. The NPL ratio rose from 2.0 percent in December 2019 to 4.4percent in April 2021, while the past due ratio rose from 2.7 percent to 5.4 percent (Figure 25). The strong capital position and liquidity conditions of the banking system should allow banks to absorb the potential losses as a whole. However, despite banks' increase in provisioning, the NPL coverage ratio has declined to below 100 percent, indicating that some banks may face difficulties in absorbing loan losses. Furthermore, the pressure could intensify after the regulatory forbearance policy expires. In addition, banks may pivot to more risky transactions in their search of higher yields given the current low interest rate environment.

Figure 25. Banks' NPL and NPL Coverage Ratio



Source: BSP, AMRO staff calculations.

Figure 26. Asset Quality by Type of Bank



Source: BSP, AMRO staff calculations.
Note: Data for rural and cooperative banks are as of December 2020; data for other banks are as of March 2021.

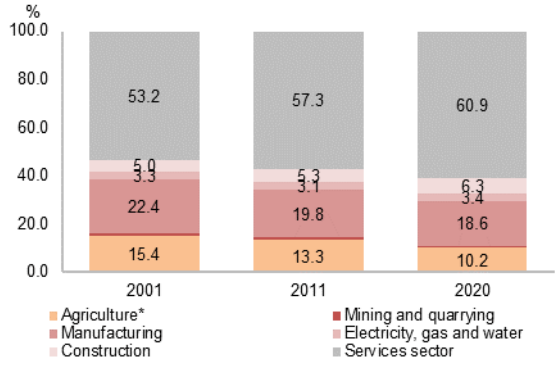
23. Financial distress could emerge on two fronts due to the uneven distribution of risk bearing capacity and impacts of the economic downturn. One is from key sectors that could have systemic impact, such as real estate, transportation, and large wholesale and retails, and the other is from MSMEs. The former tends to affect the large banks, while the latter affects more the small banks with weaker balance sheets. For example, thrifts, rural and cooperative banks have much higher NPLs and past due ratio than universal and commercial banks. They may not have enough loss absorptive capacity, as indicated by much lower NPL coverage ratio (Figure 26). Although none of the MSMEs are systemic on their own, their numbers are huge, and if a large number of them fail, the impact could be significant. The failure of these MSMEs could plunge some small banks into financial distress, which may further spillover to other banks through various interlinkages.

Authorities View

24. *The BSP agrees that some businesses in certain sectors could face financial difficulties. However, the BSP does not see the spillover of business sector risk leading to financial difficulties in the banking sector as banks are well capitalized.*

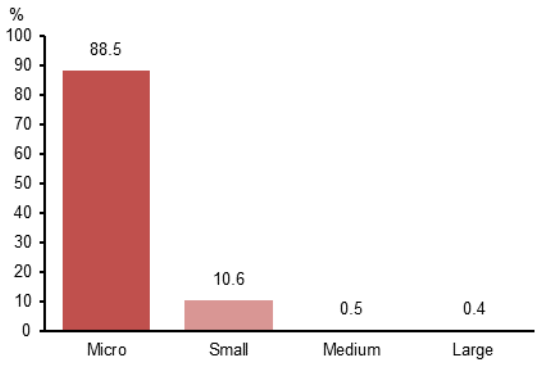
25. Some structural characteristics of the economy also tend to make it more vulnerable to the COVID-19 shock and more arduous to recover. First, the Philippine economy is more service-oriented. The service sector accounts for 60 percent of GDP and 56.9 percent of total employment (Figure 27). Second, the economy comprises predominantly of micro, small and medium enterprises (MSMEs) (Figure 28), which generate 62.4 percent of total employment. Third, a large portion of the labor force are in vulnerable types of employment. A Labor Force Survey indicated that 34.6 percent of those employed are in the vulnerable types of jobs such as low-skill jobs in the informal sector in 2020.

Figure 27. Economic Structure by Sector



Source: PSA, AMRO staff calculations.
Note: Agriculture refers to agriculture, forestry and fishing.

Figure 28. Composition of Companies by Size



Source: PSA, AMRO staff calculations.

26. Effective policy transmission also faces several practical challenges. The banking system caters mostly to large corporates and middle-to-high income households rather than the MSMEs and low-income households. In 2019, total lending to MSMEs was less than 10 percent of total loans and around two-thirds of Filipinos adults do not have a formal bank account. The share of MSMEs loans in large banks was even lower as it takes time for them to adapt their business models. Small banks have larger exposure to MSMEs, but they also tend to have weaker balance sheets and their capacity for further loan expansion is limited.

B.2 Longer-term Challenges and Vulnerabilities

27. The Philippine economy's growth potential could be weakened because of the scarring effects of the pandemic. If high unemployment becomes protracted and massive defaults occur, both human and physical capital would be eroded. Many businesses could become unviable and their capital could become idle or obsolete. Additionally, less resources will be available for public capital investment due to higher debt services from rising government debt.

28. The Philippines is likely to face some reversal of social economic gains. Although the economy is expected to recover, the level of GDP will likely stay below its pre-pandemic trend for a few years. The pandemic crisis will likely reverse some of the achievements in reducing the poverty rate from 23.3 percent in 2015 to 16.6 percent in 2018. Meanwhile the living standard of the middle class could also decline due to permanent job and income losses during the pandemic. The social economic distress will be spread unevenly across different segments of the population. Those who are most vulnerable such as women, children, low educated and the disabled, will likely be affected more.

C. Policy Discussions and Recommendations

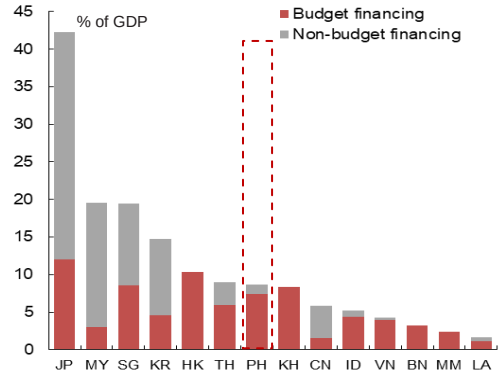
29. The Philippine government has deployed a wide array of measures to contain the pandemic. The country has arguably implemented the most stringent and the longest lockdown measures. The Philippine government was one of the earliest to introduce lockdown measures in March 2020. Since mid-March, the lockdown policies have been refined and adjusted several times into a more targeted, multi-layered community quarantine framework. Although the government had started lifting restrictions since early June 2020, the quarantine measures have never been fully lifted. General Community Quarantine measures for the National Capital Region were further extended to the end of March 2021 along with some other cities showing clusters of infections. While these restrictive measures are necessary to bring the infections to manageable levels, they also inevitably have been a drag on the economy.

C.1 Active Fiscal Policy to Ensure a Solid Economic Recovery

30. The government had devised a four-pillar strategy in 2020 to contain the COVID-19 pandemic and mitigate its adverse economic impact. The four-pillar strategy is composed of emergency support for vulnerable groups and individuals, expanded medical resources to fight COVID-19, fiscal and monetary actions/measures to finance emergency initiatives, and an economic recovery plan. The Bayanihan II allowed the government to use an additional PHP165.5 billion of the budget to better support economic recovery, including capital injection into government financial institutions (GFIs), like the Development Bank of the Philippines (DBP) and Land Bank of the Philippines (LBP). The government also proposed several legislative measures to hasten the economic recovery. Congress has passed the Corporate Recovery and Tax Incentives for Enterprises (CREATE) Act to lower corporate tax and boost business confidence.

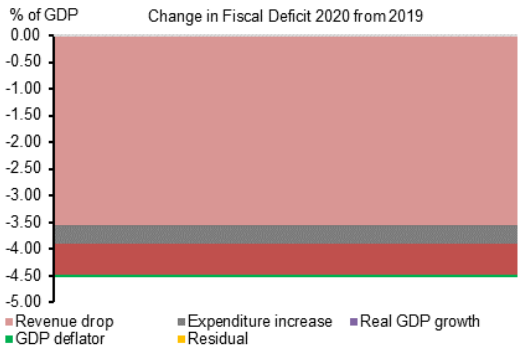
31. The size of the fiscal stimulus in 2020 is relatively modest. While the size of the four-pillar strategy may seem large at about PHP1.7 trillion or 9.1 percent of GDP, it is moderate compared with regional peers (Figure 29)[13]. The fiscal deficit widened to 7.6 percent of GDP in 2020, but this is mainly due to the loss of fiscal revenue as a result of the economic downturn (Figure 30). The increase in additional fiscal spending is modest, as shown in the small increase in overall budget expenditure, from the PHP 4.1 trillion in the original budget to PHP 4.4 trillion in actual fund release.

Figure 29. Economic Stimulus in 2020 in the ASEAN+3 Region



Source: national authorities, AMRO staff compilation.

Figure 30. Change in Fiscal Deficit from 2019 to 2020

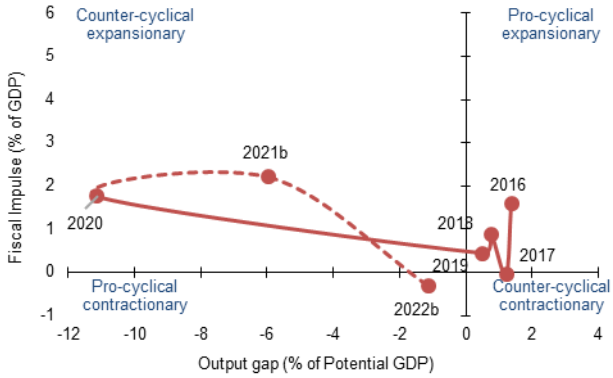


Source: DBM, PSA, AMRO staff calculations

[13] Due to the different policy arrangement, the sizes of economic stimulus in different countries are not strictly comparable.

32. The government's budget for 2021 aims for resilience and sustainability. The FY2021 Budget is PHP4.506 trillion, 9.9 percent larger than original budget for 2020, and about 4 percent larger than the adjusted budget for 2020. The largest share, 37percent, is allocated to the social services sector, prioritizing funding for health-related programs. The economic services sector remains a budgetary priority accounting for 29.4percent of expenditure. The capital expenditure is expected to rebound in 2021, in part due to the carry-over from 2020. The fiscal policy stance is expansionary in 2021 (Figure 31), but the expansion mainly comes from the tax rate cut, which tends to take a longer time to have an economic impact.

Figure 31. Fiscal Stance



Sources: Bureau of the Treasury; AMRO staff estimates.

33. The government should provide stronger fiscal support to the nascent recovery if the economic recovery were to falter or weaken. While it is important to preserve some policy space in a highly uncertain environment, sufficient fiscal support is essential not only to mitigate the tail risks of another economic downturn but also to forge a robust economic recovery. Targeting government debt level at below the emerging market average is prudent, but fiscal sustainability depends not only on the debt level but also on potential growth. Insufficient fiscal support could lead to a weaker recovery and lower potential growth, which could reduce the sustainable level of government debt. In our view, the current fiscal space is sufficient to support a larger fiscal package, and should be used to shore up economy if the recovery were to falter or weaken (For a detailed discussion, please refer to Selected Issue 2 in the Annex). In addition, the government should continue to enhance the implementation capacity of agencies in order to more effectively deliver the best outcome.

Authorities View

34. *The Department of Budget stressed that the government's fiscal package extends beyond the expenditure program. It is noteworthy that the extension of the availability of appropriations under the FY 2020 GAA and Bayanihan II, already serve as an additional stimulus for the year, on top of the FY2021 GAA, which was crafted as a response and recovery measure from the COVID-19 pandemic. However, the passage of the Corporate Recovery and Tax Incentives for Enterprises (CREATE) Act will be the largest stimulus package for the private sector as it will reduce the corporate income tax from 30 percent to 25 percent. This will help businesses continue operations and retain jobs while also enhancing the attractiveness of the country's tax incentives system to pursue investments and generate employment. In addition, the government is actively shepherding the passage of other recovery measures such as the Government Financial Institutions Unified Initiatives to Distressed Enterprises for Economic Recovery or the GUIDE bill and the Financial Institutions Strategic Transfer Act or the FIST Act to help firms rehabilitate and manage losses incurred because of the pandemic.*

C.2 Monetary Policy to Support Credit Extension

35. Monetary and regulatory policy responses have been swift and effective in ensuring ample liquidity in the financial system. In general, monetary policy and open market operations (OMOs) have been focused on lowering funding cost, ensuring sufficient liquidity and orderly market functioning, while regulatory and operational relief measures have been directed at alleviating balance sheet constraints and enhancing operation. These policy measures aim to enable banks to retain the capacity and willingness to participate in financial and credit markets, thereby transmitting monetary easing to broader financial conditions, ultimately supporting the real economy. We welcome the BSP's initiatives to promote market-enabling infrastructures, such as the Movable Collateral Registry and Credit Risk Database.[14]

36. The focus of monetary and regulatory policy could be tilted more towards enhancing the effectiveness of monetary transmission and supporting credit expansion. Monetary policy alone cannot effectively deal with banking sector's high aversion to risk. More incentives may need to be offered to banks in collaboration with other government agencies. We welcome the measures to encourage banks to provide more credit to MSMEs, including allowing banks' increased lending to MSMEs to be used for compliance with reserve requirement, and zero risk weights for loans covered by government guarantee programs. The injection of capital into state owned banks and guarantee companies is also welcome. The BSP could work with the government agencies and banks to come up with a feasible risk sharing mechanism to better direct credit extension to the real economy, especially MSMEs.

C.3 Regulatory Policy to Guard against Financial Risk

37. The BSP should continue to closely monitor financial risk and strengthen the intervention and resolution framework. The BSP is well aware of the significant impact of the COVID-19 pandemic on the banking sector. More efforts have been made to strengthen the financial surveillance and resolution institution framework. They have conducted stress testing on the banking system and real estate sector, but did not find imminent systemic risks. However, it is prudent to conduct regular stress tests to monitor the evolution of the risks, including the surveillance of possible spillovers from the real economy to the financial sector during and after the pandemic. In addition, more attention should be paid to the absorptive capacity and uneven distribution of risks across different types of banks. Besides, implementation of the Financial Institutions Strategic Transfer (FIST) Act or Republic Act No. 11523 in a timely manner will provide a more robust and efficient framework for banks to dispose NPA/NPL and free up their balance sheets for lending.

38. The withdrawal of regulatory forbearance measures need to be gradual to avoid precipitating financial distress. These policies have provided considerable support for banks to cope with the operating challenges during the pandemic. Although the economy has entered the recovery phase, the deterioration of asset quality is still ongoing. Typically, NPLs follow an inverted U-shaped trajectory and the resolution of the problem assets could stretch beyond the current economic cycle. It is important for the BSP to coordinate with stakeholders and other government agencies when deciding on the extension or withdrawal of the relief measures. The BSP's commitment to a gradual, well-communicated, and prudent unwinding process is welcome.

Authorities View.

[14] Credit Risk Database is a tool which uses financial data (based on balance sheet, profit and loss statement) and non-financial data (e.g., industry/sector, location, etc.) as well as default-related information (e.g., arrears, bankruptcy) to build statistical models predicting the creditworthiness of SMEs. It is expected to lessen the dependence of banks on collateral and increase access to finance among SMEs through risk-based lending. It complements other initiatives on SME financing.

39. *The BSP continues to closely and regularly monitor financial risk and strengthen the intervention and resolution framework. Stress testing on the exposures of the banking system (i.e., real estate sector exposures, in particular) are done regularly. Moreover, with the passage of the* Financial *Institutions Strategic Transfer (FIST) Act, the BSP expects improvement in the banking system's NPL, enabling banks to further extend credit to more sectors.*

40. *At the same time, the BSP strongly considers the time-bound relief measures implemented as crucial in supporting banks to weather the crisis and in promoting the overall stability of the financial system. The BSP is currently assessing the appropriate timing to reduce or scale back the* COVID-*19 relief measures to ensure a smooth transition in the post-pandemic period. The BSP underscores that while there are regulatory reliefs implemented, such as staggered booking of allowance for credit losses and delayed classification of past due or non-performing loans, the banking industry statistics published on the BSP website reflect the actual level of soured loans and do not consider said relief measures.*

C.4 Structural Reforms to Enhance Economic Resilience

41. The authorities need to enhance the resilience of the economy to adverse shocks and facilitate the transition to the post-pandemic new normal. The COVID-19 pandemic has revealed the vulnerability and weakness of the pre-COVID-19 economies in several areas, including supply chains built mainly on cost-efficiency considerations, inadequate healthcare capacity and social safety net, low financial inclusiveness, and infrastructure gaps.

42. To build resilience to future shocks, structural reforms are needed not only to reduce vulnerability in the economy but also to strengthen its adaptability. The government should continue to improve its "doing business" environment and develop infrastructure with an orientation toward the needs of the new normal, which will enable the private sector to adapt to the new environment.

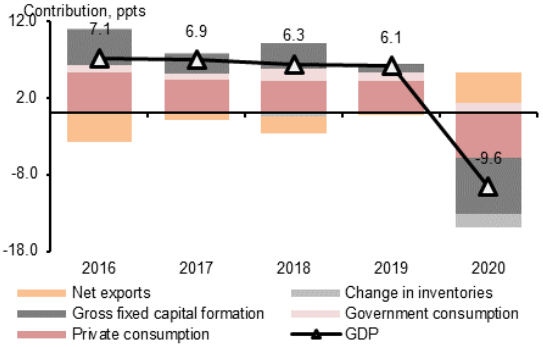
43. The government's efforts in promoting digitalization of the economy is commendable. The development of national identification (ID) system and several legal and regulation frameworks including the Digital Banking Framework will facilitate the digitalization of the economy (For more details about the digitalisation of the financial industry, please refer to Selected Issue 3 in the Annex). To mitigate the disruptions and facilitate the transition to the digital economy, it is essential to reform the education system to reskill workers and upgrade the labor force, and enhance the social security system, to provide a more comprehensive safety net.

Appendices

Appendix 1. Selected Figures for Major Economic Indicators

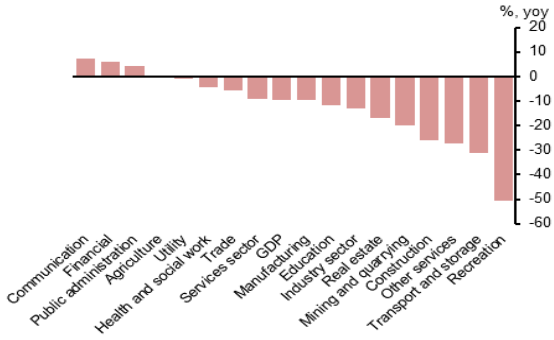
Figure 1.1. Real Sector

The economy fell into recession in 2020.



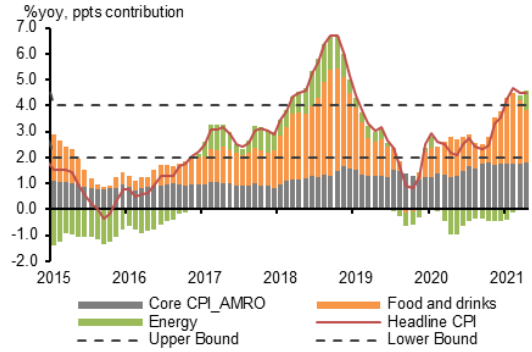
Source: PSA, AMRO staff calculations.

The collapse of demand was broad-based.



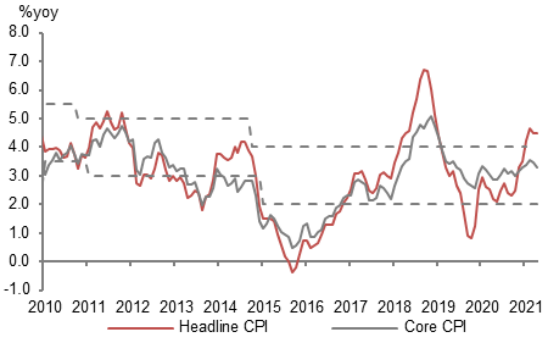
Source: PSA, AMRO staff calculations.

Supply disruptions led to transitory inflationary pressure on food prices toward the end of 2020.



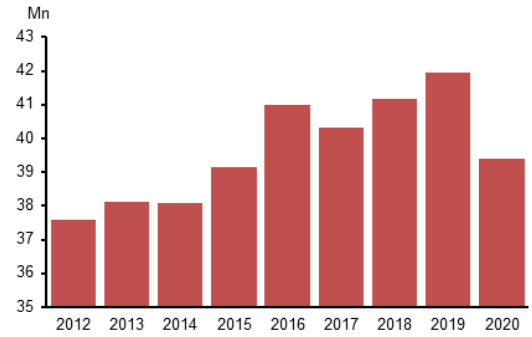
Source: BSP, AMRO staff calculations.
Note: AMRO core CPI is constructed by stripping all food and energy items from the CPI basket.

Inflation remained generally low and stable within the target range in 2020, but breached the upper bound in early 2021.



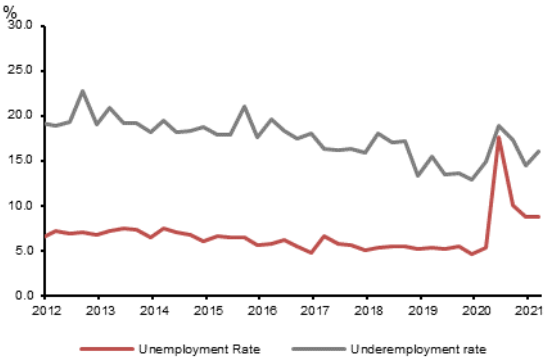
Source: BSP, AMRO staff calculations.
Note: Core CPI in this chart is from PSA, which excludes selected food and energy items.

The economic downturn led to a significant decline in employment



Source: PSA, AMRO staff calculations.

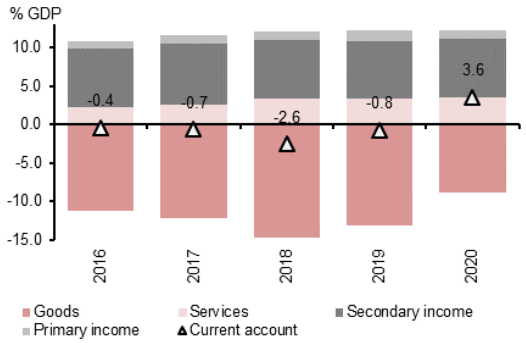
Unemployment rate remained elevated.



Source: PSA, AMRO staff calculations.

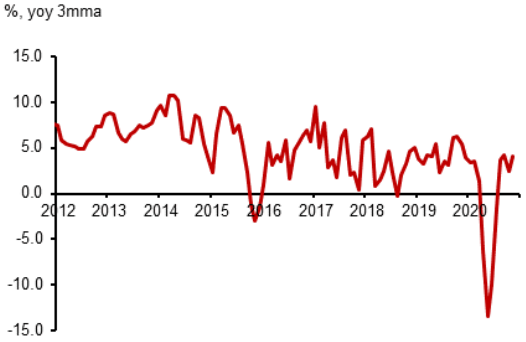
Figure 1.2. External Sector

The current account recorded a large surplus in 2020.



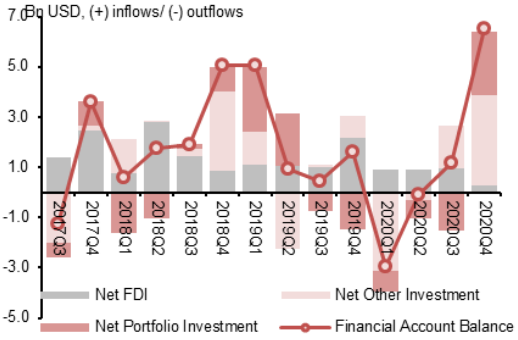
Source: BSP, PSA, AMRO staff calculations.

Overseas workers' remittances remained quite resilient.



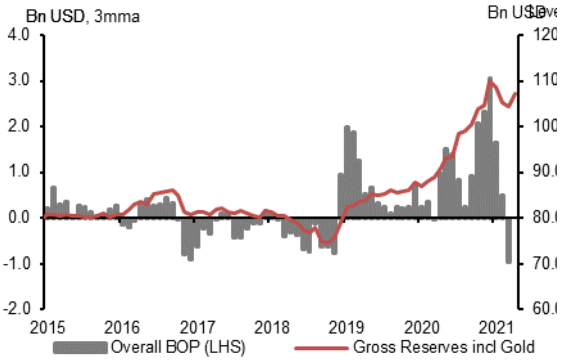
Source: BSP, AMRO staff calculations.

Financial account reversed to inflows following an outflow in H1, 2020, supported by government external borrowing.



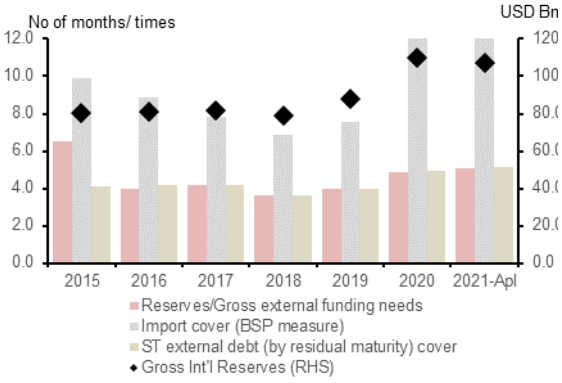
Source: BSP, PSA, AMRO staff calculations.

Continued improvement in the BOP pushed international reserves to record high level.



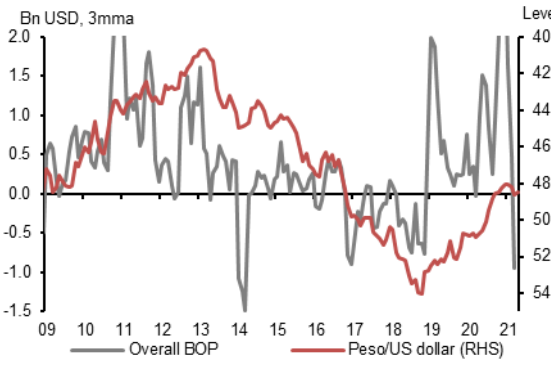
Source: BSP, AMRO staff calculations.

The coverage of external financing needs further improved.



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.

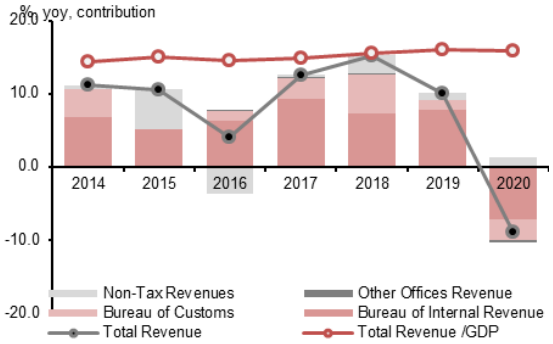
The continued improvement in the BOP and a weakening US dollar supported a strong peso.



Source: BSP, AMRO staff calculations.

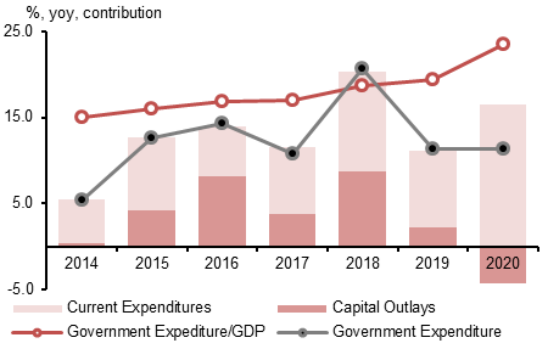
Figure 1.3. Fiscal Sector

Fiscal revenue was hard hit by the pandemic induced economic downturn.



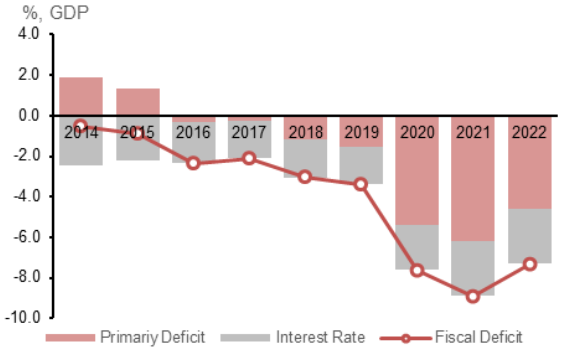
Source: Bureau of Treasury, PSA, AMRO staff calculations.

Fiscal spending was reprioritized to combat the COVID-19 pandemic and capital spending was reduced.



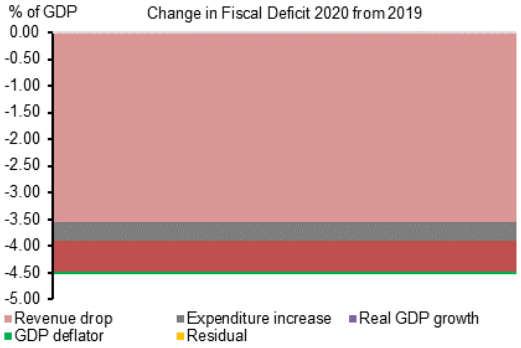
Source: Bureau of Treasury, PSA, AMRO staff calculations.

The fiscal deficit widened sharply in 2020 and is expected to remain large in 2021 and 2022.



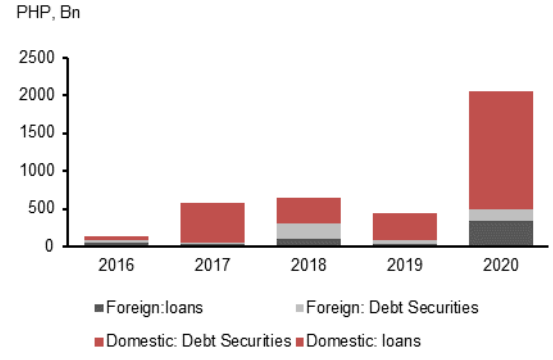
Source: DBM, AMRO staff calculations.

Despite the larger deficit in 2020, most of the widening came from the drop in fiscal revenue.



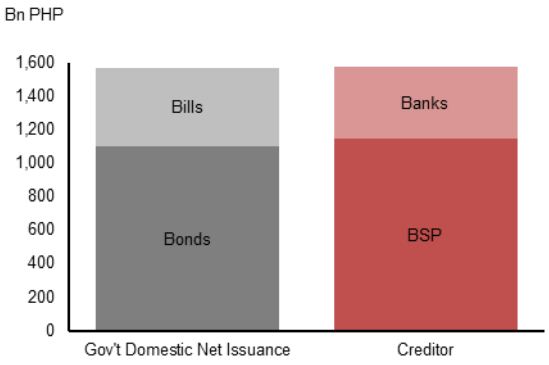
Source: DMB, PSA, AMRO staff calculations.

The government sourced most of its funding from the domestic market, and some from the external market and partners as well.



Source: Bureau of Treasury, AMRO staff calculations.
Note: the direct domestic borrowing of PHP540 billion from the BSP is not reflected in this chart as it was repaid in December 2020.

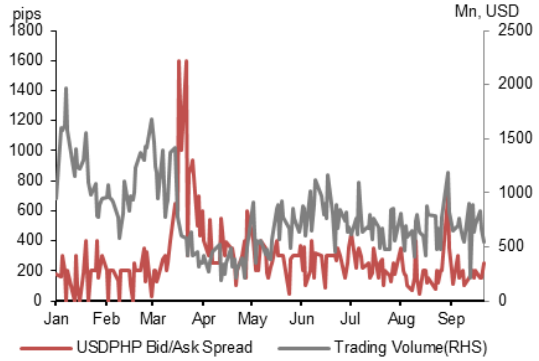
Government domestic financing and the major creditors in 2020



Source: Bureau of Treasury, BSP, AMRO staff calculations.
Note: the direct domestic borrowing of PHP540 billion from the BSP was not reflected in this chart as it has been repaid in December 2020.

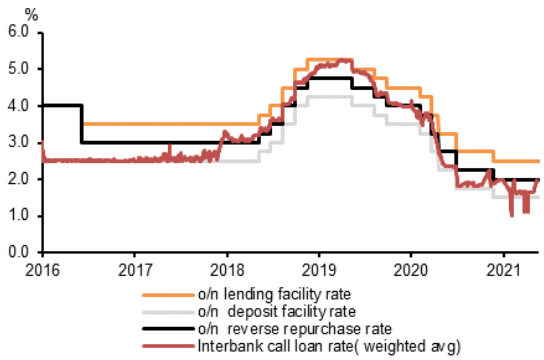
Figure 1.4. Monetary and Financial Sectors

FX market experienced some dislocations in early 2020.



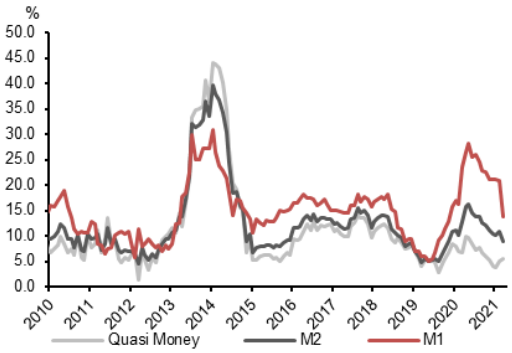
Source: Bloomberg, AMRO staff calculations.

Monetary conditions were significantly eased to mitigate the adverse impacts of the pandemic.



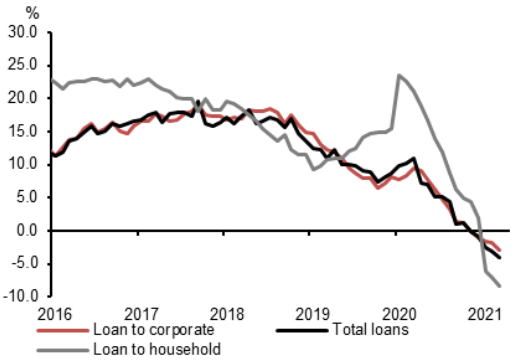
Source: BSP, AMRO staff calculations.

M1 and M2 growth rates rose markedly, indicating ample liquidity conditions in the banking system.



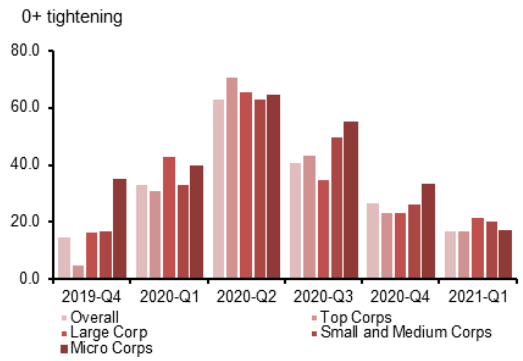
Source: BSP, AMRO staff calculations.

Loan growth continued to decelerate and fell into negative territory



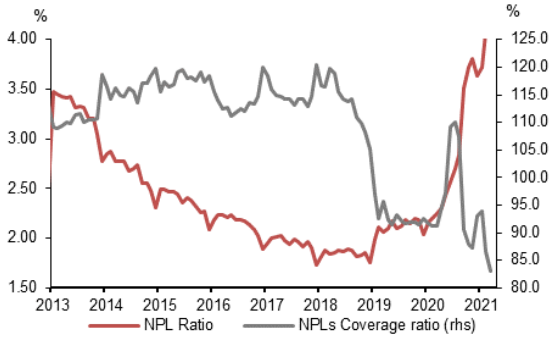
Source: BSP, AMRO staff calculations.

The tightness of banks' lending standards were lessened.



Source: BSP, AMRO staff calculations.

Banks' asset quality has been deteriorating since the onset of the pandemic.



Source: BSP, AMRO staff calculations.

Appendix 2. Selected Economic Indicators for the Philippines

	2018	2019	2020	Projection	
				2021	2022
Real sector and prices	(in percent change, unless specified)				
Real GDP	6.3	6.1	-9.6	6.4	6.8
Private consumption	5.8	5.9	-7.9	5.3	5.8
Government consumption	13.4	9.1	10.5	8.7	12.5
Gross fixed capital formation	12.9	3.9	-27.5	18.7	16.7
Exports of goods and services	11.8	2.6	-16.3	14.2	10.2
Imports of goods and services	14.6	2.3	-21.6	18.4	16.2
Prices					
Consumer price inflation (end of period 2012=100)	5.1	2.5	3.5	3.5	3.1
Consumer price inflation (period average 2012=100)	5.2	2.5	2.6	4.3	3.2
Core inflation (period average 2012=100)	4.2	3.2	3.2	3.7	3.0
GDP deflator	3.7	0.7	1.6	3.1	2.0
External sector	(in billions of U.S. dollars, unless specified)				
Current account balance	-8.9	-3.0	13.0	8.2	3.6
(in percent of GDP)	-2.6	-0.8	3.6	2.1	0.8
Goods trade balance	-51.0	-49.3	-31.8	-40.5	-48.5
Services trade balance	11.6	13.0	13.1	14.7	16.2
Primary income, net	3.7	5.3	4.4	5.3	6.4
Secondary income, net	26.8	27.9	27.4	28.7	29.6
Financial account balance	-9.3	-8.0	-4.6	-3.2	-2.7
Direct investment, net	-5.8	-5.3	-3.0	-4.4	-4.7
Portfolio investment, net	1.4	-2.5	0.5	1.9	1.0
Financial derivatives, net	-0.1	0.2	0.2	0.1	0.1
Other investment, net	-4.9	-0.1	-1.9	-0.7	1.2
Error and omission	-2.8	2.7	-1.6	0.0	0.0
Overall balance	-2.3	7.8	16.0	11.5	6.3
Gross international reserves (end-period)	79.2	87.8	110.1	114.6	117.9
Total external debt (percent of GDP)	22.8	22.2	27.2	30.1	31.9
Short-term external debt (percent of total)	20.3	20.6	14.4	12.3	11.6
Fiscal sector (National Government)	(in percent of GDP)				
Government revenue	15.6	16.1	15.9	14.6	15.4
Government expenditure	18.7	19.5	23.6	24.1	23.1
Fiscal balance	-3.1	-3.4	-7.6	-9.5	-7.7
Primary balance	-1.1	-1.5	-5.5	-6.8	-4.9
Government debt	39.9	39.6	54.6	58.2	60.9
Monetary sector	(in percent change, end-period unless specified)				
Domestic credit	14.9	10.7	4.6	-	-
Of which: Private sector	15.1	7.8	-0.3	-	-
Broad money (M4)	9.0	9.8	8.6	-	-
Memorandum items:					
Exchange rate (peso per USD, average)	52.7	51.8	49.6	49.7	50.0
Exchange rate (peso per USD, eop)	52.7	50.7	48.0	50.5	50.8
Gross domestic product at current price (In trillions of pesos)	18.3	19.5	17.9	19.7	21.4
Gross domestic product at current price (In billions of U.S. dollar)	346.8	376.8	361.5	395.9	428.8
GDP per capita (in U.S. dollar)	3,277.6	3,514.9	3,298.8	3,565.5	3,810.8

Sources: Philippine authorities and AMRO staff estimates

Appendix 3. Balance of Payments

	2016	2017	2018	2019	2020
	(in millions of U.S. Dollars, unless specified)				
Current Account (I)	-1,199	-2,143	-8,877	-3,047	12,979
Goods	-35,549	-40,215	-50,972	-49,312	-31,839
Exports	42,734	51,814	51,977	53,477	47,411
Imports	78,283	92,029	102,949	102,788	79,250
Services	7,043	8,693	11,608	13,039	13,080
Exports	31,204	34,832	38,397	41,264	31,410
Imports	24,160	26,139	26,789	28,225	18,331
Primary Income	2,579	3,226	3,669	5,276	4,356
Receipts	9,556	10,583	11,999	13,402	11,594
Payments	6,977	7,357	8,330	8,125	7,238
Secondary Income	24,728	26,153	26,818	27,949	27,381
Receipts	25,411	26,897	27,607	28,746	28,240
Payments	684	745	788	797	859
Capital Account (II)	62	69	65	127	63
Receipts	77	103	103	147	88
Payments	15	34	38	20	25
Financial Account (III)(+ indicates inflows)	-175	2,798	9,332	8,034	4,608
Net Acquisition of Financial Assets	-5,658	-6,717	-7,522	-7,297	-12,319
Net Incurrence of Liabilities	5,483	9,515	16,855	15,331	16,928
Direct Investment	5,883	6,952	5,833	5,320	3,017
Net Acquisition of Financial Assets	-2,397	-3,305	-4,116	-3,351	-3,525
Net Incurrence of Liabilities	8,280	10,256	9,949	8,671	6,542
Portfolio Investment	-1,480	-2,454	-1,448	2,474	-502
PI:Net Acquisition of Financial Assets	-1,216	-1,658	-4,740	-2,402	-5,787
PI:Net Incurrence of Liabilities	-264	-796	3,292	4,876	5,285
Financial Derivatives	32	51	53	173	239
Net Acquisition of Financial Assets	701	503	679	874	840
Net Incurrence of Liabilities	-669	-453	-626	-701	-602
Other Investment	-4,610	-1,750	4,894	67	1,855
OI:Net Acquisition of Financial Assets	-2,746	-2,257	654	-2,417	-3,847
OI:Net Incurrence of Liabilities	-1,864	508	4,240	2,484	5,702
Net unclassified items (V)	274	-1,588	-2,826	2,729	-1,629
Overall BOP (I+II+III+V)	-1,038	-863	-2,306	7,843	16,022
Change in Reserve Assets	-1,038	-862	-2,305	7,843	16,020
Memorandum items:					
Current Account (% GDP)	-0.4	-0.7	-2.6	-0.8	3.6
Gross International Reserves	80,692	81,570	79,193	87,840	110,117
In months of imports of goods and services	9.5	8.3	7.3	8.0	13.5
Changes in gross reserves	-2,495	878	-2,377	8,646	22,278
Nominal GDP (USD billion)	318	328	347	377	362

Sources: Philippine authorities and AMRO staff calculations.

Appendix 4. Statement of National Government Operations

	2016	2017	2018	2019	2020
	(In percent of GDP, unless specified)				
Government Revenue	14.5	14.9	15.6	16.1	15.9
Tax Revenue	13.1	13.6	14.0	14.5	14.0
Bureau of Internal Revenue (BIR)	10.4	10.7	10.7	11.1	10.9
Net Income & Profits	6.1	6.2	5.7	5.9	5.8
Excise Tax	1.1	1.3	1.6	1.6	1.7
Sales Taxes & Licenses	2.6	2.6	2.5	2.7	2.6
Others	0.6	0.6	0.9	0.9	0.8
Bureau of Customs (BOC)	2.6	2.8	3.2	3.2	3.0
Other Offices	0.1	0.1	0.1	0.1	0.1
Non Tax & Grant	1.4	1.3	1.6	1.6	2.0
Government Expenditure	16.8	17.1	18.7	19.5	23.6
Current Operating Expenditures	12.6	12.8	13.4	14.0	18.5
Personal Services	4.8	4.9	5.4	5.7	6.6
Maintenance and Other Operating	2.8	2.8	2.9	2.9	4.9
Subsidy	0.7	0.8	0.7	1.0	1.3
Allotment to LGUs	2.3	2.4	2.3	2.4	3.5
Interest Payments	2.0	1.9	1.9	1.8	2.1
Tax Expenditure	0.1	0.1	0.1	0.1	0.2
Capital Outlays	4.1	4.3	5.3	5.3	4.9
Infrastructure & Other Capital Outlays	3.3	3.4	4.4	4.5	3.8
Equity	0.1	0.0	0.0	0.0	0.1
Capital Transfers to LGUs	0.8	0.8	0.9	0.8	1.0
Net Lending	0.1	0.0	0.0	0.1	0.1
Government Balance	- 2.3	- 2.1	- 3.1	- 3.4	- 7.6
primary balance	- 0.3	- 0.2	- 1.1	- 1.5	- 5.5
Government Financing	2.2	4.6	4.3	4.5	13.9
External: Net	- 0.2	0.2	1.0	0.9	3.3
External: Gross	1.0	1.0	1.7	1.6	4.1
Project Loan	0.1	0.2	0.2	0.3	0.3
Program Loans	0.0	0.0	0.0	0.0	0.0
Global Bonds	0.6	0.6	0.6	0.4	1.4
Amortization	1.1	0.8	0.6	0.7	0.8
Domestic: Net	2.3	4.4	3.2	3.5	10.6
Domestic: Gross	2.4	4.4	3.5	3.6	11.1
Treasury Bills: Net	0.2	0.2	1.0	0.0	2.6
Retail Treasury Bonds	0.7	2.6	0.7	1.2	4.6
Fixed Rate Treasury Bonds	1.5	1.6	1.6	2.4	3.9
Amortization	2.1	1.4	1.7	1.8	2.5
Memorandum items:					
Government Debt	40.2	40.2	39.9	39.6	54.6
Domestic	26.0	26.8	26.2	26.3	37.3
Foreign	14.2	13.4	13.8	13.3	17.3
Short-term(% of Total)	4.7	4.7	6.8	6.4	9.8
Medium-term (% of Total)	5.8	12.0	12.6	17.8	23.0
Long-term (% of Total)	89.5	83.3	80.7	75.9	67.3
Nominal GDP (Trillion, PHP)	15.1	16.6	18.3	19.5	17.9

Sources: Philippine authorities and AMRO staff calculations

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

Surveillance Areas	Data Availability[(i)]	Reporting Frequency/Timeliness[(ii)]	Data Quality[(iii)]	Consistency[(iv)]	Others, if Any[(v)]
National Accounts	Available	Quarterly data for the expenditure and production approaches are available with a normal time lag (two months after the reference quarter)	-	-	-
Balance of Payments (BOP) and External Position	Available	BoP data are available quarterly with a normal time lag (two months and three weeks after the reference month). External debt data are 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 are available on a monthly basis with a normal time lag (one to two months after the reference month). Date for central government domestic and foreign debt outstanding are available monthly with a normal time lag (one month after the reference month)	-	-	-
Money Supply and Credit Growth	Available	Money supply data are available on a monthly basis with a normal time lag (one month after the reference month). Bank loan data are 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 are available for public access by any means.
(ii) Reporting frequency refers to the time interval that the available data are published. Timeliness refers to how up-to-date the published data are relatively with the publication date.
(iii) Data quality refers to the accuracy and reliability of the available data given the data methodologies are taken into account.
(iv) Consistency refers to both internal consistency within the data series itself and its horizontal consistency with other data series of either same or different categories.
(v) Other criteria might also apply, if relevant. Examples include but are not limited to potential areas of improvement for data adequacy.

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

Appendix 6. Government Debt Sustainability Analysis[15]

Background

1. The Philippines' public debt increased to 54.6 percent of GDP in 2020 after remaining stable during 2015-2019, with the lowest level of 39.6 percent of GDP recorded in 2019[16]. Revenue shortfalls and spending stimulus amid the COVID-19 health crisis resulted in a large fiscal deficit, which raised the debt stock.

2. Gross financing needs (GFNs) have also remained low until 2019, but more than doubled to 8.9 percent of GDP in 2020, mainly to finance the fiscal deficit.

Baseline Projection

3. Baseline projections of public debt are made based on the key assumptions including a gradual economic recovery from the COVID-19 pandemic in 2021, a stronger growth in 2022, and sustainable macroeconomic performance in the medium-term (Table 6.1). The average economic growth rate of 6.5 percent forecast for 2021-2025 is similar to the 6.6 percent recorded during 2015-2019, and is plausible as the economy is rebounding from the significant contraction in 2020. We assume similar levels of the interest rate and exchange rate in the next five years.

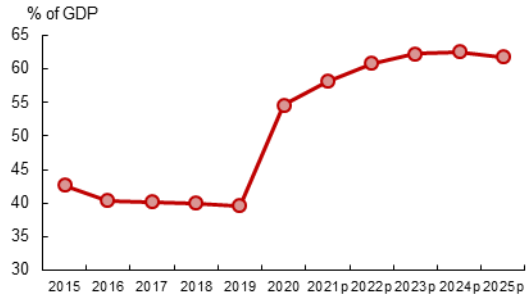
4. Moderate fiscal consolidation in the medium-term is assumed (Table 6.1)[17]. The Philippine authorities are committed to gradually reducing the fiscal and primary deficits in the medium-term after peaking in 2021. Considering the prudent fiscal management with average primary balance of -0.4 percent of GDP during 2015-2019, the targeted reduction in the primary deficit in the next five years is deemed feasible.

5. Public debt is projected to rise above 60 percent in the medium-term, followed by a decline from 2025 (Figure 6.1). The developments of primary balance and real GDP growth will be the main drivers of the debt dynamics. The real interest rate will contribute moderately to debt changes, whereas the exchange rate, which is assumed to remain stable, will only make a minimal contribution (Figure 6.3).

6. GFNs are expected to increase substantially in 2021 because of amortization and the primary deficit, and will then gradually decline in the medium-term (Figure 6.2, 6.4). Amortization in 2021 will increase significantly because the government in 2020 issued 30 percent of its domestic borrowing in treasury bills that had a maturity of less than one year[18].

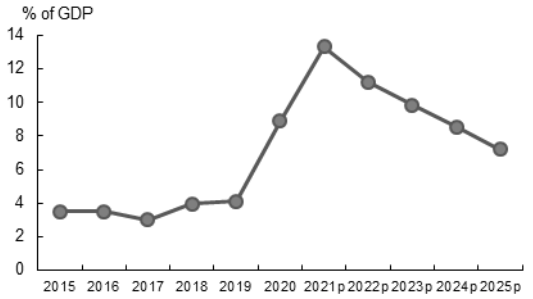
[15] Prepared by Byunghoon Nam.
[16] Public DSA for the Philippines covers the national government debt, which includes the national government debt held by local government units (LGUs) and social security institutions (SSIs), and debt created by the Bond Sinking Fund (BSF). The consolidated general government debt is lower than the national government debt as the intra-sector debt holdings and BSF are sizeable, while LGUs hold a small amount of debt and SSIs do not have any debt. In 2019, the general government debt was equivalent to 34.1 percent of GDP, while the national government debt corresponded to 39.6 percent of GDP.
[17] We assume that tax elasticity with respect to nominal GDP will recover the pre-pandemic level of 1.3. The corporate income tax rate is set to be gradually cut after 2022. Nevertheless, revenue-enhancing measures are expected to compensate for losses in the corporate income tax revenue. Non-interest expenditure is assumed to increase at a slower pace than nominal GDP growth.
[18] We assume a similar domestic security issuance portfolio after 2021, with 30 percent in treasury bills and 70 percent in treasury bonds and notes.

Figure 6.1. Public Debt



Sources: Department of Finance; AMRO staff estimates.

Figure 6.2. Gross Financing Needs



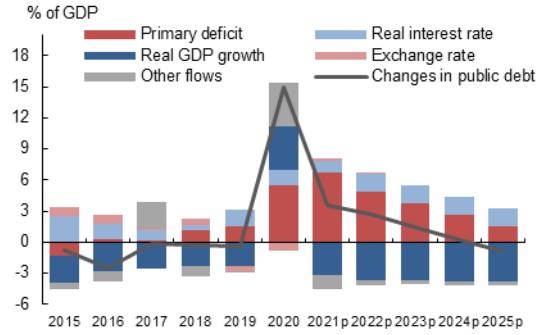
Sources: Department of Finance; AMRO staff estimates.

Table 6.1. Macroeconomic and Fiscal Indicators

	2015	2016	2017	2018	2019	2020	2021p	2022p	2023p	2024p	2025p
Macroeconomic indicators (Percent)											
Real GDP growth	6.3	7.1	6.9	6.3	6.1	-9.6	6.4	6.8	6.5	6.5	6.5
GDP deflator	-0.7	1.3	2.3	3.7	0.7	1.6	3.1	2.0	1.9	1.9	1.9
Effective interest rate	5.4	5.1	5.1	5.2	4.9	4.9	5.4	5.3	5.2	5.2	5.1
Fiscal indicators (Percent of GDP)											
Revenue	15.1	14.5	14.9	15.6	16.1	15.9	14.6	15.4	15.7	16.1	16.5
Expenditure	16.0	16.8	17.1	18.7	19.5	23.6	24.1	23.1	22.4	21.7	20.9
Fiscal balance	-0.9	-2.3	-2.1	-3.1	-3.4	-7.6	-9.5	-7.7	-6.7	-5.6	-4.5
Primary balance	1.3	-0.3	-0.2	-1.1	-1.5	-5.5	-6.8	-4.9	-3.8	-2.6	-1.5
Public debt	42.7	40.2	40.2	39.9	39.6	54.6	58.2	60.9	62.3	62.6	61.8
Gross financing needs	3.5	3.5	3.0	4.0	4.1	8.9	13.3	11.2	9.9	8.6	7.2

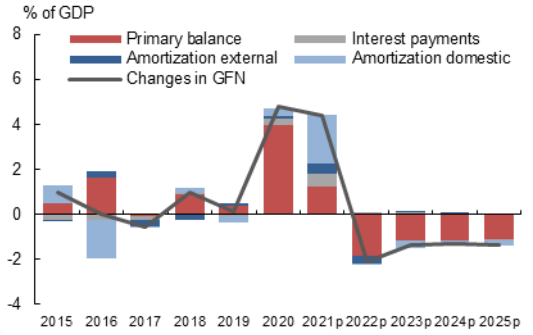
Sources: Philippine Statistics Authority; Department of Finance; AMRO staff estimates.
Note: The macroeconomic and fiscal indicators for 2021 – 2025 are based on AMRO staff projections.

Figure 6.3. Debt Dynamics



Sources: Department of Finance; AMRO staff estimates.

Figure 6.4. Gross Financing Needs Dynamics



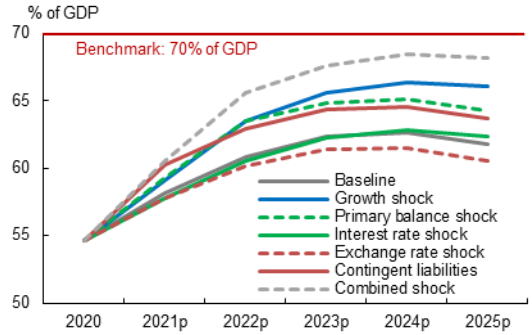
Sources: Department of Finance; AMRO staff estimates.

Macro-Fiscal Risks – Stress Tests

7. Stress test results suggest that the public debt is susceptible to growth and primary balance shocks, which are more likely to materialize than other shocks (Figure 6.5). The economic recovery could be delayed due to the prolonged COVID-19 containment measures. The primary balance could deteriorate due to either revenue shortfalls from delays in implementing tax reforms or spending needs to support the economy. Meanwhile, the one-time realization of contingent liabilities will shift the public debt trajectory at the year of recognition.

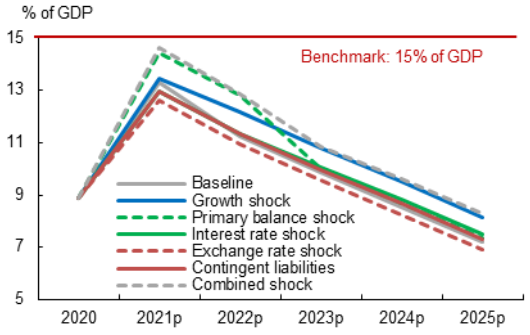
8. GFNs are sensitive to primary balance shocks (Figure 6.6). Primary balance shocks directly affect financing needs, while other shocks indirectly affect financing needs through the primary balance, interest payments, and amortization over time.

Figure 6.5. Public Debt



Sources: Department of Finance; AMRO staff estimates.
Note: We adopted the public debt benchmark from the IMF DSA in MAC (IMF, 2013).

Figure 6.6. Gross Financing Needs



Sources: Department of Finance; AMRO staff estimates.
Note: We adopted the public debt benchmark from the IMF DSA in MAC (IMF, 2013).

Table 6.2. Assumptions for Debt Stress Test

(Percent)	2021p	2022p	2023p	2024p	2025p
Baseline					
Real GDP growth	6.4	6.8	6.5	6.5	6.5
GDP deflator	3.1	2.0	1.9	1.9	1.9
Primary balance	-6.8	-4.9	-3.8	-2.6	-1.5
Effective interest rate	5.4	5.3	5.2	5.2	5.1
Growth shock					
Real GDP growth	4.9	5.3	6.5	6.5	6.5
GDP deflator	2.7	1.6	1.9	1.9	1.9
Primary balance	-6.7	-5.7	-4.5	-3.3	-2.2
Effective interest rate	5.4	5.3	5.2	5.1	5.1
Primary balance shock					
Real GDP growth	6.4	6.8	6.5	6.5	6.5
GDP deflator	3.1	2.0	1.9	1.9	1.9
Primary balance	-7.9	-6.4	-3.8	-2.6	-1.5
Effective interest rate	5.4	5.4	5.3	5.2	5.2

(Percent)	2021p	2022p	2023p	2024p	2025p
Interest rate shock					
Real GDP growth	6.4	6.8	6.5	6.5	6.5
GDP deflator	3.1	2.0	1.9	1.9	1.9
Primary balance	-6.4	-4.9	-3.8	-2.6	-1.5
Effective interest rate	5.4	5.5	5.6	5.6	5.7
Exchange rate shock					
Real GDP growth	6.4	6.8	6.5	6.5	6.5
GDP deflator	4.4	2.0	1.9	1.9	1.9
Primary balance	-6.1	-4.7	-3.5	-2.4	-1.3
Effective interest rate	5.4	5.3	5.2	5.1	5.1
Combined shock					
Real GDP growth	4.9	5.3	6.5	6.5	6.5
GDP deflator	4.0	1.6	1.9	1.9	1.9
Primary balance	-8.0	-6.2	-4.2	-3.1	-1.9
Effective interest rate	5.4	5.5	5.6	5.6	5.7

Sources: AMRO staff estimates.
Note: 1) Real GDP growth shock: –1.5 percentage points shock to 2021 and 2022; 2) Primary balance shock: –1.5 percent of GDP shock to 2021 and 2022; 3) Interest rate shock: +1 percentage points shock from 2021; 4) Exchange rate shock: one-time +5 percentage points shock in 2021; 5) Contingent liability shock: one-time 2.5 percent of GDP shock in 2021, by recognizing the accumulated contingent liabilities as of end-2020.

Debt Profile Vulnerabilities – Early Warning

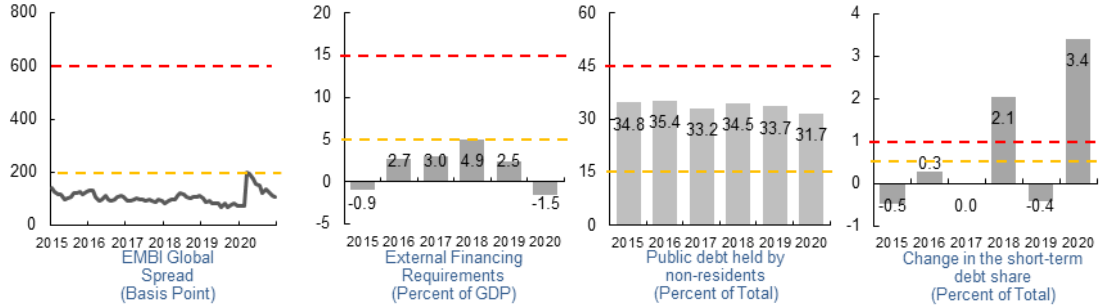
9. Market perception of sovereign risk has remained low. EMBI Global spread, which reflects market perception of risk, has been stable, except in March 2020 when the World Health Organization (WHO) declared COVID-19 as a global pandemic[19].

10. Debt structure characteristics have been broadly sound. External financing requirements have stayed low, and even became negative in 2020 as the current account recorded a surplus equal to 3.6 percent of GDP. The share of debt held by non-residents is between the lower and upper early warning thresholds, which implies moderate vulnerability to rollover and interest rate risks[20]. However, this part of the debt has been on a downward trend as the authorities have relied more on domestic financing[21]. The annual change in the share of short-term debt in 2020 has risen above the upper benchmark. However, it does not necessarily reflect an inability to issue long-term debt, because 77.5 percent of the total debt

[19] A low market perception of risk can be confirmed by CDS spread and sovereign credit ratings. The Philippines' five-year CDS spread remained low during the COVID-19 pandemic and was 42 in December 2020. The Philippines also succeeded in obtaining and maintaining the investment grade in sovereign credit ratings by major credit agencies.
[20] Composition of public debt held by non-residents in 2020 (percent of total): (By creditor) securities 57.7, multilateral 29.9, bilateral 12.5, (By currency) USD 77.0, JPY 14.4, EUR 6.8, others 1.7.
[21] The authorities financed from domestic and external sources at a ratio of 75:25 in 2020, and are aiming at 80:20 in 2021.

was still financed by medium- to long-term debt in 2020. Out of 15.0 percent of GDP increase in the public debt in 2020, short-term debt contributed only 2.8 percent of GDP while medium- to long-term debt contributed 12.2 percent of GDP.

Figure 6.7. Debt Profile Vulnerabilities



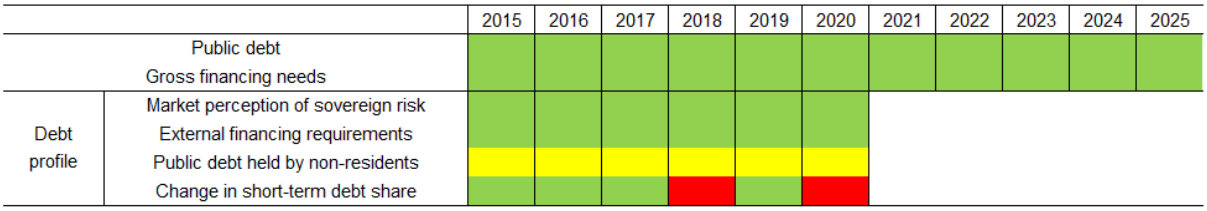
Sources: Haver; Department of Finance; AMRO staff estimates.
Note: 1) – – – Lower early warning (25 percent of the benchmark), – – – Upper early warning (75 percent of the benchmark). See IMF (2013) for a detailed discussion; 2) EMBI global spreads are computed by monthly average of daily spreads; 3)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

Overall Assessment

11. Results of our Debt Sustainability Analysis (DSA) show the overall risk of public debt sustainability to be low. The public debt-to-GDP ratio and the GFN-to-GDP ratio, which capture two important aspects related to debt difficulties – solvency and liquidity, have been stable below the benchmarks during 2015-2020. These ratios are assessed to remain below the benchmarks in the baseline and stressed scenarios in the next five years.

12. Some pockets of vulnerabilities remain in relation to the debt profile. More attention should be paid to reducing reliance on short-term debt. Although it could have been inevitable to increase short-term debt in 2020 to meet the financing needs with the diversified portfolio, the share of short-term debt should be carefully managed to prevent rollover and interest rate risks.

Figure 6.8. Heatmap



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, and 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, and 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*. https://www.imf.org/external/np/pp/eng/2013/050913.pdf

Annexes: Selected Issues

1. COVID-19's Impact on Overseas Remittances to the Philippines[22]

1.**Overseas Filipinos and their remittances play an important economic role in the Philippines.** Remittances represent an important source of income and foreign exchange for the economy. The money provides substantial assistance to many Filipino households as it contributes to the disposable income of families, improves living standards, and alleviates poverty[23]. Remittances have also been a very stable form of external income, even during recessions and crises.

2. **Unlike previous crises, the global economic fallout from the COVID-19 pandemic has led to a fall in remittances sent to the Philippines.** Though the reduction was not as large as initially expected, the economic and social impacts from this drop could be substantial given the role of remittances in enhancing welfare. Remittance flows will take time to fully recover, supported by vaccines becoming widely available globally and more Filipino workers able to work abroad again. This outlook should thus be taken into account in policymaking.

Characteristics of Overseas Filipino Workers

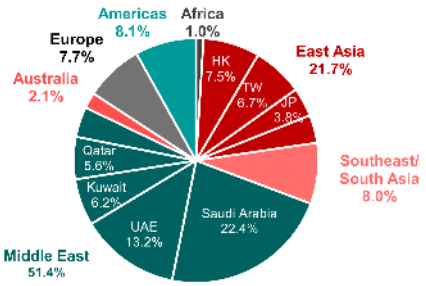
3. **Different estimates of the stock of overseas Filipinos (OFs) exist.** According to the Commission on Filipinos Overseas, 10.23 million Filipinos were residing or working overseas as of December 2013, with 48 percent as permanent migrants, 41 percent as temporary migrants, and the remainder as irregular migrants[24]. The United Nations, basing its estimates mainly on censuses across the world, put the total Filipino migrant stock in mid-2019 at 5.38 million[25]. Based on the 2019 Survey on Overseas Filipinos (SOF), the estimated stock of overseas Filipino workers (OFWs) was much lower, at around 2.2 million, but this number refers only to the OFWs who left the Philippines for work within the last five years and were still working abroad during the period April to September 2019.

4. **OFWs are widely dispersed around the globe** (Figure A1.1). More than half worked in the Middle East especially in Saudi Arabia and the United Arab Emirates. Noticeably, more females than males worked in the Middle East (60 versus 40 percent of total). For male OFWs, the popular destinations were Saudi Arabia, Europe and North America.

5. **OFWs work in diverse occupations** (Figure A1.2). Among male OFWs, almost one-quarter can be found as plant and machinery operators or assemblers, including in the construction sector, followed by technicians and associate professionals such as engineers (17.4 percent); service and sales workers (17.3 percent), and craft and related trade workers (17.3 percent). Across the different occupations, many are seafarers, such as seamen, oilers, cooks, engineers, mates or waiters, on passenger and cargo ships. The majority of female OFWs (62.5 percent) work in elementary occupations such as domestic help, as well as service and sales workers (17.7 percent). Professionals, including nurses and other health-care roles, make up 9.8 percent.

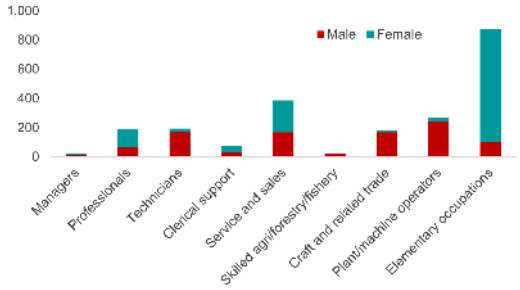
[22] Prepared by Anne Oeking.
[23] This note refers to cross-border migration and remittances. Domestic migration and remittances, often from rural to urban areas, play an important economic role as well. The 2018 National Migration Survey showed that around half of the remittance-receiving population obtained remittances from local origins, though in smaller amounts.
[24] The Commission has since not released any updates on its Stock Estimate of Filipinos Overseas, pending approval from the Philippine Statistics Authority (PSA) Board of a proposed framework on counting overseas Filipinos. See Commission on Filipinos Overseas for more details.
[25] The UN equates international migrants with the foreign-born population whenever this information is available. See United Nations, 2019 for more details.

Figure A1.1. OFWs by Place of Work, April – September 2019
(In percent of total OFWs)



Source: Philippine Statistics Authority.
Note: Based on 2.20 million OFWs captured in the 2019 Survey on Overseas Filipinos. HK = Hong Kong, China; TW = Taiwan, Province of China; JP = Japan.

Figure A1.2. OFWs by Occupation, April – September 2019
(Number of OFWs in thousands)



Source: Philippine Statistics Authority, AMRO staff calculations.
Note: Based on 2.20 million OFWs captured in the 2019 Survey on Overseas Filipinos.

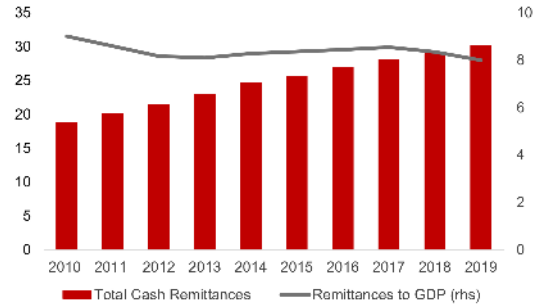
Characteristics of Remittances to the Philippines

6. **OFWs are the source of significant remittances to the Philippines**. Whichever estimate of the OFW stock is closest to the actual value, overseas Filipinos represent a sizeable group compared with the Philippines' labor force, which currently stands at around 44 million. Most OFWs remit cash home to their families – around 88 percent of OFWs according to the SOF's findings – and likely many other long-term or permanent Filipino migrants as well. The remittances they send thus account for a considerable share of income in the Philippines. Officially recorded international cash remittances have constituted around 7.5 percent of gross national income in recent years, or around USD30 billion per year.

7. **Until 2019, official cash remittances grew every year for almost two decades, although the size of the total sum in relation to the overall economy has decreased slightly over the years.** Remittances grew from around USD18.8 billion in 2010 to USD30.1 billion in 2019 (Figure A1.3). The amounts have risen steadily during this period, recording annual growth rates of between 3.1 percent (in 2018) and 8.2 percent (in 2010). However, the Philippine economy grew somewhat faster than remittances. As a result, the share of remittances in GDP fell from 9 percent in 2010 to 8 percent in 2019, the lowest since 2001.

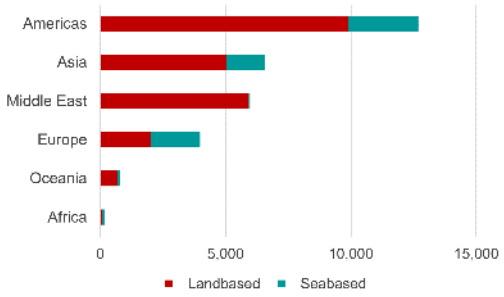
8. **The Philippines receives remittances from all over the world.** Not surprisingly, with a widely dispersed diaspora, the country sees quite a diverse source of remittances from various regions (Figure A1.4) and contributions from both land and sea-based workers. The source of origin for official cash remittances is skewed toward the Americas, but this can partially be explained by the presence of correspondent banks and money courier offices in the United States, which on paper are the immediate source of funds, even when those funds originate in other parts of the world. In contrast to the official data, the SOF showed the remittance sources of the surveyed OFWs as broadly reflecting the geographic distribution of their host countries (Figure A1.5).

Figure A1.3. Total Cash Remittances, 2010-19
(In million US dollar; percent of GDP)



Source: BSP, Haver Analytics, AMRO staff calculations.

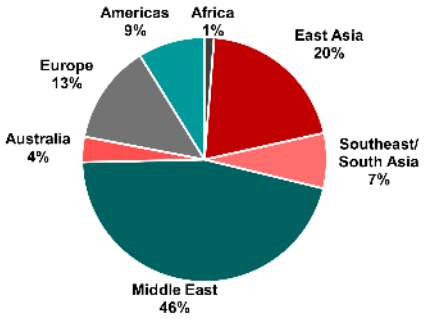
Figure A1.4. Total Cash Remittances by Source, 2019
(In thousand US dollar)



Source: BSP.
Note: Funds are attributed to the most immediate source, and since many remittances are coursed through correspondent banks or through money couriers located in the United States, the US appears as the main source of remittances.

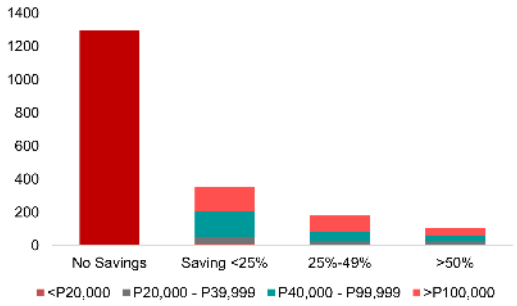
9. **A large share of remittances received by households is spent instead of saved.** Around 67 percent of all remitting OFWs do not generate savings through the remittances at the receiving end (Figure A1.6). The 2018 National Migration Survey (NMS) showed that the majority of the households used most of the money for consumption of food and other household needs, followed by education and medical expenses. Among those households able to set aside part of the remittances received, more than 55 percent saved only a small share of below 25 percent of the total. Households that received higher amounts were able to save more.

Figure A1.5. Remittances in Survey by Source, April – September 2019
(Percent of total)



Source: Philippine Statistics Authority.
Note: Based on 2.20 million OFWs and a total of 158 billion pesos of cash remittances captured in the 2019 Survey on Overseas Filipinos.

Figure A1.6. Share of Savings from Cash Remittances Received by Size of Cash Remittances, April – September 2019
(Number of OFWs)



Source: Philippine Statistics Authority, AMRO staff calculations.
Note: Based on 1.93 million OFWs who sent cash remittances, as captured in the 2019 Survey on Overseas Filipinos.

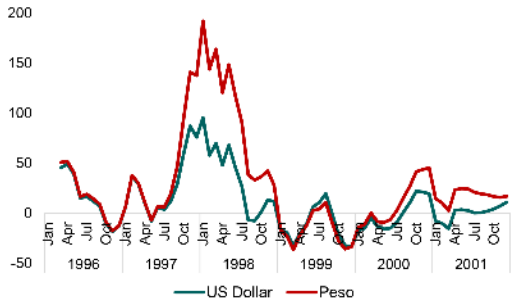
10. **Official statistics likely underestimate the actual size of the remittances**. Some remittances take place through informal channels and thus cannot be recorded. According to the 2019 SOF, around 75 percent of remittances were sent as cash, mostly via banks or money transfer. These are the types of money flow captured by official statistics and recorded

as cash remittances by the BSP[26]. In addition, 22 percent of remittances recorded in the SOF were physically brought home as cash, and another three percent as contributions in kind. The latter two types would likely be difficult to capture in officially recorded flows.

Remittances during the COVID-19 Crisis

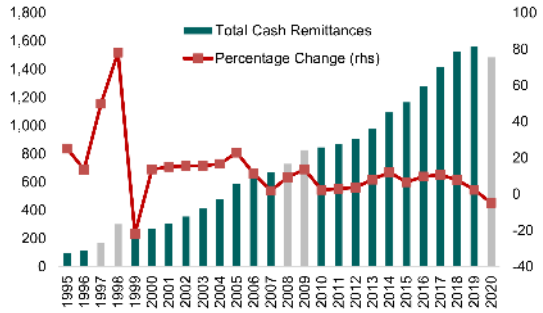
11. **In past crises, remittances poured into the Philippines.** The countercyclicality of remittances with respect to the Philippines' economy is difficult to establish empirically for an extended period (Box A.1). But at least during the Asian Financial Crisis in 1997-98 (Figure A1.7), remittances surged, measured both in US dollar terms and in peso terms (with the peso depreciating sharply in the second half of 1997). A similar, but less stark, finding holds for the Global Financial Crisis during 2008/09 (Figure A1.8). Moreover, irrespective of their countercyclicality, remittances can act as a shock absorber due to their stability. Indeed, compared with other financial inflows, remittances are by far the least volatile (Figure A1.9).

Figure A1.7. Remittance Inflows during the Asian Financial Crisis
(Percentage change year-over-year)



Source: BSP, Haver Analytics, AMRO staff calculations.

Figure A1.8. Total Cash Remittances
(Billion peso; Percentage change year-over-year)



Source: BSP, Haver Analytics, AMRO staff calculations.
Note: Economic crises are shaded in gray, including the Asian Financial Crisis (1997-98), the Global Financial Crisis (2008-09), and the COVID-19 Crisis (2020).

12. **By comparison, COVID-19 poses a unique crisis, and its enormous economic impact across the world is likely to have affected OFWs and their remittances as well.** Several important distinctions can be drawn with previous crises.

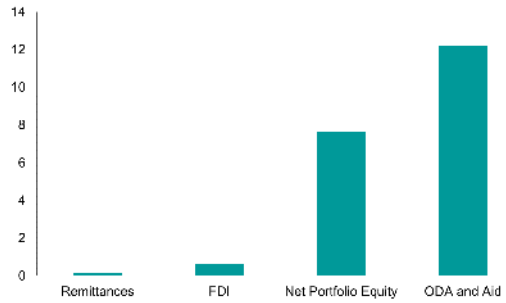
- From a health perspective, migrant workers have been directly affected by COVID-19 infections, including some who died.
- Compared to former, geographically limited economic crises, the COVID-19 crisis is truly global and affects virtually every country across the globe. The Filipino diaspora's strength of geographic diversification has thus been less effective than in the past.
- The pandemic has inflicted widespread job losses, including for OFWs, as businesses had to shut down and some host countries tried to preserve jobs for locals. With massive unemployment, many OFWs have been repatriated. In addition, with fewer

[26] The 2019 SOF found 158 billion pesos in cash remittances between April and September 2019, which according to BSP statistics represented around 10 percent of total cash remittances officially recorded in 2019. Whether other groups of remitters sent a similar amount of remittances via official channels is unknown.

available jobs, travel restrictions, and closed borders, new deployment has become more difficult[27].

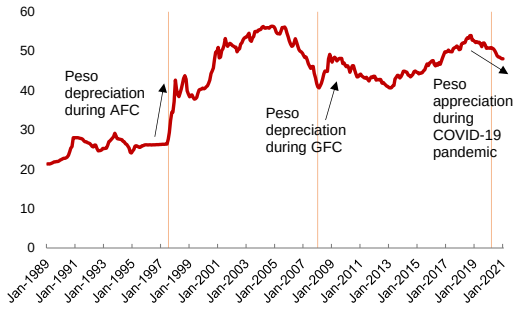
- The COVID-19 impact has been uneven across different sectors. The job diversification among OFWs might have ensured that their job losses in some sectors, such as seafaring on cruise ships or the hard-hit services sectors, could be at least somewhat offset by demand in other sectors, such as in health care or other essential services[28].
- Finally, remitting money in peso equivalent terms yields more gains when the Philippine peso is weak. The peso depreciated during past crises, benefiting overall remittances, while this time, it has continued to strengthen during the crisis (Figure A1.10). Stable remittances, of course, could be one factor supporting the peso's recent strength.

Figure A1.9. Volatility of Remittances and other Financial Inflows
(Standard deviation of year-over-year change, 1997-2019)



Source: Haver Analytics, AMRO staff calculations.

Figure A1.10. Peso-US Dollar Exchange Rate
(Peso per US dollar)



Source: Haver Analytics, AMRO staff calculations.
Note: AFC = Asian Financial Crisis, GFC = Global Financial Crisis.

13. **During the COVID-19 crisis in 2020, remittances to the Philippines dropped for the first time since 2001.** Remittances fell sharply during the first main wave of the global pandemic in the spring of 2020, and somewhat recovered after the first round of lockdowns was over (Table A1.1.1). For the full year, officially recorded inflows dropped by 0.8 percent in US dollar terms, and by a sharper 5.0 percent in peso terms. Sea-based remittances dropped more sharply than land-based remittances, though they represented only around one-fifth of the officially recorded total.

[27] According to news reports, around half a million OFWs were displaced from work in 2020 and most were repatriated. Deployment from January to October 2020 dropped by around 60 percent compared with the same time period in 2019, with the majority deployed as rehires. It is likely that some return migration to the Philippines was discouraged for fear of not being able to reenter the host economies.
[28] The Philippines implemented a temporary overseas deployment ban on health-care professionals, such as nurses and doctors, at the height of the first wave of the coronavirus in April 2020. The ban was lifted in December 2020, though a cap on the number of nurses for deployment was introduced for 2021.

Table A1.1. Monthly Remittance Inflows, 2020
(Percentage change of US dollar remittances, year-over-year; percent of total)

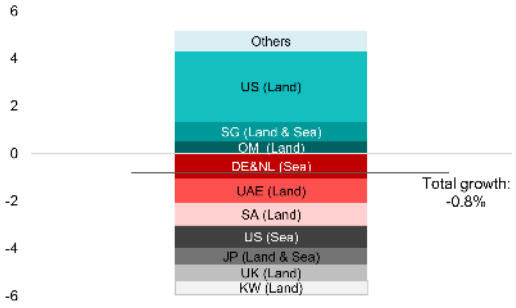
Region	2020												2020		Share of 2020 remittances
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
TOTAL	6.6	2.5	-4.7	-16.2	-19.3	7.7	7.8	-4.1	9.3	2.9	0.3	-0.4	↓	-0.8	**100.0**
Landbased	7.4	3.5	-6.6	-17.9	-21.1	14.2	12.6	-4.6	10.2	3.3	0.5	-0.7	↓	-0.2	78.8
Seabased	3.8	-1.0	2.7	-10.3	-12.4	-13.2	-9.2	-2.2	6.5	1.2	-0.2	0.8	↓	-2.8	21.2
ASIA	17.5	5.6	-0.4	-12.8	-9.2	14.2	17.9	-0.4	8.8	2.4	0.4	-6.4	↑	2.7	**22.5**
Landbased	26.0	12.5	2.7	-9.0	-8.7	25.0	22.9	-5.1	5.5	-1.4	-5.7	-9.1	↑	3.6	17.4
Seabased	-6.9	-13.6	-9.7	-22.8	-10.5	-14.9	2.2	17.2	20.1	19.1	24.7	4.7	↓	-0.1	5.1
AMERICAS	13.5	11.8	6.4	-9.2	-15.8	14.8	14.7	4.0	8.2	9.6	0.7	7.2	↑	5.4	**44.7**
Landbased	12.8	11.3	5.2	-9.8	-15.7	23.7	23.2	9.7	13.0	15.7	7.2	12.7	↑	9.1	36.1
Seabased	16.2	13.3	10.9	-7.1	-16.5	-15.2	-16.0	-17.7	-8.9	-13.3	-19.9	-11.3	↓	-7.7	8.6
OCEANIA	-35.5	-28.9	-17.7	-18.7	-20.9	4.0	-8.0	-12.5	-0.2	9.1	28.8	5.5	↓	-9.4	**2.4**
Landbased	-35.1	-34.0	-39.4	-42.8	-44.8	-19.5	-23.0	-32.8	-24.8	-15.3	3.1	-21.4	↓	-28.6	1.6
Seabased	-37.6	13.7	94.2	139.8	243.0	181.6	119.7	123.9	179.9	153.4	199.1	178.2	↑	122.0	0.7
EUROPE	-6.8	-7.4	-20.1	-26.4	-13.3	-19.5	-11.7	0.4	6.3	-3.3	-8.1	-15.5	↓	-10.8	**11.9**
Landbased	-11.8	-5.0	-34.3	-37.8	-6.2	-17.7	-9.3	8.6	2.0	-7.3	-16.2	-30.8	↓	-15.0	5.7
Seabased	-0.9	-9.8	-5.5	-15.1	-20.4	-21.5	-14.1	-6.3	9.4	0.3	0.0	5.5	↓	-6.7	6.2
MIDDLE EAST	-2.0	-7.4	-17.4	-29.6	-38.6	4.8	-2.0	-28.4	16.4	-9.2	2.3	-0.2	↓	-10.6	**17.9**
Landbased	-2.2	-7.5	-17.4	-29.6	-38.5	5.0	-1.6	-28.4	16.6	-9.1	2.8	0.0	↓	-10.5	17.7
Seabased	27.5	5.5	-15.1	-26.9	-49.9	-23.5	-43.1	-27.3	-10.4	-21.6	-45.4	-33.5	↓	-23.1	0.1
AFRICA	-15.3	-17.2	27.7	74.8	32.0	62.7	8.0	88.3	23.1	44.4	-7.6	35.3	↑	24.6	**0.6**
Landbased	-28.1	-22.1	-12.2	37.4	-27.9	19.3	-33.1	-8.5	11.4	1.4	-78.2	-1.7	↓	-24.4	0.2
Seabased	-7.4	-14.3	54.0	97.6	66.4	81.8	33.9	152.0	27.5	63.0	121.2	52.6	↑	56.0	0.5

Source: BSP, AMRO staff calculations.

14. **Many international outlets had originally forecast a much deeper fall in remittances to the Philippines, but the data surprised on the upside.** Two possible reasons for this outcome come to mind.

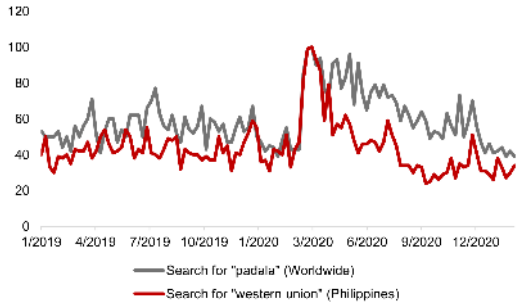
- First, altruistic OFWs who are able to keep their jobs have sent more money to support their families. The higher remittances could have been buoyed by government-stimulus checks provided in some migrant host economies, or higher savings rates as a result of social-distancing measures and restrictions on travel that have reduced opportunities for spending, including on otherwise regular home visits. As the peso appreciated over the course of 2020, it would have been necessary for the value of remittances sent in US dollar terms to increase if altruistic migrants were to have a minimum target amount of pesos for their families.
- Second, the smaller-than-expected drop in remittances could be partially transitory or artificial.
    - As travel borders remained closed, more remittances had to be sent via formal channels. These transactions would show up as an increase in official remittance data, even when total actual flows might not have increased, or might even have decreased. As far as the official data is concerned, the assumption that remittances via bank transfer or money courier have risen is backed up by the large positive growth contribution from land-based remittances originating in the United States, the home of many correspondent banks and money courier offices (Figure A1.11). Not surprisingly, Google search trends for major digital money transfer operators increased sharply over the course of the pandemic (Figure A1.12).
    - In addition, OFWs who had to return home because of the crisis might have sent all of their savings home if they did not anticipate returning to their host economies, which would have led to a temporary boost in remittances.

Figure A1.11. Contribution to Remittances Growth, 2020
(Percentage points)



Source: BSP, AMRO staff calculations.
Note: DE = Germany, JP = Japan, KW = Kuwait, NL = Netherlands, OM = Oman, SA = Saudi Arabia, SG = Singapore, UAE = United Arab Emirates, UK = United Kingdom, US = United States.

Figure A1.12. Frequency of Google Search Interest for Major Money Transfer Operators
(Index, highest interest = 100)



Source: Google Trends.
Note: Numbers represent search interest relative to the highest point for the given region and time. A value of 100 is the peak popularity for each term, while it is not comparable across the two terms.

15. **The fall in remittances, following continuous growth over the last decades, will have macroeconomic consequences**. Given that a large share of remittances goes to consumption, any slowdown or decrease is expected to amplify the slowdown in overall domestic consumption – which is particularly relevant as the Philippine economy is highly consumption-driven, with consumption accounting for around three-quarters of GDP. By extension, consumption tax revenues could drop in tandem with remittance receipts. Further, remittances are the largest source of foreign exchange and usually contribute to a sizeable part of the current account and anchor international investor confidence. A drop in remittances could thus upset balance of payments financing. But the drop in domestic demand has translated into a sharp fall in imports, more than offsetting the decline in remittances.

16. **Socioeconomic impacts from lower remittances at the household level could be more detrimental than on a macro level.** According to the NMS, nine percent of all households had at least one member who is an OF at the time of the survey in 2018. Although remittances in aggregate have not been as heavily impacted as expected, lower remittance inflows would translate into lost household incomes, and could intensify economic hardship, raise inequality, increase poverty, and lower investment in human capital such as education and health. In addition, the dispersion of occupations could yield unequal impacts across OFWs and their families. Domestic labor markets, which in the Philippines have been strongly hit, are likely struggling to absorb returning migrants. Many returning OFWs might find themselves unemployed and having to retrain to overcome skills mismatches with available jobs.

Box A1.1 Cyclicality of Remittances to the Philippines

Remittances are often regarded as countercyclical to the recipient's domestic economy. The assumption of countercyclicality tends to hold when remittances are sent mainly out of altruism, when migrants send part of their incomes home to improve the lives of family members left behind. This is likely to be the case for the Philippines.

Empirically, however, the evidence is not clear on whether aggregate remittances increase amid an economic downturn at home. Some studies, such as Sayan (2006), do not find strong evidence for countercyclicality; for the Philippines, Di Marco and others (2015) find that behavior can change over time. But on a household level, Yang and Choi (2017) and Su and Magada (2017) find that following income shocks to certain parts of the Philippines, more remittances have been recorded.

The Philippines has experienced few economic downturns in the past decades, so countercyclicality is particularly difficult to establish. The Philippines has grown quite strongly over the last few decades, and had not recorded any negative real GDP growth since the Asian Financial Crisis in the late 1990s, thus providing few episodes to study. It is important to note that remittances could of course be one supporting factor stabilizing growth.

We estimate a simple model to understand determinants of remittances in the Philippines on an aggregate level and to assess their cyclicality. Our model follows Choo and Oeking (2020). We examine correlations among remittances, income differentials between OFWs' host economies and the Philippines, the cyclical position of the Philippines and host economies, as well as exchange rate changes by estimating the following regression:

Income differential *Philippines' cyclical position*

$$\log rem_{it} = \alpha + \beta_1 \sum_{j=1}^{n} w_i^j \log\left(\overline{y_{it}}/\overline{y_{it}^j}\right) + \beta_2 \log(y_{it}/\widetilde{y_{it}}) + \beta_3 \sum_{j=1}^{n} w_i^j \log\left(y_{it}^j/\widetilde{y_{it}^j}\right) + \beta_4 \sum_{j=1}^{n} w_i^j \, \Delta ner_{it}^j + \gamma_i + \varepsilon_{it}$$

Cyclical position of host economies *Nominal exchange rate changes*

The model considers income differentials, cyclical positions, and changes in the exchange rate. We denote the Philippines by i and OFWs' host economies by j. Remittances are measured as total cash remittances in US dollars per capita. We weigh host economies' data with w_i^j, the share of OFWs in economy j based on data from the Survey of Overseas Filipinos between 1993 and 2019, for all host economies making up at least 80 percent of OFWs. Shares are reweighted so that $\sum_{j=1}^{n} w_i^j = 1$.

- The long-run income differential between the Philippines and host economies is measured as the difference in the five-year moving average per capita income in PPP valued dollars.
- The short-term cyclical positions are measured as the deviation of real GDP from its long-run trend as captured by the five-year moving-average real GDP growth.
- The change in the nominal exchange rate is measured by the change in the average nominal exchange rate between the Philippine peso and the local currency in economy j.

The final dataset is based on quarterly data for the time period Q1 1996 to Q2 2020, interpolated from annual data for a few host economies in the early years.

The long-term income differential and the exchange rate are the main factors associated with the aggregate level of remittances in the Philippines. Across different specifications, the results suggest that a positive income differential between host countries and the Philippines is associated with higher levels of remittances (Table A1.1.1). In addition, changes in the exchange rate are statistically significantly associated with the level of remittances.

Table A1.1.1 Regression Results

	Dependent variable				
	log of remittances per capita				
Explanatory variables	(1)	(2)	(3)	(4)	(5)
Income differential	1.52 ***	1.49 ***	1.51 ***	1.48 ***	
	0.14	0.13	0.13	0.13	
Philippines' cyclical position	0.09			-0.05	-0.16
	0.45			0.44	0.59
Cyclical position of destination economy	-0.85 *		-0.82 *		-0.53
	0.46		0.44		0.34
Change in nominal exchange rate	-3.18 ***	-3.36 ***	-3.17 ***	-3.35 ***	-3.01 ***
	1.00	0.99	0.99	0.99	1.08
Constant	7.27 ***	7.21 ***	7.25 ***	7.21 ***	3.59 ***
	0.31	0.29	0.31	0.29	0.06
Observations	97	98	98	98	102
R^2	0.33	0.33	0.33	0.33	0.05

Source: BSP, IMF WEO, Haver Analytics, AMRO staff calculations.
Note: ***/**/* denotes statistical significance at the 1/5/10% level. Robust standard errors.

Whether and how short-term business cycle fluctuations in the Philippines and in host economies impact aggregate remittances is less clear. Most findings are not statistically significant, and suggest that beyond the long-term income differential and the exchange rate – which could also act as a shock absorber during short-term cyclical variations – the business cycle is less important as remittances are fairly stable over time. One reason for this finding could also be very stable economic growth, such that the Philippines' data offers little variation to test the hypothesis of countercyclicality. In addition, our simple model does not capture any endogeneity, and stable remittance flows could also support the Philippine economy in times of crisis and thus help smoothen the business cycle.

Looking Ahead

17. **As the economic impacts from the pandemic are expected to linger, both in the Philippines and worldwide, remittances will likely take some time to catch up to levels that might have been reached had the crisis not happened.** Remittances will likely remain subdued for some time, as temporary factors sustaining the money flows during the crisis taper off, labor markets around the world take time to recover and closed borders continue to deter migration, likely until vaccines are widely deployed and herd immunity is achieved in most countries. Many sectors worldwide, such as the devastated services and tourism sectors, are unlikely to recover until at least 2022. And many host economies, including those in the Middle East, have been hard hit and face nationalist pressure to provide their own citizens with jobs. The deployment of OFWs – and with it the recovery in remittances – will thus take

time to return to previous levels. At the same time, the global economic landscape has changed and the scarring experienced by many economies may be permanent. Consequently, the labor markets for OFWs would have changed, as transformed economies will likely require different skillsets, and lost deployment opportunities will not be immediately offset.

18. **Though migration and remittances will eventually rebound, policy should in the meantime focus on addressing the impacts from the remittance slowdown, especially at the household level.** Even though remittances fell less than expected and much less than the Philippines' GDP in 2020, the level of officially recorded remittances still decreased in 2020 after close to two decades of positive growth; officially recorded numbers as well as transitory factors might hide even larger weaknesses. The economic consequences from this fall thus cannot be disregarded. While the Philippine authorities have already provided some assistance to displaced OFWs, further policy considerations could include expanding the coverage of social safety nets to ensure that assistance is widely available for returning or jobless OFWs and their families for an extended period. Policies to strengthen domestic labor markets to absorb and integrate returning workers could be key, including in the medium term. The government should further support the upskilling and reskilling of returning OFWs and prospective OFW candidates, to align skills with the demands of post-pandemic economies.

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2. Fiscal Policy Space and Implications on Fiscal Policy in the Philippines[29]

In 2020, fiscal policy played a critical role in mitigating adverse impacts of COVID-19 and supporting economic recovery. However, the recovery momentum is still weak in the face of a large negative output gap, while fiscal sustainability concerns are growing. Against such a background, this selected issue discusses the role and stance of fiscal policy going forward after assessing the fiscal policy space as of the end of 2020.

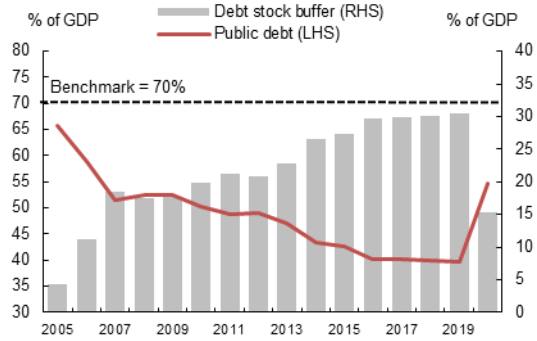
Fiscal Policy Space

1. AMRO assesses fiscal policy space based on debt sustainability, risks to the financing capacity and debt profile, and country-specific factors. Fiscal policy space is generally understood as the extent to which a government can undertake discretionary fiscal policy measures to mitigate short-term economic downturns without undermining fiscal sustainability. AMRO has developed a fiscal policy space assessment framework by using both quantitative and qualitative aspects in a three-block approach. First, debt sustainability is analyzed by comparing public debt and primary balance with their indicative benchmarks. Second, the risks to financing capacity and debt profile are assessed by reviewing and analyzing market perception of sovereign risk, balance sheet composition, and debts of the external and private sectors. Lastly, country-specific factors are incorporated to cover additional aspects that are not adequately captured in the first two blocks[30].

2. Quantitative debt sustainability indicators suggest that the Philippines has sufficient buffer for fiscal expansion. The Philippines had lowered its debt-to-GDP ratio in the past fifteen years before it was hard hit by the COVID-19 health crisis in 2020. Because of the large fiscal stimulus in response to the pandemic, national government debt increased from 39.6 percent of GDP in 2019 to 54.6 percent of GDP in 2020, but still remained below the debt burden benchmark of 70 percent of GDP, implying a relatively large fiscal buffer is still available (Figure A2.1)[31]. The primary balance deteriorated substantially in 2020 as revenue plummeted due to the economic downturn (Figure A2.2)[32]. Although the primary balance buffer vanished in 2020, the Philippines still has a buffer on the debt stock side. Therefore, the temporary worsening of the primary balance below the debt-stabilizing benchmark might be less critical as long as it is carefully managed to be short-lived.

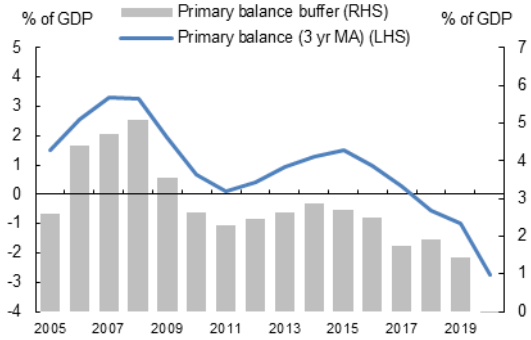
[29] Prepared by Byunghoon Nam.
[30] See Poonpatpibul and others (2020) for a more detailed discussion.
[31] AMRO adopted the debt burden thresholds of 85 percent for advanced economies (AEs) and 70 percent for emerging market economies (EMs) from the IMF Public Debt Sustainability Analysis in Market-Access Countries (IMF, 2013), which were derived from an early warning (signal-to-noise) approach. Debt stock buffer is defined as the difference between the debt burden threshold and the government debt-to-GDP ratio.
[32] Debt-stabilizing primary balance is defined as the level of primary balance needed to keep the debt-to-GDP ratio constant at a sustainable debt level (defined here as 70 percent of GDP). Specifically, $pb^* = \left(\frac{\tilde{r}-\tilde{g}}{1+\tilde{g}}\right) d^*$, where pb^*: debt-stabilizing primary balance, d^*: benchmark sustainable debt-to-GDP ratio, $\tilde{r}$: long-run real interest rate, $\tilde{g}$: long-run real growth rate. Primary balance buffer is defined as the difference between the debt-stabilizing primary balance and the three-year moving average of the primary balance.

Figure A2.1. National Government Debt



Sources: Department of Finance; AMRO staff estimates.

Figure A2.2. Primary Balance



Sources: Department of Finance; AMRO staff estimates.

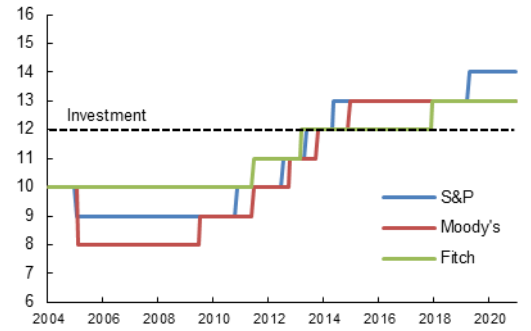
3. Assessment of the financing risk and debt profile shows that the Philippines' debt position is strong in qualitative aspects.

- **Market perception of sovereign risk is low.** The five-year Philippine sovereign CDS spread has declined significantly since the Global Financial Crisis (GFC) and remained low during the COVID-19 pandemic (Figure A2.3). The Philippines has also succeeded in obtaining and maintaining the investment grade of sovereign credit ratings issued by major credit agencies (Figure A2.4).

Figure A2.3. Five-year CDS spread

Sources: Bloomberg.

Figure A2.4. Sovereign Credit Rating

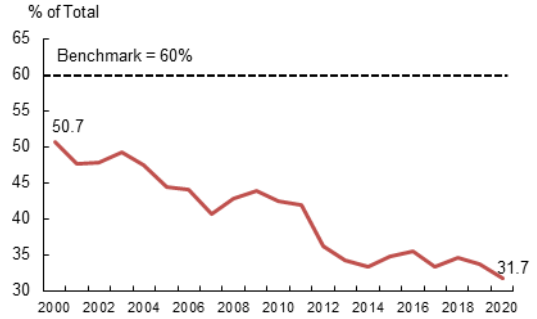


Sources: S&P; Moody's; Fitch.
Note: Credit rating was indexed to 1 – 21 with BBB- and equivalent at 12.

- **Balance sheet indicators show that the Philippines' debt composition is not vulnerable to sudden shocks.** The share of public debt held by non-residents has gradually declined to 31.7 percent in 2020, much lower than the benchmark of 60 percent (Figure A2.5)[33]. A low dependency on external financing helps alleviate vulnerabilities to liquidity risks stemming from a sudden shift in foreign investors' risk appetite. The rollover risk is also low since the share of amortization within 12 months accounted for 7.8 percent of total government debt at the end of 2020 (Figure A2.6).

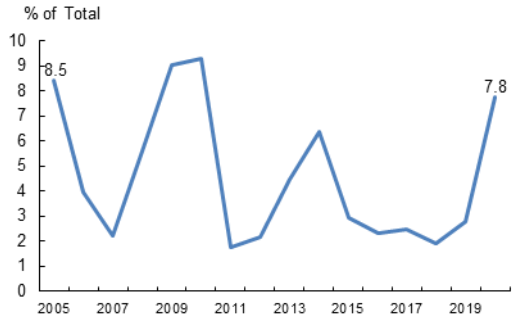
[33] AMRO adopted the debt profile benchmarks for public debt held by non-residents of 60 percent of total debt for both AEs and EMs, from the IMF Public Debt Sustainability Analysis in Market-Access Countries (IMF, 2013).

Figure A2.5. Public Debt held by Non-residents



Sources: Department of Finance; AMRO staff estimates.

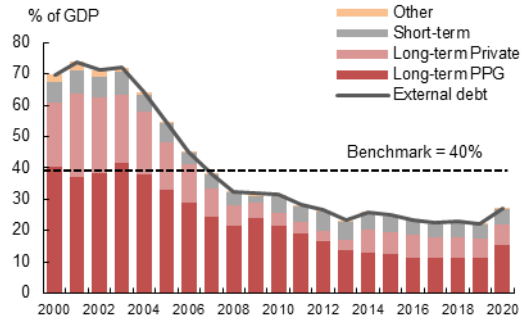
Figure A2.6. Public Debt maturing within 12 months



Sources: Department of Finance; AMRO staff estimates.

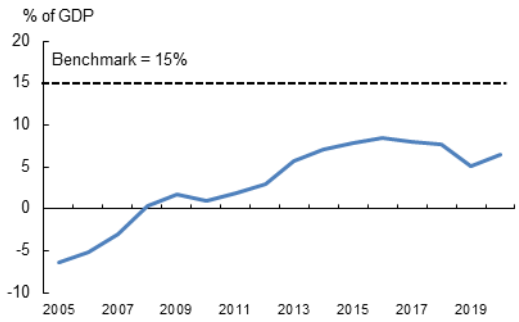
- **External and private-sector debt indicators reveal low risks related to contingent liabilities.** External debt as percent of GDP has come down below the benchmark of 40 percent since late 2000s, which implies a relatively low probability of an external debt crisis (Figure A2.7)[34]. Contingent liabilities risk from rising domestic credit has also been well-contained as the speed of expansion of domestic credit to the private sector, which carries a potential credit bubble, has always been below than the early warning threshold (Figure A2.8)[35].

Figure A2.7. External Debt



Sources: World Bank; AMRO staff estimates.

Figure A2.8. Changes in Domestic Credit to Private Sector/GDP



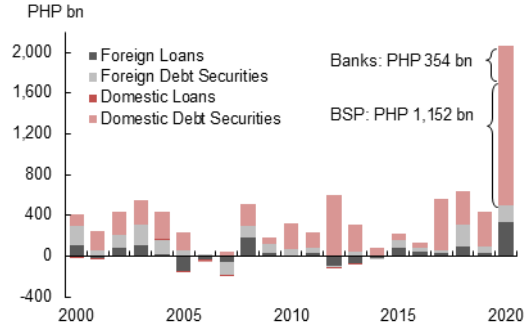
Sources: BSP; AMRO staff estimates.

4. Country-specific factors confirm the assessment made in the first two blocks, especially in terms of financing capacity and contingent liability management. The Philippine government is not expected to experience difficulties in financing the fiscal deficit as it relies mostly on domestic financing. In 2020, the BSP purchased the bulk of government securities issued through the secondary market in order to provide liquidity to the market and counter the risk aversion of commercial banks, and is committed to supporting government financing. On the other hand, the authorities have successfully reduced contingent liabilities by undertaking reform measures to strengthen the institutional framework for managing contingent liabilities arising from public-private partnership (PPP) projects.

[34] Based on its external debt sustainability analysis, the IMF argues that for countries with an external debt-to-GDP ratio of below 40 percent, the conditional probability of a debt crisis or "correction" is around 2 percent to 5 percent; for countries with debt ratios above this level, the conditional probability rises to about 15 percent to 20 percent. The estimated benchmark level thus provides a rough guide for assessing a country's external debt ratio, with an appreciable increase in the probability of a crisis at external debt levels above it.

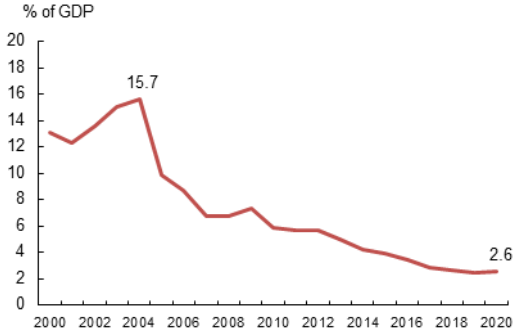
[35] The speed of expansion of domestic credit to the private sector is calculated as the past three-year cumulative level change as a share of GDP and compared with the threshold of 30 percent for AEs and 15 percent for EMs.

Figure A2.9. Government Financing



Sources: Department of Finance; AMRO staff estimates.

Figure A2.10. Contingent Liabilities



Sources: Department of Finance; AMRO staff estimates.

5. According to AMRO staff's assessment, the fiscal policy space remained relatively sufficient at the end of 2020, albeit less ample than in previous years. The debt stock buffer was still large enough for the government to undertake discretionary fiscal policy measures to support the economy without significantly risking debt sustainability. The Philippine financing capacity remained reasonably strong as the domestic bond market continued to function robustly with support from the BSP, while the market perception of risk from external investors stayed low. Risks from balance sheet composition and contingent liabilities were well-managed.

Fiscal Policy Discussion

6. Given the large negative output gap and the moderate fiscal policy space available, more expansionary fiscal policy measures are deemed appropriate should the economic recovery falter or weaken. The negative output gap is expected to remain at least until the end of 2022[36]. Weakness in the economic recovery and prolonged slack in the economy would leave a permanent scar on the economy. While it is important to preserve some policy space in a highly uncertain environment, sufficient fiscal support is essential to expedite the recovery, revitalize economic activities and confidence, and support livelihoods.

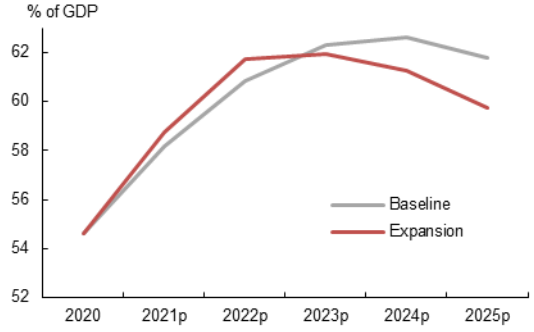
7. More active fiscal policy will support a stronger economic recovery, which will in turn enhance long-term debt sustainability. To demonstrate the medium- to long-term implications of a more active fiscal policy, we compare the projected debt-to-GDP ratio of two policy packages under two scenarios. The two policy packages are (i) baseline package that assumes a moderate fiscal consolidation and (ii) expansionary package that increases growth-friendly expenditure by 1.5 percent of GDP in 2021 and 2022, compared to the baseline. The two scenarios are (i) baseline scenario and (ii) adverse scenario that assumes the real GDP growth rate will fall by 1.5 percentage points in 2021-2022 due to the weakness in economic recovery or materialization of some risk factors.

- **Under the baseline scenario, the expansionary package will close the output gap faster and make the debt-to-GDP ratio lower in the medium-term, although higher in the short-term**. The size of the fiscal multiplier, which measures the impact of discretionary fiscal policy on output, depends on revenue/expenditure, composition, state of the economy and other factors. Among many empirical studies, we adopt the so-called

[36] The potential GDP and output gap are difficult to estimate and vary depending on the estimation methods, especially during crisis periods. However, in any method, the output is estimated to remain negative until the end of 2022.

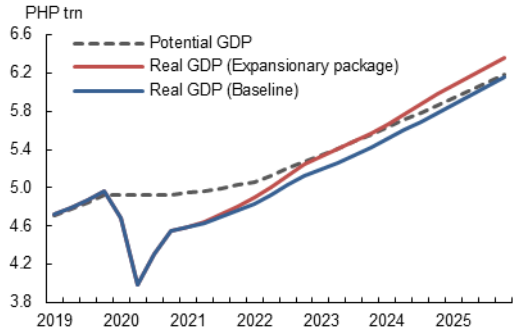
"bucket approach" suggested by the IMF (2014)[37]. Following this approach, we assume that an increase in expenditure by 1.5 percent of GDP will raise the GDP growth rate by 0.63 percentage point in the first year and have persistent effects in the following years[38]. Our debt stress test results demonstrate that the expansionary package will increase the debt-to-GDP ratio by 0.9 percent of GDP in 2022, but reduce it by 2.0 percent of GDP in 2025 (Figure A2.11). At the same time, the output gap will be closed faster (Figure A2.12)[39].

Figure A2.11. Debt Stress Test



Sources: AMRO staff estimates.

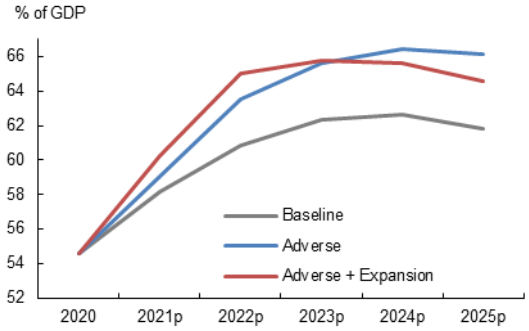
Figure A2.12. Real GDP



Sources: AMRO staff estimates.

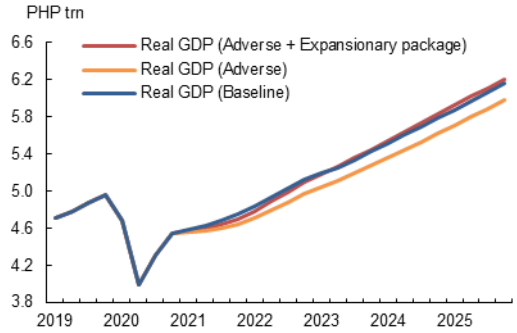
- **Under the adverse scenario, the expansionary package will help both the growth path and the debt trajectory to converge to the baseline benchmarks.** The debt-to-GDP ratio is projected to rise sharply under the expansionary package in the short-term, before gradually heading to the baseline trajectory in the medium- to long-term (Figure A2.13). Moreover, the expansionary fiscal policy will support the growth trajectory to converge to the baseline path (Figure A2.14).

Figure A2.13. Debt Stress Test



Sources: AMRO staff estimates.

Figure A2.14. Real GDP



Sources: AMRO staff estimates.

[37] The "bucket approach" bunches countries into three groups that are likely to have similar multiplier values based on their structural characteristics, including trade openness, labor market rigidities, automatic stabilizers, exchange rate regime, public debt level, and public finance management. Then, the multipliers are scaled up or down, taking into account the business cycle and monetary policy stance. See IMF (2014) for a more detailed discussion.

[38] The Philippines' spending multiplier is categorized into a "low" multiplier ranging from 0.1-0.3. But, given that the economy was at the lowest point of the business cycle in 2020 and is slowly picking up, the size of the multiplier is scaled up. For one unit spending increase in 2021, the fiscal multiplier is estimated to be 0.4 in 2021, followed by 0.4 in 2022, 0.2 in 2023, and 0.1 in 2024. The size of the fiscal multiplier is comparable to that in other literature, including Tang and others (2013) and Ducanes and others (2006).

[39] We assume low potential growth during the COVID-19 crisis and slow recovery afterward, reflecting the slack in the economy due to the containment and social-distancing measures.

8. Given that the simulation results are based on certain assumptions, the expansionary fiscal policy is still recommended because it would help to achieve both robust economic recovery and debt sustainability. This fiscal policy option is feasible because the Philippine government had pursued a prudent fiscal policy in the past and built up a sizeable fiscal policy space. Now may be the right time to leverage on the fiscal policy space to achieve a stronger and more robust recovery.

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3. Fast Development of Fintech in the Philippines[40]

1. The Philippine financial industry is in the process of digital transformation. To better understand the prospects of fintech in the Philippines, this study looks into the current state of the fintech industry, its major drivers and constraints, and how the COVID-19 pandemic affects the digital transformation process.

The Landscape of Fintech in the Philippines

2. The Philippines' fintech industry has witnessed significant growth with many new companies being established over the past several years. According to some industry reports[41], the number of fintech companies has increased from only 30 in 2016 to close to 200 in 2020. Their business has expanded from the usual financial services such as digital payments and wallets, lending and remittances to other fintech verticals, including credit scoring, alternative financing, crowd funding, investment, insurtech and crypto currencies (Figure A3.1). Despite the rapid evolvement, digital payments and wallets, lending and remittances remain the most important verticals, accounting for 33 percent, 24 percent and 12 percent of the fintech industry respectively (Figure A3.2).

Figure A3.1 Map of Philippine Fintech Start-ups (2020)

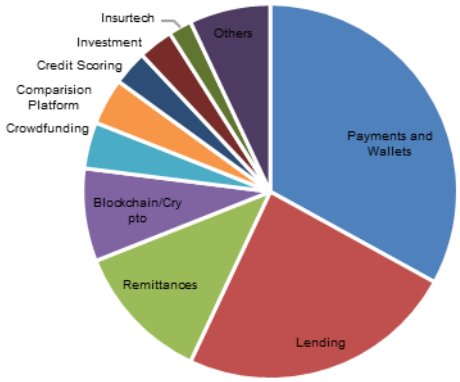
Source: Fintech News Network, AMRO.

3. The fintech industry has also become increasingly diverse, comprising telecommunication companies, foreign fintech firms, and domestic fintech start-ups. Early leaders in fintech in the Philippines are telco firms Globe and PLDT. Globe established a joint venture Mynt in 2015 with Ayala Corporation and Ant Financial to provide mobile money solutions through GCash and micro lending through FUSE. Meanwhile, PLDT through its subsidiary Voyager Innovations established Paymaya (formerly Smart eMoney, Inc) in 2017 to provide all-in-one mobile money and payments solutions. Voyager received capital injection in 2018 from Tencent, KKR, the World Bank's International Finance Corporation (IFC) and the IFC Emerging Asia Fund. The other major international entrants to the Philippine tech industry include the Singapore-based GrabPay and Indonesia-based Go-Jek (through acquisition of Coin). Besides these large players, there are also many smaller Philippine start-ups in the

[40] Prepared by Zhiwen Jiao.
[41] Fintech News Network, "The Philippines Fintech Report", available online at https://fintechnews.sg/.

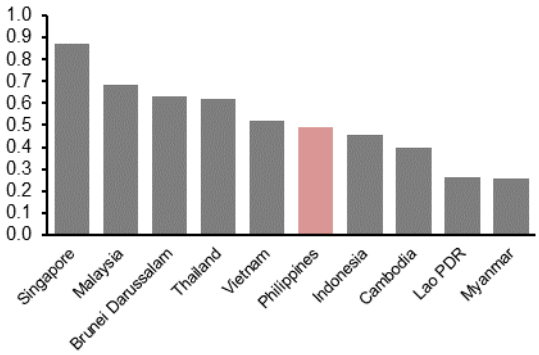
fintech industry. In payment and wallets verticals, there are Ayannah and Dragonpay. In lending verticals, there are Cashalo, Cebuana Lhuillier and Tala.

Figure A3.2 Breakdown of Fintech Companies by Sector



Source: adapted from *The Philippines Fintech Report 2020.*

Figure A3.3 World Bank Digital Adoption Index



Source: World Bank, AMRO staff calculations.

4. Despite the rapid rise of fintech start-ups in the Philippines, the adoption of fintech solutions is still at an early stage. Take the dominant vertical of digital payments as an example, a study conducted by the Better Than Cash Alliance (BTCA) in 2015 using 2013 payments data showed that the share of digital payments in the Philippines then was only about 1 percent of the total volume of payment transactions. This extremely low adoption of electronic payment services has improved due to the development of fintech and government policy efforts, however, it is still at low levels. A similar study conducted by the BTCA in 2019 reveals that the share of digital payments in the Philippines has increased to around 10 percent in volume as of end-2018. This low adoption rate of fintech solutions corroborates with the generally low level of digital adoption of the whole economy as indicated by the World Bank Digital Adoption Index (Figure A3.3).

Drivers of Fintech Development in the Philippines

5. The combination of a rapid rise of fintech start-ups with low adoption reflects the current stage and ecosystem of fintech in the Philippines. In general, the current environment is conducive to fintech start-ups. Key factors that underpins the rapid rise of fintech start-ups include low financial inclusion, improving connectivity, a rising wave of global fintechs, and a supportive policy environment.

6. The low financial inclusion and cash-based economy create a strong need for the services promised by fintech. According to the BSP's Financial Inclusion Survey (FIS), only 28.6 percent of adult Filipinos held a formal financial account[42] in 2019. The number with a bank account was only 12.2 percent of the adult population. Account ownership varied widely across income, gender, geographical locales and employment status. Access to formal loans is also limited for many Filipinos. The same survey shows only 33 percent adults have outstanding loans. The situation is similar for small businesses. The World Bank's Enterprise Survey found that only 12.4 percent of Philippine firms use bank credit to finance investments, compared to an average 20.5 percent for the East Asia and Pacific region. As relying on the expansion of traditional brick-and-mortar financial institutions to significantly enhance financial

[42] A formal financial account refers to an account held in a formal institution including banks, e-money issuers, and microfinance institutions (MFIs). This account can be used to save money; send or receive remittance, income, and benefits; and make day-to-day payments.

inclusion seems quite costly, fintech has emerged as providing a faster solution. The promising market opportunities in providing the basic financial services such as payment and credit are very appealing for investment in fintech.

7. The improving digital connectivity provides the basic means for fintech companies to deliver their services and products to users. Two developments stand out in this respect. One is the increasingly wide adoption of mobile phone and internet penetration. Since 2010, Filipino internet users has more than tripled to 73 million in 2020, with an internet penetration rate of 67 percent. Mobile devices are widely used for access to the internet. In fact, the number of mobile connections is equivalent to 159 percent of the total population[43]. Besides the high number of connections, Filipinos tend to spend long hours on the internet. On average, Filipinos spend over four hours using the mobile internet daily, and almost all of this time is spent on social media. These habits provide the ideal conditions for connecting to end-users.

8. The other critical development to close the loop is the establishment of the National Retail Payment System (NRPS). In November 2017, the BSP launched the Philippine Electronic Fund Transfer (EFT) System and Operations Network (PESONet), the first Auto Clearing House (ACH) under the NRPS. This is a batch EFT credit payment scheme, which can be considered an electronic alternative to the paper-based check system[44]. In April 2018, the BSP launched InstaPay, a real-time low-value EFT credit push payment scheme for transaction amounts up to PHP50, 000. It is designed to facilitate small value payments that can be especially useful for retail, e-commerce and MSMEs. With these two systems, financial service providers can be connected with each other and payment products can be built based upon them.

9. The fast expansion of fintech globally has provided the Philippine with access to the enabling technical know-hows and capital. Over the past several years, there has been an accelerating trend of fintech adoption globally. The maturing technology, successful solutions and huge business potential have incentivized major players to expand their business to anywhere they see opportunities. The Philippines' huge market potential and conducive environment make it one of their top target markets. In the process, global fintech companies not only bring their technology and investment but also their experience and business models. Moreover, the success of these major fintech players and their entry into the Philippines have created an exemplary effect and competition pressure on local capital and players, thus accelerating their venture into new technologies and business as well.

10. The supportive policies and proactive attitude of financial regulators towards the application of new technologies in the financial industry have allowed adequate space and significantly reduced legal risks for fintech innovations. The Bangko Sentral ng Pilipinas (BSP), the Security Exchange Commission (SEC) and the Insurance Commission of the Philippines (IC) have consistently expressed an openness and positive regulatory view towards the fintech industry. In fact, the BSP has adopted a "test and learn" approach to the application of new technologies in the financial sector as early as 2004, now referred as the so-called regulatory sandbox approach. This approach allows fintech companies that are outside the current regulatory framework to experiment with new products and services. To promote the development of fintech, the BSP and SEC have also been developing new

[43] https://datareportal.com/reports/digital-2020-philippines#:~:text=There%20were%2073.00%20million%20internet,at%2067%25%20in%20January%202020.
[44]https://www.bsp.gov.ph/Pages/PAYMENTS%20AND%20SETTLEMENTS/National%20Retail%20Payment%20System/Empowering-Every-Juan-and-Maria.aspx

regulatory policies and rules relating to fintech over the past several years. These include the National Payment Systems Act in 2018, the National QR Code Standard and the Crowdfunding Rules in 2019. Besides, the BSP and the Monetary Authority of Singapore signed a Fintech Co-operation Agreement in November 2017 to encourage collaboration on developing and supervising fintech developments.

Constraints on the Adoption of Fintech Solutions in the Philippines

11. A weak ICT infrastructure is probably the most important challenge to Fintech adoption in the Philippines. Currently around one third of the population do not have access to the internet. For those with internet connections, most of them access internet through mobile networks, which are currently dominated by 3G, while the development of high speed broadband lags behind. Consequently, users are susceptible to a poor quality of internet connectivity with low speed, high latency and unreliable connections. The country's average mobile broadband download speed, at 12.09 Mbps, ranked 122th of 140 countries before the COVID-19 pandemic, much lower than the global average of 30.89 Mbps, and also slower than regional peers[45]. Besides, the ICT infrastructure tends to be weaker in rural areas.

12. Low financial inclusion is another constraint on Fintech adoption. Low transaction account ownership limits the extent fintech companies are able to provide services to Filipinos, as many fintech services still need a transaction account at a certain stage of transaction, though technically, it may not be a necessary requirement for all. To address this issue, the BSP introduced the Basic Deposit Account (BDA)[46] in 2018, which was designed to make a transaction account accessible, affordable and within reach, particularly by the unbanked and underbanked Filipinos. Although the uptake has been impressive since its introduction[47], the overall account ownership is still low as discussed above. The FIS (2020) revealed that 60 percent of adults are still unaware of the BDA.

13. Inadequate supporting financial infrastructures also pose challenges. One is the lack of a unified national ID system, which is a critical infrastructure for enabling fintech solutions, such as uniquely identifying the user. In 2018, the Philippine government launched the Philippine ID System (PhilSys) project. The government targets to sign up at least 70 million Filipinos by the end of 2021. The other is the still low participation of the NRPS. As of April 2021, there are 82 participants for PESONet and 52 for InstaPay. The majority of rural and thrift banks have yet to join, indicating a large number of Filipinos, particularly those unbanked, are still unable to benefit from the financial services brought about by fintech companies.

14. In addition to the constraints listed above, low financial literacy is a demand side barrier to fintech adoption. First, fintech services are not used simply because a lack of awareness. For example, the FIS (2020) revealed that the lack of awareness was the main reason for not using mobile phone or the internet for financial transactions**.** Second, the lack of understanding of the product and safety concerns could make people reluctant to use these products and services. High-profile cases of fraud could exacerbate these concerns and slow the pace of digital financial inclusion.

COVID-19 pandemic - a Catalyst to Fintech Development

15. The COVID-19 pandemic has had a profound impact on the fintech industry, which will continue to unfold in the coming years. The mobility restrictions for containment of the pandemic have significantly raised people's awareness of and increased their adoption of digital financial services. Banks and various digital financial service players all reported a

[45] https://www.speedtest.net/global-index/philippines#mobile.
[46] BDA was designed as a no-frill bank account, it has opening amount of PHP100 or less, simple requirements (e.g., any official identification document), no maintaining balance, and no dormancy charges.
[47] As of the first quarter of 2020, 4.5 million depositors had such accounts with 120 banks, a significant growth from only 339,000 depositors in 2018.

massive spike in downloads of their mobile apps in 2020. The accelerated digital service adoption is also reflected in the surge in transaction volumes through retail payment systems. The volume of PESONet transfers alone rose by 376 percent to PHP15.3 million in 2020, while the transaction volume through InstaPay increased by 459 percent to PHP86.7 million.

16. The financial service providers also accelerated the expansion of digital services in collaboration with the government to support policy implementation. For example, the Rizal Commercial Banking Corporation (RCBC) and the Department of Trade and Industry (DTI) have partnered to create DiskarTech's NegosyanTech program to digitalize community-based microenterprises in every barangay nationwide. More than 1.3 million sari-sari stores (a Tagalog word that locals use for convenience stores) and market vendors, as well as an estimated 7 million informal and unregistered home-based microbusinesses stand to benefit from this program[48]. The RCBC was also one of the financial institutions that worked with the Department of Social Welfare and Development in quickly disbursing emergency cash subsidies by using its DiskarTech Lite disbursement platform.

17. The health crisis also prompted financial regulators to take a more proactive approach toward promoting digital finance. Overall financial regulators have started to take a more systematic approach. First, a more strategic regulatory framework and new rules relating to digital finance were developed. The BSP launched the Digital Payments Transformation Roadmap 2020-2023, sketching out its initiatives and strategy in advancing an efficient, inclusive, safe and secure digital payments ecosystem. The BSP set a clear target of at least 50 percent of total retail payment transactions to be shifted to digital, and 70 percent of adult Filipinos to have transaction accounts by 2023. In line with the Digital Payments Transformation Roadmap 2020-2023, the BSP also introduced the Digital Banking Framework in November 2020. Digital bank[49] is recognized as a new bank category that is separate and distinct from the existing bank classifications.

18. Meanwhile, implementation and coordination mechanisms were also strengthened. Internally, the BSP has adjusted its organizational structure**.** A Payments and Currency Management Sector (PCMS) has been established to manage the interplay of physical currency and digital money and a digital finance services and an inclusive finance expert was appointed as new deputy governor to lead this newly created division recently. Externally, the BSP has institutionalized the oversight framework on fintech with other financial regulators. The BSP with SEC, IC and Philippine Deposit Insurance Corporation signed a Memorandum of Agreement (MOA) under the auspices of the Financial Sector Forum on the establishment of a Cooperative Oversight Framework on fintech innovation. The framework aims to facilitate seamless regulation and supervision of fintech companies by using a single application platform.

19. Policy makers have realized the urgency of reducing the bottlenecks hindering the development of digital finance, including inadequacy in infrastructures. The Department of Information and Communications Technology (DICT) is working with other government agencies in pursuit of an improved ICT infrastructure, focusing on promoting faster telecommunications tower buildup through reducing tower permitting requirements[50].

20. With stronger efforts from the government agencies, a better regulatory framework, improving infrastructure, maturing technology, higher awareness, and the inherent demand

[48] https://fintechnews.sg/42913/mobilepayments/philippines-rcbc-and-dti-to-enable-digital-payments-for-micro-businesses/.
[49] Digital bank is defined as a bank that offers financial products and services that are processed end-to-end through a digital platform and/or electronic channels with no physical branches.
[50] In July 2020, DICT, Anti-Red Tape Authority (ARTA), along with other concerned agencies released a Joint Memorandum Circular (JMC) which aimed to streamline the process of applications for the requirements, permits, licenses, clearances, certificates, and other necessary documents for Independent Tower Companies (ITCs) and telecommunication companies to construct Shared Passive Telecommunications Tower Infrastructures (PTTI) in line with DICT's Common Tower Policy. In August, 2020, August 2020, the Department of Human Settlements and Urban Development (DHSUD), a signatory in the JMC, confirmed that it had updated the guidelines for permit and documentary requirement application for ICT infrastructure projects, including permits to build towers.

for financial services, the Philippines is poised to witness faster development of fintech in the coming years. The accelerated digital transformation process will help drive inclusivity, improve experience, and deliver real welfare-enhancing benefits to all Filipinos with proper risk management.

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4. Monetary Transmission Mechanism in the Philippines during Uncertain Economic Times[51]

1. As mentioned in the main consultation report, the BSP actively deployed monetary policy in 2020 to help counteract the adverse economic effects of COVID-19 in the Philippine economy. The central bank reduced the policy rate successively by a total of 200 basis points, cut the reserve requirement by 200 basis points, and implemented regulatory relief measures. How effective these policy rate cuts are in helping the Philippine economy recover, is an important empirical question. This is particularly so during periods of economic crises, when significant uncertainty exists in the economic environment, and when the responses of economic actors and effects on macroeconomic variables may be notably different than during tranquil periods. This study thus attempts to estimate the monetary transmission mechanism (MTM) in the Philippines and to quantify the magnitude of the impact of BSP's policy rate actions on the evolution of economic output. In particular, it tries to analyze if asymmetries exist in the transmission mechanism between periods of tranquillity and uncertainty.

The Monetary Transmission Mechanism: Channels of Transmission and the Role of Uncertainty

2. Studies in the transmission mechanism of monetary policy trace the effects of central banks' monetary policy actions, specifically changes in policy rates, on the targeted macroeconomic variables, namely output and inflation. The expansive literature on the topic has identified several channels through which changes in the policy rate can influence output and inflation; a brief survey of the literature is available, for example, in Ireland (2006).[52]

3. There is a considerable amount of literature pointing out that monetary policy may be less effective when headwinds are prevailing in the economic conditions (a literature review is available in Borio and Hofmann, 2017, for example). When balance sheets of businesses and households are weak, a reduction in the interest rate may not induce them to expand activities as much, as they are more pre-occupied with resolving their debt overhang and repairing their balance sheets. Financial institutions also tend to lend less during headwinds as their own loan-loss provisions and asset quality impairments plague their balance sheets, in addition to their higher risk aversion to the now credit-impaired businesses and households. Also, if the central bank successively lowers the policy rates, lending rates may fall with the policy rates but the already low deposit rates may sometimes not fall as much. This can potentially impair the banks' own profitability. In sum, the theoretical literature suggests several reasons why the effectiveness of monetary policy could be asymmetric, depending on the direction of policy rate actions. As the proverbial phrase goes, it may be easier for monetary policy to pull the string than to push it when economic headwinds prevail

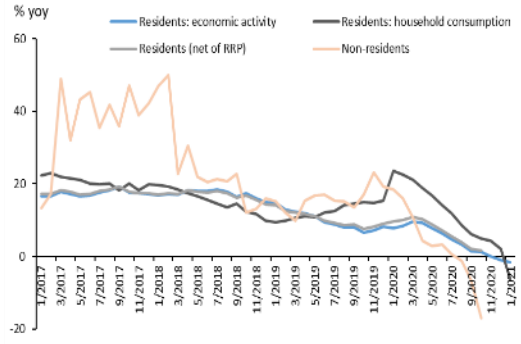
[51] Prepared by Ruperto Pagaura Majuca.

[52] When a central bank decreases the policy rate, businesses and households face lower borrowing costs, causing economic activity to expand. This is known as the *interest rate* channel. In an open-economy, the lower domestic interest rate relative to foreign interest rates, causes financial investments to flow out of the domestic economy to overseas destination under the "uncovered interest rate parity" condition, leading to the depreciation of the domestic currency and higher net exports. This is called the *exchange rate* channel. In financial and other asset markets, the lower interest rates make stocks and real estate more attractive to investors, which, coupled with the higher financial wealth of businesses and households, also increases the Tobin *q* of firms and lowers their investment costs. This is the *asset price* channel. In credit markets, the central bank's open market operations increase the supply of credit available to banks, which in turn increase the credit available to SMEs, households and others who have no access to capital market financing. This is the *bank lending* channel. Proponents of this channel, such as Bernanke and Blinder (1988) argue that households and SMEs in particular have no access to capital markets and are thus reliant on bank loans to fund their investment, on the assumption of imperfect substitutability between bank loans and other funding sources. Thus, when central banks' open market operations, for example, increase the available supply of bank credit, the increase creates a separate channel through which central banks' monetary policy actions affect the real economy. Lastly, there is the *balance sheet* channel, in which the lower interest rates strengthen the balance sheets of businesses and households, which makes banks more willing to lend to them (see, for example, Bernanke, Gertler, and Gilchrist 1996) for an elaboration).

(Angrist, Jorda, and Kuersteineir, 2013; Barnichon and Matthes, 2016; and Tenreyro and Thwaites, 2016).

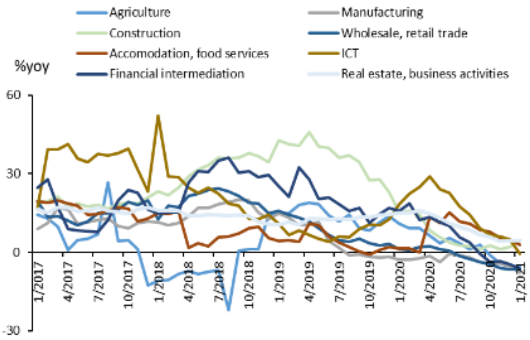
4. In the Philippines, for example, there are reasons to believe that during the COVID-19 crisis, at least the bank lending channel of monetary transmission may have been less potent. This is evidenced by the fact that, notwithstanding the BSP's successive policy rate and RRR cuts as well as significant growth in money supply aggregates (see Section A3 of the main report), bank lending to most sectors slowed down and in fact contracted in some sectors (Figures A4.1 and A4.2).

Figure A4.1 Bank Loans by Borrower Type



Source: BSP, CEIC

Figure A4.2 Bank Loans: Selected Sectors



Source: BSP, CEIC

5. The important role that increased uncertainty plays in the monetary transmission process has also received significant attention in the literature recently. Recent papers have documented that higher uncertainty in the economic environment is associated with a significant drop in output. One reason for this is that uncertainty causes businesses to adopt a wait-and-see attitude in their investment and hiring decisions until economic prospects become clearer (Bloom, 2009). Another reason is that banks anticipate a more difficult agency and monitoring problems during stress periods, amplifying the contractionary effects of the uncertainty shock on economic activity (Lhuissier and Tripier, 2016). Thus, second-moment shocks can result in significant drops in investment, employment and output.

Estimating the MTM and Role of Uncertainty: the Case of the Philippines

6. In this subsection, we provide an empirical estimation of the MTM of the Philippines through the interest rate and exchange rate channels, and examine whether monetary policy exhibits asymmetrical effectiveness during tranquil periods with economic headwinds. To do this, we estimate a Markov-switching vector autoregression (MSVAR) model with state-dependent impulse response functions (IRFs), described in Ehrmann, Ellison and Valla (2003). This framework enables us to see how structural disturbances affect endogenous variables, conditioned upon the state of the economy, allowing one to trace asymmetries in the dynamic responses depending on the regime.

7. We thus estimate an MSVAR model with regime-dependent IRFs presented in equation (1). The model allows for all coefficients and variances to switch between *m* different states, thus:

$$X_t = \begin{cases} v_1 + B_{11}X_{t-1} + \cdots + B_{p1}X_{t-p} + A_1 u_t \quad if \;\; s_t = 1 \\ \vdots \\ v_m + B_{1m}X_{t-1} + \cdots + B_{pm}X_{t-p} + A_m u_t \quad if \;\; s_t = m \end{cases} \tag{1}$$

X_t is a vector of *K* endogenous variables, *p* is the autoregressive lag order, $u_t \sim N(0; I_K)$ is a vector of normally distributed uncorrelated structural innovations, and $A_i u_t$ is the regime-dependent residual generated by premultiplying u_t by a regime-dependent matrix, A_i. The variance-covariance matrix $\Sigma_i = E(A_i u_t u_t' A_i') = A_i A_i'$ is also regime-dependent. The regime s_t is a Markov process with transition matrix

$$P = \begin{bmatrix} \rho_{11} & \rho_{12} & \cdots & \rho_{1m} \\ \rho_{21} & \rho_{22} & \cdots & \rho_{2m} \\ & \cdots & & \\ & \cdots & & \\ \rho_{m1} & \rho_{m2} & \cdots & \rho_{mm} \end{bmatrix} \tag{2}$$

where $\rho_{ij} = Pr(s_{t+1} = j | s_t = i)$ describes the conditional transition probabilities.

8. The mK^2 state-dependent IRFs describe the impact of each of the K structural innovations on each of the K endogenous variables, conditioned upon each of the *m* regimes. The step-by-step procedure on how to draw out these IRFs is described in detail in Ehrmann, Ellison and Valla (2003). These regime-dependent IRFs help characterize the different dynamics of the economy under different regimes, and help identify the periods when monetary policy are more effective in influencing output.

9. We use the model described above to analyze how monetary policy actions of the BSP are transmitted to economic output. Thus, we estimate such MSVAR model with regime-dependent IRFs using monthly data of the Philippine reverse repurchase rate, industrial production index (IPI)[53] and exchange rate[54,55] from January 1993 to December 2020, totaling 336 observations. Both the IPI and the USDPHP rate are seasonally-adjusted. We estimate the model for two regimes,[56] allowing all the coefficients and the variance-covariance matrix to switch between regimes.[57] The Schwarz information criterion suggests an optimal lag of 1 for the VAR, which we follow in the estimation of the MSVAR.

[53] As real GDP data is not available monthly, most empirical studies estimating the MTM use the IPI as a proxy for economic activity (see, for example, Collen and Reynolds, 1997, Malaysia and Thailand; Kim and Roubini, 2000, Germany, Japan, UK, France, Italy, Canada; Smets and Wouters, 1999, Germany; Cushman and Zha, 1997, Canada). Nonetheless, since the IPI does not cover the services sector, which is a big part of the Philippine economy, we recognize the limitation of the interpretation of our results, as a consequence of using the IPI as a proxy variable. As a robustness check, we also run the estimation using interpolated monthly real GDP employing Chow and Lin's (1971) method. The results are qualitatively similar to our original estimation.

[54] It is established in the MTM literature that the exchange rate channel is important for small open economies, and thus, most open-economy studies include the exchange rate as a variable (see, for example, Cushman and Zha, 1997, Canada]; Smets and Wouters, 1999, Germany; Kim and Roubini, 2000, Germany, Japan, UK, France, Italy and Canada). The reason is that, for open economies the exchange rate channel accelerates the pass-through of the MTM and leads to "different response of the GDP" (Smets and Wouters, 1999).

[55] As a robustness check, we also run the estimation using the real effective exchange rate, which by definition includes both exchange rate and CPI information. The estimation results are qualitatively similar to our original specification. For future study, an interesting question would be whether the MTM during the inflation targeting (IT) regime is different for the Philippines compared with its pre-IT period. Such would be an interesting topic of separate investigation.

[56] A two-regime specification is adopted for model estimation tractability, as MSVAR estimation increasingly becomes complex for higher number of regimes.

[57] The estimation is done using RATS Pro 10.0.

10. The variables are ordered as reverse repurchase rate, industrial production, and exchange rate,[58] following the usual practice in VAR analyses estimating MTMs. This allows the structural innovation in the policy rate equation to be interpreted as a surprise increase in the reverse repurchase rate owing to monetary policy action by the BSP. That is, the monetary policy equation structural shock is a decision by monetary authorities to change the policy to a new level. The other endogenous variables can respond contemporaneously to the policy rate, but the policy rate does not respond to the IPI and the exchange rate until the following month (see, for example, Collen and Reynolds, 1997). The exchange rate, meanwhile, is ordered last, which means that it can react to all the other variables, but it cannot influence the policy rate and output in the same month. This is in line with the assumption that prices in highly liquid markets such as the FX market react instantaneously to the release of information about policy rate and output changes.

Table A4.1 Important Switching Parameters

Parameter	Regime 1 (Low Volatility)	Regime 2 (High Volatility)
$\hat{b}_{r,r}$	0.998	0.66
$\hat{b}_{y,r}$	0.001	-0.011
$\hat{b}_{er,r}$	0.001	-0.017
$\hat{b}_{r,y}$	-0.257	0.078
$\hat{b}_{y,y}$	0.964	0.847
$\hat{b}_{er,y}$	-0.014	0.026
$\hat{b}_{r,er}$	-0.039	0.116
$\hat{b}_{y,er}$	0.007	0.047
$\hat{b}_{er,er}$	0.99	0.983
$\hat{v}_r$	-0.549	14.389
$\hat{v}_y$	23.783	58.256
$\hat{v}_{er}$	0.780	-15.407
$\widehat{\sigma_r}^2$	0.009	6.414
$\widehat{\sigma_y}^2$	14.953	54.099
$\widehat{\sigma_{er}}^2$	2.166	11.586

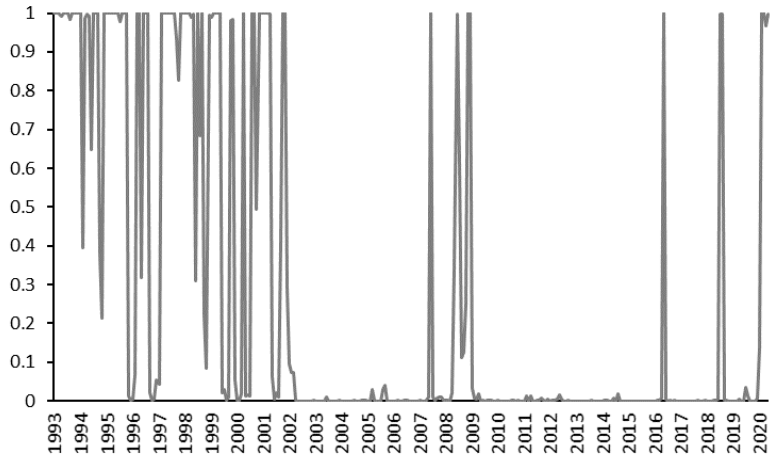
Source: AMRO staff calculations.

11. The estimation results suggests that the significant switches happen in the variance of all three variables (Table A4.1). While the regimes do not have a natural interpretation, it seems from Table A5.1 that the most significant switches occur more in the variances than in the VAR coefficients. That is, Regime 1 seems to be associated with low variability in output, exchange rate, and policy rates, while Regime 2 is associated with high variability in the same variables, a result consistent with the literature on the significant effect of uncertainty in economic outcomes, as discussed earlier. Moreover, the graph on the switches of smooth probability seems to divide the regimes into periods of high uncertainty and low variance regimes (Figure A4.3). The estimation results also suggest that the regimes are quite persistent, with the transition matrix estimated as follows:

$$\hat{P} = \begin{bmatrix} 0.923 & 0.206 \\ 0.077 & 0.794 \end{bmatrix}$$

[58] Both the IP and the exchange rate variables are de-seasonalized. Stationarity tests suggest the series are all I(1), that is, non-stationarity in levels but stationary in differences, so we estimated the VAR with all the variables in log forms, except for the reverse repurchase rate, which is in level form, similar to the usual practice in literature (see, for example, Collen and Reynolds, 1997).

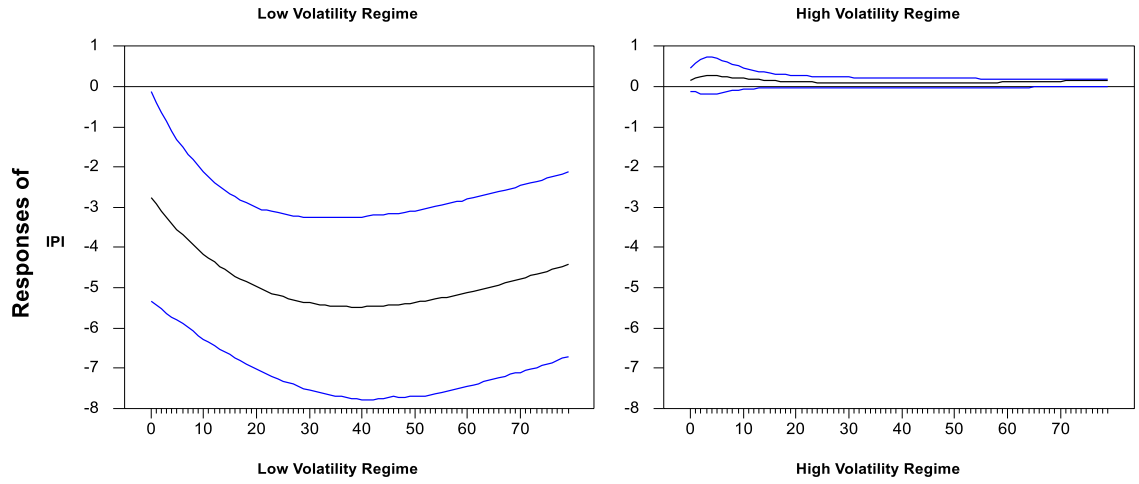
Figure A4.3 Probability of High Volatility Regime



Source: AMRO staff calculations.

12. Is the effectiveness of the MTM in the Philippines different depending on the state of the economy? Figure A4.4 shows the regime-dependent impulse responses of industrial production to a unit increase in the policy rate. Similar to Ehrmann, Ellison and Valla (2003), we normalized the size of policy rate change to 1 percentage point, in order to make the impulse responses easily comparable for both regimes. The results suggest that during periods of high volatility, the impulse response of output is not significantly affected by monetary policy rate actions. In contrast, during low volatility periods, a unit increase in the policy rate will reduce output significantly and by a larger extent, a result consistent with the hypothesis of the uncertainty shock literature discussed previously. More specifically, under a low volatility regime, a 1 percentage point increase in the policy rate lowers industrial output by around 3 percent below its base on impact, and the effect is quite persistent, reducing industrial production further in the coming months. Meanwhile, the response of industrial output during periods of high volatility is not significant.

Figure A4.4 Impulse Response of Industrial Production to a Unit Policy Rate Shock



Source: AMRO staff calculations.

Summary of Findings and Concluding Comments

13. This short study takes an initial look at the magnitude and dynamics of the Philippines' MTM, with a view to looking for asymmetries in the strength of the transmission mechanism during tranquil periods vis-a-vis times of headwinds and economic uncertainty. The theoretical literature suggests that monetary policy may not be as effective in influencing economic outcomes amid economic headwinds, and that policy rate cuts may have smaller effects on the economy than rate hikes in restraining demand during an economic boom. This study examined, in particular, if monetary policy effectiveness in the Philippines would be reduced during uncertain economic times. To do this, we estimated an MSVAR model with regime-dependent IRFs. Our empirical results seem to support the hypothesis that monetary policy actions may not be so potent in influencing output when uncertainties prevail. As suggested in the literature, the possible reasons include the wait-and-see attitude by firms (Bloom, 2009) and possible impairment of the balance sheet channel due to more severe lender-borrower agency problems during uncertain times (Lhuissier and Tripier, 2016).

14. That said, our study only examines if monetary transmission may not be so potent during periods of uncertainty. It does not answer the counterfactual question -- could the economic outcomes have been worse if monetary authorities did not take action? As the answer to the latter question could very well be in the affirmative, such an important research area should be the subject of a separate future investigation. One other interesting research question is, what exact mechanisms are behind the ineffectiveness during periods of uncertainty, in the case of the Philippines? Finally, another important question is, if monetary policy is less effective, should fiscal policy then do more? It would seem intuitive that a more active fiscal policy can help fill in the slack during periods when monetary policy is less potent. Thus, it is a significant question of policy that certainly warrants future empirical investigation. For example, how strong are the various fiscal multipliers (lower revenue targets, cash handouts, infrastructure spending, etc.) during such periods?

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