INTERNATIONAL MONETARY FUND

IMF Country Report No. 22/305

PAPUA NEW GUINEA

September 2022

2022 ARTICLE IV AND REVIEW OF THE STAFF MONITORED PROGRAM—PRESS RELEASE; STAFF REPORT; AND STATEMENT BY THE EXECUTIVE DIRECTOR FOR PAPUA NEW GUINEA

In the context of the 2022 Article IV and Staff Monitored Program, the following documents have been released and are included in this package:

- A **Press Release** summarizing the views of the Executive Board as expressed during its June 13, 2022 consideration of the staff report on issues related to the Article IV Consultation and the IMF arrangement.
- The **Staff Report** prepared by a staff team of the IMF for the Executive Board's consideration on June 13, 2022, following discussions that ended on April 26, 2022, with the officials of Papua New Guinea on economic developments and policies. Based on information available at the time of these discussions, the staff report was completed on May 25, 2022.
- An **Informational Annex** prepared by the IMF staff.
- A **Debt Sustainability Analysis** prepared by the staffs of the IMF and the World Bank.
- A **Statement by the Executive Director** for Papua New Guinea.

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

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PRESS RELEASE

PR22/258

IMF Executive Board Concludes 2022 Article IV Consultation and Review of the Staff Monitored Program with Papua New Guinea

FOR IMMEDIATE RELEASE

Washington, DC – July 14, 2022: The Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation[1] with Papua New Guinea.

On June 13, 2022, the Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation with Papua New Guinea, and the IMF Managing Director approved the completion of the Review of the Staff-Monitored Program with Papua New Guinea.

Papua New Guinea (PNG)'s economy is weathering the pandemic well, despite many challenges. After a decline in 2020, real GDP growth in 2021 was driven by the agricultural sector, buoyed by higher commodity prices and Government support. Output in the extractive sector in 2021 declined due to the closures of Ok-Tedi copper mine and Simberi and Porgera gold mines. Inflation in 2021 was at 5.7 percent, owing to freight charges and higher prices of imported goods and fuel, and domestic supply chain disruptions. The kina is still overvalued in real terms, and a shortage of foreign exchange (FX) in the non-resource sector persists. The 2021 fiscal deficit was lower than the budget projection, driven by higher tax revenues and foreign grants while tight control of expenditure was maintained.

Growth is projected to strengthen in 2022, before slowing to 3.0 percent over the medium term. Recovery is expected in the resource sector with Ok-Tedi and Simberi mines returning to normal operations in 2022, thanks to improved COVID preparedness. The reopening of the Porgera gold mine is assumed in late 2022, which will increase growth in 2023. The gradual easing of containment measures and higher capital spending by the government should support recovery in the non-resource sector. The war in Ukraine is impacting PNG through higher commodity prices and higher inflation, with the former leading to a stronger balance of payments and fiscal revenues, given that PNG is a large commodity producer.

Executive Board Assessment[2]

Executive Directors stressed that Papua New Guinea (PNG)'s economy has weathered the pandemic well despite many challenges, and that the medium-term outlook is positive, supported by the resource sector. Directors commended the authorities on their broadly

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

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

satisfactory performance under the Staff Monitored Program (SMP). They agreed that the main policy priorities are to implement fiscal consolidation and strengthen the monetary policy framework and governance, as well as to promote climate resilience, gender equality, and inclusive growth. Directors welcomed the planned opening of the Fund's resident representative office in PNG to support this policy agenda. They noted that it will also be important to accelerate the COVID-19 vaccination campaign.

Directors encouraged continued fiscal consolidation to meet the requirements of the Fiscal Responsibility Act, strengthen debt sustainability, and rebuild buffers against future shocks. They stressed the importance of raising resource sector revenues and encouraged the adoption of a moderate ad valorem levy on future resource projects. Directors called for additional revenue mobilization and improvements in the payroll system to contain expenditures and increase space for needed social and development spending over the medium term. They urged the authorities to conduct and publish audits of COVID-19 related procurement contracts.

Directors underscored the importance of tightening monetary policy to avoid second-round effects if recent inflationary pressures from higher food and energy prices persist. They emphasized that a comprehensive approach to reinstating kina convertibility is needed, including a review of the monetary policy framework, improving liquidity management, and developing a plan to gradually allow greater exchange rate flexibility and remove exchange restrictions. Directors urged the authorities to address with support from Fund technical assistance the remaining weaknesses in the Central Banking Act related to mandate, governance, autonomy, transparency, and accountability. Directors also encouraged further measures to increase financial inclusion and financial sector development.

Directors welcomed the efforts to strengthen governance, including operationalization of the Independent Commission Against Corruption, and improvements in the AML/CFT framework and regulations. They underscored the importance of a sustained, multi-year 2 program to further improve governance, with close external support, including from the Fund.

Directors remarked that PNG is highly vulnerable to climate change and stressed that policies should focus on developing and financing climate adaptation projects, as well as reducing the rate of deforestation and reaching PNG's nationally determined contributions.

Table 1. Papua New Guinea: Selected Economic Indicators, 2017–2027

Nominal GDP (2019):	US$24.8 billion 1/
Population (2019):	8.6 million
GDP per capita (2019):	US$2,878
Quota:	SDR 263.2 million

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
					Est.	Proj.	Proj.	Proj.	Proj.	Proj.	Proj.
					(Percentage change)						
Real sector											
Real GDP growth	3.5	-0.3	4.5	-3.5	1.2	4.2	4.7	3.0	3.0	3.0	3.0
Resource 2/	8.1	-9.2	11.3	-8.3	-3.5	4.8	5.9	-0.1	0.1	0.1	0.1
Non-resource	1.5	4.0	1.6	-1.2	3.2	4.0	4.3	4.2	4.1	4.1	4.1
Mining and quarrying (share)	10.2	10.4	10.8	10.0	9.4	10.4	12.1	11.9	11.5	11.0	10.5
Oil and gas extraction (share)	16.5	17.5	17.6	16.4	17.7	20.7	17.3	14.9	12.8	11.9	11.2
CPI (annual average)	5.4	4.4	3.9	4.9	4.5	6.4	5.4	4.9	4.6	4.5	4.5
CPI (end-period)	4.7	4.8	2.7	5.1	5.7	6.0	5.2	4.7	4.5	4.5	4.5
					(In percent of GDP)						
Central government operations											
Revenue and grants	15.9	17.7	16.3	14.2	14.7	15.0	14.8	15.3	15.8	16.1	16.3
Of which: Resource revenue	0.9	1.8	1.7	0.9	1.1	2.0	1.0	1.3	1.5	1.4	1.3
Expenditure and net lending	18.4	20.3	20.7	22.7	21.3	20.5	18.9	18.4	17.5	16.7	16.2
Net lending(+)/borrowing(-)	-2.5	-2.6	-4.4	-8.6	-6.6	-5.5	-4.2	-3.1	-1.7	-0.6	0.0
Non-resource net	-3.4	-4.4	-6.2	-9.4	-7.7	-7.5	-5.2	-4.3	-3.2	-2.0	-1.3
					(Percentage change)						
Money and credit											
Domestic credit	-0.1	-6.7	5.2	2.3	10.3	0.2	17.7	6.8	6.1	6.3	5.4
Credit to the private sector	-3.8	7.4	4.1	4.2	0.4	8.2	8.7	8.1	8.6	8.6	8.5
Broad money	-0.9	-3.8	4.4	7.0	13.4	-2.1	16.7	5.7	4.8	5.5	4.8
Interest rate (182-day T-bills; period	7.1	7.0	6.4	5.6	6.0	6.8	7.9	8.3	8.1	7.8	7.5
					(In billions of U.S. dollars)						
Balance of payments											
Exports, f.o.b.	10.1	9.7	11.0	10.0	9.7	12.3	12.7	12.7	12.9	13.2	13.5
Of which: Resource sector	7.7	7.4	8.3	6.6	7.8	7.9	8.1	8.4	8.8	9.1	9.4
Imports, c.i.f.	-2.5	-2.5	-3.9	-3.3	-3.2	-3.5	-3.7	-3.9	-4.1	-4.3	-4.5
Current account (including grants)	6.5	5.9	4.5	5.5	5.1	7.3	7.4	7.2	7.3	7.4	7.5
(In percent of GDP)	28.4	24.5	18.3	22.4	18.7	23.1	22.0	20.6	19.9	19.0	18.2
Gross official international reserves	1.7	2.2	2.3	2.7	3.2	3.0	3.0	2.8	2.7	2.6	2.6
(In months of goods and services	5.2	4.6	4.8	7.5	8.3	7.3	6.9	5.0	4.8	4.8	4.5
					(In percent of GDP)						
Government debt											
Government gross debt	32.5	36.7	40.2	47.1	50.9	49.5	48.9	50.5	41.7	39.9	37.5
External debt-to-GDP ratio (in percent)	12.3	14.8	17.2	21.8	24.4	22.0	21.8	21.0	19.7	18.0	16.4
External debt-service ratio (percent of	1.0	1.1	1.2	4.9	4.5	2.7	3.5	3.7	4.4	4.6	4.5
Exchange rates											
US$/kina (end-period)	0.3095	0.2970	0.2935	0.2850	0.2850	...	...	...	...	...	...
NEER (2005=100, end-period)	98.6	95.0	96.0	94.6	89.1	...	...	...	...	...	...
REER (2005=100, end-period)	122.3	120.9	124.8	127.4	122.5	...	...	...	...	...	...
Terms of trade (2010=100, end-period)	56.7	56.8	60.8	68.8	55.8	62.7	65.5	66.4	67.5	68.2	68.4
Nominal GDP (in billions of kina)	72.5	79.4	83.8	85.4	94.6	109.3	116.0	120.8	126.2	133.9	142.3
Non-resource nominal GDP (in billions of	53.1	57.3	60.1	62.9	69.0	75.3	81.8	88.5	95.6	103.2	111.4

Sources: Department of Treasury; Bank of Papua New Guinea; and IMF staff estimates and projections.

1/ Based on period average exchange rate.

2/ Resource sector includes production of mineral, petroleum, and gas and directly-related activities such as mining and quarrying, but excludes indirectly-related activities such as transportation and construction.

3/ Public external debt includes external debt of the central government, the central bank, and statutory authorities.

INTERNATIONAL MONETARY FUND

PAPUA NEW GUINEA

May 25, 2022

STAFF REPORT FOR THE 2022 ARTICLE IV CONSULTATION AND REVIEW OF THE STAFF MONITORED PROGRAM

EXECUTIVE SUMMARY

Context. Papua New Guinea (PNG)'s economy is weathering the pandemic well, despite many challenges. Real GDP in 2022 is projected to exceed its 2019 level, and the medium-term outlook is positive, supported by investment in (and revenues from) the resource sector. The war in Ukraine is impacting PNG through higher commodity prices and higher inflation, with the former leading to a stronger balance of payments and higher fiscal revenues, since PNG is a large commodity producer. Risks remain skewed to the downside and include a worsening health situation given the low vaccination rate, volatility in commodity prices, and political instability.

Staff Monitored Program (SMP) performance. The performance of the SMP was broadly satisfactory. All quantitative targets were met and all structural benchmarks were also fully met on time, apart from the benchmark related to the Central Banking Act (CBA). Amendments to the CBA were passed, which addressed some weaknesses identified in the IMF safeguards assessment. However, the amendments have weakened the CBA in other areas. The authorities agreed to revisit areas of key concerns as part of the Phase 2 of CBA reform, with the help of Fund technical assistance.

Policy Priorities. Near- and medium-term policies need to focus on: addressing debt vulnerabilities, easing FX shortages, strengthening the CBA, improving governance, and promoting climate-resilient and inclusive growth.

- ***Fiscal policy.*** PNG needs to increase revenues from the resource sector, while improving the payroll system to contain expenditures. Other priorities include completing revisions to the Income Tax Act, improving the tax administration system, and updating their medium-term revenue strategy, with Cabinet oversight.

- ***Central banking policies.*** A comprehensive approach to reinstating kina convertibility is needed, which includes a review of the monetary policy framework, improving liquidity management and forecasting, and a gradual increase in exchange rate flexibility and removal of exchange restrictions. Further amendments to the CBA are needed to sufficiently protect the BPNG's financial, personal, and institutional autonomy.

- ***Reforms to raise medium-term growth.*** Continue structural reforms to boost non-resource sector growth, including SOE reforms, tax code modernization and anti-corruption measures. Ensure the Independent Commission Against Corruption can fulfill its mandate by developing implementing regulations and recruiting staff. Large climate adaptation needs will need to be financed mainly from external concessional sources while efforts to reorient expenditure away from current spending should be intensified, given the limited fiscal space.

- ***Data issues***. PNG needs to further improve data quality and availability. While information sharing has substantially improved compared to the 2020-21 SMP, addressing reporting lags and challenges in data compilation remains a priority.

Approved By
Sanjaya Panth (APD) and Andrea Schaechter (SPR)

Remote discussions took place between an IMF staff team—led by Tahsin Saadi Sedik and comprising Natalija Novta, Narayanan Raman (both APD), Daniel Wales (SPR) and Devendra Narain (Pacific Islands Resident Representative Office)—and the Papua New Guinea authorities between April 4-26, 2022. Laura Johnson and Rhoda Karl (OED) also participated in the meetings. Enakshi Das and Nadine Dubost assisted in the preparation of this report.

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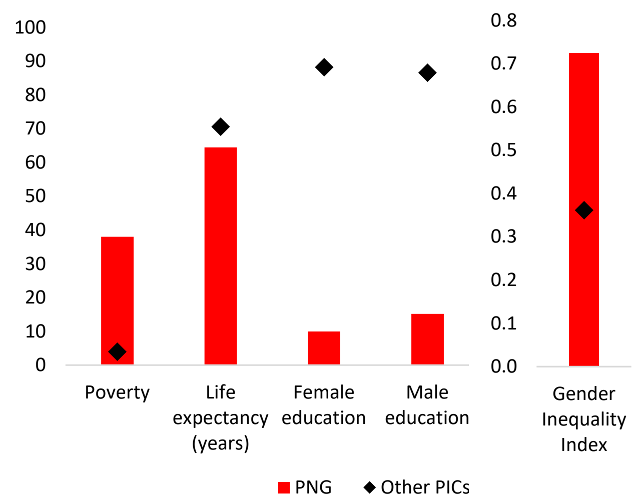
APPENDIX

CONTEXT

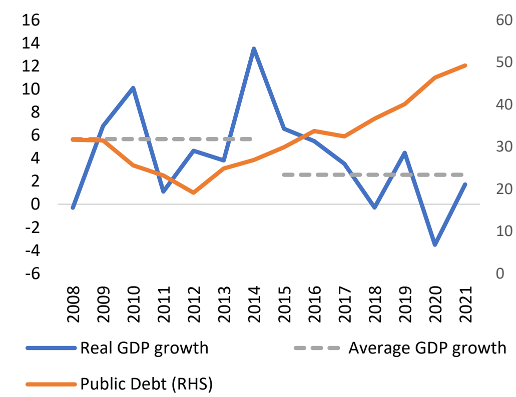
1. **Papua New Guinea (PNG) is a fragile, climate-vulnerable country, seeking to foster inclusive growth while grappling with high debt.** PNG is home to the third largest rainforest in the world, rich in biodiversity and natural resources. More than two thirds of its exports are petroleum gases (primarily liquified natural gas, LNG), gold, and copper. From 2014 to 2020, low commodity prices, a severe drought in 2015-16, and a major earthquake in 2018 softened growth, led to shortages of foreign exchange, and contributed to a pre-pandemic build-up of public debt, which is now at high risk of distress. The pandemic, coupled with vaccine hesitancy and poor public health resources, has further strained public finances.

2. **Poverty and gender inequality are high, health conditions are weak, and education levels are very low.** Most of the population lives in rural areas, without access to electricity and infrastructure. Development needs and governance challenges remain significant. Women have substantially less access to health care and education, and minimal representation in government.

Indicators of Human Development
(Percent, unless otherwise indicated)



Real GDP Growth and Gross Public Debt
(Percent)



Sources: World Bank, UNDP Human Development Report, 2020; and IMF staff calculations.

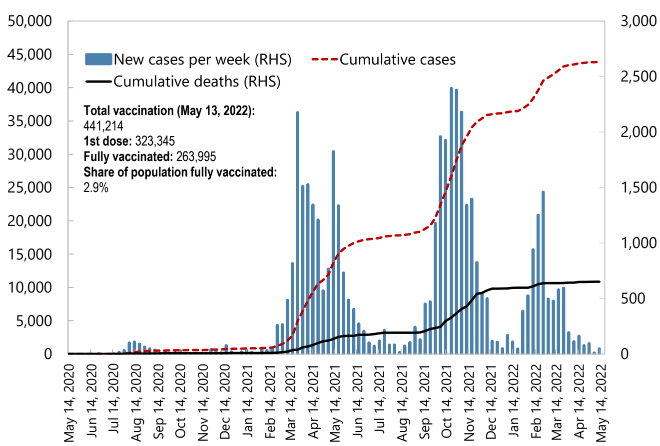
Note: Poverty is the headcount ratio at US$1.90 a day (2011 PPP, percent of population). Poverty for PNG is for 2009 (latest available), for other Pacific Island Countries (PICs) average of 2008-10 is used. Education variables show percent of population over 25 with at least some secondary education. Gender Inequality Index ranges from 0 to 1, with higher value indicating higher inequality, and is based on three groups of variables: reproductive health, female political representation, and gender gaps in the labor market.

3. **General elections are scheduled to take place in July 2022.** With a caretaker government in place during the campaigning period, no policy initiatives are expected until a new government is sworn in. The post-election period offers a window for reforms, as the continuity of the Prime Minister is assured for the first 18 months following a general election.

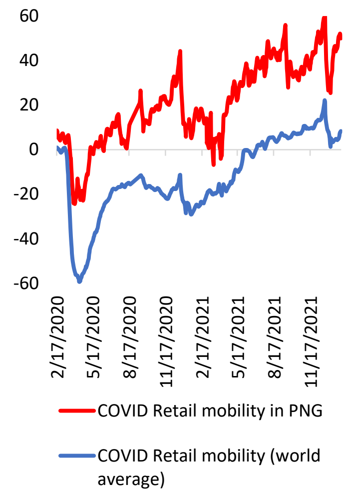
RECENT ECONOMIC DEVELOPMENTS

4. Swift measures prevented a large COVID-19 outbreak in 2020, but mobility quickly returned to pre-pandemic levels, contributing to waves of COVID-19 in 2021 and 2022. In March 2020, the authorities introduced nationwide isolation, restrictions on domestic and international travel, and school closures, which have since been removed. Cumulative cases and deaths have been relatively low, but many likely go unrecorded. Less than 3 percent of the population is fully vaccinated. Widespread beliefs that vaccines are unsafe are thwarting the authorities' vaccination efforts.

COVID-19 Incidence and Vaccinations
(Cases, Deaths)



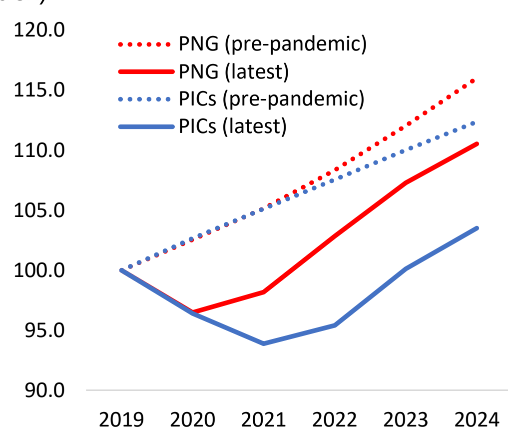
Google Mobility
(Deviation from baseline)



Sources: PNG National Department of Health; Google COVID-19 Mobility data; and IMF staff estimates.

5. Despite many challenges, PNG's economy has weathered the pandemic better than its regional peers. Growth in 2021, at 1.2 percent, was driven by the agricultural sector (palm oil, cocoa), buoyed by higher commodity prices and government support. Output in the extractive sector in 2021 was dampened by the continued closure of the Porgera gold mine. Inflation was at 5.7 percent in 2021, reflecting higher prices and freight charges for imported goods and fuel, and domestic supply chain disruptions.

GDP Projections, Pre- and Post-COVID-19
(Index)

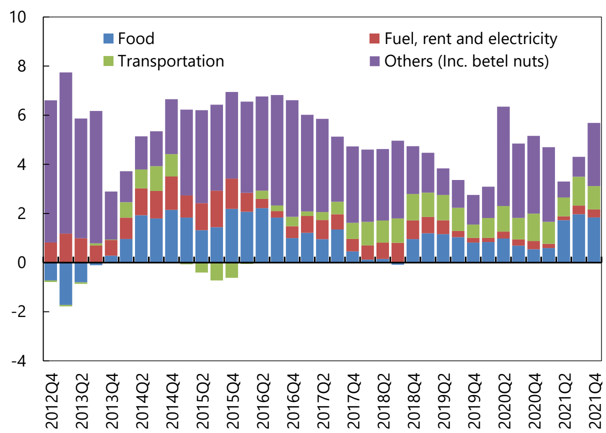


Source: IMF staff calculations. PICs shows an average for Pacific Island Countries, excluding Papua New Guinea.

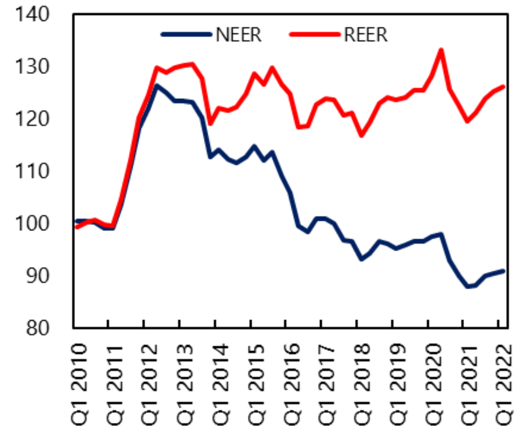
6. PNG's external position in 2021 was broadly in line with the level implied by

fundamentals and desirable policy settings. This assessment is preliminary given most 2021 data are still estimates, but initial results suggest a 2021 current account gap of –0.9 percent of GDP, and the kina as overvalued by about 2.4 percent in real terms (Annex III). The external position has profited from high commodity prices and strong global demand for PNG's export goods.[1] FX market pressures have eased, though FX shortages persist. Gross international reserves comfortably exceeded the program target of US$2 billion, consistent with IMF staff's assessment for reserves adequacy.

Contribution to CPI Inflation
(Percentage points)



Exchange Rates
(Index 2010=100)



Sources: IFS; and IMF staff estimates and calculations.

7. The 2021 fiscal deficit was lower than the budget projection. Revenues exceeded budget projections, driven by significantly higher non-tax revenues, especially foreign grants and dividends from the resource sector, late in the year. On the expenditure side, the budget outcome shows slightly higher retirement-related costs, remuneration for new teachers, defense and police personnel, offset by lower capital spending. As a result, the deficit stood at 6.6 percent of GDP, well below the program target of 7.4 percent. The deficit was financed through external concessional sources, though domestic borrowing, particularly through the issuance of Treasury bills, was significant. PNG was impacted by a ransomware attack on the Integrated Financial Management System (IFMS) in October 2021, which temporarily impacted budget execution and preparation of the 2022 budget. The 2021 increase in the general allocation of SDRs was used for budget financing, replacing costly financing and allowing the authorities to execute the budget as planned. This is appropriate given the need to balance the urgent demands of the pandemic and the need to strengthen debt sustainability. Staff is working with the Treasury and BPNG to record this transparently and consistently.

8. PNG's public and publicly guaranteed debt remains at high risk of debt distress. After rapid increases in recent years, public debt ratios remain elevated while the bullet payment on PNGs

[1] The CA surplus is likely overstated. See Annex III.

existing Eurobond represents a liquidity risk. The Debt Sustainability Analysis (DSA) also suggests that PNG is susceptible to exports and other shocks, signaling downside risks to the debt outlook in a global environment of high uncertainty.

9. Banks remain profitable and well capitalized, with ample liquidity, but non-performing loans (NPLs) have risen. At end-March 2022, the reported capital adequacy ratio stood at 36.3 percent, mostly composed of Tier 1 capital, and NPLs at 6 percent. In July 2021, the AML/CFT regulator, the Financial Analysis Supervision Unit, initiated regulatory actions against the Bank South Pacific (BSP), the largest commercial bank in PNG, citing several breaches of regulations. The actions aimed at strengthening AML/CFT compliance and reducing risks of disrupting correspondent banking relationships.

10. The Central Banking Act (CBA) was amended in December 2021, raising new concerns. The new CBA addressed some weaknesses identified in the IMF safeguards assessment. These include prohibiting carryover of central bank advances across fiscal years, and introducing eligibility criteria for all Board appointments, replacing the previous system of appointing ex-officio members. However, the 2021 amendments have weakened the CBA in other areas. The key concern is the introduction of a requirement for BPNG to provide advances to the government on demand. The amendments also: (i) introduced growth and employment in the non-resource sector as new (unranked) mandates, which could come into conflict with the price stability mandate; and (ii) transferred monetary policy decision-making to the BPNG Board, which creates a conflict with the Board's oversight role.

Authorities' Views

11. The authorities broadly agreed on recent developments and highlighted their strong economic performance relative to peers. They noted supportive fiscal measures and prudent economic policies, both at the onset of the COVID-19 pandemic and in response to the war in Ukraine, to protect the vulnerable population and maintain activity in the non-resource sector. The authorities were more optimistic about their debt-carrying capacity and perceived a lower risk of debt distress, pointing to increased revenues by 2027 as debt payments for the PNG LNG project are completed.

PROGRAM PERFORMANCE AND FUND ENGAGEMENT

12. PNG has engaged extensively with the Fund in recent years, including in the contexts of a Rapid Credit Facility and two Staff Monitored Programs (SMPs). The pre-pandemic SMP expired in June 2021. Despite eventual expiry, the 2020-21 SMP provided an important anchor for the authorities to advance their reform agenda. The burden of the pandemic, coupled with capacity constraints, the challenges of mounting virtual missions, and a lack of experience with Fund programs caused delays in sharing information needed for a timely completion of program reviews.[2]

[2] A detailed discussion of performance under the 2020-21 SMP can be found in IMF Country Report No. 2022/055.

13. To address the pandemic, SDR263.2 million (US$363.6 million, 100 percent of quota) was disbursed in June 2020 under the Rapid Credit Facility (RCF). The 2021 increase in the general allocation of SDRs was used to replace costly financing within the existing budget deficit, which is appropriate given the ongoing demands of the pandemic. Staff is working with the authorities to ensure this is done transparently and consistently and in accordance with the authorities' legal and institutional frameworks. The authorities are also receiving Fund technical assistance (TA) in national accounts, public debt, government finance and external sector statistics, revenue administration, banking supervision and regulation, and macroeconomic forecasts.

14. The current 6-month SMP—built on the priorities identified in the 2020-21 SMP (Box 1)—was streamlined, with one prior action, 6 quantitative targets (QTs), and 4 structural benchmarks (SBs) (Annex I). The 2021 SMP was approved in December 2021. Data for the single test date at end-December 2021 show the authorities have met all QTs. In particular, the 2021 fiscal deficit was lower than the program target, reserves comfortably exceeded the program floor, and FX provision to the market was in line with the program target. The December 2021 indicative targets (ITs) were also met. Regarding SBs, the authorities met the comprehensive payroll review (SB #2) and strengthening of the public debt committee (SB #4). In addition, the authorities published audited financial statements for major non-petroleum SOEs and passed the consequential amendments to the Tax Administration Act (SB #3), alongside the 2022 Budget, before program approval, further strengthening public sector governance and revenue administration respectively. Preliminary data suggest that the ITs for March 2022 were met, with the exception of the target on social and other priority spending, which was missed as capital projects in the affected sectors had not yet started.

Box 1. Key Objectives and Measures of the 2022 SMP

Fiscal

To gradually strengthen medium-term debt sustainability:

- Lower the fiscal deficit in 2022 to 6.0 percent of GDP, with ½ percent of GDP in policy measures,
- Contain spending on compensation of employees, and
- Strengthen tax administration and collection.

Monetary and FX

To prepare for a gradual return to kina convertibility:

- Strengthen liquidity management, and
- Reduce delay in fulfilling FX orders.

Structural and Governance

- Address weaknesses in the governance, autonomy, and internal controls of the BPNG.

15. While amendments to the CBA have been passed (SB #5), a number of key recommendations from staff have not yet been incorporated (see para 10). The window for corrective actions during the SMP has closed due to the electoral calendar, but the authorities intend to revisit in the context of Phase 2 some areas covered under Phase 1 of the CBA review, including the mandate, advances to the government, and the role of the Board. They have requested Fund technical assistance (TA) in this respect (Letter of Intent). Staff noted that further amendments should be done in consultation with Fund staff.

16. The Safeguards Assessment of the BPNG, completed in August 2021, found that amendments to the CBA were necessary to safeguard the financial, personal, and institutional

autonomy of the BPNG and enhance its governance arrangements. Other weaknesses were identified in the internal audit mechanism, the external audit findings and arrangements, and internal controls, particularly with regards to Board vacancies, the investment policy, and the emergency lending framework of the BPNG. The BPNG is addressing recommendations on internal audit practices and the financial reporting mechanism. Overall, however, progress in implementing recommendations has been slow, in part due to management changes introduced with the CBA amendments.

Authorities' Views

17. The authorities welcomed the continued engagement with the IMF that started with the Due Diligence Exercise and Staff Monitored Program in 2019. The authorities support the planned placement of an IMF Resident Representative in Port Moresby to strengthen engagement, and further discussions in person as COVID restrictions are reduced. The authorities look forward to further cooperation on the central bank reforms and request Technical Assistance from the IMF to support the Government's Independent Advisory Group process and the reforms which aimed to modernize and strengthen BPNG. This should help improve external understanding of the reform process and support tailoring international best practice to PNG's circumstances.

OUTLOOK AND RISKS

18. Growth is projected to strengthen to 4.2 percent in 2022 and 4.7 percent in 2023 driven by the resource sector, before slowing to 3.0 percent over the medium term (Table 1). Real GDP in 2022 is projected to exceed its 2019 level, barring large new negative shocks.

- **2022:** With improved COVID preparedness, Ok-Tedi and Simberi mines are expected to return to normal operations in 2022. The reopening of the Porgera gold mine is now assumed in Q4 2022. If opening is postponed to 2023, then 2022 growth would be slightly lower and 2023 growth slightly higher. The gradual easing of containment measures and higher capital spending by the government should support recovery in the non-resource sector. The war in Ukraine is impacting PNG through higher commodity prices and higher inflation, with the former leading to a stronger balance of payments and fiscal revenues, given that PNG is a large commodity producer.

- **Over the medium term,** a gradual recovery in the non-resource sector is expected to drive growth. Public debt as a percentage of GDP is projected to decline due to the fiscal consolidation envisaged, which will require steadfast reform implementation. The medium-term outlook will depend on: (a) the health burden of the pandemic in PNG, which is expected to ease somewhat, (b) commodity prices and external demand, which are expected to remain strong, and (c) structural reforms to boost non-resource sector growth, including SOE reforms, anti-corruption measures and tax code modernization, which are expected in the baseline.

19. Risks are tilted to the downside (Annex II).

- **Downside risks** include a worsening health situation domestically; weaker external demand for PNG's exports; large volatility in commodity prices, or higher inflation, potentially related to the war in Ukraine or slowdown in China; domestic political instability, and difficulty forming a government that could delay reform implementation; or climate-related natural disasters.
- **Upside risks** include higher-than-expected commodity prices, or start of any of several major projects, including Papua LNG, P'nyang LNG or the Wafi Golpu mining, and a series of other smaller projects, which are not yet in the baseline scenario. Revenues may increase significantly if amortization of the PNG LNG Project loans ends, and depreciation expenses fall, earlier than the baseline.

Authorities' Views

20. The authorities broadly agreed with the outlook and risks. They pointed to the upside risks, with the expected start of major resource projects and significant improvement in fiscal balances in the outer years. Even though the likelihood of the start of major resource projects is high, they agreed to include them in the baseline only when investment decisions are reached.

POLICY DISCUSSIONS

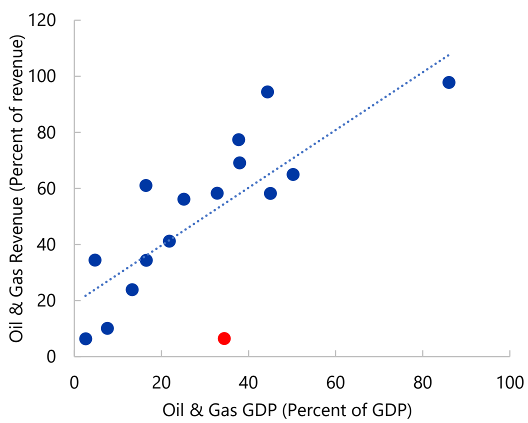
The Article IV and SMP review discussions centered on: near- and medium-term policies to reduce debt vulnerabilities; monetary and exchange rate policies to facilitate a gradual return to kina convertibility; further amendments needed to sufficiently protect the BPNG's financial, personal, and institutional autonomy; and policies needed to improve governance, promote climate-resilient and inclusive growth.

A. Fiscal Policies: Strengthening Debt Sustainability

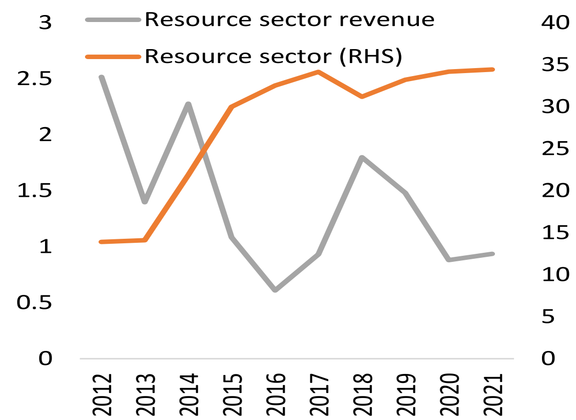
21. Rapid progress on fiscal consolidation, as envisaged by the authorities, is appropriate to strengthen debt sustainability. Lowering the deficit as planned by about 5½ percent of GDP by 2027 is needed to meet the requirements of the Fiscal Responsibility Act, which specifies that government debt should be maintained at no more than 40 percent of GDP over the long term. Further, achieving a balanced budget by 2027 would lower the risks from significant debt service obligations on external borrowing coming due in 2028. PNG is also vulnerable to climate shocks and natural disasters, which will require the rebuilding of buffers to address these shocks as they manifest.

22. The priority for PNG is to increase revenues from the resource sector to strengthen debt sustainability. Compared to other commodity exporters, the share of government revenue coming from the resource sector is very low in PNG relative to the share of resource sector in GDP (see text figure). Since 2012, average resource sector revenue has fallen, even as the resource sector's share of GDP more than doubled, to a third of GDP. The authorities project a sharp increase in tax revenues from the PNG LNG project from 2026 onward, after tax exemptions expire. Further, the authorities see scope for significantly higher dividends after loan amortization for the project is completed but this is not included in the baseline. Staff advised the introduction of an additional moderate *ad valorem* levy on future resource projects that would be paid directly to the central government, in line with IMF TA recommendations.

Commodity Exporters: Oil & Gas revenue vs. Oil & Gas GDP



Resource Sector Revenue and Share of GDP
(Percent of GDP)

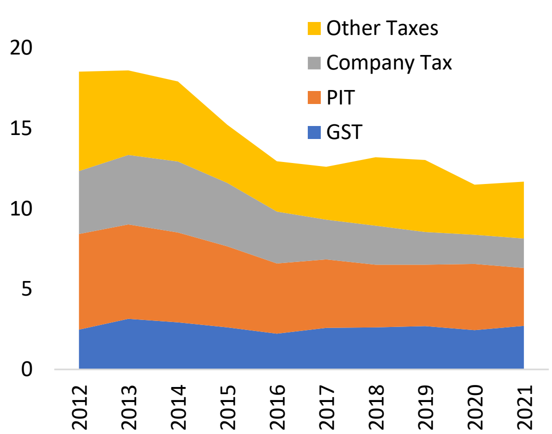


Sources: Middle East and Centra Asia Regional Economic Outlook (April, 2022); and IMF staff calculations.

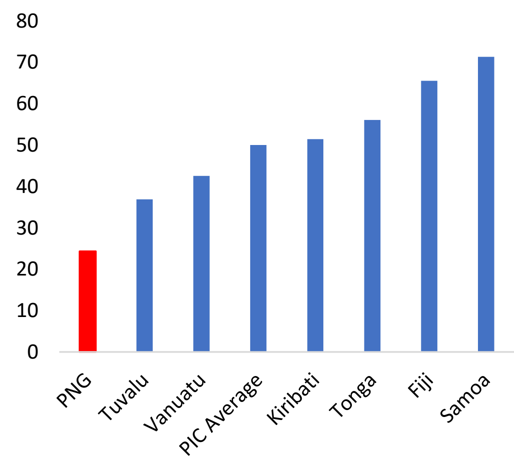
Note: PNG's resource sector revenue and share of GDP (shown in red) is compared to oil and gas revenue and oil and gas GDP of other countries.

23. While near-term tax revenues are expected to improve with the recovery, the authorities are pursuing reforms to improve revenue collection over the medium term. Tax revenues have declined by about 5 percent of GDP since 2012, driven by personal income tax and company tax. GST revenue collection improved in 2021. Further improvement is possible, as PNG collects only a quarter of its potential GST (right text chart), partly because of a large informal economy and low capacity. Over the medium term, the new Income Tax Act (ITA), is expected to improve compliance by simplifying the tax code, though the authorities have not yet prepared estimates on the potential yields from these reforms. In March 2022, the authorities introduced a new flat tax on the banking and telecommunication sectors, targeting companies with market concentration over 40 percent, which was estimated to yield additional revenues of 0.3 percent of GDP in 2022. In March, the annual levy on the telecommunications sector was replaced by a one-off charge of K350 million (0.3 percent of GDP), raising the yield for 2022 to 0.5 percent of GDP but lowering the medium-term gains to less than 0.2 percent annually. The Internal Revenue Commission (IRC) plans to introduce a new Integrated Tax Administration System, to allow online filing of returns and payments, better taxpayer services, and improved case management. Staff stressed the need to strengthen revenue mobilization while improving the investment climate. A new Medium-term Revenue Strategy (MTRS) to improve revenue administration, with Cabinet oversight to strengthen implementation, would support reforms. The authorities have asked for TA to assist in their review of their MTRS.

Tax Revenue Components
(Percent of GDP)



GST/VAT C-efficiency Across Pacific Islands[1]
(Percent)



Sources: IMF (forthcoming) Domestic Resource Mobilization in the Pacific Island Countries; and IMF staff calculations.

[1] VAT C-efficiency is defined as the ratio of actual VAT revenues to the product of the standard rate and final consumption. It conveys the percentage of potential VAT (GST) a country can collect. PIC = Pacific Island Countries.

24. The authorities' near-term expenditure management is focused on strengthening payroll systems. Reducing current spending, particularly on compensation of employees, would support the fiscal consolidation efforts and enable the authorities to increase capital spending. In 2022, the authorities undertook a Staffing and Establishment Survey (SB#2) to determine current staffing levels, and eventually integrate the payroll management system into the IFMS, the public expenditure management system. While containing overall expenditures, the authorities are committed to increasing healthcare spending and maintaining social spending in real terms to meet the pressing needs of the pandemic and post-pandemic period. Staff emphasized efforts to contain current expenditure, particularly remuneration of public employees, to free up room for needed social and development spending. Staff discussed follow up actions to contain personnel expenses, building on the completion of SB #2 to move away from the imposition of caps on overall wage bills, which are not sustainable. Staff advised that the Survey also allow and budget for the clearance of arrears to the staff retirement fund. As the authorities rebalance fiscal expenditure to prioritize development spending, management of capital expenditure will be critical, and staff recommended strengthening PFM, including through TA from the IMF. A Public Investment Management Assessment could identify reforms needed to strengthen public investment management going forward.

25. To mitigate the effects of high prices due to the war in Ukraine, the authorities introduced a package of temporary measures in March 2022. The package consists of a removal of the fuel excise and GST on fuel products for six months; raising the income tax threshold from K12,500 to K17,500 from 1 June 2022 to the end of the year; paying for school project fees; and purchasing selected staple food items for sale to the public at fixed prices. The combination of temporary tax and spending measures are expected to cost K611 million (0.6 percent of GDP), to be financed through higher resource revenues due to higher commodity prices, thereby keeping the nominal fiscal deficit and the medium-term fiscal consolidation path unchanged. Given PNG's weak social safety nets, more efficient mechanisms such as targeted transfers were judged to be not feasible. Efforts to develop a formal social safety net would be needed to enhance support's targeting and spending efficiency. Further government measures to reduce poverty and support inclusive growth focus on infrastructure investments through the Connect PNG Program, funding to reduce gender-based violence, and greater expenditures on health and education (Annex IV).

Authorities' Views

26. The authorities stressed their commitment to continue budget repair to strengthen long-term debt sustainability. In the near term, they expect to see improved revenues from the newly-introduced concentration levy, which they saw as necessary given the lack of competition and elevated profits in the banking and telecommunications sectors, noting that the levies would still allow the affected companies to be highly profitable. Over the medium term, the implementation of the Tax Administration Act and passage of the revised ITA are expected to strengthen revenue collection while streamlining tax compliance, which should improve the business climate. On improving resource revenues, the authorities agreed that improving on past performance would be critical and were confident that their strategy based on equity participation in new projects would yield significant benefits in the medium term due to the positive prospects for energy prices. On controlling expenditure, the completion of the Staffing and Establishment Review is expected to feed into the setting of the personnel emoluments budget for 2023. In addition, the government is trialing a pilot project to link payrolls to the issuance of warrants, thereby bringing these payments into the IFMS and under Parliamentary Appropriation limits.

B. Monetary, Exchange Rate and Financial Sector Policies

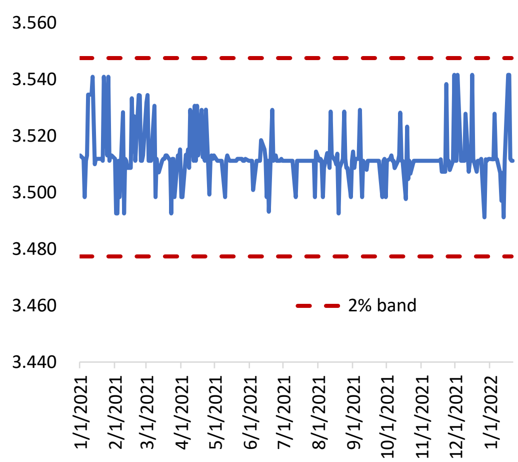
27. PNG's *de jure* exchange rate regime is floating, but *de facto* the kina is classified as stabilized, which has impeded exchange rate adjustment and contributed to the FX shortage. Staff assesses the kina to be overvalued. BPNG imposed a trading margin on FX buy-sell spreads of authorized dealers since 2014, which impedes the exchange rate from adjusting to a market-clearing level to eliminate the overvaluation and, coupled with an insufficient supply into the market, has resulted in FX rationing. Despite the FX shortage, no evidence of a parallel FX market has emerged because small FX orders, which affect the bulk of customers, are fulfilled first. Larger FX orders, often to pay dividends abroad, typically experience delays. Anecdotal evidence suggests there is large pent-up demand for FX and that firms are using bilateral off-market deals to secure FX.

28. Thanks to favorable commodity prices in 2021, sustained donor inflows, the SDR allocation, and BPNG provision of FX to the market, FX orders were fulfilled more promptly in 2021 and early 2022 than in 2020. Despite the increase in commodity prices and the fact that the exchange rate has been stable against the US dollar, there has been no commensurate increase in reserves, and while the FX shortages have diminished, they persist. The underlying reasons are the kina overvaluation (expected depreciation of the exchange rate in future) and FX rationing (firms are not able to access FX when they need it), which have created incentives for firms to keep their FX offshore (Annex VII). Exit from the current system should be carefully planned, given the pent-up demand for FX and risks of the exchange rate overshooting.

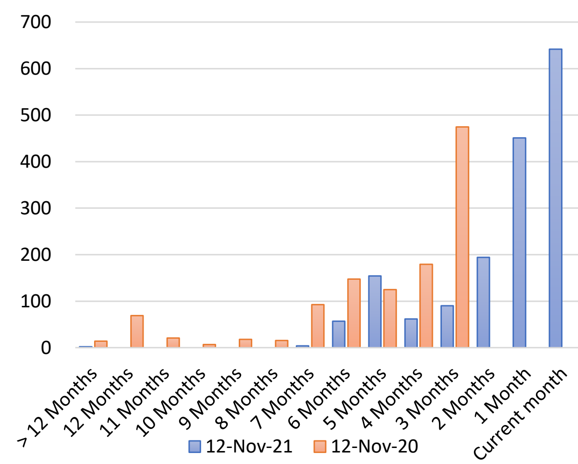
29. A comprehensive approach is needed to reinstate kina convertibility. As a precondition, the BPNG needs effective tools to manage current excess kina liquidity. The authorities committed to strengthening their existing Public Debt Committee (SB #4) to improve liquidity management and forecasting. Staff noted that an eventual move to kina convertibility calls for a review of the monetary policy framework, greater exchange rate flexibility and removal of exchange restrictions. Further TA from the Fund on these issues is recommended (Annex V and VII).

30. If inflationary pressures persist, the BPNG should tighten monetary policy to maintain inflation under control. Following the pandemic, BPNG reduced its policy rate, the Kina Facility Rate, and has kept it at 3 percent since 2020. BPNG plans to keep an accommodative monetary policy stance for the time being, citing weak recovery. However, if inflation pressures persist despite

Stabilized Exchange Rate: Kina to US Dollar
(Ratio)



Distribution of FX Orders by Due Date
(Million kina)



Sources: Datastream; BPNG; and IMF staff calculations.

recent fiscal measures in response to the fallout of the war in Ukraine, a tighter monetary policy may be needed sooner to avoid the second-round effects, and should be data dependent. BPNG will likely keep the exchange rate stable against the US dollar to avoid further inflationary pressures, impeding the needed exchange rate adjustment to eliminate the kina overvaluation and ease FX shortages. Monetary policy tightening by the US Federal Reserve is further complicating policy trade-offs, given the stabilized exchange rate.

31. PNG's financial sector is underdeveloped. There are four commercial banks, two domestic and two foreign, generally serving separate markets. Phase 2 of the CBA review is expected to look at the competition in the banking sector. Credit to GDP is just under 20 percent, with preliminary plans to increase access to credit for agricultural or informal enterprises articulated in PNG's Financial Sector Development Strategy 2016-2020. Superannuation funds, life insurance companies and the stock exchange are developing. Financial sector inclusion is constrained by low urbanization, a large informal economy, and low financial literacy. Financial sector COVID measures such as loan payment deferrals were temporary, approved on a case-by-case basis, and have all since expired, without negative implications for banking system's asset quality. Staff recommended a Financial Sector Stability Review.

Authorities' Views

32. The Treasury agreed with the need to gradually restore exchange rate convertibility, while BPNG argued that the exchange rate is market-determined and saw no need for change. The Treasury emphasized that the FX shortages and overvalued fixed exchange rate are hurting growth and employment in the non-mineral sector. They argued that BPNG incentives need to change to move away from the sole focus on inflation, and a more balanced approach is needed. BPNG views the current exchange rate regime as both *de jure* and *de facto* floating, and sees no FX rationing.

C. Strengthening the Central Banking Act

33. Further amendments are needed to strengthen the CBA. Phase 2 of the CBA reform is expected to revisit some areas covered under Phase 1, including clarifying the mandate of the central bank; strengthening the institutional, operational, personal, and financial autonomy of the BPNG; and clarifying the role of the Board in monetary policy formulation to avoid complicating the accountability framework of the BPNG. Staff stressed that progress toward a satisfactory CBA, to be drafted in consultation with Fund staff, will be an essential element for an eventual upper credit tranche (UCT) program, and recommended subsequent amendments to address remaining weaknesses identified by the safeguards assessment and those introduced by the new amendments (see paragraph 10). Staff recommended that further amendments be made after carefully considering all aspects of the legal framework (legal structure and mandate, governance, financial/personal/institutional autonomy, transparency, and accountability).

34. Staff noted that the overvalued kina and FX shortages have hurt the non-resource sector growth but advised that adding an unranked growth and employment mandate for the BPNG is not the appropriate solution to address FX shortages. Instead, staff recommended moving closer to the equilibrium exchange rate and improving FX market operations to carefully address pent-up demand for FX. Staff also advised the authorities to be deliberate in the next steps in the process as rapid and frequent changes of the BPNG's legal framework will likely lead to sub-optimal outcomes and weaken the credibility of the central bank.

35. The authorities have used the Temporary Advance Facility (TAF) prudently so far. Use of TAF was repaid at the end of 2021 following the drawdown of external financing. In early 2022, there was minimal use of the TAF, with the cash flow funded from oversubscriptions in the auction of Treasury Bills and carry-over of funds from previous year's external financing. The authorities have separated the Waigani Public Account (the Treasury Single Account) from the TAF account, to ease monitoring, reporting and audit. So far in 2022, there have not been any central bank purchases of government securities to help finance the budget (the slack arrangement).

Authorities' Views

36. The Treasury highlighted many improvements introduced with the 2021 amendments to the CBA. This particularly includes the strengthened BPNG Board and removal of ex-officio positions from the board. They also pointed to the move to a more collegiate decision-making on monetary policy, which is expected to be strengthened further with a move to a Monetary Policy Committee now moved to Phase 2 to allow greater input from partners. The authorities now view the BPNG Board as more empowered, more qualified, and better aligned with its increased responsibilities. The authorities emphasized their prudent use of the TAF to manage cash flow within the fiscal year, and the new limit on purchase of government securities to prevent monetary financing. The Treasury believes that the new growth and employment objectives will reduce the BPNG's incentive to maintain a stabilized exchange rate. BPNG expressed concerns about the introduction of new, unranked, objectives, and highlighted the challenge for monetary policy to pursue these multiple objectives.

D. Addressing Governance Challenges

37. The authorities are making a concerted effort to strengthen governance. The 2020 ICAC law bestows a new body with the power to investigate and pursue complex corruption cases. The law is facing a constitutional challenge, but the interim ICAC office is preparing for full operationalization by developing implementing regulations and recruiting staff. In the context of these efforts, the Corruption Perception Index compiled by Transparency International shows an improvement in 2021. However, significant governance challenges remain, reflected in PNG's negative scores in almost all components of Worldwide Governance Indicators. To address governance weaknesses and corruption vulnerabilities in PNG, a sustained, multi-year effort with close external support, including from the IMF, is needed. Staff stand ready to provide IMF TA to complement the extensive anti-corruption support provided by other developing partners, including the UN, EU, ADB, and Australia, and discussed corruption in the context of impediments to growth.

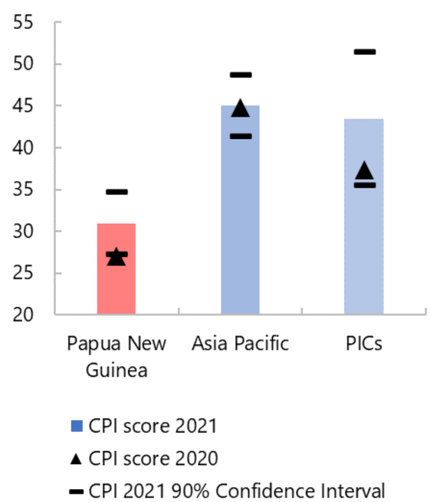
38. Transparency in procurement needs to be improved, particularly for COVID-related spending. Staff urged the government to resume updating information on COVID-related procurement, including posting details of beneficial owners of successful bidders at https://www.procurement.gov.pg/covid-19-procurement/, which has not been updated since mid-2020. The authorities have reiterated their intention to conduct an audit of procurement contracts, and staff recommended that the audit start as soon as possible. While the National Procurement Act has now been operationalized, improved commitment to transparency in procurement is necessary for a durable improvement in governance. Such reforms to strengthen fiscal governance will help to reduce vulnerabilities to corruption and improve public sector management.

39. Efforts to strengthen the AML/CFT framework should continue. PNG's latest mutual evaluation against FATF standards was in 2011, with PNG rated partially compliant or non-compliant with 32 out of 40 recommendations, leading to the placement of PNG on the FATF's grey list in 2014 (as a jurisdiction with strategic AML/CFT deficiencies). Following significant improvements in the AML/CFT regime, PNG was removed from the FATF grey list in 2016. A favorable evaluation at the upcoming evaluation, currently planned for 2023, will be important. In preparation for the next evaluation, the Financial Analysis and Supervision Unit (FASU) has provided training to supervised entities, conducted sectoral risk assessments, and is working on changes to the AML/CFT legal framework.

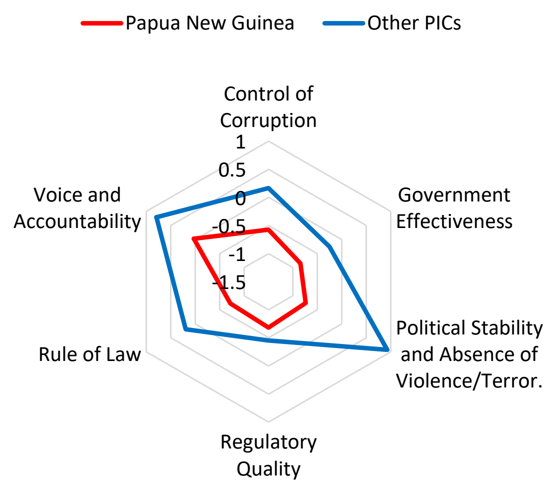
Authorities' Views

40. The authorities described active recruiting procedures for full operationalization of ICAC, hopeful that ICAC will be upheld at the Supreme Court. They noted strong public support for anti-corruption efforts and ICAC, and expectation that ongoing work will continue regardless of the election outcome. BPNG commended prudent and active regulatory actions by the FASU in line with AML/CFT commitments.

Corruption Perceptions Index
(Index)



Components of Worldwide Governance Indicators
(Standard normal units)



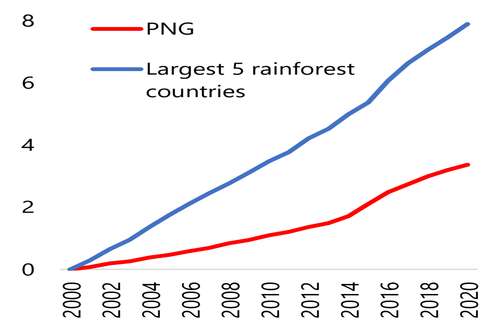
Sources: Transparency International, *D. Kaufmann (Natural Resource Governance Institute and Brookings Institution) and A. Kraay (World Bank) (2020);* and IMF staff calculations.

Note: For Worldwide Governance indicators, negative values are below the global average. Higher values of the Corruption Perception Index indicate lower perceived corruption. Use of these indicators should be considered carefully, as they are derived from perception-based data. PICs refers to Pacific Island Countries.

E. Climate and Biodiversity: Challenges and Opportunities

41. Climate issues are deemed macrocritical in PNG, given high vulnerability to climate change and large adaptation needs (Annex VI). Major climate hazards in PNG include sea level rise, coastal erosion, coastal and inland flooding, drought, and landslides. While lacking infrastructure, PNG has a high environmental capital, which supports extensive subsistence farming, and is increasingly under threat from climate change and deforestation. Climate adaptation needs are estimated at about 2 percent of GDP annually for the next 10 years and need to be financed largely from external sources given limited fiscal space.

Percent of Own Forest Lost Since 2000



Sources: United Nations Biodiversity Lab; and IMF staff calculations.

42. PNG's large rainforest provides essential global climate stabilization service and ecosystem services to the local population. Urgent action is needed to reduce the rate of deforestation—while it is still lower than in other major rainforest countries—and promote green, inclusive growth, and raise revenue. The authorities are looking to establish Voluntary Carbon Markets (VCMs) and have recently joined a carbon offsets scheme with Australia, even as this requires greater efforts to reach PNG's nationally determined contributions (NDCs). Debt-for-climate swaps could be explored as part of a broader climate finance strategy. Implementation of the authorities National Strategy on Reducing Emissions from Deforestation and Forest Degradation (REDD+) is vital. REDD+ Results Based Payments through the Green Climate Fund and other entities should be pursued further.

Authorities' Views

43. The authorities welcomed staff's focus on climate issues as in line with the country's long-time leadership in this space internationally. They detailed their extensive efforts to reduce emissions and protect the rainforest, while also adapting to climate change. BPNG Center for Excellence in Financial Inclusion (CEFI) noted their initiative to design a green finance policy for PNG, including a green taxonomy, which they plan to launch this year.

F. Improving Data Availability for Program Monitoring and Policy Formulation

44. PNG has strengthened data reporting to support program monitoring but further work is needed to ensure the data to support policy formulation is adequate. To improve information-sharing with staff, the authorities set up a high-level Program Monitoring Committee to maintain close contact with staff and follow-up on data requests. As a result, there has been substantial improvement in information sharing compared to the 2020-21 SMP. In the 2021-22 SMP, meetings and information flows have become more frequent, though addressing reporting lags remains a priority. Reporting of fiscal data was affected by a ransomware attack in late 2021, which hindered access to funds and continues to affect the quality and timeliness of fiscal data. Staff emphasized the need to implement the recommendations of the recent Fund TA, including on public sector debt and external sector statistics.

Authorities' views

45. The authorities agreed that information-sharing with Fund staff has improved significantly with the formation of Program Monitoring Committee. They reiterated their commitment to greater engagement with the Fund and successful completion of the SMP.

STAFF APPRAISAL

46. Papua New Guinea (PNG)'s economy is weathering the pandemic well, despite many challenges, including vaccine hesitancy. Real GDP in 2022 is projected to exceed its 2019 level, and the medium-term outlook is positive, supported by the resource sector. But inflationary pressures have increased. The introduction by the authorities of a package of fiscal measures to mitigate the impact of higher prices due to the war in Ukraine was appropriate, given that it consisted of temporary tax cuts and higher social spending, financed by higher resource revenues. Developing a formal social safety net, which would allow more targeted transfers to the vulnerable, would be needed. PNG's external position in 2021 was broadly in line with the level implied by fundamentals, with the kina still overvalued in real terms. FX market pressures have eased, though shortages persist. PNG's public and publicly guaranteed debt is at high risk of debt distress but remains sustainable.

47. The performance of the SMP was broadly satisfactory. All quantitative targets were met and all structural benchmarks were also fully met on time, apart from the benchmark related to the CBA. Amendments to the CBA were passed, which addressed some weaknesses identified in the IMF safeguards assessment. However, the amendments have weakened the CBA in other areas. While the window for corrective actions during the SMP has closed due to the electoral calendar, the authorities agreed to revisit areas of key concerns as part of the Phase 2 of CBA reform, supported by IMF TA. Staff support the authorities' request to complete the sole review under the 6-month SMP.

48. Near- and medium-term policies need to focus on: addressing debt vulnerabilities, maintaining inflation under control, easing the foreign exchange shortages, strengthening the CBA, improving governance, promoting climate-resilient and inclusive growth:

- **Rapid progress on fiscal consolidation, as envisaged by the authorities, is appropriate to strengthen debt sustainability.** Lowering the deficit as planned is needed to meet the requirements of the Fiscal Responsibility Act, which specifies government debt should be maintained at no more than 40 percent of GDP over the long term. Further, achieving a balanced budget by 2027 would lower the risks from significant debt service obligations on external borrowing coming due in 2028. PNG is also vulnerable to climate shocks and natural disasters, which will require the rebuilding of buffers to address these as they manifest.

- **The priority for PNG is to increase revenues from the resource sector to lower the deficit and strengthen debt sustainability.** The authorities are advised to introduce an additional moderate ad valorem levy on future resource projects, payable directly to the central government, which would yield revenues immediately and lower risk to future revenues compared to an excessive reliance on equity participation in new projects. The authorities are encouraged to complete revisions to the Income Tax Act, improve the tax administration system to allow online filing of returns and payments, and update their medium-term revenue strategy, with Cabinet oversight.

- **Efforts to strengthen medium-term revenue collection and the payroll system to contain expenditures should continue.** The authorities should strengthen payroll systems throughout the government to contain expenditure on remuneration of public employees and increase room for needed social and development spending.

- **BPNG should tighten monetary policy sooner if inflationary pressures persist** to avoid second-round effects from higher food and energy prices.

- **A comprehensive approach to reinstating kina convertibility is needed.** The authorities were advised to review the monetary policy framework, continue to improve liquidity management and forecasting, and plan for a gradual increase in exchange rate flexibility and removal exchange restrictions. Further measures to increase financial inclusion and financial sector development are welcome.

- **The CBA needs to be revisited to strengthen the BPNG.** In particular, Phase 2 needs to address weaknesses in the governance, autonomy, transparency, and accountability of the BPNG, as identified by the safeguards assessment and following the 2021 CBA amendments. The prudent use of the TAF so far is welcome.

- **The authorities are making continued efforts to strengthen governance.** Efforts include plans for operationalization of the ICAC office which will investigate and pursue complex corruption cases, ensuring greater transparency in procurement, and improvements in the AML/CFT framework and regulation. In light of significant governance challenges, a sustained, multi-year effort with close external support, including from the IMF, is needed.

- **Risks from climate change are macrocritical in PNG.** Policy should focus on developing and financing climate adaptation projects. Measures to reduce the rate of deforestation and reach PNG's nationally determined contributions are essential.

49. The authorities' willingness to remain engaged with the Fund is welcome. Further Fund engagement will continue to play a role in advancing PNG's reform agenda, raising revenue, and supporting green, inclusive growth.

50. **PNG needs to further improve data quality and availability.** There has been substantial improvement in information sharing compared to the 2020-21 SMP. Nevertheless, addressing reporting lags and challenges in data compilation remains a priority. In particular, improving the compilation of key fiscal indicators such as expenditure, revenue and financing would strengthen monitoring of budget execution and support policy formulation.

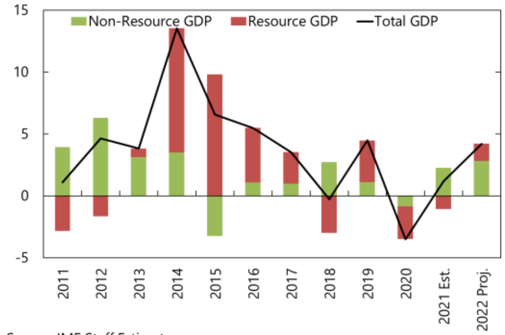
51. It is proposed that the next Article IV consultation with PNG be held on the standard 12-month cycle.

Figure 1. Papua New Guinea: Real and External Sector Developments

Real GDP recovered modestly led by the non-resource sector after contraction in 2020.

Real GDP Growth

(Contributions to percent change)

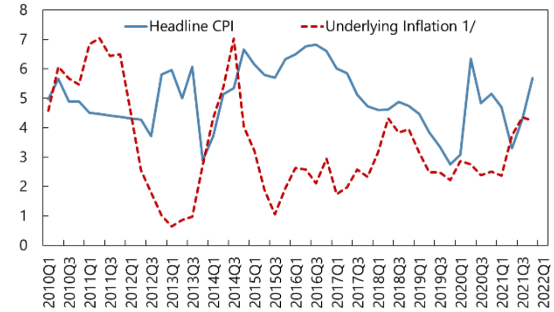


Source: IMF Staff Estimates

After subsiding in 1H2021, headline inflation picked up alongside commodity prices

CPI Inflation

(In year-on-year percent change)



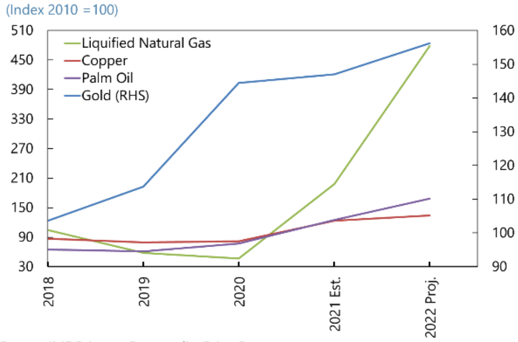
Sources: BPNG and IMF staff estimates

1/ Trimmed Mean by BPNG

Commodity prices have seen a sharp increase since 2020…

Commodity Prices

(Index 2010 = 100)

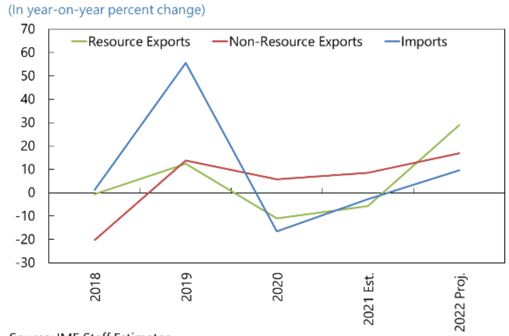


Source: IMF Primary Commodity Price System

… bolstering export revenues despite supply bottlenecks.

Exports and Imports

(In year-on-year percent change)

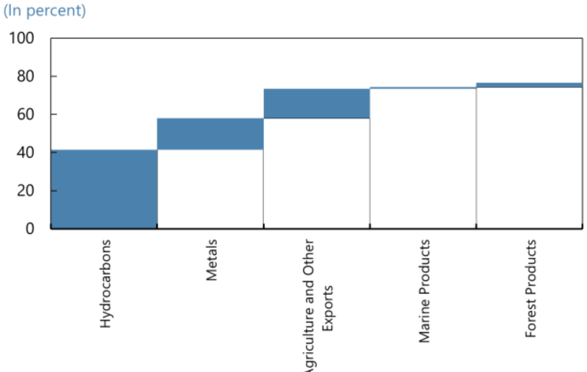


Source: IMF Staff Estimates

Strong global demand for PNG's export goods …

Export Product Share, 2021

(In percent)

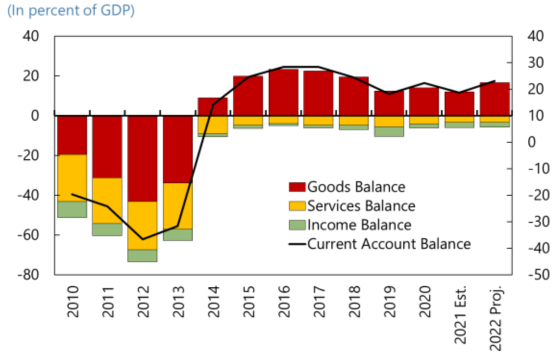


Source: BPNG

…. supported the trade balance and current account.

Current Account

(In percent of GDP)



Source: IMF Staff Calculations

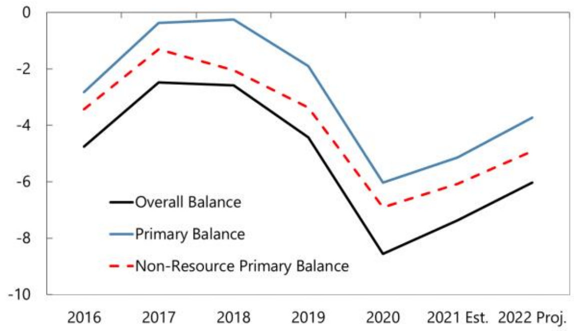
1/ Trimmed mean estimate calculated by BPNG.

Source: BPNG, IMF Commodity Price System, IMF staff estimates and projections.

Figure 2. Papua New Guinea: Fiscal Developments

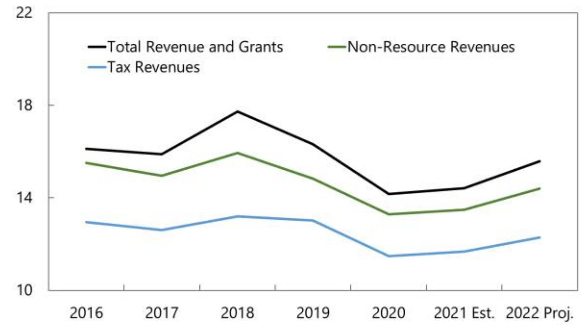
After widening significantly in 2020 due to the pandemic, the fiscal deficit narrowed in 2021…

Fiscal Balance
(In percent of GDP)



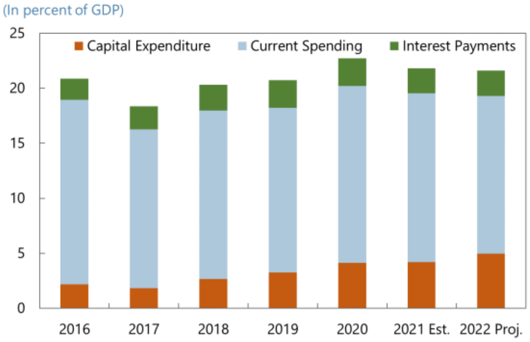
…driven by an improvement in tax revenues.

Central Government Revenue
(In percent of GDP)



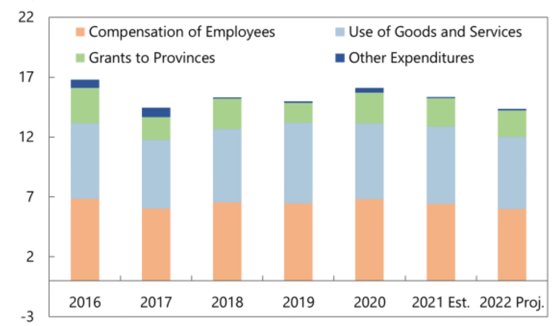
Current spending continues to take up the bulk of government spending…

Central Government Expenditure
(In percent of GDP)



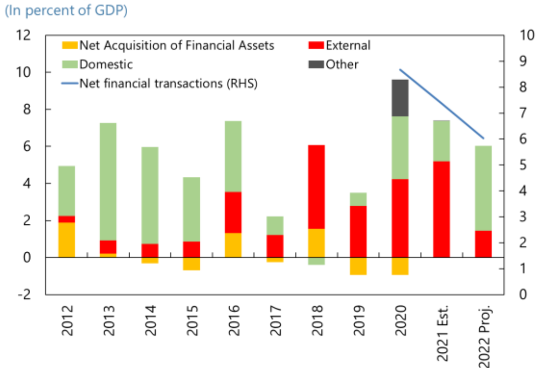
…driven by employee compensation and use of goods and services.

Recurrent Government Expenditure
(In percent of GDP)



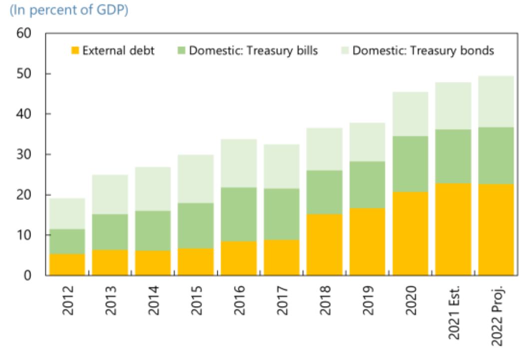
The fiscal deficits in 2020 and 2021 were largely externally financed.

Financing
(In percent of GDP)



Public debt exceeds 50 percent of GDP, driven by an accumulation of external debt.

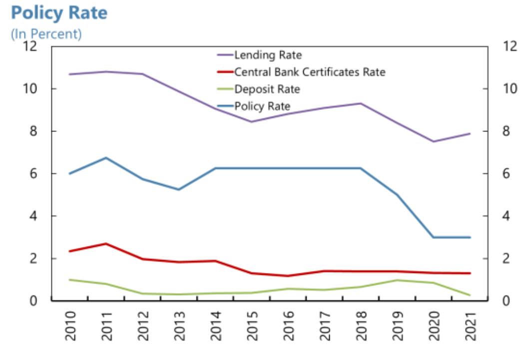
Public Debt
(In percent of GDP)



Sources: Country authorities, IMF staff estimates and projections.

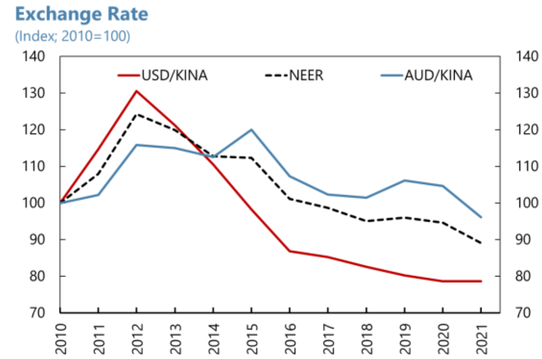
Figure 3. Papua New Guinea: Monetary and Financial Sector Developments

The policy rate has decreased in response to the pandemic…



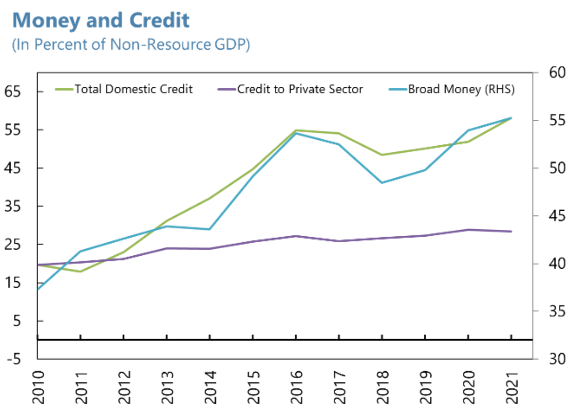
Note: Data updated as of December 2021
Sources: IFS,and BPNG

…while the kina has been stabilized against the US$ since 2020.



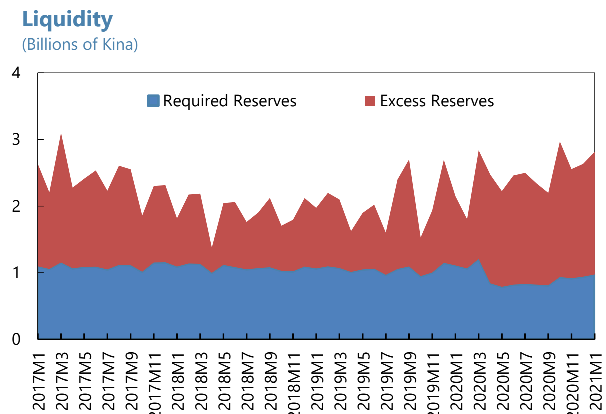
Note: Data updated as of December 2021
Sources: IFS and IMF Staff Calculations

Credit to the private sector is broadly unchanged…



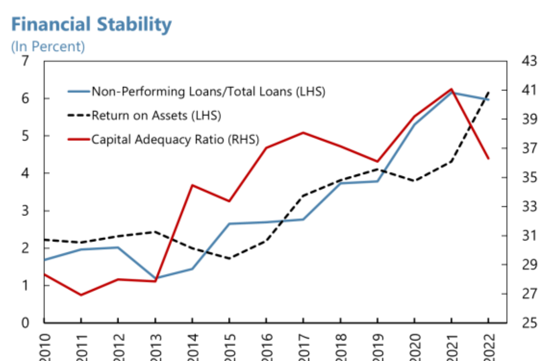
Sources: BPNG

…with continued excess liquidity in the banking system.



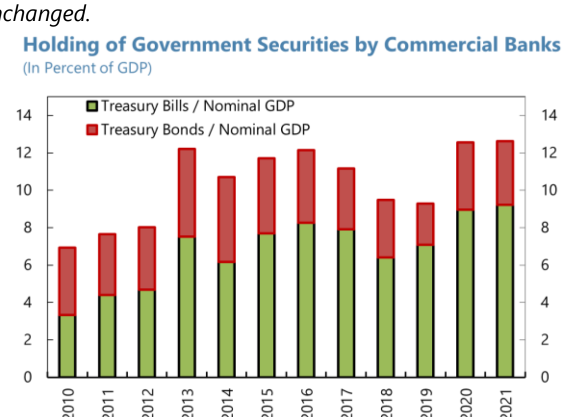
Sources: BPNG

NPLs are on the rise, though banks are still well-capitalized.



Note: Data updated as of March 2022
Sources: BPNG and IMF Staff Calculations

Commercial banks' holdings of government paper are broadly unchanged.



Sources: BPNG and IMF Staff Calculations.

Table 1. Papua New Guinea: Selected Economic Indicators, 2017–2027

Nominal GDP (2019): US$24.8 billion 1/
Population (2019): 8.6 million
GDP per capita (2019): US$2,878
Quota: SDR 263.2 million

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
					Est.	Proj.	Proj.	Proj.	Proj.	Proj.	Proj.
					(Percentage change)						
Real sector											
Real GDP growth	3.5	-0.3	4.5	-3.5	1.2	4.2	4.7	3.0	3.0	3.0	3.0
Resource 2/	8.1	-9.2	11.3	-8.3	-3.5	4.8	5.9	-0.1	0.1	0.1	0.1
Non-resource	1.5	4.0	1.6	-1.2	3.2	4.0	4.3	4.2	4.1	4.1	4.1
Mining and quarrying (share)	10.2	10.4	10.8	10.0	9.4	10.4	12.1	11.9	11.5	11.0	10.5
Oil and gas extraction (share)	16.5	17.5	17.6	16.4	17.7	20.7	17.3	14.9	12.8	11.9	11.2
CPI (annual average)	5.4	4.4	3.9	4.9	4.5	6.4	5.4	4.9	4.6	4.5	4.5
CPI (end-period)	4.7	4.8	2.7	5.1	5.7	6.0	5.2	4.7	4.5	4.5	4.5
					(In percent of GDP)						
Central government operations											
Revenue and grants	15.9	17.7	16.3	14.2	14.7	15.0	14.8	15.3	15.8	16.1	16.3
Of which : Resource revenue	0.9	1.8	1.7	0.9	1.1	2.0	1.0	1.3	1.5	1.4	1.3
Expenditure and net lending	18.4	20.3	20.7	22.7	21.3	20.5	18.9	18.4	17.5	16.7	16.2
Net lending(+)/borrowing(-)	-2.5	-2.6	-4.4	-8.6	-6.6	-5.5	-4.2	-3.1	-1.7	-0.6	0.0
Non-resource net lending(+)/borrowing(-)	-3.4	-4.4	-6.2	-9.4	-7.7	-7.5	-5.2	-4.3	-3.2	-2.0	-1.3
					(Percentage change)						
Money and credit											
Domestic credit	-0.1	-6.7	5.2	2.3	10.3	0.2	17.7	6.8	6.1	6.3	5.4
Credit to the private sector	-3.8	7.4	4.1	4.2	0.4	8.2	8.7	8.1	8.6	8.6	8.5
Broad money	-0.9	-3.8	4.4	7.0	13.4	-2.1	16.7	5.7	4.8	5.5	4.8
Interest rate (182-day T-bills; period average)	7.1	7.0	6.4	5.6	6.0	6.8	7.9	8.3	8.1	7.8	7.5
					(In billions of U.S. dollars)						
Balance of payments											
Exports, f.o.b.	10.1	9.7	11.0	10.0	9.7	12.3	12.7	12.7	12.9	13.2	13.5
Of which: Resource sector	7.7	7.4	8.3	6.6	7.8	7.9	8.1	8.4	8.8	9.1	9.4
Imports, c.i.f.	-2.5	-2.5	-3.9	-3.3	-3.2	-3.5	-3.7	-3.9	-4.1	-4.3	-4.5
Current account (including grants)	6.5	5.9	4.5	5.5	5.1	7.3	7.4	7.2	7.3	7.4	7.5
(In percent of GDP)	28.4	24.5	18.3	22.4	18.7	23.1	22.0	20.6	19.9	19.0	18.2
Gross official international reserves	1.7	2.2	2.3	2.7	3.2	3.0	3.0	2.8	2.7	2.6	2.6
(In months of goods and services imports)	5.2	4.6	4.8	7.5	8.3	7.3	6.9	5.0	4.8	4.8	4.5
					(In percent of GDP)						
Government debt											
Government gross debt	32.5	36.7	40.2	47.1	50.9	49.5	48.9	50.5	49.7	47.4	44.2
External debt-to-GDP ratio (in percent) 3/	12.3	14.8	17.2	21.8	24.4	22.0	21.8	21.0	19.7	18.0	16.4
External debt-service ratio (percent of exports)	1.0	1.1	1.2	4.9	4.5	2.7	3.5	3.7	4.4	4.6	4.5
Exchange rates											
US$/kina (end-period)	0.3095	0.2970	0.2935	0.2850	0.2850	…	…	…	…	…	…
NEER (2005=100, end-period)	98.6	95.0	96.0	94.6	89.1	…	…	…	…	…	…
REER (2005=100, end-period)	122.3	120.9	124.8	127.4	122.5	…	…	…	…	…	…
Terms of trade (2010=100, end-period)	56.7	56.8	60.8	68.8	55.8	62.7	65.5	66.4	67.5	68.2	68.4
Nominal GDP (in billions of kina)	72.5	79.4	83.8	85.4	94.6	109.3	116.0	120.8	126.2	133.9	142.3
Non-resource nominal GDP (in billions of kina)	53.1	57.3	60.1	62.9	69.0	75.3	81.8	88.5	95.6	103.2	111.4

Sources: Department of Treasury; Bank of Papua New Guinea; and IMF staff estimates and projections.
1/ Based on period average exchange rate.
2/ Resource sector includes production of mineral, petroleum, and gas and directly-related activities such as mining and quarrying, but excludes indirectly-related activities such as transportation and construction.
3/ Public external debt includes external debt of the central government, the central bank, and statutory authorities.

Table 2a. Papua New Guinea: Summary Operations of the Central Government, 2017–2027

(In millions of kina, unless otherwise specified)

	2017	2018	2019	2020	2021		2022			2023	2024	2025	2026	2027
					Prog.	Prel.	Prog.	Budget	Revised			Proj.		
Revenue and Grants	**11,525**	**14,086**	**13,681**	**12,093**	**13,424**	**13,860**	**15,730**	**16,190**	**16,416**	**17,117**	**18,484**	**19,943**	**21,605**	**23,164**
Taxes	9,141	10,476	10,918	9,802	10,868	11,129	12,401	12,523	12,138	13,692	14,963	16,322	17,875	19,170
Taxes on income, profits, and capital gains	5,317	6,119	6,070	5,669	6,011	6,356	6,393	6,579	6,444	7,503	8,394	9,337	10,070	10,752
of which: Personal income tax	3,094	3,102	3,212	3,517	3,360	3,468	3,608	3,608	3,473	4,179	4,523	4,896	5,242	5,625
of which: Company tax	1,794	1,933	1,697	1,554	1,699	1,690	1,785	1,763	1,763	2,092	2,272	2,467	2,810	3,057
Taxes on payroll and workforce	11	9	2	0	1	1	0	0	0	0	0	0	0	0
Taxes on goods and services	3,255	3,537	3,937	3,373	4,127	3,994	5,144	5,095	4,845	5,347	5,702	6,088	6,862	7,426
of which: GST	1,869	2,067	2,253	2,079	2,517	2,457	2,890	3,223	3,073	3,286	3,538	3,811	4,401	4,788
Taxes on international trade and transactions	558	811	909	760	730	779	864	848	848	841	867	897	943	993
Grants	1,440	1,836	1,776	1,425	1,643	2,088	1,825	1,825	1,825	1,725	1,775	1,825	1,875	2,075
Other Revenue	944	1,774	987	866	913	643	1,504	1,843	2,454	1,700	1,747	1,796	1,855	1,918
Resource revenue 1/	676	1,429	1,242	752	871	1,016	1,194	1,588	2,199	1,194	1,531	1,873	1,873	1,877
Mining and Petroleum Taxes	114	775	761	183	521	635	594	738	738	694	1,031	1,373	1,373	1,377
Mining and Petroleum and Gas Dividends	562	654	381	569	350	381	600	850	1,461	500	500	500	500	500
Other Dividends	0	0	100	0	0	0	0	0	0	0	0	0	0	0
Grants from other general government units 2/	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Non-resource revenue	10,849	12,657	12,439	11,341	12,554	12,845	14,536	14,602	14,217	15,923	16,954	18,070	19,731	21,286
Expenditure	**13,320**	**16,134**	**17,396**	**19,398**	**20,287**	**20,131**	**21,825**	**22,175**	**22,401**	**21,953**	**22,201**	**22,137**	**22,392**	**23,109**
Expense	12,005	14,022	14,679	15,887	16,375	16,480	16,810	16,930	17,156	17,034	17,419	17,473	17,775	18,321
Compensation of employees	4,376	5,198	5,424	5,832	5,973	6,094	6,050	6,008	6,008	6,228	6,127	6,250	6,474	6,720
Use of goods and services	4,138	4,879	5,639	5,388	6,022	6,161	6,100	6,091	6,317	5,956	5,706	5,476	5,326	5,261
of which: COVID-19 related 3/				505	600	600								
General election expenses							850	850	850					
Interest	1,525	1,853	2,129	2,160	2,085	2,249	2,324	2,314	2,314	2,390	3,141	3,171	3,373	3,593
Grants 4/	1,383	2,000	1,401	2,190	2,183	1,915	2,206	2,405	2,405	2,316	2,297	2,420	2,437	2,573
Social benefits	0	1	0	218	57	0	71	48	48	81	84	88	93	99
Other expenses	582	90	86	99	54	61	58	64	64	62	65	67	72	76
Net acquisition of non-financial assets	1,315	2,113	2,717	3,511	3,912	3,650	5,015	5,245	5,245	4,919	4,782	4,664	4,617	4,789
Gross operating balance	-480	64	-999	-3,794	-2,951	-2,620	-1,080	-740	-740	83	1,065	2,470	3,830	4,843
Net lending (+)/borrowing (-)	**-1,795**	**-2,048**	**-3,715**	**-7,305**	**-6,863**	**-6,270**	**-6,095**	**-5,985**	**-5,985**	**-4,836**	**-3,716**	**-2,194**	**-787**	**54**
Primary balance	-270	-195	-1,586	-5,145	-4,778	-4,021	-3,771	-3,671	-3,671	-2,445	-576	977	2,587	3,647
Non-resource net lending (+)/borrowing (-)	-2,471	-3,477	-4,957	-8,056	-7,734	-7,286	-7,289	-7,573	-8,184	-6,029	-5,247	-4,067	-2,660	-1,823
Non-resource primary balance	-946	-1,624	-2,828	-5,896	-5,649	-5,037	-4,964	-5,259	-5,870	-3,639	-2,107	-896	713	1,769
Net financial transactions 5/	**1,795**	**2,049**	**3,715**	**7,399**	**6,863**	**6,270**	**6,095**	**5,985**	**5,985**	**4,836**	**3,716**	**2,194**	**787**	**-54**
Net acquisition of financial assets	-180	1,229	-784	-803	0	1,685	0	0	0	0	0	0	0	0
Net acquisition of financial liabilities	1,614	3,277	2,932	6,596	6,863	7,956	6,095	5,985	5,985	4,836	3,716	2,194	787	-54
Domestic	736	-319	598	2,882	2,030	3,042	4,639	2,240	2,240	2,895	1,847	1,258	1,441	661
Treasury bills	531	-517	898	1,711	530	1,395	2,737	260	260	1,708	960	654	749	344
Treasury bonds	205	344	-300	1,266	1,601	1,601	1,902	1,980	1,980	1,187	887	604	692	317
Other accounts payable	0	-146	0	0	0	0	0	0	0	0	0	0	0	0
External	878	3,596	2,334	3,619	4,832	4,913	1,456	3,745	3,745	1,941	1,870	936	-655	-715
Debt securities	0	1,672	0	0	0	0	0	0	0	0	0	0	0	0
Loans	878	1,924	2,334	3,619	4,832	4,913	1,456	3,745	3,745	1,941	1,870	936	-655	-715
of which: IMF RCF				1,276	0	0	0	0	0	0	0	-130	-262	-264
of which: IMF SDR allocation					1,256	1,244	0	0	0	0	0	0	0	0
Gross government debt	**23,558**	**29,120**	**33,678**	**40,168**	**46,234**	**48,173**	**51,750**	**52,765**	**54,158**	**56,772**	**61,054**	**52,695**	**53,482**	**53,428**
Domestic debt	17,173	17,103	19,701	22,216	24,958	25,258	28,879	26,456	27,498	30,393	32,804	33,497	34,938	35,599
Treasury bills	9,194	8,678	9,685	11,902	12,350	13,297	14,168	12,662	13,557	15,265	16,225	16,879	17,629	17,972
Treasury bonds	7,979	8,322	8,022	9,233	10,916	10,833	12,818	12,583	12,813	14,000	14,887	15,490	16,182	16,499
Loans		103	1,994	1,081	1,692	1,128	1,893	1,210	1,128	1,128	1,692	1,128	1,128	1,128
External debt	6,385	12,017	13,976	17,953	21,276	22,916	22,871	26,309	26,660	26,380	28,249	19,198	18,543	17,828
Debt securities	0	1,684	1,684	1,701	1,701	1,750	1,684	1,700	1,750	1,701	1,701	1,701	1,701	1,701
Loans	6,385	10,333	12,293	16,252	19,576	21,166	21,188	24,609	24,910	24,679	26,549	17,497	16,843	16,128
Memorandum items:														
Core fiscal deficit 6/	n.a.	n.a.	n.a.	-5,753	-5,191	-5,251	-4,815	-4,705	-4,705	-4,386	-3,516	-2,044	-687	154
Gross government debt, percentage of GDP	32.5	36.7	40.2	47.1	49.7	50.9	51.2	48.3	49.5	48.9	50.5	41.7	39.9	37.5
Contingent liabilities 7/	2,431	2,431	2,431	2,431	2,431	2,431	2,431	2,431	2,431	2,431	2,381	2,331	2,281	2,231
Future unfunded superannuation liabilities	2,431	2,431	2,431	2,431	2,431	2,431	2,431	2,431	2,431	2,431	2,381	2,331	2,281	2,231
SOE borrowing	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Contingent liabilities, percentage of GDP	3.4	3.1	2.9	2.8	2.6	2.6	2.4	2.2	2.2	2.1	2.0	1.8	1.7	1.6
Nonresource GDP at current prices	53,139	57,280	60,088	62,884	73,836	75,287	73,836	81,839	88,502	81,839	88,502	95,565	103,202	111,447
GDP at current prices	72,522	79,405	83,846	85,357	93,079	94,609	101,003	109,344	109,344	115,992	120,783	126,240	133,905	142,342

Sources: Department of Treasury; and IMF staff estimates and projections.

1/ Does not include projected revenues from new mining projects where the investment decision has not yet been reached.

2/ Withdrawals from the Stabilization Fund (mining and petroleum taxes; mining, petroleum and gas dividends.)

3/ No specific allocation for COVID-19 related spending is proposed for 2022. Nevertheless, spending on healthcare and other social services is anticipated to cover any COVID-related needs.

4/ Grants include spending on wages and salaries, goods and services, and capital expenditure.

5/ Discrepancies between the overall balance and financing may arise because of data coverage gaps in revenue and expenditure for extrabudgetary units, and payment arrears and cash withdrawals from trust accounts which are not fully accounted for due to data weaknesses.

6/ Excluding payments made for settlement of domestic arrears and net acquisition of non-financial assets not classified as "core" in the Staff Monitored Program approved in February 2020.

7/ Contingent liabilities include future unfunded superannuation liabilities with Nambawan Super and SOE borrowing.

Table 2b. Papua New Guinea: Summary Operations of the Central Government, 2017–2027

(In percent of GDP, unless otherwise specified

	2017	2018	2019	2020	2021		2022			2023	2024	2025	2026	2027
					Prog.	Prel.	Prog.	Budget	Revised			Proj.		
Revenue and Grants	**15.9**	**17.7**	**16.3**	**14.2**	**14.4**	**14.7**	**15.6**	**14.8**	**15.0**	**14.8**	**15.3**	**15.8**	**16.1**	**16.3**
Taxes	12.6	13.2	13.0	11.5	11.7	11.8	12.3	11.5	11.1	11.8	12.4	12.9	13.3	13.5
Taxes on income, profits, and capital gains	7.3	7.7	7.2	6.6	6.5	6.7	6.3	6.0	5.9	6.5	6.9	7.4	7.5	7.6
Taxes on payroll and workforce	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Taxes on goods and services	4.5	4.5	4.7	4.0	4.4	4.2	5.1	4.7	4.4	4.6	4.7	4.8	5.1	5.2
Taxes on international trade and transactions	0.8	1.0	1.1	0.9	0.8	0.8	0.9	0.8	0.8	0.7	0.7	0.7	0.7	0.7
Grants	2.0	2.3	2.1	1.7	1.8	2.2	1.8	1.7	1.7	1.5	1.5	1.4	1.4	1.5
Other Revenue	1.3	2.2	1.2	1.0	1.0	0.7	1.5	1.7	2.2	1.5	1.4	1.4	1.4	1.3
Resource revenue 1/	0.9	1.8	1.5	0.9	0.9	1.1	1.2	1.5	2.0	1.0	1.3	1.5	1.4	1.3
Mining and Petroleum Taxes	0.2	1.0	0.9	0.2	0.6	0.7	0.6	0.7	0.7	0.6	0.9	1.1	1.0	1.0
Mining and Petroleum and Gas Dividends	0.8	0.8	0.5	0.7	0.4	0.4	0.6	0.8	1.3	0.4	0.4	0.4	0.4	0.4
Other Dividends	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Grants from other general government units 2/	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Non-resource revenue	15.0	15.9	14.8	13.3	13.5	13.6	14.4	13.4	13.0	13.7	14.0	14.3	14.7	15.0
Expenditure	**18.4**	**20.3**	**20.7**	**22.7**	**21.8**	**21.3**	**21.6**	**20.3**	**20.5**	**18.9**	**18.4**	**17.5**	**16.7**	**16.2**
Expense	16.6	17.7	17.5	18.6	17.6	17.4	16.6	15.5	15.7	14.7	14.4	13.8	13.3	12.9
Compensation of employees	6.0	6.5	6.5	6.8	6.4	6.4	6.0	5.5	5.5	5.4	5.1	5.0	4.8	4.7
Use of goods and services	5.7	6.1	6.7	6.3	6.5	6.5	6.0	5.6	5.8	5.1	4.7	4.3	4.0	3.7
of which: COVID-19 related 3/				0.6	0.6	0.6								
General election expenses							0.8	0.8	0.8					
Interest	2.1	2.3	2.5	2.5	2.2	2.4	2.3	2.1	2.1	2.1	2.6	2.5	2.5	2.5
Grants 4/	1.9	2.5	1.7	2.6	2.3	2.0	2.2	2.2	2.2	2.0	1.9	1.9	1.8	1.8
Social benefits	0.0	0.0	0.0	0.3	0.1	0.0	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1
Other expenses	0.8	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Net acquisition of non-financial assets	1.8	2.7	3.2	4.1	4.2	3.9	5.0	4.8	4.8	4.2	4.0	3.7	3.4	3.4
Gross operating balance	-0.7	0.1	-1.2	-4.4	-3.2	-2.8	-1.1	-0.7	-0.7	0.1	0.9	2.0	2.9	3.4
Net lending (+)/borrowing (-)	**-2.5**	**-2.6**	**-4.4**	**-8.6**	**-7.4**	**-6.6**	**-6.0**	**-5.5**	**-5.5**	**-4.2**	**-3.1**	**-1.7**	**-0.6**	**0.0**
Primary balance	-0.4	-0.2	-1.9	-6.0	-5.1	-4.3	-3.7	-3.4	-3.4	-2.1	-0.5	0.8	1.9	2.6
Non-resource net lending (+)/borrowing (-)	-3.4	-4.4	-5.9	-9.4	-8.3	-7.7	-7.2	-6.9	-7.5	-5.2	-4.3	-3.2	-2.0	-1.3
Non-resource primary balance	-1.3	-2.0	-3.4	-6.9	-6.1	-5.3	-4.9	-4.8	-5.4	-3.1	-1.7	-0.7	0.5	1.2
Net financial transactions 5/	**2.5**	**2.6**	**4.4**	**8.7**	**7.4**	**6.6**	**6.0**	**5.5**	**5.5**	**4.2**	**3.1**	**1.7**	**0.6**	**0.0**
Net acquisition of financial assets	-0.2	1.5	-0.9	-0.9	0.0	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net acquisition of financial liabilities	2.2	4.1	3.5	7.7	7.4	8.4	6.0	5.5	5.5	4.2	3.1	1.7	0.6	0.0
Domestic	1.0	-0.4	0.7	3.4	2.2	3.2	4.6	2.0	2.0	2.5	1.5	1.0	1.1	0.5
Treasury bills	0.7	-0.7	1.1	2.0	0.6	1.5	2.7	0.2	0.2	1.5	0.8	0.5	0.6	0.2
Treasury bonds	0.3	0.4	-0.4	1.5	1.7	1.7	1.9	1.8	1.8	1.0	0.7	0.5	0.5	0.2
Loans	0.0	-0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
External	1.2	4.5	2.8	4.2	5.2	5.2	1.4	3.4	3.4	1.7	1.5	0.7	-0.5	-0.5
Debt securities	0.0	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Loans	1.2	2.4	2.8	4.2	5.2	5.2	1.4	3.4	3.4	1.7	1.5	0.7	-0.5	-0.5
of which: IMF RCF				1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.2	-0.2
of which: IMF SDR allocation					1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gross government debt	**32.5**	**36.7**	**40.2**	**47.1**	**49.7**	**50.9**	**51.2**	**48.3**	**49.5**	**48.9**	**50.5**	**41.7**	**39.9**	**37.5**
Domestic debt	23.7	21.5	23.5	26.0	26.8	26.7	28.6	24.2	25.1	26.2	27.2	26.5	26.1	25.0
Treasury bills	12.7	10.9	11.6	13.9	13.3	14.1	14.0	11.6	12.4	13.2	13.4	13.4	13.2	12.6
Treasury bonds	11.0	10.5	9.6	10.8	11.7	11.5	12.7	11.5	11.7	12.1	12.3	12.3	12.1	11.6
External debt	8.8	15.1	16.7	21.0	22.9	24.2	22.6	24.1	24.4	22.7	23.4	15.2	13.8	12.5
Debt securities	0.0	2.1	2.0	2.0	1.8	1.8	1.7	1.6	1.6	1.5	1.4	1.3	1.3	1.2
Loans	8.8	13.0	14.7	19.0	21.0	22.4	21.0	22.5	22.8	21.3	22.0	13.9	12.6	11.3
Memorandum items:														
Core fiscal deficit 6/	n.a.	n.a.	n.a.	-6.7	-5.6	-5.6	-4.8	-4.3	-4.3	-3.8	-2.9	-1.6	-0.5	0.1
Contingent liabilities 7/	3.4	3.1	2.9	2.8	2.6	2.6	2.4	2.2	2.2	2.1	2.0	1.8	1.7	1.6
Future unfunded superannuation liabilities	3.4	3.1	2.9	2.8	2.6	2.6	2.4	2.2	2.2	2.1	2.0	1.8	1.7	1.6
SOE borrowing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Nonresource GDP at current prices (millions of kina)	53,139	57,280	60,088	62,884	73,836	75,287	73,836	81,839	88,502	81,839	88,502	95,565	103,202	111,447
GDP at current prices (millions of kina)	72,522	79,405	83,846	85,357	93,079	94,609	101,003	109,344	109,344	115,992	120,783	126,240	133,905	142,342

Sources: Department of Treasury; and IMF staff estimates and projections.

1/ Does not include projected revenues from new mining projects where the investment decision has not yet been reached.

2/ Withdrawals from the Stabilization Fund (mining and petroleum taxes; mining, petroleum and gas dividends.)

3/ No specific allocation for COVID-19 related spending is proposed for 2022. Nevertheless, spending on healthcare and other social services is anticipated to cover any COVID-related needs.

4/ Grants include spending on wages and salaries, goods and services, and capital expenditure.

5/ Discrepancies between the overall balance and financing may arise because of data coverage gaps in revenue and expenditure for extrabudgetary units, and payment arrears and cash withdrawals from trust accounts which are not fully accounted for due to data weaknesses.

6/ Excluding payments made for settlement of domestic arrears and net acquisition of non-financial assets not classified as "core" in the Staff Monitored Program approved in February 2020.

7/ Contingent liabilities include future unfunded superannuation liabilities with Nambawan Super and SOE borrowing.

Table 3. Papua New Guinea: Balance of Payments, 2017–2027

(In millions of US dollars, unless otherwise specified)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
				Est.	Est.	Proj.	Proj.	Proj.	Proj.	Proj.	Proj.
Current account balance	6,464	5,896	4,523	5,524	5,124	7,312	7,363	7,203	7,261	7,365	7,493
Resource	7,316	7,029	6,568	6,639	5,655	7,639	8,105	8,177	8,268	8,418	8,596
Nonresource	-852	-1,133	-2,045	-1,116	-531	-327	-742	-974	-1,007	-1,053	-1,103
Trade balance	7,614	7,207	7,025	6,723	6,461	8,746	8,928	8,757	8,815	8,919	9,047
Exports (f.o.b.)	10,113	9,739	10,967	10,012	9,661	12,255	12,671	12,704	12,896	13,186	13,516
Resource	8,516	8,465	9,516	8,477	7,993	10,305	10,837	10,929	11,069	11,286	11,538
Nonresource	1,597	1,274	1,451	1,536	1,668	1,950	1,834	1,775	1,827	1,900	1,978
Imports (f.o.b.)	-2,499	-2,532	-3,942	-3,289	-3,200	-3,509	-3,743	-3,948	-4,081	-4,267	-4,469
Resource	-1,200	-1,436	-1,530	-1,091	-1,238	-1,402	-1,428	-1,432	-1,481	-1,548	-1,622
Nonresource	-1,299	-1,096	-2,412	-2,198	-1,962	-2,107	-2,315	-2,515	-2,600	-2,719	-2,847
Services	-1,069	-1,135	-1,403	-1,053	-948	-1,058	-1,117	-1,164	-1,164	-1,164	-1,164
Income	-324	-547	-1,175	-451	-672	-802	-844	-871	-871	-871	-871
Current Transfers	243	371	76	305	283	426	395	481	481	481	481
Capital and financial account balance	-6701	-5762	-5439	-4709	-5593	-6348	-6423	-6614	-6780	-6957	-7148
Capital account balance	28	28	6	4	7	57	47	10	10	10	10
Financial account balance	-6729	-5790	-5445	-4714	-5600	-6405	-6469	-6624	-6790	-6967	-7158
Direct investment	2	-7	-550	-787	-847	-987	-1,013	-1,114	-1,226	-1,348	-1,483
Portfolio investment	-333	-216	20	-73	-77	-84	-89	-89	-89	-89	-89
Other investment	-6,398	-5,566	-4,915	-3,854	-4,676	-5,333	-5,367	-5,421	-5,475	-5,530	-5,585
Loans (Net)	-1,056	-574	-272	947	-1,212	-1,986	-2,284	-2,389	-2,417	-2,523	-2,428
Commercial banks	151	413	-3	-253	-268	-5	-11	0	0	0	0
Other private capital flows 1/	-4,288	-4,399	-4,915	-3,854	-3,196	-3,343	-3,072	-3,032	-3,058	-3,007	-3,157
Net errors and omissions	315	0	0	0	0	0	0	0	0	0	0
Overall balance	**79**	**134**	**-915**	**814**	**-469**	**964**	**940**	**588**	**481**	**407**	**346**
Financing	**79**	**134**	**-915**	**-814**	**469**	**-964**	**-940**	**-588**	**-481**	**-407**	**-346**
Reserve assets	79	134	-915	-814	469	-964	-940	-588	-481	-407	-346
Financing gap					0	0	0	0	0	0	0
Memorandum items:											
Current account (in percent of GDP)	**28.4**	**24.5**	**18.3**	**22.4**	**18.7**	**23.1**	**22.0**	**20.6**	**19.9**	**19.0**	**18.2**
Resource	32.2	29.2	26.5	26.9	20.7	24.2	24.2	23.4	22.7	21.8	20.9
Nonresource	-3.7	-4.7	-8.3	-4.5	-1.9	-1.0	-2.2	-2.8	-2.8	-2.7	-2.7
Net international reserves (end-year)											
In millions of U.S. dollars	1,522	2,069	2,309	2,306	3,042	2,106	2,086	2,749	2,638	2,561	2,496
Gross international reserves (end-year)	1,682	2,230	2,309	2,686	3,240	3,040	3,014	2,838	2,723	2,642	2,572
In months of nonmineral sector imports	19.0	11.0	12.6	13.2	14.8	12.6	11.5	8.4	8.1	7.7	7.4
In months of imports of goods and services	5.2	4.6	4.8	7.5	8.3	7.3	6.9	5.0	4.8	4.8	4.5
Public external debt-service-exports ratio (in percent) 2/	1.0	1.1	1.2	4.9	4.5	2.7	3.5	3.7	4.4	4.6	4.5
Public external debt-GDP ratio (in percent) 2/	12.3	14.8	17.2	21.8	24.4	22.0	21.8	21.0	19.7	18.0	16.4

Sources: Historical data from BPNG and IMF. Near-term forecasts 2020-2023 from BPNG. IMF staff projections from 2024.

1/ Includes money-transfer via offshore accounts.

2/ Public external debt includes external debt of the central government, the central bank, and statutory authorities.

Table 4. Papua New Guinea: Monetary Developments, 2017–2027
(In millions of kina, unless otherwise specified)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
					Est.			Proj.			
Bank of Papua New Guinea				(In millions of kina; end of period)							
Net foreign assets	5,026	6,856	7,255	7,417	8,221	7,520	7,427	7,130	6,712	6,413	6,165
Foreign assets	5,606	7,450	7,867	9,424	11,369	10,668	10,575	10,279	9,860	9,561	9,313
Foreign liabilities	580	594	612	2,007	3,148	3,148	3,148	3,148	3,148	3,148	3,148
Net domestic assets	337	-1,595	-1,340	-1,370	-915	-25	39	105	172	240	310
Domestic credit	2,405	1,119	1,315	-918	-118	232	283	337	393	450	509
Net credit to government	2,369	1,088	1,251	-1,003	278	628	680	734	789	846	905
Claims	2,852	2,646	2,312	1,615	2,926	2,973	3,025	3,078	3,132	3,188	3,246
Of which: Loans: IMF SDR Allocation					1,260	1,260	1,260	1,260	1,260	1,260	1,260
Central government deposits	483	1,558	1,061	2,619	2,648	2,345	2,345	2,344	2,343	2,342	2,341
Credit to other sectors	36	31	64	86	-397	-397	-397	-397	-397	-397	-397
Other items, net	-2,068	-2,714	-2,655	-453	-797	-257	-244	-232	-220	-209	-199
Of which: Central bank securities	-2,092	-2,405	-1,778	-1,614	-3,040	-980	-931	-885	-840	-798	-758
Reserve money	5,363	5,261	5,915	6,046	6,702	7,495	7,466	7,236	6,884	6,653	6,475
Currency in circulation	2,076	2,154	2,300	2,434	2,666	2,975	3,037	3,162	3,305	3,505	3,726
Deposits of other depository corporations	3,287	3,106	3,615	3,612	4,036	4,520	4,429	4,074	3,579	3,148	2,748
Required reserves	2,118	2,049	2,090	1,794	1,611	1,579	1,866	1,982	2,086	2,210	2,323
Excess reserves	1,169	1,058	1,525	1,818	2,425	2,941	2,563	2,091	1,493	938	425
Other deposits	0	0	0	0	0	0	0	0	0	0	0
Depository Corporations Survey					(In millions of kina; end of period)						
Net foreign assets	5,498	7,018	7,666	7,831	8,679	8,050	7,989	7,716	7,324	7,062	6,855
Net domestic assets	16,710	14,350	14,652	16,049	18,411	18,473	22,970	24,999	26,949	29,091	31,021
Domestic credit	22,916	21,371	22,477	22,990	25,352	25,414	29,911	31,940	33,889	36,032	37,962
Net credit to central government	9,155	6,806	7,150	7,451	9,703	8,658	11,886	12,625	13,106	13,662	13,878
Claims on other sectors	13,761	14,566	15,327	15,539	15,649	16,755	18,024	19,315	20,783	22,370	24,084
Claims on the private sector	10,945	11,759	12,238	12,754	12,805	13,850	15,055	16,281	17,680	19,193	20,826
Other items, net	-6,207	-7,022	-7,825	-6,941	-6,941	-6,941	-6,941	-6,941	-6,941	-6,941	-6,941
Broad money	22,208	21,368	22,318	23,880	27,091	26,523	30,959	32,715	34,272	36,153	37,876
Narrow money	16,283	15,780	17,125	18,916	22,325	21,948	26,567	28,499	30,225	32,268	34,146
Currency outside other depository corporations	1,523	1,579	1,656	1,890	1,814	1,742	1,672	1,605	1,541	1,479	1,420
Demand deposits	14,759	14,201	15,469	17,026	20,511	20,207	24,895	26,894	28,684	30,789	32,726
Quasi-money	5,863	5,526	5,193	4,964	4,765	4,575	4,392	4,216	4,047	3,885	3,730
Securities other than shares	62	62	0	0	0	0	0	0	0	0	0
					(Annual percentage change)						
Net foreign assets	11.6	27.7	9.2	2.1	10.8	-7.2	-0.8	-3.4	-5.1	-3.6	-2.9
Net domestic assets	-4.5	-14.1	2.1	9.5	14.7	0.3	24.3	8.8	7.8	8.0	6.6
Net domestic credit	-0.1	-6.7	5.2	2.3	10.3	0.2	17.7	6.8	6.1	6.3	5.4
Of which: Private sector	-3.8	7.4	4.1	4.2	0.4	8.2	8.7	8.1	8.6	8.6	8.5
Broad money	-0.9	-3.8	4.4	7.0	13.4	-2.1	16.7	5.7	4.8	5.5	4.8
Memorandum items:											
Reserve money (percentage change)	-16.6	-1.9	12.4	2.2	10.8	11.8	-0.4	-3.1	-4.9	-3.4	-2.7
Gross international reserves (in millions of U.S. dollars)	1,735	2,213	2,309	2,686	3,240	3,040	3,014	2,929	2,810	2,725	2,654
Nominal nonresource GDP/Broad money	2.4	2.7	2.7	2.6	2.5	2.8	2.6	2.7	2.8	2.9	2.9

Sources: Bank of Papua New Guinea; and IMF staff estimates and projections.

Table 5. Papua New Guinea: Financial Stability Indicators, 2017-2022 1/

(In percent, unless otherwise indicated)

	2017	2018	2019	2020	2021	2022 March
Capital Adequacy						
Capital to risk-weighted assets 2/	38.1	37.1	36.1	39.2	41.1	36.3
Tier 1 capital to risk-weighted assets	30.8	29.6	28.2	31.9	32.5	32.9
Asset Quality						
Nonperforming loans to total loans	2.8	3.7	3.8	5.3	6.2	6.0
Past due loans to total loans	5.4	5.1	5.1	n.a	n.a	n.a
Provision for losses to NPL	180.0	142.9	152.4	n.a	n.a	n.a
Earnings and Profitability						
Return on assets	3.4	3.8	4.1	3.8	4.3	6.2
Return on equity 3/	25.1	26.4	28.4	25.6	30.9	44.7
Liquidity						
Liquid assets to total assets	16.9	15.9	17.7	18.3	18.9	19.7
Loan-to-deposit ratio	65.8	71.4	71.3	65.6	59.7	57.5
Other						
Capital to total assets 2/	14.2	14.5	14.0	14.5	13.5	13.4
Risk-weighted assets to total assets	46.6	49.3	50.8	47.5	42.9	42.6

Sources: Bank of Papua New Guinea; and IMF staff calculations.

1/ Fourth quarter data for each year.

2/ Capital base includes Tier 1 and Tier 2 capital.

3/ Return on equity is calculated with Tier 1 capital.

Annex I. Staff Monitored Program Targets

Table 1. Papua New Guinea: Quantitative Targets and Indicative Targets for 2021 – 2022 1/

(In billions of kina, unless otherwise indicated)

	2021			2022			
	End-December Test Date			End-March Indicative Targets [2]			End-June Projection
	Prog.	Outcome	Status	Prog.	Outcome	Status	
Quantitative Targets							
Fiscal deficit of the central government (cumulative, ceiling within the year)	6.863	6.270	Met	2.563	-0.895	Met	3.824
New non-concessional external debt contracted or guaranteed by the central government or the BPNG with maturity of one year or more (cumulative ceiling over the duration of the program, US$ millions)	0	0	Met	0	0	Met	0
External debt service arrears of the central government (ceiling, US$ millions)	0	0	Met	0	0	Met	0
Stock of net international reserves of the BPNG (floor, US$ millions)	2,000	3,240	Met	2,000	3,000	Met	2,000
BPNG provision of foreign exchange to authorized FX dealers (floor, cumulative within the year, US$ millions)	660	663.6	Met	180	188.8	Met	360
BPNG direct monetary financing of the public sector (ceiling, cumulative within the year)	0	0	Met	0	0	Met	0
Indicative Targets							
Tax revenue of the central government (floor, cumulative within the year)	10.868	11.1294	Met	2.613	2.773	Met	5.376
New domestic payments arrears of the central government (ceiling)	0	0	Met	0	0	Met	0
Social and other priority spending (cumulative floor within the year) [3]	3.160	3.680	Met	1.262	0.203	Not Met	2.665
Present value of public and publicly-guaranteed external debt (ceiling, US$ millions) [4]	6,500	6,327	Met	6,750	6,707	Met	6,707
Memorandum Items:							
Concessional borrowing (cumulative, millions of US$)	627.9			150			300
Stock of arrears to be cleared (cumulative for the year)	1.200	0.419		0.500			0.700

Sources: Papua New Guinea authorities; and Fund staff estimates.

[1] For definitions and adjustors see the Memorandum of Economic and Financial Policies and the Technical Memorandum of Understanding.

[2] End-March 2022 indicative target outcomes are preliminary.

[3] Comprises central government spending on health, education and law and order (both capital and operating expenses).

[4] The ceiling is to apply for the entire year.

Table 2. Papua New Guinea: SMP Structural Measures, December 2021–March 2022			
No.	**Proposed Measure**	**Due by**	**Status**
1.	Approval of a framework for the 2022 budget, in line with understandings reached with the IMF mission, by NEC	Prior Action	Met.
2.	Complete and share with Fund staff the Staffing and Establishment Review report, a comprehensive review of staffing in the government, including a plan for maintaining the integrity of the staffing data and a proposal to institute a quality assurance process to govern the payment of salaries.	End-February 2022	Met.
3.	Approval of the Consequential Amendments to the Tax Administration Act, 2017 by the NEC and submission to Parliament for approval. The Amendments to the Act should clarify the enforcement powers of the revenue authorities (the Internal Revenue Commission and the Customs Department) and address any inconsistencies with legislation governing the collection of other taxes and revenues, including income taxes, the goods and services tax, stamp duties, the gaming tax and the departure tax.	End-March 2022	Met.
4.	Strengthen the public debt committee comprising of BPNG and Treasury staff by establishing and sharing with Fund staff a set of objectives and aligning TORs defining members' responsibilities, producing a draft annual debt issuance strategy to support forward planning and discussing as part of meetings.	End-March 2022	Met.
5.	Submit for parliamentary approval amendments to the Central Banking Act to strengthen the independence, governance, accountability, and transparency of the Central Bank, in consultation with Fund staff.	End-March 2022	Not Met. CBA amendments passed, without sufficiently strengthening the CBA.

Annex II. Risk Assessment Matrix[1]

Sources of Risk	Relative likelihood	Expected impact	Staff advice on policy response
Domestic Risks			
Natural disasters related to climate change.	**Medium**: PNG is highly vulnerable to natural disasters (flooding, landslides, earthquakes) and climate change (droughts & sea level rise).	**Medium**: Negative impact on GDP growth, export and fiscal revenues, higher inflation.	Invest in disaster risk reduction and resilience with the help of development partners. Built fiscal and external buffers for post-disaster relief effort.
Widespread social discontent and political instability.	**High**: Elevated risk of instability in the lead-up to as well as after the 2022 general elections. Frustration over Covid-19 policy response and high vaccination hesitancy.	**Medium**: Adverse impact on foreign direct investment and confidence, negatively impacting growth. This can exacerbate pre-existing inequalities, causing socio-economic hardship (unemployment, poverty).	Focus on transparent and effective communication on key policies, including vaccination. Implement policies to support vulnerable households for which there is a need to build fiscal buffers through fiscal consolidation.
Major natural resource projects initiated; Higher LNG revenues over the medium term.	**Medium**: Some major projects are being negotiated; amortization of LNG Project loans ends, and depreciation expenses fall, earlier.	**Medium**: Upside risk. Favorable impact on GDP, external balance, and fiscal position.	Fast-track its implementation; Build fiscal buffers.
External Risks			
Outbreaks of lethal and highly contagious Covid-19 variants.	**Medium**: Rapid increase in hospitalization & deaths due to low vaccination. Slower global demand would lower commodity prices (minerals, oil & gas).	**High**: Lower economic activity due to supply shortages (raw materials) and disruptions to expatriate labor which would also affect fiscal balance via revenue collections. Lower export receipts would affect external balance.	Focus on increasing vaccination rate by creating awareness at grass roots level with the help development partners and prioritize spending in health sector. Fiscal consolidation to create fiscal space to reprioritize spending if the need arises.

[1] The Risk Assessment Matrix (RAM) shows events that could materially alter the baseline path (the scenario most likely to materialize in the view of IMF staff). The relative likelihood is the staff's subjective assessment of the risks surrounding the baseline ("low" is meant to indicate a probability below 10 percent, "medium" a probability between 10 and 30 percent, and "high" a probability between 30 and 50 percent). The RAM reflects staff views on the source of risks and overall level of concern as of the time of discussions with the authorities. Non-mutually exclusive risks may interact and materialize jointly. "Short term" and "medium term" are meant to indicate that the risk could materialize within 1 year and 3 years, respectively.

Sources of Risk	Relative likelihood	Expected impact	Staff advice on policy response
Russia's invasion of Ukraine leads to escalation of sanctions and other disruptions.	**High**: The impact on PNG will be through the commodity prices.	**High**: Would lead to higher inflation. Since PNG is a commodity exporter external position and fiscal balance would improve.	Create fiscal space for stimulus to support the economy as well as increase spending on social welfare to support people in need.
Cyberthreats.	**Medium**: Cyber-attacks on critical infrastructure and institution. PNG had a ransomware attack in October 2021.	**Medium**: Can affect provision of Government service and trigger financial instability or widespread disruptions in socio-economic activities and remote work arrangements.	Need to invest in advance IT security systems and train key personnel on cyber/ ransomware attacks. Invest in business recovery sites and backup for important Government services and financial sector
Rising and volatile food and energy prices.	**High**: Commodity prices are volatile and trend up amid pent-up demand and supply disruptions, conflicts.	**High**: High commodity export receipts would improve external position and fiscal balance. This would lead to bouts of price and real sector volatility.	Higher resource revenue should help create fiscal space. Continue with fiscal spending to support the economy and most vulnerable but ensure fiscal consolidation remains priority.
Abrupt growth slowdown in China.	**Medium:** Covid-19 lockdowns, geopolitical tensions result in sharp slowdown, with spillovers on supply chains, trade and commodity prices.	**High:** Would lead to lower external demand and lower commodity prices. BOP would worsen, but long-term LNG contracts would soften the negative impact on budget.	Build buffers to support the economy and most vulnerable in the non-resource sector, as needed.

Annex III. External Sector Assessment

Overall Assessment: *Staff's judgement is that PNG's external position is broadly in line with the level implied by fundamentals and desirable policies (current account gap of -0.9 percent of GDP based on the REER model). The real effective exchange rate is overvalued by around 2.4 percent. This judgement is preliminary, given most 2021 data are still estimates.*

Potential Policy Responses: *The assessment of Kina valuation is consistent with limited exchange rate adjustment to international inflation differentials or terms of trade movements. Future real exchange rate depreciation would help support competitiveness of non-resource exports and address foreign exchange shortages. Improved FX operations and liquidity management would also strengthen the BPNG's ability to manage inflation and the real exchange rate.*

Foreign Assets and Liabilities: Position and Trajectory

Background. PNG does not produce international investment position (IIP) data.

Current Account

Background. In 2021, goods exports volumes decreased by around 11 percent compared to 2020, owing to a fall in the volume of mineral resource exports, including gold, silver, copper and nickel, partly as a result of the Porgera mine closure. Despite this, owing mainly to resurgent 2021 commodity prices, the value of exports decreased by only 4 percent. Modest increases in the price of gold helped to offset a decline in its export volume, with export growth led by the agricultural sector. The nominal value of imports fell by around 3 percent, and consequently, the current account (CA) surplus reduced to 18.7 percent of GDP in 2021.

Assessment. The EBA-lite framework provides multiple models to aid assessment of potential misalignment of the CA and REER.

Considering all estimates, and the uncertainties around them, staff's assessment of PNG's external position is based on the REER model, which estimates the CA gap at -0.9 percent of GDP in 2021 and the REER as overvalued by around 2.4 percent. This judgement is preliminary, given most 2021 data are still estimates.

Before adjustments, the EBA-lite REER model estimates an overvaluation of 3.2 percent, which is reduced by 0.5 percent to reflect deviations of current policy setting between PNG and the ROW and an additional 0.3 percent to reflect natural disasters. The REER norm therefore suggests a 2.4 percent overvaluation. Using a semi-elasticity of -0.37, this is equivalent to a CA gap of -0.9 percent of GDP. This suggests the external position is broadly in line with the level implied by fundamentals and desirable policies.

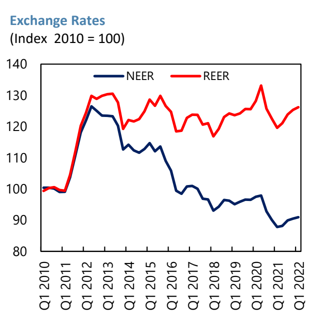
A second model from the EBA-lite suite concentrates on determinants of the CA. This estimates the CA norm at -0.3 percent of GDP and, after adjustments for cyclical contributions and COVID-19, an adjusted CA at +19.2 percent of GDP. In the CA model, the COVID-19 adjuster amounts to 0.6 percent of GDP, based on a tourism balance of 1.6 percent and an assumed drop of 75 percent arising from travel restrictions and collapsing demand for tourism services. The CA gap (the difference between the CA in cyclically adjusted terms and the CA norm) is therefore assessed to be +19.6 percent of GDP. Policy gaps, reflecting deviations of current policy settings between PNG and the Rest of the World (ROW) from their desired settings, contribute 0.5 percentage points of this gap. The semi-elasticity of the CA (trade balance) to the real effective exchange rate (REER) is estimated at -0.37 (Nakatani 2017), and the CA gap of 19.6 percent of GDP therefore corresponds to a -52.9 percent undervaluation of the REER.

	CA model	REER model
CA-Actual	**18.7**	
Cyclical contributions (from model) (-)	0.2	
COVID-19 adjustor (+) 1/	0.6	
Additional temporary/statistical factors (+)	0.0	
Natural disasters and conflicts (-)	-0.1	
Adjusted CA	**19.2**	
CA Norm (from model) 2/	**-0.3**	
Adjustments to the norm (+)	0.0	
Adjusted CA Norm	**-0.3**	
CA Gap	**19.6**	**-0.9**
o/w Relative policy gap	0.5	
Elasticity	-0.37	
REER Gap (in percent)	**-52.9**	**2.4**

1/ Additional cyclical adjustment to account for the temporary impact of the tourism (1.6 percent of GDP).
2/ Cyclically adjusted, including multilateral consistency adjustments.

There is an extremely large divergence in the estimates from the EBA-lite models. The published data on the CA surplus in PNG is likely overstated due to long-standing challenges in classifying large income account outflows, including external debt service payments related to resource projects, under the financial account rather than the current account. See the discussion in Box 1 in the Staff Report for the 2019 Article IV Consultation with Papua New Guinea and Request for a RCF (IMF Country Report No. 20/95). This significantly distorts the results from standard models when these are reliant on PNG's current account. The EBA-lite CA model results are, therefore, discounted. The authorities are receiving Fund technical assistance (TA) in external sector statistics.

Real Exchange Rate



Sources: IFS; and IMF Staff Calculations.

Background. While the kina has significantly depreciated in nominal terms (NEER) over the past few years, the REER has remained highly stable (see Figure). The 2020 Article IV Staff Report (Box 1) estimated a REER gap of around 11 percent for 2019, based on preliminary data. Meanwhile, in 2021, the Kina remained constant against the US dollar and nominally appreciated 8.9 percent against the Australian dollar.

Assessment. The EBA-lite models suggest that the kina is overvalued by around 2.4 percent. The overvaluation of the Kina contributes to continued pressures in the domestic foreign exchange (FX) market.

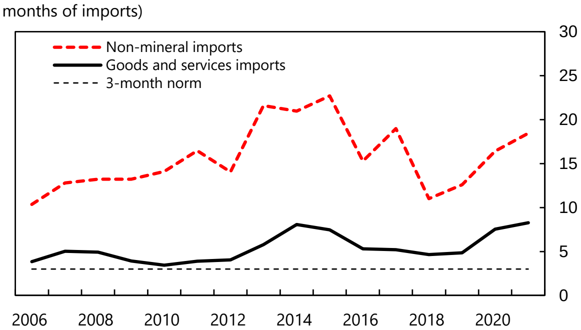
Capital and Financial Accounts: Flows and Policy Measures

Background. The capital account balance continues to be very small (US$7 million, net; with credits of US$12.8 million and debits of US$5.9 million). The financial account balance has worsened by 19 percent from 2020, offsetting the improvements since 2019. Net direct investment in 2021 amounted to around US$847 million, driven by depressed direct investment into PNG. Portfolio investment and financial derivatives have traditionally been negligibly small. Most investment flows, including offshore flows, are captured as other investment (US$4.7 billion).

Assessment. PNG maintains exchange restrictions subject to IMF approval under Article VIII, Section 2(a) of the IMF's Articles of Agreement arising from: (i) the requirement to obtain a tax clearance certificate evidencing the payment of all taxes prior to making payments or transfers for certain current international transactions; and (ii) the rationing of FX, which results in undue delays and arrears in current international payments. Staff recommends eliminating these impediments to exchange. Their removal would imply the need to adjust the foreign exchange system, including allowing the exchange rate to adjust flexibly to a market clearing level to eliminate the kina overvaluation, and clearing the existing backlog of FX orders to reduce delays in providing FX. PNG also maintains the following multiple currency practice (MCPs) subject to Fund approval under Article VIII, Section 3: an MCP arising from the potential spread deviation of more than 2 percent between the rates set by BPNG for its FX transactions with the government and embassies, and the rates use by AFEDs in transactions with their clients.

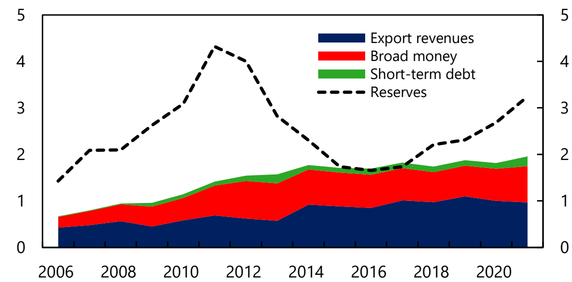
FX Intervention and Reserves Level

Gross Official Reserves
(In months of imports)



Source: BPNG.

Reserve Adequacy: Decomposition
(US$ Billion)



Sources and Note: BPNG; and IMF staff estimates. Decomposition uses ARA EM risk weights: export revenues (10%), broad money (10%) and short-term debt (80%).

Background. With limited domestic and external borrowing opportunities, PNG's fiscal and balance-of-payment financing gaps typically need to be financed with reserves. In 2021, gross reserves increased to 8 months of total imports (or 15 months of non-mineral imports, respectively), well exceeding the 3-month norm (left chart). Over the past few years, the BPNG has been targeting a gross international reserves level of no less than US$1.8-2.0 billion to meet the economy's needs for FX (right chart). The staff assessed reserve adequacy for PNG therefore utilizes data available on export revenues, broad money, and short-term debt liabilities.

Assessment. Higher commodity prices projected for 2022 are expected to compensate for continued supply constraints owing mainly to the impact of the pandemic on resource-sector production. The 2021 SDR allocation provided an additional US$360 million boost to reserves temporarily helped to reduce foreign exchange imbalances, and ease FX shortages. The government has used these SDRs for budget support in 2021. Further, in recent years the disbursement of external project financing and bilateral budget support typically occurred towards the end of the year, implying that FX pressures subside by year-end. The reserve adequacy assessment (right chart) suggests that a floor of US$2.0 billion appears adequate. This floor is also included in the SMP as a quantitative target. Going forward, it will be important to address FX shortages with the aim of a gradual return to kina convertibility, by eliminating exchange restrictions and multiple currency practices, and the adoption of a market-determined exchange rate.

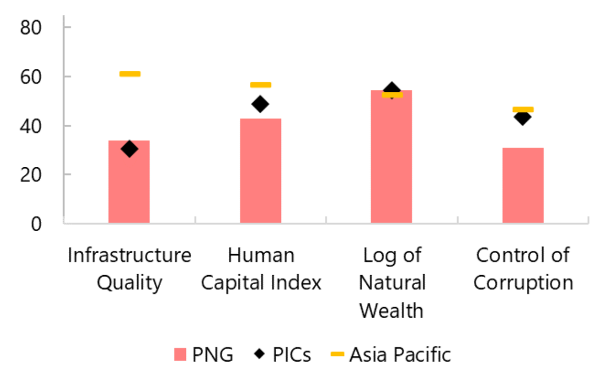
References

Nakatani, Ryota, 2017, "External Adjustment in a Resource-Rich Economy: The Case of Papua New Guinea", IMF Working Papers, Volume 217, Issue 267, Washington, DC.

Annex IV. Removing Impediments to Growth

This annex reviews the impediments to growth in PNG, both in terms of physical capital and human capital. First, it puts a spotlight on health outcomes and gender equality necessary to support human capital growth, and overall development. Second, it reviews the economic structure in PNG, the level of economic complexity, and comments on future opportunities for diversification, which are urgently needed.

Factors of Production: PNG and the Rest of the World
(Index)



Sources: Global Quality of Infrastructure Index; World Bank Human Capital Index; The Changing Wealth of Nations; Corruption Perception Index; Transparency International; and IMF staff calculations.

1. **To diversify its economy and achieve sustainable and inclusive long-term growth and development, PNG needs both human capital and physical capital, two key factors of production.** Land and natural wealth are a third factor of production, that PNG has in abundance. The rule of law, while not a factor of production *per se*, is needed so that the output produced, i.e., property, is protected and honored. Compared to the rest of the world, PNG as well as its peers in the Asia Pacific are among the richest countries in terms of natural wealth (World Bank, 2021a). However, in terms of quality of infrastructure, human capital and control of corruption, PNG has relatively more room for improvement. To foster growth, especially in non-resource sector, PNG needs to make significant progress in building human and physical capital and lowering corruption, so that it can leverage its natural wealth and achieve development goals.

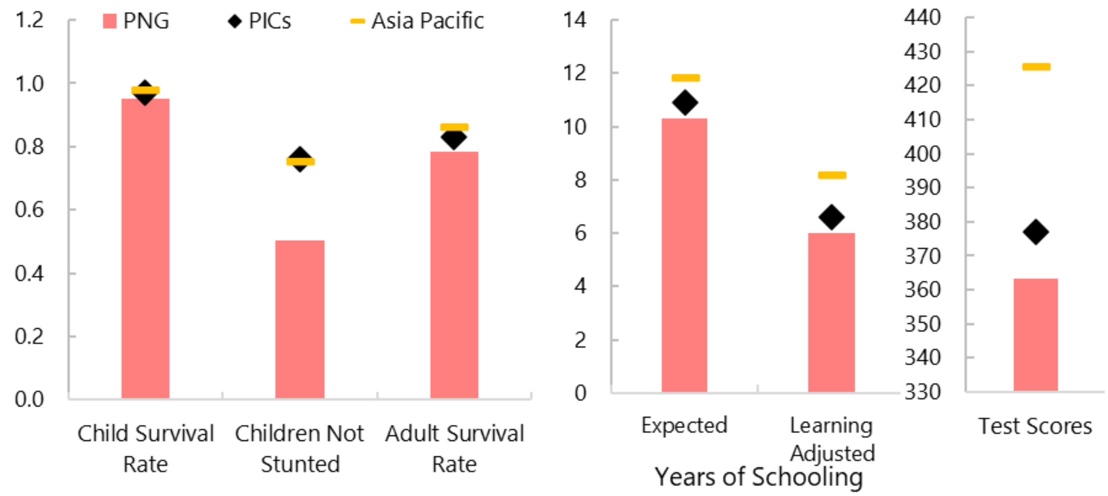
Human Capital

2. **Human capital typically includes health and education, and in a broader sense also gender equality, all qualities that are necessary for a productive labor force.** If a high share of working-age adults is not in good health, the overall workforce is less productive. Higher quality education allows workers to be more productive, especially at higher-value-added tasks. Finally, gender equality is important because it ensures human capital development among girls and women, which is necessary for the full use of human resources of a country. At the extreme—if women do not participate in the labor force—they cannot contribute to GDP. If women are less educated, and have less personal autonomy, there are fewer opportunities for them to contribute to economic development (Duflo, 2012, Jayachandran, 2015). McKinsey (2015) estimates that advancing women's equality can add $12 trillion to global growth.

3. **PNG has relatively poor health and education outcomes compared to peers.** PNG has achieved high infant survival rate, with the vast majority of children surviving to age 5. However,

about 50 percent of children under 5 are stunted, indicating poor overall health. Adult survival rate is also somewhat lower than avarage in peer countries. In terms of education, while children on average can expect to go to school for about 10 years, the learning-adjusted years of school are about 6 years. Similarly, gloabally harmozied test scores, PNG ranks poorly.

Human Capital Index: Health and Education Components
(Probability; fraction; years; scores)



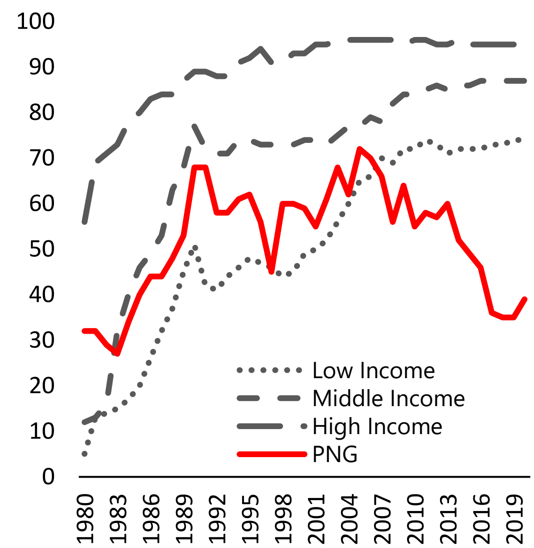
Sources: World Bank Human Capital Index, 2020; and IMF staff calculations.
Notes: Child survival rate is the probability of survival to age 5. Children not stunted shows the fraction of children under 5. Adult survival rate is 1 minus the mortality for age 15-60. Expected and learning-adjusted years of schooling following the Human Capital Index methodology. Black lines show the global interquartile range.

4. Immunization coverage[1] in PNG is among the lowest in the world and has been declining over the past decade, which is of particular concern. A positive relationship between health and economic growth is well known, as good health raises productivity and wages, especially in low-income countries (Strauss and Thomas, 1998, Currie and Vogl, 2012). There are also direct macroeconomic benefits of vaccination, with GDP growth found to be higher in the years following increases in vaccination rates (Masia and others, 2018). Low and declining vaccination rates in PNG will likely burden the population and raise public health costs over time in the absence of remedial policy action. PNG has low health expenditures per capita, compared to its peers, which hampers its development goals, a key item on the authorities' agenda. It would be prudent to further increase health expenditures to support vaccination drives, expand nursing staff, and improve vital statistics.[2]

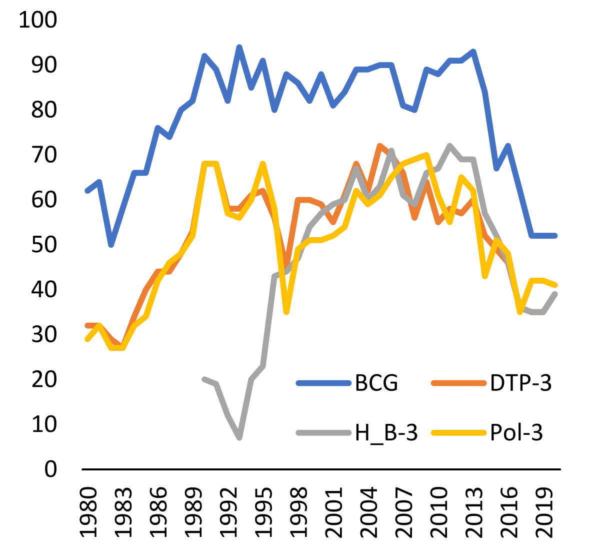
[1] Based on common vaccines for immunization programs across the world: Bacille calmette-guerin (BCG; Diphtheria, tetanus, & pertussis third dose (DTP-3); Hepatitis B third dose (H_B-3); and Polio third dose (P-3).

[2] Incomplete vital statistics is a widespread problem in PNG: completeness of birth registration was estimated at only 13 percent in 2018 (World Bank) and information on completeness of death registration is unavailable, but likely to be similarly poor. Official COVID-19 case and death totals appear significantly undercounted. For example, the test positivity rate at the Port Moresby General Hospital reached 80 percent in January 2022, but the increase in official reported COVID cases was relatively low.

DTP-3 Immunization by Income Group
(Percent)



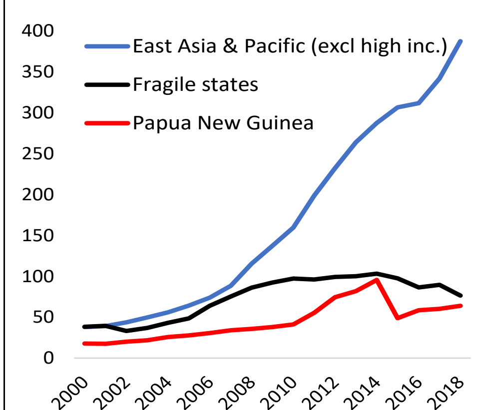
PNG: Immunization Coverage
(Percent)



Sources: World Health Organization; UNICEF; Our world in data; and IMF staff calculations.
Note: DTP-3 refers to the vaccine for diphtheria, tetanus, & pertussis third dose. BCG refers to the Bacille calmette-guerin vaccine; H_B-3 refers to Hepatitis B third dose; and Pol-3 refers to Polio third dose.

5. **COVID 19 vaccination rate in PNG is among the lowest in the world, in part due to strong vaccine hesitancy, fueled by social media.** COVID vaccination was rolled out in May 2021, and only 2.9 percent of the population is fully vaccinated as of mid-February 2022, making PNG the least vaccinated country in the Asia Pacific region, and the 10th in the world. A recent survey found that less than 20 percent of the respondents in PNG planned to vaccinate against COVID 19. About 50 percent of respondents did not want the vaccine, citing fear of side effects, lack of trust in vaccines, and skepticism about its effectiveness (Hoy and others, 2021).[3] Misinformation through social media has contributed to the anti-vaccine sentiment, which is so strong at times that some health workers and vaccine awareness teams have been threatened with violence while on duty (Blades, 2021).

Health Expenditure Per Capita
(Current USD)



Sources: World Bank; and IMF staff calculations.

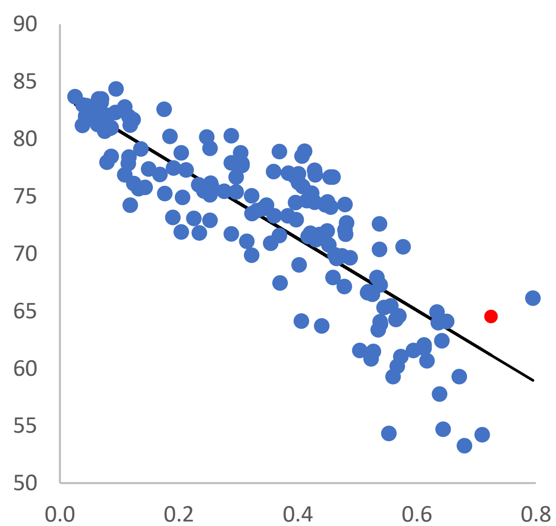
6. **Women's economic empowerment and greater decision-making in the household tend to** promote **better health and education outcomes, and support human capital development.**

[3] Similar results were observed in surveys conducted by The National news agency and ANU's Development Policy Center.

There is a strong underlying relationship between gender inequality and health outcomes across countries. For example, lower gender inequality is associated with higher male and female life expectancy, lower morbidity and premature mortality (Veas and others, 2021). Gender inequality is also strongly associated with COVID vaccination rates across countries (see text figure). While women typically have user rights over land in PNG, they rarely hold ownership rights, which reduces their ability to access credit from financial institutions (FAO, 2019). Greater empowerment of women and the poor, along with fiscal decentralization and community-driven development, can improve delivery of local public goods (Casey, 2018, Duflo 2012). Narrowing economic gender gaps would promote health and education, and help reach PNG's development goals.

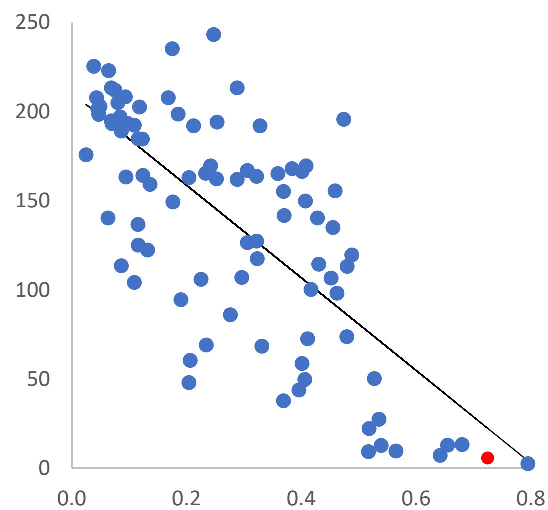
Gender Inequality and Life Expectancy

(x-axis gender inequality index)
(y-axis life expectancy in year)



Gender Inequality and COVID Vaccinations

(x-axis gender inequality index)
(y-axis vaccinations per hundred people)



Sources: World Bank Development Indicators; UNDP Human Development Report; Our world in data; and IMF staff calculations.

Note: Each blue dot represents a country, while PNG is shown in red.

Physical Capital and Economic Complexity

7. The quality of infrastructure in PNG is low and, along with low human capital and undiversified exports, appears not conducive to the development of industry. In terms of manufacturing value added and industry employment, PNG is well below peers. In the past 10 years, PNG has rapidly expanded its exports of minerals, especially LNG. Over the same period, the economic complexity of PNG's exports has declined. Economic complexity is a measure of the knowledge in a society as expressed in the products in makes. The economic complexity of a country is calculated based on the diversity of exports a country produces and their ubiquity, or the number of the countries able to produce them (Hidalgo and Hausmann, 2009). Research from the Harvard's Growth Lab suggests that countries whose exports are more complex than expected for their income level grow faster, driven by a process of diversifying knowhow to produce a broader set of goods and services.

8. PNG has not yet started the traditional development process of structural transformation. Structural transformation refers to the transition from primarily agricultural production to more manufacturing sector output. Typically, along the development path, growth is driven by diversification into new products that are related to those already being produced domestically, but slightly more complex (Hausmann and Klinger, 2007). Given PNG's undiversified economy there are relatively limited opportunities for expansion into nearby products and jumps into new strategic areas of production may be appropriate, the so-called "strategic bets approach" (Hausmann and Klinger, 2009).

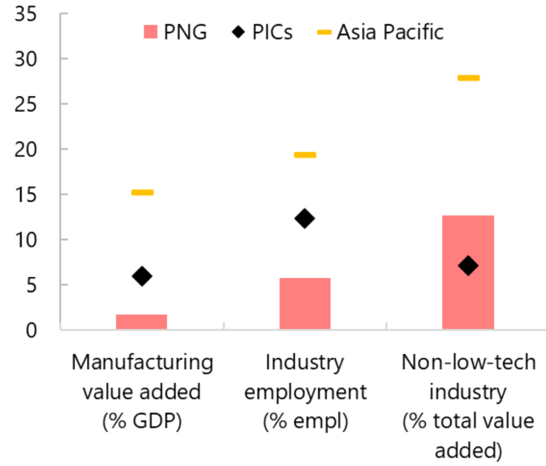
9. PNG is currently at the bottom of the distribution in terms of economic complexity of exports, even when compared to other commodity exporters. However, the fact that some commodity exporters have managed to diversify and increase their economic complexity, relative to PNG, suggests that exporting commodities need not be a trap *per se*. Nevertheless, almost all commodity exporters have below average economic complexity and face considerable challenges to transition into higher-value-added sectors. New analysis by UNCTAD (2021) identifies opportunities for commodity exporters to derive benefits from digitalization and the global technological revolution, and policies that can support their structural transformation.

10. To promote investment in physical capital and support development, PNG should strengthen property rights and contract enforcement. At least 85 percent of the total land mass in PNG constitute the so-called "unalienated" land governed by customary law (Hennings, 2021). The customary tenure practices vary from community to community and are passed on verbally. The authorities have showed efforts to unlock economic value of the land and attract investment by formalizing the land tenure and transaction rules. At the same time, large-scale extractive operations, related environmental damages and lack of transparency in public contracts have caused intra and inter-community conflicts over land rights and further complicated the reforms.

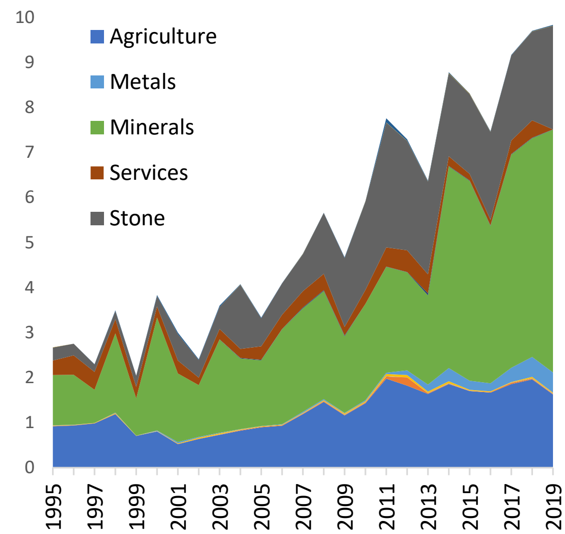
Conclusion: The Road Ahead

11. Despite the myriad of challenges, the authorities are starting to make progress. In terms of health, the authorities are making crucial efforts to improve health outcomes. The 2022 National Budget has significantly increased health expenditures. In November 2020, PNG administered oral polio vaccine and managed to reach 91 percent of the 1.3 million target children under 5 years. In 2019, PNG integrated measles and rubella vaccines into the last round of the polio vaccination, which prevented potential measles outbreak in PNG that affected several Pacific countries in 2019. In 2018, PNG successfully vaccinated 3.1 million children under 15 years in a nationwide polio vaccination campaign – attaining around 80 percent coverage in most provinces. These successful immunization programs indicate that if right strategies are implemented, PNG can improve vaccination rates. Combating misinformation about the COVID vaccine in PNG will be

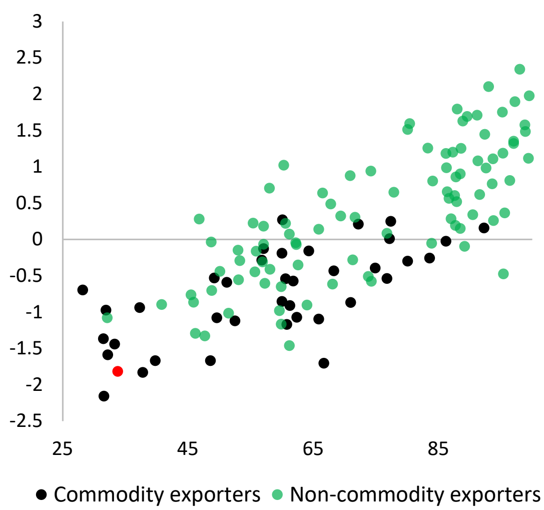
Manufacturing Sector
(Percent)



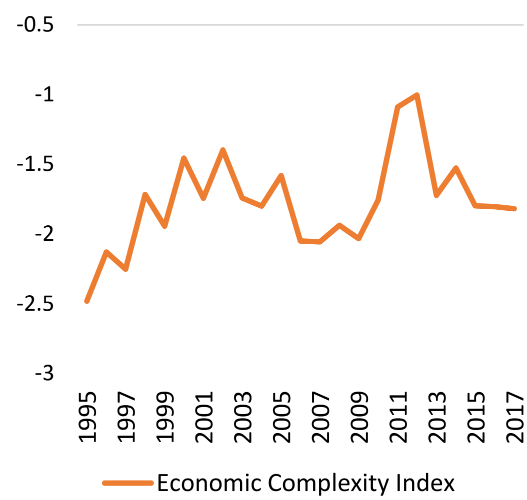
PNG Exports by Sector
(USD billion)



Economic Complexity and Infrastructure
(y-axis economic complexity index)
(x-axis quality of infrastructure index)



PNG Economic Complexity Over Time
(Index)



Sources: World Bank World Development Indicators, The Atlas of Economic Complexity, Global Quality of Infrastructure Index and IMF staff calculations.

Note: Exports chart legend lists major sectors in PNG; other sectors are included but not labeled. Each country in scatterplot represents a country, PNG shown in red. Years shown are latest available.

difficult. But the fact that a sizeable share of the population, up to 30 percent, is unsure about COVID vaccination and may be open to it, offers some hope (Hoy and others, 2021).

12. **In terms of gender equality, the authorities are making efforts to reduce violence against women.** A Special Parliamentary Committee on Gender-Based Violence issued its first report calling for urgent Government Action. The 2022 Budget allocates funds to establish a

Government Secretariat dedicated to the fight against gender-based violence, and support for related NGOs. It is important to note that COVID-19 disproportionately affects women's income, employment and education opportunities, as they care for the family during a time of crisis (IMF, 2021). Therefore, countries should deploy gender-responsive policies, which will help to mitigate the short-term impacts, while also addressing long-term structural drivers of gender inequality.

13. With regards to infrastructure, the Connect PNG Program and related efforts are important steps forward. The 2022 Budget supports a group of projects—"Economic Enablers"—to improve infrastructure. This includes improvements in transport infrastructure, connecting road networks, expansion of the electricity grid, improved reliance and efficiency of the ICT and the telecommunications network, clean renewable energy, and safe water and sanitation, all important ways for PNG to reduce poverty and enhance sustainable growth (World Bank, 2020). Passage of the Connect PNG Funding and Implementation Arrangements Bill in November 2021 will further facilitate the implementation of the ambitious infrastructure development and rehabilitation program. Further investment in climate-resilient infrastructure will be needed.

14. In terms of corruption, the authorities are making crucial headway with the Independent Commission Against Corruption (ICAC). ICAC's future ability to coordinate development and implementation of anti-corruption policies, along with the ability to investigate and prosecute complex corruption cases is expected to deter corruption and strengthen the rule of law. Implementation of the recently enacted Whistleblowers Act should also contribute to greater transparency and accountability, and deter abuse of public office for personal gain. If consistently implemented over time, these developments should have positive effects on the business and investment climate, paving the way for development.

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Annex V. Monetary Policy Framework

This annex reviews the current monetary policy framework in PNG and how the monetary policy framework might change with the reforms of the Central Banking Act. It summarizes the key considerations when choosing a monetary framework and exchange rate regime and points to further technical assistance to determine the most appropriate exchange rate regime with a consistent monetary framework and build a possible roadmap for the transition.

1. **The monetary policy framework is determined by the central bank objective(s), its intermediate and operational target(s), and the instruments it uses to achieve these.** In PNG, the monetary policy framework can be summarized as in Table 1 below. Formally, PNG has followed reserve money targeting, with the main objective of stable inflation. The intermediate target was reserve money, or growth of monetary aggregates more broadly. The operational target was the policy rate—the Kina Facility Rate (KFR)—which would be set with the aim of influencing domestic market interest rates. In recent years, however, the exchange rate was implicitly an additional nominal anchor, as BPNG viewed stability of the exchange rate as necessary for stable inflation.

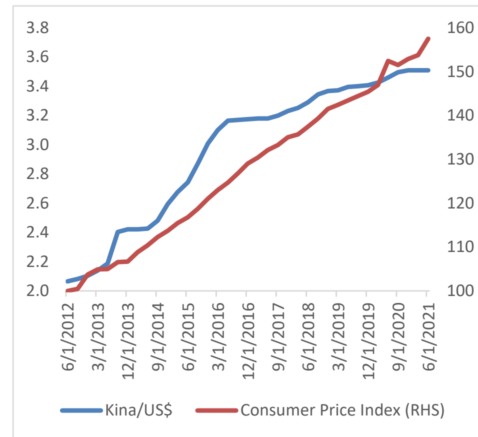
Table 1. PNG Monetary and Exchange Rate Policy Framework until December 2021

Framework (Nominal Anchor)	**Objective**	**Intermediate targets**	**Operational targets**	**Instruments**
Reserve Money Targeting *(explicitly)* *and* ***Exchange rate*** *(implicitly)*	Inflation and Stable exchange rate (implicitly)	Reserve money and Exchange rate (implicitly)	Interest rate and Exchange rate (implicitly)	Open Market Operations, FX Intervention, Reserve requirements, Repo facility

2. **The monetary policy framework needs to be consistent with the exchange rate arrangement, which can be assessed from the perspective of the "impossible trinity".** There are three desirable properties that countries would like to have: monetary policy autonomy, stable exchange rate and free capital mobility. However, the impossible trinity (or trilemma) states that, in theory, only two of these properties are possible at the same time. For example, in recent years BPNG has had monetary policy autonomy and maintained a stable exchange rate, and therefore PNG could not have free capital mobility. To maintain a stable exchange rate in the FX market, BPNG imposed exchange rate trading margins around the official rate in June 2014, forcing the market exchange rate in line with the official rate. This, coupled with BPNG's limited supply of FX to the market, led to FX shortages, which likely disrupted trade and economic activity. More generally, attempts to prevent exchange rate depreciation without supportive fiscal or monetary policies usually lead to an excess demand for FX in the official market.

3. **In recent years, BPNG did not commit to a specific target for money growth, allowing ample discretion, and implicitly adding the exchange rate as a nominal anchor and target.** BPNG would communicate its analysis through semiannual monetary policy statements, each March and September, announcing the monetary policy stance for the next six months. In this way, the Governor would decide the extent to which inflation stability requires exchange rate stability, often noting pass-through. In practice, the exchange rate implicitly became an additional nominal anchor, and the exchange rate regime moved from *de jure* floating to *de facto* stabilized (PNG country AREAER Report). The BPNG would typically monitor the exchange rate, reserve money growth and the interest rate, steering them within a comfort zone. Deviations from reserve money growth from target would typically not trigger an adjustment, despite larger-than-targeted excess liquidity, as long as BPNG was comfortable about the level of inflation (de Barros Serrao and others, 2019).

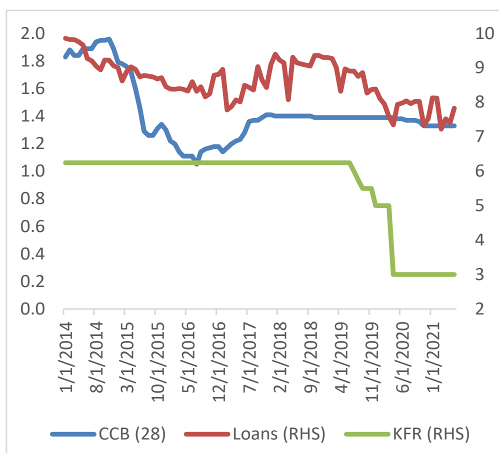
Exchange Rate and Consumer Price Index
(Units, RHS index)



Sources: BPNG; and IMF staff calculations.

4. **BPNG implements monetary policy primarily through open market operations.** BPNG issues central bank bills with 1-month (28 days), most commonly, as well as 2-month (63 days) and 3-month (91 days) and longer tenors. Open market operations (OMOs) are typically aimed at draining excess kina liquidity. The OMOs are calibrated based on the BPNG liquidity forecast, conducted weekly, and take into account any effects on short-term interest rates and inflation developments, against the background of the reserve money framework. BPNG also participates in the primary and secondary market for Treasury bills and Government Bonds.

Kina Facility Rate, Central Bank Bills Rate and Commercial Loans Rates
(Percent)



Sources: BPNG; and IMF staff calculations.

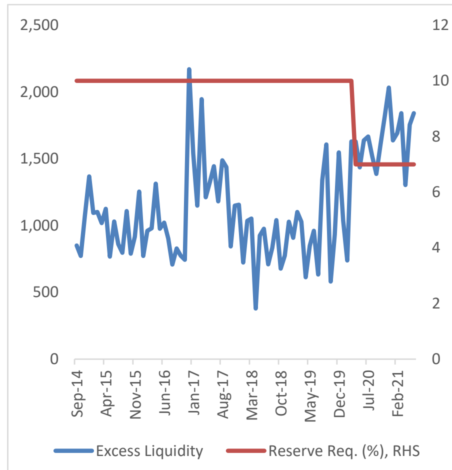
Note: CCB (28) refers to 28-day Central Bank Bills. Commercial loan rate is the weighted average for performing loans. KFR is the Kina Facility Rate.

5. **The KFR is intended to be a reference for interbank money market rates and open market operations, however transmission to deposit and lending rates is weak.** The 28-day central bank bill rates are the most relevant for transmission, and they are only loosely correlated with the KFR. Binding credit limits and bidding limits for certain commercial banks in PNG, high liquidity demand for precautionary purposes, and lack of a reliable secondary market for government securities, all limit the demand of central bank's bills so that auctions are sometimes under-allotted. The BPNG retains the discretion to cut the auction and reject yields considered

outliers. In this way it can prevent an upward drift in yields, but often fails to drain excess liquidity (de Barros Serrao and others, 2019).

6. **Other instruments used for monetary policy implementation include reserve requirements, the repo facility, and FX intervention**. Cash reserve requirements are calculated weekly, and the reserve requirement in percent has been stable from late 2014 until the COVID-19 pandemic. Reserve requirements can affect the demand for excess liquidity for precautionary purposes. The Repo Facility intends to provide short-term liquidity to commercial banks and is not used much. FX intervention is not viewed as a monetary policy instrument by BPNG, but FX provision by BPNG to authorized FX dealers also directly affects kina liquidity in the market.

Excess Liquidity and Reserve Requirements
(kina million; percent, RHS)



Sources: BPNG; and IMF staff calculations.

Amendments to the Central Banking Act and Implications for the Monetary Framework

7. **In July 2021, the PNG government set up an Independent Advisory Group (IAG) to review and recommend reforms to the Central Banking Act, with implications for the monetary policy framework.** The Central Banking Act, originally passed in 2000, needed to be modernized. Some of the key problems identified in the IAG Report, include the practice of FX rationing and insufficient support for growth by the BPNG. To address these, the IAG recommended to return to full kina convertibility (and implicitly, a more flexible exchange rate regime) and to modify the central bank objectives to introduce growth and employment as additional objectives, of equal rank to stable inflation).[1] Following the IAG report, a wide-ranging reform to the Central Banking Act was made by the PNG Parliament on December 2, 2021, via the Central Banking (Amendment) Bill 2021. Additional amendments are planned for the Phase II of the reforms. These changes affect the monetary framework in PNG.

8. **The introduction of growth and employment as additional BPNG objectives complicates the monetary policy framework in PNG.** First, monetary policy cannot generate long term growth or employment, and if BPNG repeatedly stimulated short term growth, beyond the potential, inflation and inflation expectations would increase. Second, at times, there will be conflicts between inflation and growth objectives, which will be difficult to resolve when these objectives are unranked. For example, it is possible that lowering interest rates could promote growth in the short term but also raise inflation. At times of conflict between unranked objectives, a lack of primary inflation mandate tends to lead to heightened uncertainty about the future level of inflation, de-anchoring of inflation expectations, and lack of accountability of monetary policy (IMF, 2015). With a

[1] In addition, the IAG made recommendations to strengthen BPNG governance and accountability, to limit monetary financing, and other recommendations not discussed here.

growth objective subordinate to inflation, policymakers can still transparently allow inflation to deviate from its target over a longer-than-usual horizon, allowing growth to recover, and keeping inflation expectations anchored. Based on experience in other countries (IMF, 2015), the existence of several unranked objectives is likely to introduce more discretion in the BPNG decision making, and reduce accountability. Also, assessing the growth rate (or unemployment rate), consistent with price stability, is difficult even in advanced countries. In PNG, it is a daunting challenge given the lack of data and the dominance of the informal sector.

9. While kina convertibility does not necessarily require a floating exchange rate regime, for kina convertibility to be sustainable over the long run, some movement in the exchange rate would need to be permissible. Kina convertibility means that anyone who wants to exchange kina for US dollars is able to do so, without restrictions in terms of amount or wait time. If the kina is overvalued and fully convertible, BPNG would eventually run out of US dollar reserves as people demand to buy dollars. Achieving such convertibility would require an exchange rate that clears the market, and in turn, require a well-functioning FX market, including central bank operations. The introduction of a more flexible exchange rate regime would have brought a major change in the monetary policy framework in PNG. A move to greater kina flexibility, would have to be carefully planned, to avoid any excess volatility in the exchange rate, and ensure that the market and institutions are ready.

Monetary and Exchange Rate Policy Frameworks Should Provide a Clear Nominal Anchor

10. Monetary and exchange rate policy frameworks should provide a clear nominal anchor, consistent with each country's economic needs and goals (IMF, 2015). For example, many low-income countries have a framework that targets a monetary aggregate, such as a reserve money framework. Many emerging market economies have an inflation targeting framework. An exchange rate arrangement that is inconsistent with a country's characteristics can amplify the impact of adverse shocks and undermine economic growth. In recent years many countries have successfully balanced their need for adequate exchange rate flexibility with some active management of the exchange rate to prevent exchange rate overshooting, inflation pressures and financial vulnerabilities (Fayad and Ward, 2020). In economies with underdeveloped credit markets, monetary policy is mainly transmitted through the exchange rate channel, so greater exchange rate flexibility tends to improve transmission.

11. The appropriate monetary and exchange rate policy framework will depend on country-specific characteristics. In particular, it will depend on (1) initial macroeconomic conditions, such as inflation, FX reserve adequacy, and fiscal and external imbalances; (2) structural characteristics of the economy, including its size and openness, mobility and flexibility of factors of production, and type and frequency of shocks; and (3) institutional features and prospects for their development (IMF, 2022a). For commodity exporting countries, the choice can be challenging (IMF, 2016, Al-Sadiq and Otker, 2021). Commodity exporters with relatively undiversified output, that are susceptible to large and frequent terms-of-trade shocks, may favor a more flexible exchange rate. Those that are very small, very open, and with undeveloped financial markets may prefer a fixed exchange rate. If country characteristics do not clearly support the choice of either a float or a peg, an intermediate arrangement—a crawling peg or a crawl-like arrangement—could be an appropriate choice. The chosen FX regime should allow nominal stability, facilitate sustained economic growth and trade, ease external adjustment, and promote broad systemic stability.

12. As countries move towards more exchange rate flexibility, some continue to rely on the exchange rate as nominal anchor, while increasing its flexibility. The transition to a more flexible exchange rate anchor is easier and often represents an intermediate step on the road to a different nominal anchor such as inflation targeting. It initially requires relatively minor operational changes and does not rely on a central bank having the analytical, operational, and communications capacity to move to a floating exchange rate (IMF 2022b). A more flexible exchange rate anchor serves to get businesses and households accustomed to two-way variations in the exchange rate, tends to promote development of FX markets and hedging tools.

13. Transition to greater exchange rate flexibility can be a difficult and long process, and success is most likely when the transition is carefully planned.[2] IMF technical assistance can help define a roadmap for the transition that would usually be implemented over several years (IMF, 2022b). For countries opting for a wider band around a peg, the initial exchange rate should be close to equilibrium, and the band should be wide enough to accommodate typical shocks, but not so wide that the exchange rate anchor is lost. For commodity exporters, changes in the FX regime might be smoothest when commodity prices and reserves are high, and depreciation pressures low, as in the current juncture. An intervention policy needs to be articulated. Under a crawling peg, the exchange rate adjustments may be at a fixed rate or in response to changes in selected quantitative indicators, such as past inflation differentials vis-à-vis major trading partners or differentials between the inflation target and expected inflation in major trading partners (IMF, 2022b).

14. A transition to inflation targeting would require reforms, implemented over several years. An inflation target is often chosen as a new nominal anchor, given the difficulty of targeting reserve money, or other monetary aggregates at lower rates of inflation. A key benefit of an inflation target is that it helps to simultaneously maintain low and stable inflation and stabilize output. For successful inflation targeting, a country needs to have a clear central bank mandate for price stability, political and operational independence, forecasting and analytical capacity, and an effective operational and communications framework (Heenan and others, 2006, IMF 2022b). In particular, for successful and effective inflation targeting, central bank financing of the government may not be permitted, unless it expressly serves the purpose of monetary policy.

15. Regardless of the chosen exchange rate regime and nominal anchor, central bank analytical capacity building is helpful. In the case of PNG, improvement in liquidity forecasting is one such preparatory measure, which is included as a structural benchmark in the Staff Monitored Program. In addition, capacity building in monetary and foreign exchange operations, as well as communications would be helpful. BPNG needs to invest in capacity building regardless of the chosen monetary policy framework.

[2] See Otker-Robe and Vavra (2007) for a detailed country experiences of orderly and disorderly transitions.

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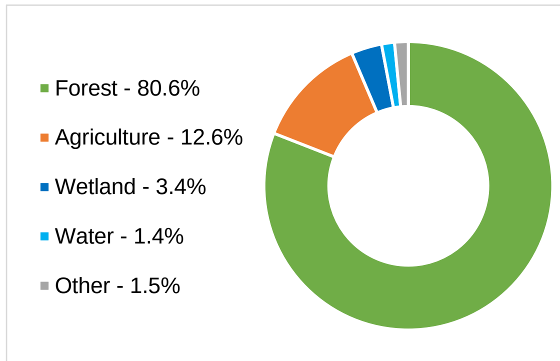
Annex VI. Climate Change Vulnerabilities, Adaptation Needs and Access to Climate Finance

This annex reviews the effects of climate change in PNG and the climate mitigation services that PNG provides to the rest of the world. First, it identifies climate risks and vulnerabilities in PNG. Second, it discusses PNG's climate adaptation needs. Third, it presents PNG's current track record of access to climate finance, and comments on possible ways forward to better adapt to the changing climate and to strengthen mitigation efforts.

1. **Papua New Guinea (PNG) has a humid, tropical climate, with immense biodiversity.** Home to the third largest rainforest in the world, PNG hosts about 6-7 percent of the world's biodiversity on less than 1 percent of land area (PNG, 2007). Small settlements are spread out over a vast rural area without much access to infrastructure but with high environmental capital, which is increasingly under threat from climate change and deforestation.

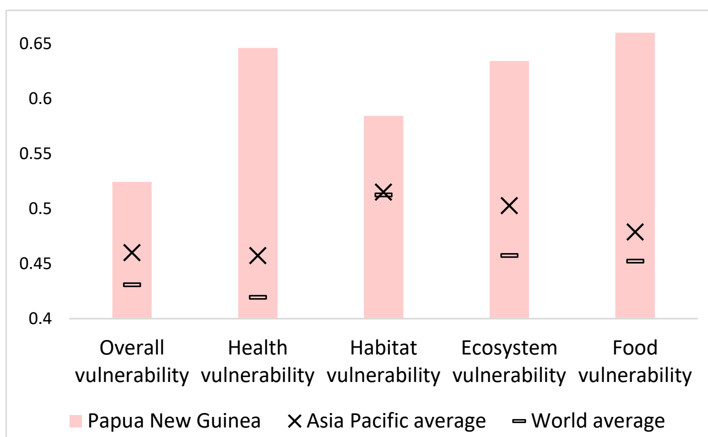
Land Cover in Papua New Guinea
(Percent)



Source: United Nations Biodiversity Lab.

2. **Papua New Guinea is among countries most vulnerable to the negative effects of climate change (Volz, 2020).** PNG is the ninth most vulnerable country in the world, based on the United Nations University World Risk Report (2021). Based on the Notre Dame vulnerability index, in 2019 it was the thirty-fifth most vulnerable country, well above the average vulnerability of either the Asia Pacific region or the world (see figure). PNG's vulnerabilities are particularly high in terms of food security, ecosystem services, quality of human habitat, and health. Climate hazards in PNG include sea level rise, coastal erosion, coastal and inland flooding, drought, landslides, heatwaves, and inland frost, among others (GCF 2020, UNDP 2016). Estimates suggest that climate change could trigger a loss of up to 15.2% of GDP by 2100 in PNG (ADB, 2013).

Overall and Sectoral Vulnerabilities to Climate Change
(Index)



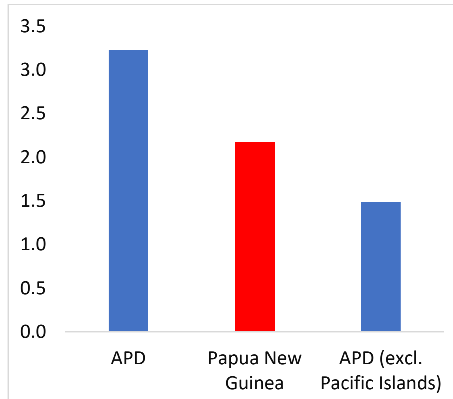
Source: University of Notre Dame Global Adaptation Index, 2019.

3. **Most of the population—about 80 percent—is rural, highly exposed to climate risks.** Due to high dependence on

subsistence farming, livelihoods are disrupted by flooding, landslides in the mountainous areas, and saltwater intrusion on the islands.[1] Commercial agriculture contributes to net deforestation, which reduces ecosystem services that people rely on. Weak governance and lack of transparency and accountability in natural resources management increase exposure to climate risks. Access to water and sanitation is often inadequate. In the rural areas, access to safe water and sanitation is available to only 33 and 13 percent of the population, while in the urban areas it is 89 and 57 percent, respectively (PNG, 2015).

4. Climate adaptation needs in PNG are large and current adaptive capacity is low. Climate adaptation needs are estimated at about 2 percent of GDP annually for the next 10 years (IMF, 2021a). This is less than the average for the Asia Pacific region, but more than the average for Asia excluding the Pacific Island Countries (see figure). Most importantly investments of 2 percent per year for climate adaptation are currently prohibitive for PNG, given lack of fiscal space, and will need to be supported externally. PNG's adaptive capacity is one of the lowest in Asia Pacific, due to fragile health and education systems as well as insecurity of water supply (IMF, 2021a).

Annual Public Adaptation Needs
(Percent of GDP)



Source: IMF (2021a).

5. Thanks to vast forests which act as carbon sinks, Papua New Guinea's net emissions were negative until 2008 (PNG, 2018), but are rising. Papua New Guinea's emissions were dominated by the energy sector (see chart), but have risen in Land use, land-use change and forestry (LULUCF). In the agriculture sector, emissions have been also rising but at a much slower pace. Nevertheless, PNG is still considered a low emitter of GHGs, both in absolute terms and per capita.

6. As part of its nationally determined contributions (NDC), PNG aims to reach carbon neutrality by 2050, but this commitment is conditional on external financing. As such, the likelihood of achieving the NDC is uncertain. The key target is to reduce emissions from deforestation and forest degradation due to commercial logging and agriculture expansion, by enhanced land use planning, enforcement of timber legality, and promotion of climate-friendly agriculture. Corruption, rule of law and climate vulnerabilities are closely interlinked in PNG and constitute fragility factors. High rate of deforestation and reported destruction of biodiversity are associated with lack of transparency and accountability in granting concession and large contracts. Strong governance safeguards and anti-corruption measures, such as transparency of public contracts, oversight mechanisms against corruption, accountability of officials and companies, are

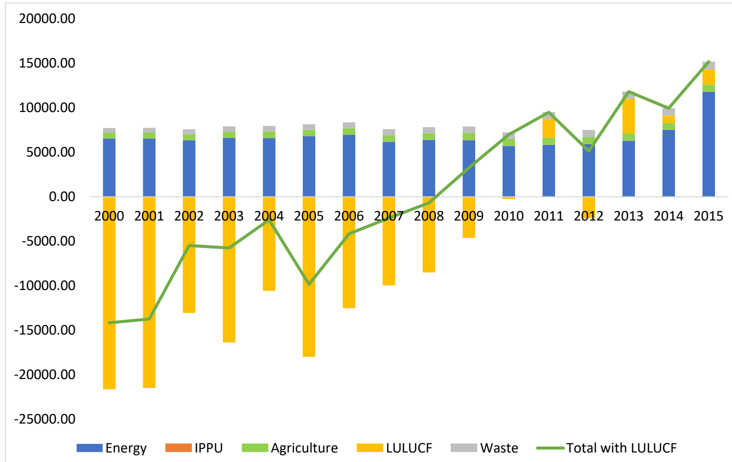
[1] According to the World Bank Hotspot Study, PNG ranks first in global landslide hazard profile.

critical for reducing climate vulnerabilities, meeting NDCs, and achieving sustainable economic growth.

7. **PNG has long been a leader in the call to reduce emissions from deforestation and forest degradation in developing countries, which developed into REDD+, supported by UNFCCC.** The Prime Minister has announced a ban on round log exports by 2025 and an end to logging by 2030 (National 2022a). But success will depend on PNG's ability to provide alternative sources of revenue to compensate for the revenue lost from industrial logging operations (Economist, 2022; The National, 2022b). Success in raising revenue through REDD+ results-based payments will be crucial in this respect.

GHG Emissions and Removals by Sector in Papua New Guinea, 2000-2015

(Gg CO2 equivalent)



Source: PNG (2018), Climate Change and Development Authority, Biennial Update Report.

Note: Land-use change and forestry (LULUCF) includes emissions and removals from forest plantations, non-forest trees, logging, fuelwood consumption and other wood use. IPPU stands for Industrial Processes and Product Use. Energy includes emissions from fossil fuel combustion and liquified natural gas. Waste includes methane emissions from solid waste and wastewater.

8. **To support its climate mitigation and adaptation efforts, PNG launched several implementation plans and legislative initiatives.** The Enhanced NDC Implementation Plan 2021-2030 (PNG, 2021) details goals and targets, finance needs and monitoring plans. With help from development partners, PNG also issued the Electricity Implementation Roadmap. In October 2021, PNG passed amendments to the Climate Change (Management) Act to establish a new climate trust fund, administered by the Climate Change and Development Authority, to collect and distribute all forms of climate finance, including REDD+ payments (Economist, 2022). PNG's Development strategic plan 2010-2030, and other supportive documents in the national planning framework, are expected to support domestic climate adaptation and climate finance efforts.

9. **PNG's track record of access to climate finance has so far been relatively poor given significant needs, and mostly sourced from bilateral donors.** Australia, Japan and the European Union have been the largest bilateral donors supporting PNG investments in both adaptation and mitigation. Expanding the sources of financing to include global climate funds would enable PNG to benefit also from the technical expertise brought by such funds such as in project selection and monitoring. PNG has made crucial progress in producing a detailed Country Program with the Green Climate Fund (GCF 2020), which should facilitate access to the GCF. Despite recent progress,

however, PNG's average annual investments in climate adaptation of about 0.2 percent of GDP fall well short of the estimated need of 2 percent (see text table).

10. In addition to other instruments of climate finance, PNG could consider debt-for-climate swaps. A debt-for-climate or debt-for-nature swap is an operation in which debt claims are exchanged for specific spending or policy commitments on the side of the debtor country typically at lower fiscal cost than the original debt service. For example, in exchange for debt forgiveness, the member can commit to policies which would firmly protect the existing forested area in the country and pursue a faster pace of GHG reductions across sectors. Most recently, the Seychelles, the Democratic Republic of Congo and Belize have negotiated debt-for-climate swaps in 2018, 2019 and 2021, respectively (IMF, 2022). Debt-for-climate swaps are most appropriate for countries where debt is still sustainable (see Debt Sustainability Assessment), but limited fiscal space restricts domestic climate-related spending. Depending on alignment of specific climate priorities between creditors and the debtor country, and the modalities of a debt-for-climate swap, fiscal space can be increased for climate spending and directed to climate-friendly growth and resilience.

Climate Finance, 2014-19
(Millions USD, unless otherwise indicated)

Donor	Adaptation & Mutiple Foci	Mitigation
Australia	317.6	4.6
EU	125.9	0.0
Japan	4.9	230.1
Other	30.0	9.8
Bilateral total	**478.4**	**244.6**
ADB	88.0	60.9
World Bank	7.7	29.3
Other	55.0	16.4
Multilateral total	**150.8**	**106.6**
Total	629.2	351.1
Total average annual	104.9	58.5
Total average annual (% GDP)	0.4	0.2

Source: IMF (2021b).

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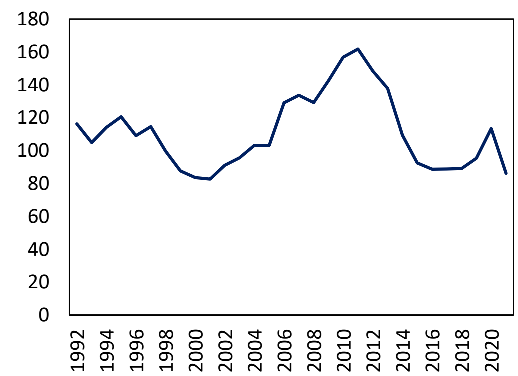
Annex VII. FX Shortages

This annex reviews the persistent FX shortages in PNG. First, it provides the background for how and when FX shortages began. Second, it discusses current FX shortages and their possible causes.

1. Papua New Guinea (PNG) has experienced persistent FX shortages since 2013. Between 2010 and 2012 PNG experienced high currency inflows associated with the construction phase of PNG LNG and high commodity prices. FDI flows declined in 2013. The fall in commodity prices, which began with the fall in copper and gold prices in 2011 and 2012, followed by the collapse of oil prices in 2014, caused a rapid deterioration in PNG's terms of trade (text chart). To slow the nominal depreciation of the Kina, while also preventing the emergence of a spread between the market and official exchange rates, on June 4 2014, the BPNG instated a trading margin around FX buy-sell spreads of authorized dealers around the official rate. This allowed the BPNG to gradually devalue the Kina, which has depreciated by around 21 percent in effective nominal terms since 2014. This compares to a 2.6 depreciation of the REER over the same period. Although PNG's de jure exchange rate arrangement is floating, beginning in April 2014 the exchange rate followed a depreciating trend within a 2 percent band against the US dollar resulting in a de facto reclassification as ``crawl-like''. Since November 2020 the Kina has remained within a 2 percent band against the US dollar, resulting in a further de facto reclassification as ``stabilized''. Difficulties in obtaining FX have led to import compression since 2012, with multiple surveys highlighting this as a key constraint on businesses (text chart below). This is most notable in the non-mineral sector, as the decline in imports in the mineral sector partly reflects completion of the PNG LNG construction phase.

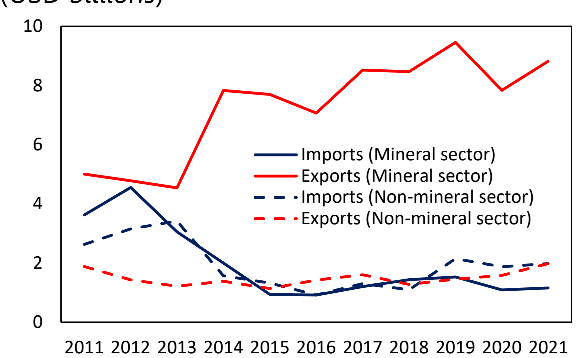
Goods Terms of Trade
(Index, 2005 = 100)



Sources: BPNG; and IMF calculations.

2. The scale of the problem is difficult to gauge. Anecdotal evidence suggests large pent-up demand for FX. Data from BPNGs order book report the duration of FX order fulfillments. However, some firms may seek permanent alternative solutions to mitigate delays in FX provision, thereby reducing officially recorded FX orders. Alternatively, firms may place multiple or larger orders as they

Imports and Exports of Goods
(USD *billions*)



Source: BPNG.

attempt to secure FX from the official market. Despite the FX shortage, it seems no parallel FX market has developed because small FX orders, affecting most customers, are fulfilled first.

3. **Exports are highly concentrated, while import needs are broad-based.** PNG's mineral goods exports account for the majority of FX revenue (for example 29.1 percent from Gold and an additional 28.7 percent from LNG alone). In the absence of a market-determined exchange rate, the individual incentives of each exporting company to repatriate foreign currency through the official market may differ. Two key considerations for exporters, at the firm-level, are: (i) the expectation of future depreciation; (ii) potential difficulties in re-obtaining FX to pay for required intermediary imports (including operational costs, debt service and tax obligations). Both factors act to reduce the supply of FX provided to the official market. In contrast, as a largely undiversified island economy, imported goods are required across most sectors.

4. **In response to FX shortages some exporters hold export receipts offshore.** This practice, permissible under multiple resource sector Project Development Agreements (PDAs), allows exporting firms to repatriate a small fraction of FX revenue to pay local costs, while the majority of FX revenue does not enter the domestic market. Dividends are typically paid to shareholders from these offshore accounts. This represents a further impediment to fully functioning FX market as few companies bridge the mineral/non-mineral or exporting/importing sector divide. This confines FX provision from the private sector. Accompanying this, the profile of government take from PNG LNG export profits is only forecast to rise substantially after 2026, limiting FX provision from the public sector until 2026.

5. **Large fiscal deficits, financed through the slack arrangement, increased FX demand.** A sustained fiscal deficit, if financed by BPNG, typically increases FX demand. Indeed, during 2014 and into 2015 Treasury bill auctions were mostly under-subscribed resulting in central bank purchases of under-subscribed bills through BPNGs ''slack agreement''. BPNGs share of domestic debt increased, reaching 20 percent in June 2016.

6. **Several idiosyncratic factors have also worsened FX shortages in recent years.** The severe drought in 2015, earthquake in 2018 and the more recent closure of the Porgera, Simberi and Ok Tedi mines have reduced exports, and hence FX supply to the official market. As these temporary factors fade FX supply should increase.

7. **Higher commodity prices and policy action may help alleviate the problem.** A rise in the price of PNG's primary exports should increase the supply of FX to the market. Duration within the BPNG's order book has already fallen, reflecting both an improvement in the terms of trade in 2021 and greater FX provision during the IMF SMP. However, incomplete or lagged pass-through from spot price changes to contracted prices, may reduce the revenue elasticity of PNG's exporters. Additionally, higher commodity prices will not alter the structural symptom of offshore profits unless accompanied by expectations of exchange rate appreciation, and medium-term commitments to sustained FX injections by BPNG to fully fulfill FX demand.

8. IMF staff have advised BPNG to allow greater flexibility in the Kina/USD exchange rate since 2014. Flexibility would allow the exchange rate to adjust to a market clearing level to eliminate the kina overvaluation. A more flexible exchange rate will also help facilitate adjustment to external shocks. The current juncture of high commodity prices, lower overvaluation, and the expected beginning of the construction phase for Papua LNG create a unique opportunity for the authorities to act and help alleviate risks from a disorderly adjustment. Any adjustment should be carefully planned to avoid exchange rate overshooting, with consideration given to how changes may impact the overall monetary policy framework (Appendix V). In the medium-term, a holistic approach to overcome structural impediments, including expanded market access and greater export diversity, could improve liquidity in the FX market.

Annex VIII. Authorities' Responses to Fund Advice in the 2019 Article IV Consultation

Fund Recommendation	Policy Actions
Fiscal Policies	
• Fiscal consolidation to gradually reverse the buildup of public debt	The pandemic has put significant pressure of fiscal balance in 2020, affecting the consolidation. The 2021 fiscal deficit was lower than the budget projection. The authorities intend to make gradual progress on medium-term fiscal consolidation strategy driven by improved revenue.
• Implement measures to strictly control personnel emoluments.	The Authorities completed a pilot program in the Department of Treasury to correct payroll records and ensure warrants for payrolls are aligned with the actual workforce. As the exercise was extended to other government units, other staff past the mandatory retirement have been identified. While upfront costs to finance their retirement benefits will need to be allocated, transitioning this cohort to retirement will contain the trajectory of personnel costs over the medium term.
• Eliminate Government payment delays and arrears.	The Authorities have taken steps to pay arrears to SOEs. Additionally, the payroll verification exercise undertaken in 2021 should ensure new arrears do not emerge.
• Strengthen domestic revenue mobilization through implementation of the MTRS.	The implementation of MTRS was hampered by capacity constraints as well as external shocks, including the pandemic. Some progress has been made with regards to strengthening revenue. In November 2021, the authorities have approved the Consequential Amendments to the Tax Administration Act (TAA), which clarifies existing laws and strengthen the legal authority of revenue collection agencies. Work to reform the Income Tax Act (ITA) is at an advanced stage and expected to be completed by 2022 and expected to be implemented in 2023. PNG Customs and the Department of Finance have made substantial progress with MTRS implementation.
Monetary, Financial and Exchange Rate Policies	
• Restore kina convertibility, exchange rate flexibility, and clear the backlog of FX orders inhibiting activity in the non-resource sector	BPNG has provided FX injection of about US$150-180 million every quarter, but the FX shortage persists. BPNG's goal is to fulfill all FX orders within 3 months in line with the invoicing period. A comprehensive approach is needed to reinstate kina convertibility, and gradually introduce greater exchange rate flexibility.
• Gradual elimination of exchange rate overvaluation	The exchange rate was not allowed to adjust as the authorities maintained a de facto stabilized arrangement. However, the estimate of kina overvaluation declined because the equilibrium exchange rate appreciated.

Fund Recommendation	Policy Actions
• Strengthen liquidity management by strengthening liquidity forecasting, ensuring market communication, and enhancing the monetary policy operational framework.	The authorities are improving debt and liquidity management by institutionalizing the Public Debt Committee to develop a debt issuance strategy, develop cashflow projections to guide debt issuance. The BPNG has requested Fund TA to improve effectiveness of FX operations.
Governance	
• Takes appropriate steps to address governance and corruption as they hamper growth in all sectors of the economy by undermining investor confidence and efficiency.	The passage of the ICAC Act and Whistleblowers' Act represent important advances in strengthening the anti-corruption framework. The authorities are recruiting staff for ICAC and working on implementing regulations for these Acts.
Structural Reform	
• Initiate reforms to state-own enterprises to strengthen performance in industries such as power generation and telecoms, which have a keystone role in enabling development of the non-resource sector.	The authorities have completed all reform measures for 2021 in the ADB-supported SOE reform program, improving the legislative and policy framework, and enhancing governance and transparency. Further commitment to SOE reforms, in line with the program developed with the ADB, is strongly encouraged.
Data Compilation and Reporting	
• Restore a National Statistics Council or NSO reform committee to oversee reforms to NSO management, establish strong accountability, and ensure close cooperation between agencies in the production of core macroeconomic statistics. Improve collection of administrative data through the NSO database management initiative to develop templates which can be replicated within various agencies.	The authorities continue to receive TA from the Fund, including through PFTAC, and other development partners, notably the Australian Bureau of Statistics, to address these concerns. Arrangements under the SMP have strengthened data sharing with the Fund with the setting up of the Program Monitoring Committee.

Appendix I. Letter of Intent

21 May 2022

Dear Ms. Georgieva,

In completing our Staff Monitored Program (SMP), which was approved in December 2021, we are pleased to have further strengthened our reform work, and collaboration with the international community. Significant political support for reform, repairing the budget, and a desire to engage closely with the international community has meant the Government of Papua New Guinea has maintained substantial engagement with the IMF since our first request for a SMP in late 2019. This engagement has been productive and supported several key reforms, starting with the Due Diligence exercise to review debt and fiscal data; and progressing the work we have done starting to reform the Central Bank Act. Under the first stage of the 2020/21 SMP[1] we were pleased to have made significant strides on:

1) Establishing the Arrears Verification Committee, which has led to the identification of over K5 billion in pre-2019 arrears, that we have made strides in clearing – validating and paying K255 million in 2020, and K419 million in 2021.
2) Improving information sharing between the Treasury and the Central Bank – particularly on liquidity management, and cash planning. We have since formalized the Terms of Reference (TORs) for the public debt committee, including the Bank of Papua New Guinea (BPNG)'s role.
3) The final implementation of the new Tax Administration Act which will allow us new powers to enforce tax regulations.
4) The introduction of a new Small Business Tax, to simplify the tax code for small companies,
5) The passage of the Independent Commission on Anti-Corruption (ICAC) Act and launching the process for the development of supporting regulation.
6) Instituting the Temporary Access Facility (TAF) for cash flow management, and the issuance of guidelines around its use, the latter of which were developed in line with IMF advice.

We were also grateful for the urgent approval of a Rapid Credit Facility (RCF), that helped us implement the 2020 budget even during the COVID-19 outbreak. In addition to providing immediate financing, we were pleased we managed to achieve some reforms during this period, tied to the RCF. These included, forming a Steering Committee to implement our Medium-term Revenue Strategy that provided reporting against reforms the Internal Revenue Commission has been making; and reporting on our procurement and contracts to our internal Budget Management Committee (BMC) to help us keep track of COVID spending. The strengthening of the BMC has been a crucial part of improving information flow between central agencies, with information on cash flow forecasts, spending, revenue collection, warrants and major procurements now regularly shared. We reaffirm our commitment to report on COVID spending at the end of the pandemic emergency, publish details on all outstanding awarded COVID-related contracts (including related beneficial

[1] Please see also our Letter of Intent and associated Memorandum of Economic and Financial Policies that accompanied IMF Country Report No. 20/95.

ownership information), and have COVID spending audited and the report published within 6 months of the ending of the pandemic. We are also grateful for the allocation of Special Drawing Rights (SDRs), which enabled us to execute our budget and meet urgent healthcare and other social needs in 2021 in the face of the prolonged COVID-19 pandemic. We used the SDR allocation to replace costly financing.

Turning to our 2021/22 SMP, we are pleased to report good progress: all quantitative targets and all but one of the structural benchmarks were met on time based on the IMF review.

In particular, the 2021 budget deficit stood at K6.3 billion, significantly below our program target of K6.9 billion. We exceeded our target on tax revenue collection by K261 million (0.3 percent of GDP) while maintaining strict control over expenditure. Since 2020, the deficit has declined by over 2 percentage points of GDP, which is a quite remarkable turnaround. Data through March 2022 shows this positive trend continued: we have recorded a budget surplus of K895 million on the back of both exceeding our target on tax revenue collection. The higher revenues have allowed us to provide much-needed relief due to rising food and fuel prices without increasing the fiscal deficit beyond its budget target. We remain committed to continue strengthening public finances and debt sustainability.

We also comfortably met the end-December 2021 Net International Reserves target, helping to strengthen our reserve adequacy, and the BPNG provided more than the targeted foreign exchange to FX dealers to help meet FX demand.

More importantly, the reduction in the deficit was achieved while maintaining social spending and advancing on several meaningful reforms, including:

1) The approval of a budget that targeted a lower deficit than was agreed as a prior action for the SMP to signal our steadfast commitment to budget repair.
2) The early approval of the consequential amendments around the Tax Administration Act, to prevent conflicts with other legislation.
3) The completion of a staffing and establishment review, that incorporated details on the issues we face and sets out a plan to resolve them – including key issues like the proper recording of staff under the correct appropriation heads. This report was crucial to allow future meaningful reforms to occur in this space.
4) The strengthening of the public debt committee comprising of the BPNG and Treasury by establishing a set of objectives, aligning TOR defining members' responsibilities, and producing a draft annual debt issuance strategy to support forward planning.
5) The passage of selected amendments to the Central Bank Act (CBA) following the completion of the first stage of the Independent Advisory Group report, and we look forward to completing our reform agenda as envisaged under the structural benchmark.

We are committed to maintaining the momentum on structural reforms, including progressing on our salary reform work; strengthening revenue collection; and building on our major reforms in our anti-corruption framework by operationalizing the ICAC and by leveraging IMF TA on a rule of law diagnostic. Our data reporting and information sharing framework was also strengthened due to the

SMP through the formation of a Program Monitoring Committee. Despite problems caused by a ransomware attack on the Treasury's computer systems in late 2021, we have been able to furnish IMF staff with the information needed to assess program performance and intend to build on the work done so far. There have also been a large number of economic reforms instituted by the government that have not been formally incorporated in the SMP, but the IMF's broad role in monitoring the progress of the PNG economy and wider reforms has been vital for re-building confidence in PNG's economic management. As we make progress on these key issues, we intend to work closely with IMF staff.

We request IMF TA to continue the work on reviewing and amending the Central Bank Act and other relevant Acts, including central bank objectives, the role of the board, and the central bank's role in government cash management all within an understanding of PNG's circumstances. We also recognize that reforms will need to encompass not only legislative changes but strengthening the BPNG's capacity and improving coordination with the government, most notably with the Treasury and look forward to IMF engagement in these areas.

We welcome IMF efforts to improve dialogue and re-engage in person as COVID restrictions are reduced. The appointment of an IMF Resident Representative will be a key step in this regard. This should help strengthen the relationship with the Fund and the international community, promote better two-way communication and information sharing, and support our reform process.

In view of the strong performance under the SMP, and ongoing steps to reform the CBA, we request that management of the IMF approve this review under the SMP. We authorize the IMF to publish this letter and its attachment, in line with the commitment to transparency of our government.

Yours Sincerely,

/s/

Hon. Ian Ling Stuckey, CMG, MP.
Treasurer

Attachment I. Technical Memorandum of Understanding

This technical memorandum of understanding (TMU) sets out the understanding between the Papua New Guinea authorities and the International Monetary Fund (IMF) regarding the definitions of the indicative targets for the 6-month Staff-Monitored Program (SMP) spanning from December 7, 2021 to June 15, 2022, and should be read in conjunction with the Memorandum of Economic and Financial Policies (MEFP) that accompanies this TMU. It specifies the assessment criteria and indicative targets on which the implementation of the SMP will be monitored in the period following completion of the sole First Review in April 2022 and until program expiration in June 2022. In addition, the TMU reaffirms the terms and timeframe for transmitting the data that will enable IMF staff to assess program implementation and performance.

A. Assessment Criteria: Quantitative Targets

1. Assessment Criteria have been set for the end of December 2021 and performance under the program is assessed against those quantitative targets, unless otherwise specified. The assessment criteria are specified in Table 1 of the MEFP.

2. For the purposes of the SMP, the government is defined as the central government. Central government is defined as the component of general government covered by the national budget and encompasses fundamental activities of the national executive, legislative and judiciary powers. It includes Extra Budgetary Units which have individual budgets not fully covered by the national budget.

Definitions and Calculations

For the calculation, monitoring and evaluation of the assessment criteria, the following definitions will be used:

3. The cumulative fiscal deficit is calculated on a cash basis, and will be calculated as the net incurrence of financial liabilities less net acquisition of financial assets by the central government from the start of the fiscal year on January 1. The definitions and data to assess the fiscal deficit will be the same as set out in Table E ("Transactions in Assets and Liabilities") in the 2020 Final Budget Outcome published by the Government of PNG.

4. Net acquisition of financial assets will be calculated as the net change in domestic financial assets plus the net change in external financial assets of the central government.

5. Net incurrence of liabilities is defined as the sum of the net incurrence of domestic liabilities and net incurrence of external liabilities of the central government.

- **Domestic liabilities** will include debt securities outstanding; loans received from residents of PNG; insurance, pension and standardized guarantee schemes; financial derivatives and employee stock options; and other accounts payable.

- **External liabilities** will include debt securities outstanding; and loans received from lenders not resident of PNG; and any other liabilities that meet the definition of external debt as set out in paragraph 7 below.

To encourage monitoring of arrears clearance, the fiscal deficit excluding payments for the clearance of arrears incurred in past fiscal years may be reported as a memorandum item.

6. Debt is defined for the program purposes in accordance with paragraph 8 of the Guidelines on Public Debt Conditionality in Fund Arrangements, adopted by Decision No. 16919-(20/103) of the Executive Board of the IMF on October 28, 2020. The term "debt" will be understood to mean all current, i.e. not contingent liabilities, created under a contractual arrangement through the provision of value in the form of assets (including currency) or services, and which requires the obligor to make one or more payments in the form of assets (including currency) or services, at some future point(s) in time; these payments will discharge the principal and/or interest liabilities incurred under the contract. Debts can take various forms; the primary ones being as follows:

- loans, i.e., advances of money to the obligor by the lender made on the basis of an undertaking that the obligor will repay the funds in the future (including deposits, bonds, debentures, commercial loans and buyers' credits) and temporary exchanges of assets that are equivalent to fully collateralized loans under which the obligor is required to repay the funds, and usually pay interest, by repurchasing the collateral from the buyer in the future (such as repurchase agreements and official swap arrangements);

- suppliers' credits, i.e., contracts where the supplier permits the obligor to defer payments after the date on which the goods are delivered or services are provided; and

- leases, i.e., arrangements under which property is provided which the lessee has the right to use for one or more specified period(s) of time that are usually shorter than the total expected service life of the property, while the lessor retains the title to the property. For the purpose of these guidelines, the debt is the present value (at the inception of the lease) of all lease payments expected to be made during the period of the agreement excluding those payments that cover the operation, repair, or maintenance of the property.

Under the definition of debt set out in this paragraph, arrears, penalties, and judicially awarded damages arising from the failure to make payment under a contractual obligation that constitutes debt are debt. Failure to make payment on a contractual obligation that is not considered debt under this definition (e.g., payment on delivery) will not give rise to debt.

For the purposes of this SMP, debt shall include borrowing by, or that receives guarantees from, the central government and the Bank of Papua New Guinea (BPNG) as set out in paragraph 10. Accumulation of liabilities for the purposes of conducting monetary policy by the BPNG, including the issuance of securities or other marketable instruments such as central bank bills or notes, shall be excluded from the definition of debt.

7. **External public debt** is defined as a debt denominated, or requiring payment, in a currency other than the Kina. For program purposes, a debt and/or guarantee is considered contracted when all conditions for its coming into effect have been met, including approval by the Treasury. The contracting of credit lines with no predetermined disbursements schedules or with multiple disbursements will be also considered as contracting of debt.

8. The **present value of any external borrowing by the government** is defined as the annual discounted future debt service payments for that loan, using a discount rate of 5 percent.

9. **External concessional borrowing by the government** is defined as external borrowing where the difference between the face value of the loan and the present value of the loan as defined in paragraph 8 is not less than 35 percent when expressed as a percentage of the face value. A continuous zero ceiling will apply on the contracting or guaranteeing of external non-concessional debt by the Government or the BPNG. For the purposes of the SMP, official bilateral and multilateral borrowing is excluded from the external non-concessional borrowing ceiling to assess program performance.

10. **Government debt guarantee** means an explicit legal obligation of the central government or the BPNG to service a debt in the event of nonpayment by the borrower.

11. **External debt service arrears** are defined as external debt obligations of the government that have not been paid when due in accordance with the relevant contractual terms (taking into account any contractual grace periods). A continuous ceiling on the non-accumulation of external debt service arrears shall apply during the program period.

12. **Net international reserves** (stock) are defined as the difference between the BPNG's gross foreign assets and gross foreign liabilities, in line with the definition in Section 78 of the PNG Central Banking Act (2000).

13. **Gross foreign reserves are defined as the sum of**:

- The BPNG's holdings of monetary gold (excluding amounts pledged as collateral);
- Holding of Special Drawing Rights (SDRs);
- BPNG holdings of convertible currencies in cash or in nonresident financial institutions (deposits, securities, or other financial instruments);
- Papua New Guinea's reserve tranche position with the IMF.

14. **Gross foreign reserves exclude:**

- Any foreign currency claims on residents;
- Capital subscriptions in international institutions;
- Assets obtained through currency swaps of less than three months duration;

- Pledged, swapped, or any encumbered reserve assets, including but not limited to reserve assets used as collateral or guarantees for third-party external liabilities;

- Precious metals other than gold, assets in nonconvertible currencies and illiquid foreign assets.

15. Gross foreign reserve liabilities are defined as:

- The total outstanding liabilities of the BPNG to the IMF, excluding the SDR allocations;

- Convertible currency liabilities of the BPNG to nonresidents with an original maturity of up to and including one year;

- Commitments to sell foreign exchange arising from derivatives (such as futures, forwards, swaps, and options).

16. BPNG provision of foreign exchange to authorized foreign exchange dealers is defined as the amount of FX sold by BPNG to banks and other authorized FX dealers in PNG, as defined by the BPNG under FX administration regulations, each month, with the intention to assist meeting the FX orders in the market.

17. Direct monetary financing of the central government refers to BPNG providing direct financing to the central government that spans more than a single fiscal year. Limited, temporary financing for cash management purposes shall be permitted via the Temporary Advance Facility (TAF), and excluded from calculation of direct monetary financing, if it complies with the Operational Guidelines (Terms & Conditions) governing the use of the TAF between Treasury, Finance and BPNG. The acquisition of government securities by the BPNG as part of its monetary policy and management operations is excluded from the definition of monetary financing.

B. Assessment Criteria: Indicative Targets

18. Indicative targets have been set for end of December 2021 and March 2022. Indicative targets serve to assess progress under the program but are not binding quantitative criteria under which performance under the program is evaluated. The targets are specified in Table 1 of the MEFP. For the calculation, monitoring and evaluation of the indicative targets, the following definitions will be used:

Definitions and Calculations

19. Tax revenues of the government are defined in line with the GFSM 2014 and are classified into the following categories: (i) taxes on income, profits, and capital gains; (ii) taxes on payroll and workforce; (iii) taxes on property; (iv) taxes on goods and services; (v) taxes on international trade and transactions; and (vi) other domestic revenue, including non-tax revenue.

20. Domestic payment arrears are overdue domestic payment obligations of the central government, owed to entities legally incorporated in Papua New Guinea and residents of Papua New Guinea. They include obligations to domestic service providers but exclude government liabilities to other public sector units. Except in case where the terms and conditions of the transaction stipulate a longer period, payments are deemed to be in arrears when:

- Debt remains unpaid for more than 30 days after the due date stipulated in the agreement between the parties (creditor/debtor).
- Wages or pensions remain unpaid 90 days after their due date.
- Payments for goods and services rendered received more than 90 days after processing of the supporting documents submitted by suppliers.

The indicative target on the non-accumulation of new domestic arrears shall only be assessed against any arrears that are first accumulated in 2021, and not on arrears accumulated in 2020 or earlier.

21. Social and other policy priority spending is measured on a cash basis and comprises central government spending in the following areas: health, education and law and order (both capital and operating expenses).

C. Program Monitoring and Data Reporting

22. To facilitate the monitoring of program implementation, the Papua New Guinea authorities shall maintain a Program Monitoring Committee. The committee will be composed of senior officials from the Treasury and the Bank of Papua New Guinea, and shall be responsible for monitoring the performance of the program, informing the Fund regularly, and transmitting the supporting materials necessary for the evaluation of benchmarks.

23. The Committee will prepare and provide to the Fund staff electronically the following information contained in the data reporting table below.

Table 1. Papua New Guinea: Data Reporting for Program Monitoring				
Data Description	**Type of Data**	**Reporting Agency**	**Reporting Frequency**	**Reporting Lag**
Fiscal Sector				
Net acquisition of financial assets and net incurrence of financial liabilities	Budget operations	Treasury	Quarterly	1 month
Payments incurred by the central government on education, health, and law and order (both capital and current spending)	Budget operations	Treasury	Quarterly	6 weeks
Total domestic revenues received by the central government	Revenue	Treasury	Monthly	1 month
The monthly cash plan			Monthly	1 month
Total stock of domestic arrears, with a breakdown between service providers	Domestic arrears	Treasury	Monthly	1 month
Stock of domestic debt, disbursements, amortization, interest, and other fees and charges; face value, maturity, interest rate, and payment schedule	Domestic debt	Treasury	Monthly	1 month
Total volume of sovereign bond issued, with interest rate, maturity, and recipient			Monthly	1 month
The amount of new domestic debt contracted by Government			Monthly	1 month
Details of disbursed external budget support and project grants and loans	External debt	Treasury	Monthly	1 month
End of year external debt in U.S. dollars, by creditor, and originating currency.			Monthly	1 month
The amount of new external debt contracted by Government			Monthly	1 month
All guarantees provided by the government including guarantees to public corporations and private sector			Monthly	1 month
Real Sector				
Consumer Price Index	Economic indicators	NSO	Quarterly	3 months

Table 1. Papua New Guinea: Data Reporting for Program Monitoring (continued)				
Data Description	**Type of Data**	**Reporting Agency**	**Reporting Frequency**	**Reporting Lag**
National Accounts (breakdown of production) in real and nominal terms			Annual	24 months (latest GDP figures are for 2018)
Agricultural production data (volume/value of major products)		BPNG /Treasury	Quarterly	3 months
Mineral production data (volume/value of major products)		BPNG/ Treasury	Quarterly	3 months
Structural Benchmarks				
A table with a description of the status of implementation of the structural measures in Table 2 of the MEFP.	Structural benchmarks	Treasury	Quarterly	3 months
Monetary and Financial Sector				
Detailed balance sheet data of the BPNG submitted in the reporting template	Monetary Survey	BPNG	Monthly	1 month
Cash flows of the Waigani Public Account, including any use of TAF and TAF repayment			Monthly	1 month
Sale of FX by the BPNG to authorized FX dealers			Monthly	1 month
Depository Corporations Survey			Quarterly	3 months
Balance sheets and income statements by financial institutions (aggregate and by bank)			Quarterly	3 months
Financial Soundness Indicators (aggregate and by bank)			Quarterly	1 month
Lending activity of banks (by sector)			Monthly	1 month
External Sector				
Balance of Payments data in the reporting template provided by IMF staff	BOP	BPNG	Quarterly	3 months
Import and export data, by sectors			Quarterly	3 months
Net international reserves, including reserve assets/liabilities by original currency			Monthly	1 month
Foreign exchange flow data (by type of flow)			Monthly	1 month

Table 1. Papua New Guinea: Data Reporting for Program Monitoring (concluded)				
Data Description	Type of Data	Reporting Agency	Reporting Frequency	Reporting Lag
Banks' purchases and sales of foreign currency (specified by bank and by type of flow)			Monthly	1 month
List of the foreign exchange allocation pipeline (orderbook) with information about length of time needed to fulfill order			Monthly	1 month

PAPUA NEW GUINEA

STAFF REPORT FOR THE 2022 ARTICLE IV CONSULTATION AND REVIEW OF THE STAFF MONITORED PROGRAM — INFORMATIONAL ANNEX

May 25, 2022

Prepared By
Asia and Pacific Department
(In consultation with other departments)

CONTENTS

FUND RELATIONS

(As of April 30, 2022)

Membership Status

Joined: October 9, 1975; Article VIII

General Resources Account

	SDR Million	Percent Quota
Quota	263.20	100.00
Fund holdings of currency	262.76	99.83
Reserve position in Fund	0.45	0.17

SDR Department

	SDR Million	Percent Allocation
Net cumulative allocation	377.76	100.00
Holdings	259.00	68.56

Outstanding Purchases and Loans	SDR Million	Percent Quota
RCF Loans	263.2	100.00

Latest Financial Arrangements

Type	Approval Date	Expiration Date	Amount Approved (SDR million)	Amount Drawn (SDR million)
Stand-by	3/29/2000	9/28/2001	85.54	85.54
Stand-by	7/14/1995	12/15/1997	71.48	35.34
Stand-by	7/31/1991	9/30/1992	26.36	0.00

Projected Payments to Fund[1]

(SDR million; based on existing use of resources and present holding of SDRs):

	Forthcoming				
	2022	2023	2024	2025	2026
Principal				26.32	52.64
Charges/interest	0.37	0.59	0.59	0.59	0.59
Total	**0.37**	**0.59**	**0.59**	**26.91**	**53.23**

[1] When a member has overdue financial obligations outstanding for more than three months, the amount of such arrears will be shown in this section.

Safeguards Assessments

The first Safeguards Assessment of the Bank of Papua New Guinea (BPNG) was completed. The assessment found that the Central Banking Act requires amendments to sufficiently protect the

BPNG's financial, personal, and institutional autonomy and enhance governance arrangements. Such amendments remain necessary after the 2021 review of the Act. While transparency is supported by compliance with International Financial Reporting Standards (IFRS), audit arrangements should be improved to safeguard the external auditors' independence and align internal audit to international standards. The internal control system is being strengthened, including through the establishment of a risk management function. Closer engagement of the BPNG's oversight bodies over the ongoing initiatives is needed to ensure timely implementation.

Exchange Rate Arrangement

Papua New Guinea's de jure exchange rate arrangement is "floating". On June 4, 2014, the BPNG introduced an exchange rate trading margin with a kina buying rate within 75 basis points (bps) above the interbank midrate and a kina selling rate within 75 bps below the midrate. Since November 2020, the exchange rate has stabilized within a two percent band against the US dollar. Accordingly, the de facto exchange rate arrangement was reclassified to "stabilized" from crawl-like, effective November 3, 2020. The BPNG publishes the intervention data in its annual report and semi-annual monetary policy statement.

Papua New Guinea maintains the following exchange restrictions subject to IMF approval under Article VIII, Section 2(a) of the IMF's Articles of Agreement arising from: (i) the requirement to obtain a tax clearance certificate (TCC) evidencing the payment of all taxes prior to making payments or transfers for certain current international transactions; and (ii) the rationing of FX, which results in undue delays and arrears in current international payments. Papua New Guinea also maintains the following multiple currency practices (MCPs) subject to Fund approval under Article VIII, Section 3: an MCP arising from the potential spread deviation of more than 2 percent between the rates set by BPNG for its FX transactions with the government and embassies, and the rates used by AFEDs in transactions with their clients.

Article IV Consultations

The 2019 Article IV consultation discussions were held on October 28-November 9, 2019. It was concluded by the Executive Board on April 6, 2020 (IMF Country Report No. 20/95). Papua New Guinea is on the standard 12–month consultation cycle.

TA from Headquarters

FAD: In 2020, missions were conducted on IPSAS Cash Reporting, IRC external governance, Taxpayer service implementation, IRC organization design and IT tender evaluation support. Joint FAD/PFTAC mission on MTRS update and review were conducted in September and October 2020 and January-February 2021. In April 2021, TA was provided on the rewrite of Income Tax Act and Tax modeling. In December 2021, a mission on revenue administration program was carried focused on further development and introduction of new organizational structure for IRC.

LEG: A mission in September 2018 assisted in planning legislative reforms for the MTRS. In 2020 (February to March), a virtual mission was conducted on Institutional and Governance Review of the Internal Revenue Commission and PNG Customs

MCM: A mission in August 2018 delivered technical assistance in liquidity forecasting and management, and foreign exchange operations. Missions in December 2017 and February 2018 delivered TA on banking supervision.

STA: TA was provided on government finance statistics (January and September 2020); national accounts and price statistics (February 2020); a remote TA on Balance of Payments Statistics/Direct Investment (October 2020) and a remote TA on External Sector Statistics (February 2022). In January 2022 a virtual technical assistance mission was conducted on public sector debt statistics.

Resident Representative

The Regional Resident Representative Office for Pacific Island Countries based in Suva, Fiji was opened on September 13, 2010 and the office covers Fiji, Kiribati, Marshall Islands, Micronesia, Nauru, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu, and Vanuatu. Mr. Neil Saker is the current resident representative.

The Fund is in the process of opening a Resident Representative Office in Port Moresby.

RELATIONS WITH THE PACIFIC FINANCIAL TECHNICAL ASSISTANCE CENTER

(As of April 2022)

The Pacific Financial Technical Assistance Centre (PFTAC) in Suva, Fiji, is a regional TA institution operated by the IMF with financial support of PFTAC member countries, the Asian Development Bank, Australia, the European Union, Korea, New Zealand, Canada and the US Government. The Center's aim is to build skills and institutional capacity for effective economic and financial management that can be sustained at the national level. Member countries are: Cook Islands, Federated States of Micronesia, Fiji, Kiribati, Marshall Islands, Nauru, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Timor-Leste, Tokelau, Tonga, Tuvalu, and Vanuatu. Technical assistance to PNG suffered due to COVID 19.

A. Public Financial Management

PFTAC led a multilateral mission in July 2019 with colleagues from UNDP, World Bank, JICA, and the ADB for a full Public Expenditure Financial Accountability (PEFA) diagnostic assessment of the country's PFM systems, which was published in 2020. In September 2020, a remote mission helped formulate a sequenced and prioritized PFM reform roadmap, building on the findings of the 2020 PEFA assessment and taking on board capacity constraints. The government remains committed to the broader PFM roadmap.

B. Tax Administration and Policy

The Department of the Treasury, with FAD assistance, has developed a 2018-2022 Medium-Term Revenue Strategy (MTRS) of which a comprehensive Revenue Mobilization Framework is a key element. FAD missions[1] provided advice on the MTRS framework and content. PFTAC missions[2] facilitated the design of a new corporate plan, design and monitoring unit, taxpayer services unit and a large taxpayer office. Funding to support PNG's MTRS implementation had been sourced through the multi-lateral Revenue Mobilization Trust Fund (RMTF) and included the placement of an IMF resident advisor in Port Moresby (August 2018-June 2021). Support through the RMTF ended in June 2021, with continued capacity development provided through PFTAC. In December 2021, a PFTAC mission focused on further development and introduction of new organizational structure for IRC.

C. Financial Sector Regulation and Supervision.

In 2018 PFTAC and Bank PNG initiated the Supervision Framework Enhancement Program (SFEP), incorporating a Supervision Framework Development strategy and a TA plan. The SFEP covers

[1] Cotton (August 2017) and Baunsgaard (September 2017) provided advice on the MTRS framework and content.

[2] PFTAC missions in July 2017, December 2017, and September 2018 (STX McNeil) facilitated the design of a new corporate plan, design and monitoring unit, taxpayer services unit and a large taxpayer office.

development and enhancement of risk rating; supervisory action planning; on-site examination; financial analysis; and a review and update of legislation and prudential standards. The SFEP with Bank PNG has been successfully running for three and a half years, with significant development of Bank PNG's risk-based supervision (RBS) framework, in risk rating and supervisory action planning, and on-site examination and off-site analysis capabilities. In 2021, PFTAC provided TA to review and develop 11 prudential standards including consolidated supervision. The report was completed in August 2021.

D. Economic and Financial Statistics

Support for Real Sector Statistics has been provided in close collaboration with the Australian Bureau of Statistics (ABS). ABS has provided TA on data collection issues including business and household surveys, with temporary repeated secondments of ABS staff to the PNG National Statistics Office (NSO). PFTAC provides on-the-job training and improvement on the production system. Further PFTAC TA on real sector statistics is scheduled for FY23. Government finance statistics and public sector debt statistics TA are supported by PFTAC and the Data for Decisions (D4D) Trust Fund. External sector statistics continue to be supported by the Japan Administered Account for Selected IMF Activities (JSA) for the Asia-Pacific region through October 31, 2023.

E. Macroeconomic Analysis

In January 2019, the Department of Treasury hosted an interagency workshop with participants from the Department of Treasury, the Bank of Papua New Guinea, and the National Statistics Office on Economic and Fiscal Forecasting which was facilitated by the PFTAC macro advisor.
In May 2021, a three-week Financial Programing course was conducted by ICD and PFTAC, with the aim of this being part of the long-term adoption of a new Financial Programing model, with further missions planned.

F. Public Debt Management

During October and November 2021, a two-week regional training course provided capacity development on the fundamentals of debt reporting and monitoring. Department of Treasury officials attended the training and gained understanding of the benefits and key requirements of publishing reliable, comprehensive, timely, and accurate debt data.

In November 2021, PFTAC delivered a remote training on financial and loan analysis to Papua New Guinea Department of Treasury officials. Papua New Guinea has access to both a domestic debt market and external financing and CD of officials in financial and loan analysis is part of the foundations for improving debt management practices. The training focused on building capacity in financial and market concepts, debt and liability management operation instruments, loan structures and cashflows, and portfolio risk indicator analysis. Enhancing the foundational knowledge of officials is also fundamental towards Papua New Guinea's aim to raise overall Debt Management Performance Assessment (DeMPA) scores. The DeMPA is a diagnostic of government debt management practices and institutions.

INFORMATION ON THE ACTIVITIES OF OTHER IFIs

Information on the activities of other IFIs in Papua New Guinea can be found at:

- World Bank: https://www.worldbank.org/en/country/png
- Asian Development Bank: https://www.adb.org/countries/papua-new-guinea/main

STATISTICAL ISSUES

(As of April 2022)

I. Assessment of Data Adequacy for Surveillance
General: Data provision has some shortcomings, but data are broadly adequate for surveillance. Most affected areas are national accounts, fiscal accounts, and balance of payments.
National Accounts: The accuracy and reliability of the statistics are affected by inadequate source data and lagged release dates. Due to management and capacity constraints, GDP data is released with a lag of two years. In November 2021, the NSO released GDP for 2019. To assist the NSO in addressing these issues, PFTAC and ABS agreed on a coordinated approach to TA. ABS addressed the timely compilation and publication of GDP figures, while PFTAC focused on the steady improvement of data and methodology. Nevertheless, to increase user confidence in the NSO, proactive management and regular stakeholder engagement must improve.
Price Statistics: The NSO currently disseminates a quarterly consumer price index, with expenditure weights from the 2009–10 Household Income Expenditure Survey. These weights should ideally be updated. Producer price indexes are not compiled.
Government Finance Statistics (GFS): The Department of Treasury annually compiles and reports GFS data for the budgetary central government (BCG) to the IMF, making PNG a regular reporter, although coverage and timeliness could improve. Central government tax revenue, nontax revenue, and public expenditure data are deficient. Development budget expenditures and the utilization of grants and project loans are recorded with long lags, and limited records on the use of trust accounts are available. Tax revenues collected by authorities (extrabudgetary units of the central government) are generally not reflected in the central government's financial information. While interest payment records are accurate, there are timing issues regarding the recording of interest on discounted securities. Even though compiling, reconciling and disseminating public sector debt statistics and government guarantees has improved challenges remain in debt instrument and institutional coverage. These weaknesses contribute to discrepancies in financing between estimates from monetary and debt data and those derived from fiscal records. Financial balance development remains a priority to support better decision making for fiscal policy and fiscal sustainability. Papua New Guinea continue to benefit from technical assistance and regional capacity building initiatives through the PFTAC and Data for Decisions (D4D) Trust Fund.

Monetary and Financial Statistics: Monetary data are now being produced and reported to STA on a regular basis. Progress has been achieved by the BPNG in many areas of the collection, compilation, and dissemination of monetary and financial statistics (MFS), leading to the introduction of the standardized report form (SRF) for the central bank, other depository corporations (ODCs), and the other financial corporations (OFCs). A 2013 TA mission introduced general insurance companies into the institutional coverage of OFCs and an improved SRF for OFCs. Most of the monetary statistics published in *International Financial Statistics (IFS)* are currently aligned with the *Monetary and Financial Statistics Manual and Compilation Guide* (*MFSMCG*).
Financial sector surveillance: In the area of financial soundness indicators (FSIs), the BPNG has compiled selected FSIs for deposit takers to support the financial sector assessment. BPNG currently reports thirteen core financial soundness and eight additional indicators for deposit takers and real estate markets to STA, with quarterly data availability starting in 2008Q4 and in line with the 2019 FSI *Compilation Guide*. However, no FSIs are reported on other sectors such as other financial corporations, nonfinancial corporations, and households. Papua New Guinea reports data on several series indicators of the Financial Access Survey (FAS) including the two indicators (commercial bank branches per 100,000 adults and ATMs per 100,000 adults) adopted by the UN to monitor Target 8.10 of the Sustainable Development Goals (SDGs).
External Sector Statistics: PNG's annual balance of payments data up to 2018 are disseminated on the IMF's website. IIP data are not available. A Remote TA mission was conducted in February 2022 to improve the quality of external sector statistics (ESS). The mission conducted training to Bank of Papua New Guinea staff on compiling balance of payments statistics in line with the BPM6 framework and provided guidance on how to address critical data gaps, particularly in sectors with large cross-border transactions such as the liquified natural gas project, mining sector, and deposit taking corporations. Significant effort is required on the part of the authorities to implement the recommendations of the recent and previous TA Missions to improve the quality, coverage, periodicity and timeliness of ESS.
II. Data Standards and Quality
PNG began to participate in the General Data Dissemination System in 2012. PNG has not yet implemented the recommendations of the enhanced GDDS (e-GDDS) by launching a National Summary Data Page (NSDP).
III. Reporting to STA
PNG last reported GFS for publication in *Government Finance Statistics Yearbook* and *IFS* for 2017, covering only the budgetary central government. Monetary data are reported to STA for publication in *IFS* on a regular monthly basis. BOP data for 2018 were reported to STA for publication in *Balance of Payments Yearbook* and *IFS*. National accounts data for 2006-13 were reported to STA for publication in *IFS*.

Papua New Guinea: Table of Common Indicators Required for Surveillance

(As of May, 2022)

	Date of Latest Observation	Date Received	Frequency of Data[1]	Frequency of Reporting[1]	Frequency of Publication[1]
Exchange Rates	1/2022	3/1/2022	M	M	M
International Reserve Assets and Reserve Liabilities of the Monetary Authorities[2]	03/2022	05/06/2022	M	M	M
Reserve/Base Money	03/2022	05/06/2022	M	M	M
Broad Money	03/2022	05/06/2022	M	M	M
Central Bank Balance Sheet	03/2022	05/06/2022	M	M	Q
Consolidated Balance Sheet of the Banking System	11/2021	01/2022	M	M	Q
Interest Rates[3]	12/2021	01/2022	M	M	M
Consumer Price Index	12/2021	02/31/2022	Q	Q	Q
Revenue, Expenditure, Balance and Composition of Financing[4]—General Government[5, 8]	N/A	N/A	N/A	N/A	N/A
Revenue, Expenditure, Balance and Composition of Financing[4]—Central Government	12/2021	4/14/2022	A	A	A
Stocks of Central Government and Central Government-Guaranteed Debt[6]	12/2021	4/14/2022	Q	A	A
External Current Account Balance	Q2 2019	11/28/2019	Q	Q	Q
Exports and Imports of Goods and Services	Q2 2019	11/28/2019	Q	Q	Q
GDP/GNP	2019	11/04/2021	A	A	I
Gross External Debt	2018	07/03/2018	Q	A	A
International Investment Position[7, 8]	N/A	N/A	N/A	N/A	N/A

[1] Daily (D), Weekly (W), Monthly (M), Quarterly (Q), Annually (A), Irregular (I); and Not Available (N/A).

[2] Includes reserve assets pledged or otherwise encumbered as well as net derivative positions.

[3] Both market-based and officially-determined, including discount rates, money market rates, rates on treasury bills, notes, and bonds.

[4] Foreign, domestic bank, and domestic nonbank financing.

[5] The general government consists of the central government (budgetary funds, extra-budgetary funds, and social security funds) and state and local governments.

[6] Including currency and maturity composition.

[7] Includes external gross financial asset and liability positions vis-à-vis nonresidents.

[8] Lack of capacity prevented the authorities from providing the data.

INTERNATIONAL MONETARY FUND

PAPUA NEW GUINEA

May 25, 2022

STAFF REPORT FOR THE 2022 ARTICLE IV CONSULTATION AND REVIEW OF THE STAFF MONITORED PROGRAM—DEBT SUSTAINABILITY ANALYSIS

Approved By
Sanjaya Panth (IMF), Marcello Estevão and Hassan Zaman (both IDA)

Prepared by the staff of the International Monetary Fund (IMF) and the International Development Association (IDA)[1,2]

Papua New Guinea Joint Bank-Fund Debt Sustainability Analysis	
Risk of external debt distress	*High*
Overall risk of debt distress	*High*
Granularity in the risk rating	*Sustainable*
Application of judgment	*No*

Papua New Guinea (PNG) remains at high risk of debt distress under the Low-Income Country Debt Sustainability Framework (LIC DSF), with weak debt-carrying capacity. While the planned fiscal consolidation helps address debt vulnerabilities exacerbated by the global COVID-19 shock, the risk of both external and public debt distress continues to be assessed as high. Over the medium-term, public debt enters a downward trend and the projected temporary breaches of sustainability indicators can mostly be addressed by debt management operations as well as improvements in revenue generation. The Debt Sustainability Analysis (DSA) suggests that PNG is susceptible to exports and other shocks, signaling downside risks to the debt outlook in a global environment of high uncertainty. To lower the risk of debt distress and ensure debt sustainability, gradual fiscal consolidation, including boosting revenues, and steadfast structural reforms to promote private sector growth would be needed. Conditional on the implementation of the authorities plans for further fiscal consolidation and conservative financing strategies, PNG's external and overall debt is judged as sustainable.

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[1] The Composite Indicator (CI) of 2.62 is based on the latest available CI information—April 2022 IMF World Economic Outlook (WEO) and the World Bank's Country Policy and Institutional Assessment (CPIA) for 2021, indicating a "weak" capacity to carry debt.

[2] This Debt Sustainability Analysis has been prepared jointly by the International Monetary Fund and the World Bank, in accordance with the revised Debt Sustainability Framework for low-income countries approved by the Executive Boards of the IMF and the International Development Association.

PUBLIC SECTOR DEBT COVERAGE

1. The coverage of public debt in the DSA is unchanged from the previous (December 2021) DSA (Text Table 1). The segments of the public sector captured in the DSA include the central government, state and local government, and to some extent guarantees to other entities in the public and private sector, including parts of state-owned enterprises (SOEs). However, debt numbers do not fully capture implicit government guaranteed debts of SOEs and unfunded superannuation liabilities relating to pensions. For the purposes of this DSA, the coverage of public sector debt remains unchanged from the last DSA, which was prepared in December 2021 in the context of a request for an IMF Staff Monitored Program (SMP). Given continued difficulties in capturing and assessing SOE risks, a contingent liabilities stress test is included in this DSA, assuming 9 percent of GDP as SOE debt is not captured in official public debt data, and 3 percent of GDP for other elements of general government (mainly unfunded superannuation liabilities related to pensions). Separately, according to the World Bank's PPP database, the PPP capital stock in PNG is zero and, therefore, no default shock is triggered. A financial market shock of 5 percent is added, reflecting the average fiscal cost of financial crisis in low-income countries. With these assumptions, the cumulative shock in the contingent liabilities stress test amounts to 17 percent of GDP—compared to 7 percent under default assumptions.

Text Table 1. Papua New Guinea: Coverage of Public Debt

	Subsectors of the public sector	Subsection Covered
1	Central government	X
2	State and local government	X
3	Other elements in the general government	
4	o/w: Social security fund	
5	o/w: Extra budgetary funds (EBFs)	
6	Guarantees (to other entities in the public and private sector, including to SOEs)	X
7	Central bank (borrowed on behalf of the government)	
8	Non-guaranteed SOE debt	

1	The country's coverage of public debt	The central, state, and local governments, government-guaranteed debt			
		Default		Used for the analysis	Reasons for deviations from the default settings
2	Other elements of the general government not captured in 1.	0	percent of GDP	3.0	Unfunded superannuation liabilities, relating to pensions.
3	SoE's debt (guaranteed and not guaranteed by the government) 1/	2	percent of GDP	9.0	SOE sovereign guarantee in dispute.
4	PPP	35	percent of PPP stock	0.0	
5	Financial market (the default value of 5 percent of GDP is the minimum value)	5	percent of GDP	5.0	
	Total (2+3+4+5) (in percent of GDP)			17.0	

BACKGROUND ON DEBT

2. Between 2017 and 2021, the stock of public debt in PNG increased from around 25 billion Kina to 49 billion Kina. This was mainly due to external loans, while the creditor composition has been gradually shifting away from commercial loans towards official multilateral and bilateral financing. Shocks from the pandemic, including the terms-of-trade shock to PNGs main exports (mainly LNG and metals) have exacerbated fiscal deficits and increased government debt, resulting in a gross nominal public debt path that is higher than at the time of the 2019 Article IV consultation. However, expensive commercial loans have been replaced with official multilateral and bilateral financing at more favorable conditions. This has helped to improve debt stability indicators. PNG participated in the G-20 Debt Service Suspension Initiative (DSSI) which lowered debt service costs during 2020 and 2021. Public and Publicly Guaranteed (PPG) external debt figures used for this DSA are consistent with the information in the World Bank's International Debt Statistics.

3. **The IMF's general allocation of Special Drawing Rights (SDRs) became effective in August 2021, with SDR 252 million (US$ 357 million, or 95.7 percent of quota) allocated to PNG.** The authorities decided to use the full SDR allocation to support the 2021 budget. They used the SDR allocation to replace costly financing, while reducing the budget deficit. The SDR allocation is included in public debt numbers for the purpose of this DSA (international reserves with the central bank increase temporarily until the SDRs are converted into hard currency and used), and the associated debt service for the amount outstanding is reflected as well.

4. **PNG is an IDA blend country, with total IDA19 allocation at SDR 178.4 million.** IDA's Performance-Based Allocation (PBA) for PNG benefitted from resource frontloading amid a shortening of IDA19 to two years as well as an intra-regional reallocation for SDR 0.6 million, approved in November 2021. The IDA decision to graduate a country to IBRD-only status is based on an assessment of the country's macroeconomic prospects, risk of debt distress, vulnerability to shocks, institutional constraints, and levels of poverty and social indicators.

5. **The IDA Sustainable Development Finance Policy (SDFP) supports PNG in addressing key debt vulnerabilities.** This may allow future access to full IBRD borrowing. As part of the SDFP, PNG has satisfactorily implemented the Performance and Policy Actions (PPA) for fiscal year 2021. These were aimed at improving debt management and debt transparency. PNG has two further SDFP PPAs for fiscal year 2022: (i) a US$ 1 billion non-concessional PPG borrowing limit for new non-concessional long-term contractual obligations, which applies continuously throughout FY22, and (ii) to operationalize the 2021 State Guarantee Policy (supported by the SDPF in FY21) with the adoption of a binding Guidance Note for Loan Guarantees. The Guidance Note would be the most important step for functionality of the Guarantee Policy, with the overall objective to incorporate credit risk assessment in decision making on guarantees and to improve reporting by guaranteed entities.

BACKGROUND ON MACROECONOMIC FORECASTS

6. **Economic activity in 2020 was significantly disrupted by the pandemic but has rebounded since then** (*Text Table 2*). Real GDP in 2021 is estimated to have increased by 1.2 percent due to stronger demand for PNG's key exports as well as high global commodity prices. The pre-crisis forecast (2019 Article IV Staff Report) had 2021 GDP growth at 2.8 percent. Headline inflation (period-average CPI) rose to an estimated 4.5 percent in 2021, reflecting spikes in food and medical prices and the depreciation of the Kina. Partly resulting from the Porgera mine closure, the 2021 current account surplus is estimated to have

decreased to 19 percent of GDP in 2021. Over the medium-term, the forecast includes a marginally smaller surplus, around 18 percent of GDP.

Text Table 2. Papua New Guinea: DSA Vintages: Macroeconomic and Fiscal Assumptions, 2021-2032

	DSA Vintage	2020	2021	2022	2023	2024-2032 (average)
Real GDP growth y/y (in percent)	**2022**	**-3.5**	**1.2**	**4.2**	**4.7**	**3.0**
	2021	-3.5	1.7	4.8	4.3	3.1
Resource sector	2022	-8.3	-3.5	4.8	5.9	0.1
	2021	-8.4	-3.2	8.5	4.0	-0.1
Non-resource sector	2022	-1.2	3.2	4.0	4.3	4.1
	2021	-1.2	3.9	3.3	4.5	4.2
Inflation, annual average (consumer prices, percent)	**2022**	**4.9**	**4.5**	**6.4**	**5.4**	**4.6**
	2021	4.9	5.0	5.6	4.7	4.5
Current account balance (percent of GDP)	**2022**	**22.4**	**18.7**	**23.1**	**22.0**	**17.7**
	2021	21.2	20.2	22.6	21.0	21.2
Growth of exports of G&S (US$, in percent)	2022	-10.8	-3.2	26.6	3.4	2.3
	2021	-20.4	11.0	15.1	4.7	2.7
Growth of imports of G&S (US$, in percent)	2022	-22.3	-3.8	9.9	6.3	3.7
	2021	-20.7	2.2	8.7	9.4	3.3
Primary balance (percent of GDP)	**2022**	**-6.0**	**-4.3**	**-3.4**	**-2.5**	**1.4**
	2021	-6.0	-5.1	-3.7	-2.7	1.4
Government revenues (excluding grants, percent of GDP)	2022	12.5	12.4	13.1	13.3	15.0
	2021	12.5	12.7	13.8	14.0	14.6

7. **Fiscal assumptions for 2022, under the SMP, include a gradual consolidation while ensuring space for needed spending is preserved**. Parliament approved a budget that aims for an overall deficit of 5.9 percent of GDP, below the 6 percent target agreed with the Fund as part of the Staff Monitored Program. This budget envisages an improvement in domestic revenues, driven by a cyclical improvement in tax revenues and policy measures taken to increase the contribution from SOEs following the passage of the *Non-Tax Revenue Bill* while expenditures will be focused on supporting the recovery, continuing the shift toward capital spending, adequately financing education, and the one-off allocation for the organization of the elections. The baseline projection assumes vaccination rates remain slow, but low mobility prevents large-scale transmission between urban and rural communities. In March 2022, the authorities announced a temporary relief package to address the impacts of rising food and fuel prices triggered by the war in Ukraine consisting of tax relief and higher spending, offset by higher revenue from the mining sector due to the increase in commodity prices. As a result, the government does not envisage an increase in the fiscal deficit beyond the budget target for the year.

8. **The medium-term baseline macroeconomic forecast is broadly unchanged from the 2021 DSA** (Text Table 2). At 3.1 percent, the long-term potential real growth estimate remains unchanged from the 2021 DSA. Inflation is projected to remain significantly higher in the medium term, before falling to an annual average of 4.5 percent, owing largely to imported inflation from global markets. As strong global demand for PNG's export goods is expected to persist over the medium-term, and with resource-sector projects that have been delayed by the pandemic coming on stream, the current account surplus is forecast to remain very large and around 18 percent of GDP.

Text Table 3. Papua New Guinea: Summary of Fiscal Operations, 2020-2024
(In percent of GDP)

	2020	2021		2022			2023	2024
		Prog.1/	Prel.	Prog.1/	Budget 2/	Revised 3/	Proj.	
Revenue and Grants	**14.2**	**14.4**	**14.7**	**15.6**	**14.8**	**15.0**	**14.8**	**15.3**
Taxes	11.5	11.7	11.8	12.3	11.5	11.1	11.8	12.4
Grants	1.7	1.8	2.2	1.8	1.7	1.7	1.5	1.5
Other Revenue	1.0	1.0	0.7	1.5	1.7	2.2	1.5	1.4
Resource revenue 4/	0.9	0.9	1.1	1.2	1.5	2.0	1.0	1.3
Non-resource revenue	13.3	13.5	13.6	14.4	13.4	13.0	13.7	14.0
Expenditure	**22.7**	**21.8**	**21.3**	**21.6**	**20.3**	**20.5**	**19.3**	**19.0**
Expense	18.6	17.6	17.4	16.6	15.5	15.7	14.8	14.3
Compensation of employees	6.8	6.4	6.4	6.0	5.5	5.5	5.4	5.1
Use of goods and services	6.3	6.5	6.5	6.0	5.6	5.8	5.3	5.0
Interest	2.5	2.2	2.4	2.3	2.1	2.1	2.1	2.6
Other	2.9	2.5	2.1	2.3	2.3	2.3	2.1	1.6
Net acquisition of non-financial assets	4.1	4.2	3.9	5.0	4.8	4.8	4.5	4.2
Gross operating balance	-4.4	-3.2	-2.8	-1.1	-0.7	-0.7	0.0	0.5
Net lending (+)/borrowing (-)	**-8.6**	**-7.4**	**-6.6**	**-6.0**	**-5.5**	**-5.5**	**-4.5**	**-3.7**
Primary balance	-6.0	-5.1	-4.3	-3.7	-3.4	-3.4	-2.5	-1.1
Non-resource net lending (+)/borrowing (-)	-9.4	-8.3	-7.7	-7.2	-6.9	-7.5	-5.5	-5.0
Non-resource primary balance	-6.9	-6.1	-5.3	-4.9	-4.8	-5.4	-3.5	-2.4

Sources: Department of Treasury; and IMF staff estimates and projections.
Prel. = Preliminary, Proj. = IMF staff projection.
1/ Estimates/projection at the time of the approval of the Staff Monitored Progam in December 2021.
2/ Budget approved by Parliament for FY 2022 in December 2021
3/ Revised fiscal frame with fiscal relief package approved in March 2022 to addess rising food and fuel prices.
4/ Does not include projected revenues from new mining projects where the investment decision has not yet been reached.

9. **The medium-term baseline also assumes rapid progress on fiscal consolidation, as envisaged by the authorities.** This is appropriate to strengthen debt sustainability. While continued primary deficits are anticipated in the short-term (Text Table 3), the projection builds in a significant amount of fiscal consolidation and primary surpluses in the second half of the projection period, consistent with the authorities plans to meet the requirements of the Fiscal Responsibility Act, which specifies government debt should be maintained at no more than 40 percent of GDP over the long term. The authorities project a sharp increase in tax revenues from the PNG LNG project from 2026 onward, as tax exemptions expire. Further, the authorities see scope for significantly higher dividends after loan amortization for the project is completed but this is not yet included in the baseline. Achieving a balanced budget by 2027 would lower the risks from significant debt service obligations on external borrowing coming due in 2028.

10. **The main downside risks include: outbreaks of Covid-19, natural disasters, lower global growth, and social or political instability.** As new Covid-19 variants emerge, in the absence of faster progress on vaccinations, further restrictions and lockdowns are possible, with the attendant impact on growth and external inflows, particularly if the resource sector is forced to shut down again due to a high number of infections. PNG is also vulnerable to natural disasters (flooding, landslides and earthquakes) as well as the impact of climate change (through droughts and sea level rises). Lower global growth would likely impact PNG through lower commodity prices, with adverse consequences for the balance of payments and budget through lower resource revenue. Political and social risks are also elevated in the lead-up to, as well as after, the 2022 general elections. With limited sources of financing available in an adverse scenario, and continued pressing social and development needs, the room for significant policy

adjustment is relatively limited. The current SMP provided an important anchor for the authorities to advance their reform agenda, but this expires in 2022. If growth deteriorated significantly compared to the projections, further debt buildup may be needed to finance the budget and maintain government services.

11. The war in Ukraine is impacting PNG through higher commodity prices and higher inflation. This has led to a stronger balance of payments and higher fiscal revenues, given that PNG is a large commodity producer. Sustained higher commodity prices represent an upside risk to inflation and the fiscal projection. Other upside risks include the start of any of several resource projects, including Papua LNG, P'nyang LNG and the Wafi Golpu mining project, where the investment decisions have not yet been reached and thus are not included in the baseline. These could boost growth and fiscal revenues over the medium term.

12. The realism tools indicate that the government's primary balance adjustment is ambitious. At about 3.8 precent, the three-year cumulative adjustment the primary balance is within the top 12 percent of historical experiences, relative to peers. Much of this adjustment arises during 2022 and reflects temporarily higher deficits, because of the pandemic (Figure 4). Similarly, one-off factors also explain the divergence of GDP growth from the implied path consistent with the range fiscal multipliers. Normal operations are assumed to resume at the Ok-Tedi and Simberi mines in 2022, while the Porgera mine is expected to reopen in Q4 2022, contributing to strong growth in the resource sector.

13. Financing mix: For domestic financing, the DSA assumes that the composition of T-bills and T-bonds remains unchanged compared to the past six years. For the near-term, the DSA considers existing commitments and, from 2025, the DSA assumes that, on average, one-third of the financing needs are covered from official multilateral and bilateral resources, while the rest is domestic financing, with a balanced mix of bonds and T-bills. Continued development of the domestic debt market is necessary to increase liquidity and transition towards greater reliance upon domestic financing sources. Phase 2 of the Central Banking Act review is expected to look at competition in the domestic banking sector. During the SMP, there was a zero limit to new non-concessional external borrowing (NCB) by the Department of Treasury and Bank of Papua New Guinea; multilateral and official bilateral financial support is exempted from this limit. NCB may be allowed only in exceptional circumstances, which may be warranted when financing is needed for a project integral to the authorities' development program for which concessional financing is not available, or when non-concessional borrowing is used for debt management operations that improve the overall public debt profile.

COUNTRY CLASSIFICATION AND DETERMINATION OF SCENARIO STRESS TEST

Text Table 4. Papua New Guinea: Composite Indicator and Applicable Thresholds

Components	Coefficients (A)	10-year average values (B)	CI Score components (A*B) = (C)	Contribution of components
CPIA	0.385	2.871	1.11	42%
Real growth rate (in percent)	2.719	2.407	0.07	3%
Import coverage of reserves (in percent)	4.052	52.582	2.13	81%
Import coverage of reserves^2 (in percent)	-3.990	27.649	-1.10	-42%
Remittances (in percent)	2.022	0.315	0.01	0%
World economic growth (in percent)	13.520	3.050	0.41	16%
CI Score			2.62	100%
CI rating			Weak	

Final	Classification based on current vintage	Classification based on the previous vintage	Classification based on the two previous vintages
Weak	Weak	Weak	Weak
	2.62	2.63	2.64

Applicable thresholds

APPLICABLE	
EXTERNAL debt burden thresholds	
PV of debt in % of	
Exports	140
GDP	30
Debt service in % of	
Exports	10
Revenue	14

APPLICABLE	
TOTAL public debt benchmark	
PV of total public debt in percent of GDP	35

14. PNG's debt carrying capacity is assessed as weak. According to the April 2022 World Economic Outlook and Country Policy and Institutional Assessment (CPIA), PNG's Composite Indicator (CI) is 2.62, indicating weak debt-carrying capacity (Text Table 4).[3] Hence, the applicable thresholds are 30 percent for the present value (PV) of external debt-to-GDP ratio; 140 percent for the PV of the external debt-to-exports

[3] At 2.62 PNG's CI is close to the weak/medium threshold of 2.69.

ratio; 10 percent for the external debt service-to-exports ratio; 14 percent for the external debt service-to-revenue ratio; and 35 percent for the PV of public debt-to GDP ratio, respectively.

15. Scenario stress tests: As indicated in the section on public debt coverage, a contingent liabilities stress test is included to account for SOE debt not captured in official public debt data.[4] Further, given the size and importance of PNG's resource sector (with a share of commodities in total exports of goods and services of 96 percent), a commodity price shock is included in the DSA. Considering the high price volatility over the past two year, the fuel price shock is set at 35 percent (compared to the default shock of 27 percent), and the shock to non-fuel commodity prices is set to 21 percent—with 20 percent for base metals and precious metals, and 22 percent for agricultural commodities other than grain (price shocks to grain like wheat, corn, and soybeans, are not relevant for PNG and, therefore, not included in the stress test). Mitigating factors are included as well, and at default values (2 percent for fuel, and 27 percent for non-fuel). PNG's single outstanding Eurobond (maturing in 2028) activates the market financing module.

DEBT SUSTAINABILITY

A. External Debt Sustainability Analysis

16. Under the baseline scenario, the debt-service to revenue indicator is projected to breach its threshold. This, relatively large, breach in 2028 arises due to the bullet payment for the US$ 500 million Eurobond, which was issued in 2018. After 2028, the indicator remains close to the threshold with further marginal breaches until 2032. In the baseline scenario, the present value of the debt-to-GDP ratio as well as the debt-to-exports and debt service-to-export ratios remain below their respective thresholds over the entire projection horizon. Each of these indicators are on a downwards trend.

17. Stress tests point to vulnerabilities in PNG's external debt dynamics particularly with respect to exports shocks, which would cause threshold breaches for all four external sustainability indicators. Changes in policy and the structure of the economy manifests in a divergence between the historical scenario and the baseline. The historical scenario reflects large current account deficits associated with the construction phase of PNG LNG and is not considered an appropriate indicator for future risks. The market financing risk module indicates a moderate risk of heightened liquidity pressures as the EMBI spread is elevated, although GFNs remain below their benchmark. However, a heightened market stress event would not have a substantial impact of debt burden indicators (Figure 5). PNG's elevated sovereign spreads likely reflect the perceived risks due to the country's characteristics (small and undiversified export base, small revenue base, vulnerability to shocks).

18. As in the past, the assessment of debt dynamics is hampered by large residuals from external financial flows from money transfer by resource companies via offshore accounts (Figure

[4] In the context of the previous SMP, which expired in end-June 2021, the authorities initiated an SOE reform program to reduce the backlog of audited annual financial statements and to strengthen SOE oversight and improve understanding of fiscal risks. This program includes a detailed review of SOE debt and government guarantees and is also expected to improve the reporting of public debt.

3). The published data on the current account surplus in PNG is likely overstated due to long-standing challenges in classifying large income account outflows, including external debt service payments related to resource projects, under the financial account rather than the current account.

B. Public Sector Debt Sustainability Analysis

19. Public debt ratios have increased substantially in recent years and reached 51 percent of GDP in 2021. Starting from this level means that the public debt sustainability indicator is in breach of the threshold for countries with weak debt-carrying capacity (that is, 35 percent of GDP) during the first half of the projection horizon. However, the debt-to-revenue ratio sees a continuous downward trend over the projection horizon. In the baseline projection, the continuous fall in the public debt-to-GDP ratio over the next 5 years arises through stronger real GDP growth and a smaller fiscal deficit than over the past 5 years, as growth headwinds wane and gradual fiscal consolidation continues (Figure 3).

20. A tailored stress test for the combined contingent liability shock causes a deterioration in public debt sustainability (Figure 2 and Table 4). The trajectory of the PV of the public debt-to-GDP ratio shifts upwards by 16 percentage points from the baseline, representing the most extreme shock for all three public debt indicators. This analysis suggests contingent liabilities represent one important source of vulnerabilities in PNG.

RISK RATING AND VULNERABILITIES

21. PNG remains at "high" risk of external and overall debt distress. The (mechanical) external debt distress rating as well as the overall debt distress rating are "high", owing to the breaches of sustainability thresholds under the baseline scenario, as discussed in the previous section. No staff judgement has been applied to these ratings.

22. Debt service on existing loans, paired with relatively weak revenue generation, are expected to almost double the debt service-to-revenue ratio by 2025. However, as debt service reduces and revenues increase, and barring further shocks to demand growth, the indicator enters a significant downward trend from this peak.

23. Stress tests show that adverse shocks to exports and contingent liabilities constitute the main risks to public debt sustainability. Further, the historical scenario indicates that it will be challenging to reduce debt from current levels and that reforms, including those already implemented during the SMP, are essential for supporting the sustainability of public finances. Market financing risks continue to be relevant, with the EMBI spread threshold breached, pointing to moderate market financing pressures.

24. Debt dynamics are assessed as sustainable. Public debt is expected not to increase in the near-term and to enter a clear downward path over the medium-term. Also, the projected temporary breaches of sustainability indicators can be prevented by debt management operations as well as by boosting revenue generation. The external debt-to-GDP and debt-to-exports ratios are below their thresholds over the entire projection horizon. Public external and overall debt is judged to be sustainable conditional on the implementation of the authorities plans for further fiscal consolidation and conservative financing strategies.

AUTHORITIES' VIEWS

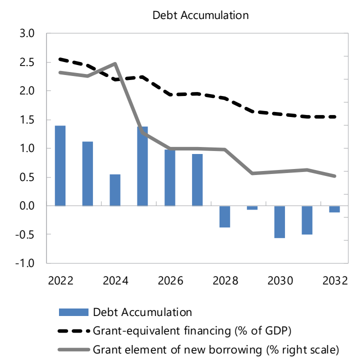
25. The authorities noted the Staff's assessment that PNG remains at high risk of debt distress but remains sustainable under the baseline projection. In discussions, the authorities agreed that large financing requirements to dampen the effects of the COVID-19 pandemic on PNG's economy have left their mark on public debt, and that redemption of the US$ 500 million Eurobond in 2028, issued in 2018, is a key risk. However, the authorities were more optimistic about their debt-carrying capacity and perceived a lower risk of debt distress, pointing to increased revenues by 2027 as debt payments for the PNG LNG project are completed. They highlighted their strategy in recent years to substitute costly financing with concessional financing from multilateral and bilateral partners, which has improved PNG's debt profile. The authorities noted interest costs of domestic securities have fallen over the past two years. They also highlighted the importance of more favorable future contract negotiation and the medium-term revenue strategy as mitigating factors, which will reduce risks in the medium-term. The authorities are committed to fiscal consolidation and conservative financing strategies to support the sustainability of PNG's debt going forward.

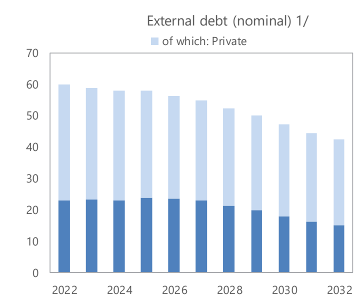
Table 1. Papua New Guinea: External Debt Sustainability Framework, Baseline Scenario, 2019-2042

(In percent of GDP, unless otherwise indicated)

	Actual			Projections												Average 8/	
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2042	Historical	Projections
External debt (nominal) 1/	62.6	68.6	66.7	60.0	58.8	58.0	57.9	56.2	54.7	52.4	49.9	47.1	44.5	42.3	24.4	74.9	52.9
of which: public and publicly guaranteed (PPG)	18.0	23.0	24.7	22.9	23.2	23.1	23.8	23.5	23.0	21.3	19.8	17.9	16.2	14.9	6.0	9.2	20.9
Change in external debt	-8.9	6.0	-1.9	-6.7	-1.2	-0.8	-0.1	-1.6	-1.5	-2.3	-2.5	-2.8	-2.7	-2.1	-1.8		
Identified net debt-creating flows	-20.0	-22.5	-25.7	-25.8	-24.9	-22.6	-21.8	-20.9	-20.0	-19.5	-18.6	-17.8	-17.1	-16.3	-10.4	-13.2	-20.5
Non-interest current account deficit	-20.4	-24.2	-20.1	-24.4	-23.1	-21.6	-20.7	-19.7	-20.0	-19.5	-18.6	-17.8	-17.0	-16.3	-10.3	-13.1	-19.9
Deficit in balance of goods and services	-22.7	-23.0	-20.2	-24.3	-23.3	-21.8	-21.0	-20.0	-19.2	-18.6	-17.9	-17.2	-16.4	-15.7	-10.1	-13.1	-19.6
Exports	45.8	41.0	35.8	39.2	38.2	36.8	35.7	34.5	33.2	32.5	31.4	30.4	29.3	28.3	20.1		
Imports	23.1	18.0	15.7	14.9	14.9	15.1	14.8	14.4	14.0	13.9	13.5	13.2	12.9	12.6	10.0		
Net current transfers (negative = inflow)	-0.3	-1.2	-1.0	-1.3	-1.2	-1.4	-1.3	-1.2	-1.2	-1.1	-1.0	-1.0	-0.9	-0.9	-0.5	-0.9	-1.1
of which: official	-1.4	-1.2	-1.1	-1.4	-1.3	-1.3	-1.2	-1.1	-1.1	-1.0	-1.0	-0.9	-0.9	-0.8	-0.4		
Other current account flows (negative = net inflow)	2.6	0.1	1.1	1.3	1.4	1.5	1.5	1.5	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.9	0.8
Net FDI (negative = inflow)	0.1	-0.3	-0.3	-0.3	-0.3	-0.3	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.1	0.7	-0.2
Endogenous debt dynamics 2/	0.3	2.0	-5.3	-1.2	-1.5	-0.7	-0.8	-0.9	0.2	0.2	0.2	0.2	0.1	0.1	0.1		
Contribution from nominal interest rate	2.1	1.8	1.4	1.2	1.1	1.0	0.8	0.7	1.8	1.8	1.7	1.6	1.5	1.4	0.9		
Contribution from real GDP growth	-3.1	2.2	-0.7	-2.4	-2.7	-1.7	-1.6	-1.6	-1.6	-1.6	-1.5	-1.4	-1.4	-1.3	-0.8		
Contribution from price and exchange rate changes	1.3	-2.0	-6.0	...	...	...	...	...	...	...	...	...	...	...	...		
Residual 3/	11.2	28.5	23.8	19.1	23.7	21.7	21.7	19.3	18.5	17.1	16.2	15.0	14.4	14.2	8.5	12.5	18.3
of which: exceptional financing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Sustainability indicators																	
PV of PPG external debt-to-GDP ratio	...	...	23.1	21.2	21.1	20.8	21.2	20.9	20.5	19.2	18.0	16.4	14.9	13.9	5.6		
PV of PPG external debt-to-exports ratio	...	...	64.6	54.1	55.1	56.4	59.2	60.6	61.7	59.0	57.2	53.9	50.8	49.0	28.1		
PPG debt service-to-exports ratio	1.2	4.8	4.5	2.7	3.5	3.9	4.6	5.0	5.0	8.5	6.7	8.1	7.7	7.4	6.0		
PPG debt service-to-revenue ratio	3.8	15.8	12.8	7.9	10.2	10.3	11.5	11.6	11.1	18.7	13.9	15.9	14.4	13.2	7.6		
Gross external financing need (Million of U.S. dollars)	-2319.0	-3906.7	-3298.9	-5617.9	-5343.7	-5404.7	-5262.8	-6134.5	-5612.5	-5254.2	-5605.6	-5573.9	-5747.5	-5949.5	-7497.7		
Key macroeconomic assumptions																	
Real GDP growth (in percent)	4.5	-3.5	1.2	4.2	4.7	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.1	3.1	3.4	4.0	3.3
GDP deflator in US dollar terms (change in percent)	-1.7	3.3	9.5	10.9	1.3	1.1	1.5	3.0	3.2	1.9	3.2	3.2	3.3	3.3	3.2	0.7	3.3
Effective interest rate (percent) 4/	3.1	2.8	2.2	2.1	2.0	1.8	1.5	1.3	3.5	3.5	3.4	3.4	3.4	3.3	3.6	2.7	2.6
Growth of exports of G&S (US dollar terms, in percent)	12.7	-10.8	-3.2	26.6	3.4	0.3	1.5	2.2	2.5	2.7	2.7	2.8	2.9	2.9	3.2	4.4	4.6
Growth of imports of G&S (US dollar terms, in percent)	43.3	-22.3	-3.8	9.9	6.3	5.1	2.5	3.4	3.6	3.6	3.7	3.7	3.9	4.0	4.3	-4.0	4.5
Grant element of new public sector borrowing (in percent)	...	...	...	41.5	40.7	43.3	28.4	24.9	24.9	24.8	19.6	19.9	20.2	19.0	19.6	...	27.9
Government revenues (excluding grants, in percent of GDP)	14.2	12.5	12.4	13.1	13.3	13.8	14.4	14.7	14.8	14.8	15.1	15.5	15.8	16.0	16.0	15.7	14.7
Aid flows (in Million of US dollars) 5/	1258.7	1736.2	1119.8	917.6	975.9	816.9	814.3	764.8	813.6	808.6	697.6	719.8	742.7	766.4	1006.6		
Grant-equivalent financing (in percent of GDP) 6/	...	...	...	2.6	2.4	2.2	2.2	1.9	2.0	1.9	1.6	1.6	1.5	1.5	1.1	...	2.0
Grant-equivalent financing (in percent of external financing) 6/	...	...	...	67.2	63.7	70.0	52.8	54.5	56.7	57.1	59.5	59.9	60.2	54.5	59.9	...	59.6
Nominal GDP (Million of US dollars)	24,751	24,670	27,344	31,603	33,524	34,909	36,486	38,701	41,139	43,181	45,898	48,800	51,977	55,402	105,634		
Nominal dollar GDP growth	2.7	-0.3	10.8	15.6	6.1	4.1	4.5	6.1	6.3	5.0	6.3	6.3	6.5	6.6	6.7	4.5	6.7
Memorandum items:																	
PV of external debt 7/	...	...	65.1	58.3	56.7	55.7	55.2	53.6	52.2	50.3	48.1	45.6	43.2	41.3	24.1		
In percent of exports	...	...	181.8	148.6	148.3	151.2	154.5	155.7	157.3	154.6	153.2	150.2	147.3	145.7	119.9		
Total external debt service-to-exports ratio	23.9	21.0	23.2	17.5	19.4	17.4	18.4	12.0	19.9	23.2	21.0	21.7	21.0	20.1	16.5		
PV of PPG external debt (in Million of US dollars)			6326.8	6707.7	7058.5	7244.1	7727.2	8085.1	8432.9	8278.0	8245.8	7987.3	7741.5	7682.0	5955.3		
(PVt-PVt-1)/GDPt-1 (in percent)				1.4	1.1	0.6	1.4	1.0	0.9	-0.4	-0.1	-0.6	-0.5	-0.1	-0.2		
Non-interest current account deficit that stabilizes debt ratio	-11.6	-30.2	-18.2	-17.7	-21.9	-20.8	-20.6	-18.1	-18.6	-17.2	-16.1	-15.0	-14.4	-14.1	-8.5		

Definition of external/domestic debt	Residency-based
Is there a material difference between the two criteria?	No





Sources: Country authorities; and staff estimates and projections.

1/ Includes both public and private sector external debt.

2/ Derived as [r - g - ρ(1+g) + Ɛα (1+r)]/(1+g+ρ+gρ) times previous period debt ratio, with r = nominal interest rate; g = real GDP growth rate, ρ = growth rate of GDP deflator in U.S. dollar terms, Ɛ=nominal appreciation of the local currency, and α= share of local currency-denominated external debt in total external debt.

3/ Includes exceptional financing (i.e., changes in arrears and debt relief); changes in gross foreign assets; and valuation adjustments. For projections also includes contribution from price and exchange rate changes.

4/ Current-year interest payments divided by previous period debt stock.

5/ Defined as grants, concessional loans, and debt relief.

6/ Grant-equivalent financing includes grants provided directly to the government and through new borrowing (difference between the face value and the PV of new debt).

7/ Assumes that PV of private sector debt is equivalent to its face value.

8/ Historical averages are generally derived over the past 10 years, subject to data availability, whereas projections averages are over the first year of projection and the next 10 years.

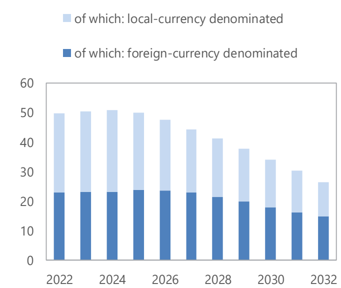
Table 2. Papua New Guinea: Public Sector Debt Sustainability Framework, Baseline Scenario, 2019-2042

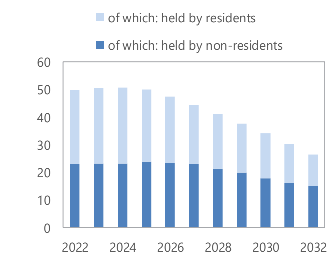
(In percent of GDP, unless otherwise indicated)

	Actual			Projections								Average 6/	
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2032	2042	Historical	Projections
Public sector debt 1/	**41.5**	**49.0**	**51.4**	**49.8**	**50.3**	**50.7**	**49.8**	**47.4**	**44.3**	**26.3**	**4.5**	**31.5**	**42.0**
of which: external debt	**18.0**	**23.0**	**24.7**	**22.9**	**23.2**	**23.1**	**23.8**	**23.5**	**23.0**	**14.9**	**6.0**	**9.2**	**20.9**
Change in public sector debt	4.7	7.5	2.4	-1.6	0.6	0.4	-0.9	-2.4	-3.1	-3.9	-1.5		
Identified debt-creating flows	**2.3**	**2.4**	**-2.6**	**-0.7**	**0.2**	**0.1**	**-0.9**	**-2.1**	**-2.7**	**-3.6**	**-2.2**	**0.5**	**-2.0**
Primary deficit	**1.9**	**6.0**	**4.3**	**3.4**	**2.5**	**1.1**	**0.0**	**-0.9**	**-1.6**	**-2.7**	**-1.8**	**2.9**	**-0.6**
Revenue and grants	16.3	14.2	14.7	14.8	14.8	15.3	15.8	16.1	16.3	17.2	16.9	**17.6**	**16.1**
of which: grants	2.1	1.7	2.2	1.7	1.5	1.5	1.4	1.4	1.5	1.2	0.9		
Primary (noninterest) expenditure	18.2	20.2	18.9	18.2	17.2	16.4	15.8	15.2	14.7	14.5	15.1	**20.5**	**15.4**
Automatic debt dynamics	**0.4**	**2.4**	**-2.6**	**-4.1**	**-2.3**	**-1.0**	**-0.9**	**-1.2**	**-1.1**	**-0.9**	**-0.4**		
Contribution from interest rate/growth differential	0.2	2.6	-1.6	-4.1	-2.3	-1.0	-0.9	-1.2	-1.1	-0.9	-0.4		
of which: contribution from average real interest rate	1.7	1.1	-1.0	-2.0	0.0	0.4	0.6	0.3	0.3	0.0	-0.2		
of which: contribution from real GDP growth	-1.6	1.5	-0.6	-2.1	-2.3	-1.4	-1.5	-1.4	-1.4	-0.9	-0.2		
Contribution from real exchange rate depreciation	0.3	-0.2	-1.1	...	...	...	...	...	...	...	...		
Other identified debt-creating flows	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Privatization receipts (negative)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Recognition of contingent liabilities (e.g., bank recapitalization)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Debt relief (HIPC and other)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Other debt creating or reducing flow (please specify)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Residual	**2.4**	**5.1**	**5.0**	**2.4**	**2.8**	**1.4**	**0.0**	**-1.3**	**-0.4**	**-0.3**	**0.7**	**3.7**	**0.3**
Sustainability indicators													
PV of public debt-to-GDP ratio 2/	**...**	**...**	**50.2**	**48.4**	**48.5**	**48.7**	**47.5**	**45.1**	**42.1**	**25.3**	**4.2**		
PV of public debt-to-revenue and grants ratio	**...**	**...**	**342.4**	**326.6**	**328.3**	**317.8**	**300.6**	**279.6**	**258.3**	**146.6**	**24.9**		
Debt service-to-revenue and grants ratio 3/	**106.8**	**131.0**	**48.4**	**35.4**	**50.8**	**67.7**	**78.1**	**75.8**	**70.8**	**40.3**	**-10.4**		
Gross financing need 4/	19.3	24.6	11.3	8.6	10.0	11.5	12.3	11.3	9.9	4.2	-3.6		
Key macroeconomic and fiscal assumptions													
Real GDP growth (in percent)	4.5	-3.5	1.2	4.2	4.7	3.0	3.0	3.0	3.0	3.1	3.4	**4.0**	**3.3**
Average nominal interest rate on external debt (in percent)	0.4	2.7	1.7	2.2	2.6	2.6	2.6	2.6	2.6	2.0	2.2	**1.4**	**2.4**
Average real interest rate on domestic debt (in percent)	9.4	3.5	-1.7	-4.1	0.3	1.5	1.7	0.6	0.6	-0.1	0.1	**3.9**	**0.2**
Real exchange rate depreciation (in percent, + indicates depreciation)	1.9	-1.2	-4.9	...	...	...	...	...	...	...	...	**2.9**	**...**
Inflation rate (GDP deflator, in percent)	1.1	5.5	9.5	10.9	1.3	1.1	1.5	3.0	3.2	3.3	3.2	**4.3**	**3.4**
Growth of real primary spending (deflated by GDP deflator, in percent)	5.8	7.0	-5.3	0.2	-0.7	-1.7	-1.1	-0.6	-0.9	3.1	3.9	**3.0**	**0.8**
Primary deficit that stabilizes the debt-to-GDP ratio 5/	-2.9	-1.5	1.9	5.0	1.9	0.7	0.9	1.5	1.5	1.2	-0.3	**-0.8**	**1.6**
PV of contingent liabilities (not included in public sector debt)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		

Definition of external/domestic debt	**Residency-based**
Is there a material difference between the two criteria?	**No**

Public sector debt 1/





Sources: Country authorities; and staff estimates and projections.

1/ Coverage of debt: The central, state, and local governments, government-guaranteed debt . Definition of external debt is Residency-based.

2/ The underlying PV of external debt-to-GDP ratio under the public DSA differs from the external DSA with the size of differences depending on exchange rates projections.

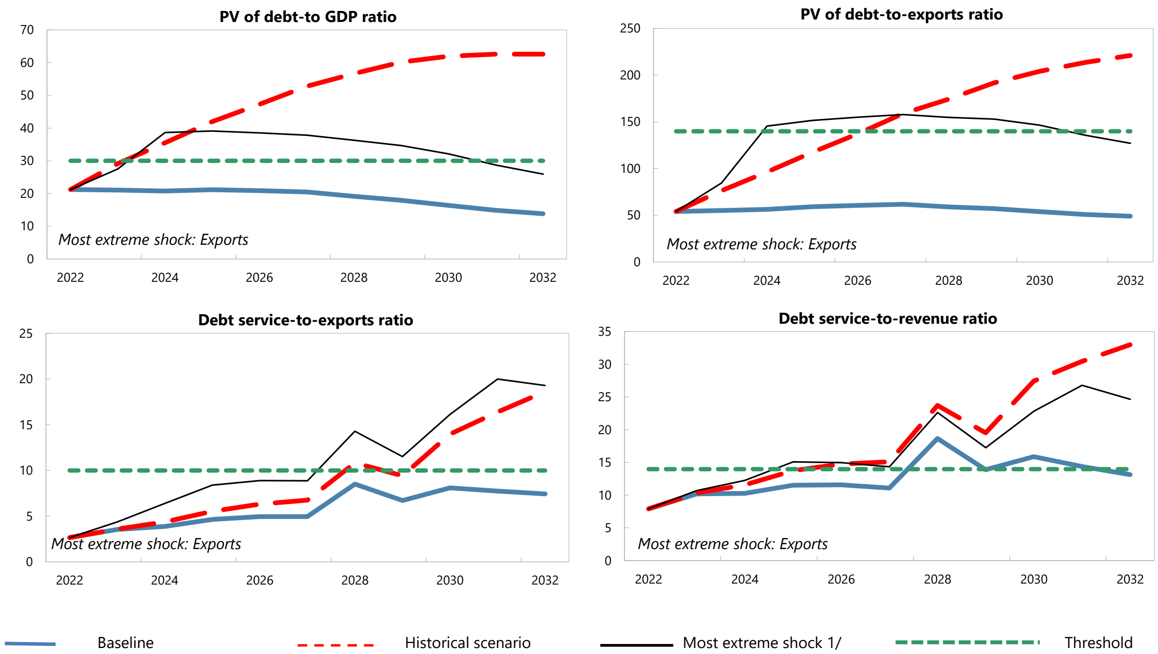
3/ Debt service is defined as the sum of interest and amortization of medium and long-term, and short-term debt.

4/ Gross financing need is defined as the primary deficit plus debt service plus the stock of short-term debt at the end of the last period and other debt creating/reducing flows.

5/ Defined as a primary deficit minus a change in the public debt-to-GDP ratio ((-): a primary surplus), which would stabilizes the debt ratio only in the year in question.

6/ Historical averages are generally derived over the past 10 years, subject to data availability, whereas projections averages are over the first year of projection and the next 10 years.

Figure 1. Papua New Guinea: Indicators of Public and Publicly Guaranteed External Debt Under Alternative Scenarios, 2022-2032



Customization of Default Settings	Size	Interactions
Tailored Stress		
Combined CL	Yes	
Natural disaster	n.a.	n.a.
Commodity price	Yes	No
Market financing	No	No

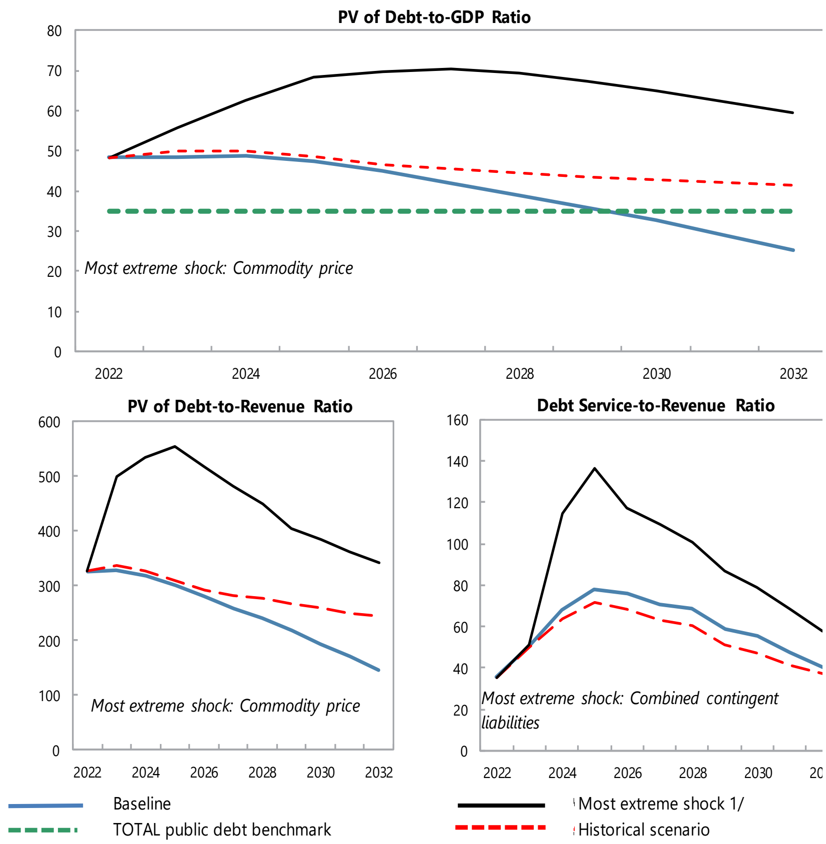
Note: "Yes" indicates any change to the size or interactions of the default settings for the stress tests. "n.a." indicates that the stress test does not apply.

Borrowing assumptions on additional financing needs resulting from the stress tests*	Default	User defined
Shares of marginal debt		
External PPG MLT debt	100%	
Terms of marginal debt		
Avg. nominal interest rate on new borrowing in USD	1.6%	1.6%
USD Discount rate	5.0%	5.0%
Avg. maturity (incl. grace period)	16	16
Avg. grace period	6	6

* Note: All the additional financing needs generated by the shocks under the stress tests are assumed to be covered by PPG external MLT debt in the external DSA. Default terms of marginal debt are based on baseline 10-year projections.

Sources: Country authorities; and staff estimates and projections.
1/ The most extreme stress test is the test that yields the highest ratio in or before 2032. The stress test with a one-off breach is also presented (if any), while the one-off breach is deemed away for mechanical signals. When a stress test with a one-off breach happens to be the most exterme shock even after disregarding the one-off breach, only that stress test (with a one-off breach) would be presented.

Figure 2. Papua New Guinea: Indicators of Public Debt Under Alternative Scenarios, 2022-2032



Borrowing assumptions on additional financing needs resulting from the stress tests*	Default	User defined
Shares of marginal debt		
External PPG medium and long-term	22%	22%
Domestic medium and long-term	37%	37%
Domestic short-term	40%	40%
Terms of marginal debt		
External MLT debt		
Avg. nominal interest rate on new borrowing in USD	1.6%	1.6%
Avg. maturity (incl. grace period)	16	16
Avg. grace period	6	6
Domestic MLT debt		
Avg. real interest rate on new borrowing	4.0%	4.0%
Avg. maturity (incl. grace period)	2	2
Avg. grace period	1	1
Domestic short-term debt		
Avg. real interest rate	2.2%	2.2%

* Note: The public DSA allows for domestic financing to cover the additional financing needs generated by the shocks under the stress tests in the public DSA. Default terms of marginal debt are based on baseline 10-year projections.

Sources: Country authorities; and staff estimates and projections.

1/ The most extreme stress test is the test that yields the highest ratio in or before 2032. The stress test with a one-off breach is also presented (if any), while the one-off breach is deemed away for mechanical signals. When a stress test with a one-off breach happens to be the most exterme shock even after disregarding the one-off breach, only that stress test (with a one-off breach) would be presented.

Table 3. Papua New Guinea: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2022-2032

(In percent)

	Projections 1/										
	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
PV of debt-to GDP ratio											
Baseline	21	21	21	21	21	20	19	18	16	15	14
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2022-2032 2/	21	29	**36**	**42**	**47**	**53**	**57**	**60**	**62**	**63**	**63**
B. Bound Tests											
B1. Real GDP growth	21	23	24	24	24	24	22	21	19	17	16
B2. Primary balance	21	21	22	23	23	23	22	21	19	18	17
B3. Exports	21	28	**39**	**39**	**39**	**38**	**36**	**35**	**32**	29	26
B4. Other flows 3/	21	24	27	27	27	27	25	24	22	20	18
B5. Depreciation	21	27	28	28	28	28	26	24	22	20	19
B6. Combination of B1-B5	21	28	**31**	**31**	**31**	**30**	29	27	25	22	21
C. Tailored Tests											
C1. Combined contingent liabilities	21	24	25	26	27	27	27	26	25	24	23
C2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C3. Commodity price	21	27	**32**	**34**	**36**	**37**	**37**	**37**	**36**	**35**	**33**
C4. Market Financing	21	23	23	24	23	23	21	20	18	17	15
Threshold	30	30	30	30	30	30	30	30	30	30	30
PV of debt-to-exports ratio											
Baseline	54	55	56	59	61	62	59	57	54	51	49
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2022-2032 2/	54	76	96	117	137	**159**	**174**	**192**	**204**	**214**	**221**
B. Bound Tests											
B1. Real GDP growth	54	55	56	59	61	62	59	57	54	51	49
B2. Primary balance	54	56	60	64	67	69	67	66	63	60	59
B3. Exports	54	84	**146**	**152**	**155**	**158**	**155**	**153**	**147**	136	127
B4. Other flows 3/	54	63	73	77	78	80	77	76	72	67	64
B5. Depreciation	54	55	60	63	65	66	63	61	58	55	52
B6. Combination of B1-B5	54	74	75	96	98	100	97	95	90	84	79
C. Tailored Tests											
C1. Combined contingent liabilities	54	62	67	74	78	82	82	83	82	80	80
C2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C3. Commodity price	54	82	100	108	114	119	119	122	123	122	121
C4. Market Financing	54	55	56	59	61	62	59	57	54	51	49
Threshold	140	140	140	140	140	140	140	140	140	140	140
Debt service-to-exports ratio											
Baseline	3	4	4	5	5	5	9	7	8	8	7
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2022-2032 2/	3	4	4	6	6	7	**11**	9	**14**	**16**	**19**
B. Bound Tests											
B1. Real GDP growth	3	4	4	5	5	5	9	7	8	8	7
B2. Primary balance	3	4	4	5	5	5	9	7	8	8	8
B3. Exports	3	4	6	8	9	9	**14**	**12**	**16**	**20**	**19**
B4. Other flows 3/	3	4	4	5	5	5	9	7	9	**10**	10
B5. Depreciation	3	4	4	5	5	5	9	7	8	8	8
B6. Combination of B1-B5	3	4	5	6	7	7	**11**	9	**12**	**13**	**12**
C. Tailored Tests											
C1. Combined contingent liabilities	3	4	4	5	5	5	9	7	9	8	8
C2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C3. Commodity price	3	4	5	6	7	7	**11**	9	**12**	**14**	**14**
C4. Market Financing	3	4	4	5	5	5	9	7	8	7	7
Threshold	10	10	10	10	10	10	10	10	10	10	10
Debt service-to-revenue ratio											
Baseline	8	10	10	12	12	11	**19**	14	**16**	**14**	13
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2022-2032 2/	8	10	12	14	**15**	**15**	**24**	**20**	**27**	**30**	**33**
B. Bound Tests											
B1. Real GDP growth	8	11	12	13	13	13	**21**	**16**	**18**	**17**	**15**
B2. Primary balance	8	10	10	12	12	12	**19**	**14**	**17**	**16**	**14**
B3. Exports	8	11	12	**15**	**15**	**14**	**23**	**17**	**23**	**27**	**25**
B4. Other flows 3/	8	10	11	12	12	12	**19**	**15**	**18**	**19**	**17**
B5. Depreciation	8	13	13	**15**	**15**	**14**	**24**	**18**	**20**	**19**	**18**
B6. Combination of B1-B5	8	11	12	**14**	**14**	13	**22**	**17**	**22**	**21**	**20**
C. Tailored Tests											
C1. Combined contingent liabilities	8	10	11	12	12	12	**20**	**15**	**17**	**15**	**14**
C2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C3. Commodity price	8	**14**	**16**	**19**	**18**	**16**	**24**	**18**	**23**	**24**	**23**
Threshold	14	14	14	14	14	14	14	14	14	14	14

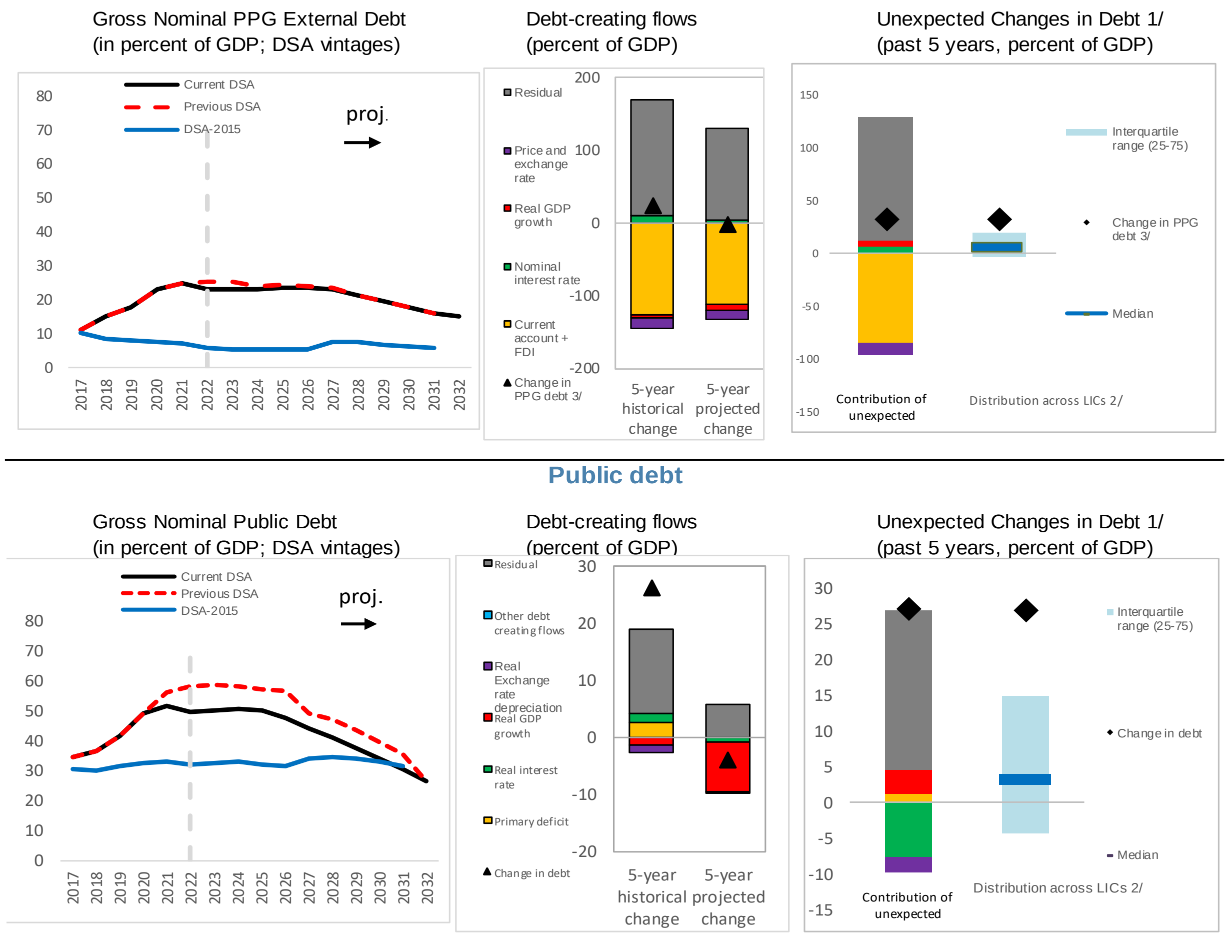
Sources: Country authorities; and staff estimates and projections.
1/ A bold value indicates a breach of the threshold.
2/ Variables include real GDP growth, GDP deflator (in U.S. dollar terms), non-interest current account in percent of GDP, and non-debt creating flows.
3/ Includes official and private transfers and FDI.

Table 4. Papua New Guinea: Sensitivity Analysis for Key Indicators of Public Debt, 2022-2032

	Projections 1/										
	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
PV of Debt-to-GDP Ratio											
Baseline	**48**	**48**	**49**	**48**	**45**	**42**	**39**	**36**	33	29	25
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2022-2032 2/	**48**	**50**	**50**	**49**	**47**	**45**	**44**	**44**	**43**	**42**	**41**
B. Bound Tests											
B1. Real GDP growth	**48**	**56**	**63**	**63**	**61**	**59**	**58**	**56**	**54**	**51**	**48**
B2. Primary balance	**48**	**53**	**58**	**56**	**52**	**49**	**46**	**42**	**39**	**35**	31
B3. Exports	**48**	**54**	**63**	**62**	**59**	**56**	**53**	**49**	**45**	**40**	35
B4. Other flows 3/	**48**	**52**	**55**	**54**	**51**	**48**	**45**	**42**	**38**	34	29
B5. Depreciation	**48**	**54**	**54**	**52**	**47**	**43**	**39**	**35**	31	27	22
B6. Combination of B1-B5	**48**	**51**	**55**	**54**	**50**	**47**	**44**	**41**	**38**	35	31
C. Tailored Tests											
C1. Combined contingent liabilities	**48**	**67**	**68**	**66**	**62**	**58**	**55**	**51**	**47**	**43**	**39**
C2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C3. Commodity price	**48**	**56**	**63**	**68**	**70**	**70**	**70**	**67**	**65**	**62**	**59**
C4. Market Financing	**48**	**48**	**49**	**48**	**45**	**42**	**39**	**36**	33	29	25
TOTAL public debt benchmark	35	35	35	35	35	35	35	35	35	35	35
PV of Debt-to-Revenue Ratio											
Baseline	327	328	318	301	280	258	240	217	194	170	147
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2022-2032 2/	327	338	327	310	291	282	277	267	258	249	244
B. Bound Tests											
B1. Real GDP growth	327	379	406	396	375	361	351	333	316	296	278
B2. Primary balance	327	358	376	355	325	302	282	257	232	205	181
B3. Exports	327	364	412	392	368	344	325	299	270	235	203
B4. Other flows 3/	327	349	359	341	318	296	277	253	227	198	171
B5. Depreciation	327	370	357	330	296	268	243	215	186	157	130
B6. Combination of B1-B5	327	345	356	339	312	291	273	250	227	202	178
C. Tailored Tests											
C1. Combined contingent liabilities	327	453	442	416	383	357	337	309	282	254	227
C2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C3. Commodity price	327	500	533	555	515	481	449	404	384	362	342
C4. Market Financing	327	328	318	301	280	259	240	217	194	170	147
Debt Service-to-Revenue Ratio											
Baseline	35	51	68	78	76	71	69	59	55	48	40
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2022-2032 2/	35	50	64	71	68	63	60	51	47	41	37
B. Bound Tests											
B1. Real GDP growth	35	55	80	98	102	101	103	96	94	89	83
B2. Primary balance	35	51	73	95	93	84	81	69	64	56	48
B3. Exports	35	51	68	80	78	73	70	61	60	57	49
B4. Other flows 3/	35	51	68	79	77	72	70	60	57	52	44
B5. Depreciation	35	49	66	76	74	69	70	59	56	48	41
B6. Combination of B1-B5	35	50	69	81	79	75	74	64	61	54	46
C. Tailored Tests											
C1. Combined contingent liabilities	35	51	115	137	117	109	101	87	79	68	58
C2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C3. Commodity price	35	69	93	110	118	123	122	109	107	102	98
C4. Market Financing	35	51	68	78	76	71	69	60	55	47	40

Sources: Country authorities; and staff estimates and projections.
1/ A bold value indicates a breach of the benchmark.
2/ Variables include real GDP growth, GDP deflator and primary deficit in percent of GDP.
3/ Includes official and private transfers and FDI.

Figure 3. Papua New Guinea: Drivers of Debt Dynamics – Baseline Scenario



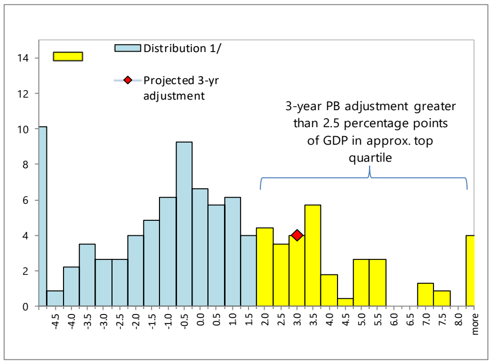
1/ Difference between anticipated and actual contributions on debt ratios.

2/ Distribution across LICs for which LIC DSAs were produced.

3/ Given the relatively low private external debt for average low-income countries, a ppt change in PPG external debt should be largely explained by the drivers of the external debt dynamics equation.

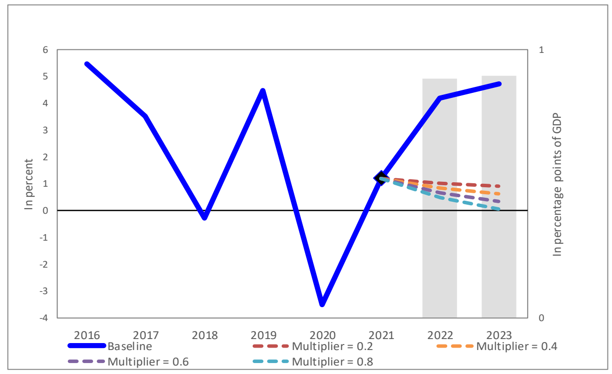
Figure 4. Papua New Guinea: Realism Tools

3-Year Adjustment in Primary Balance
(Percentage points of GDP)



1/ Data cover Fund-supported programs for LICs (excluding emergency financing) approved since 1990. The size of 3-year adjustment from program inception is found on the horizontal axis; the percent of sample is found on the vertical axis.

Fiscal Adjustment and Possible Growth Paths 1/



1/ Bars refer to annual projected fiscal adjustment (right-hand side scale) and lines show possible real GDP growth paths under different fiscal multipliers (left-hand side scale).

Public and Private Investment Rates
(percent of GDP)

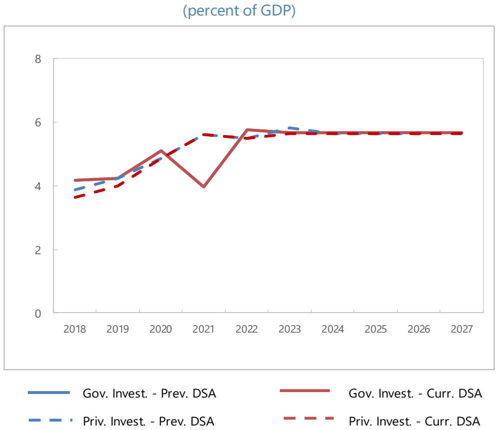
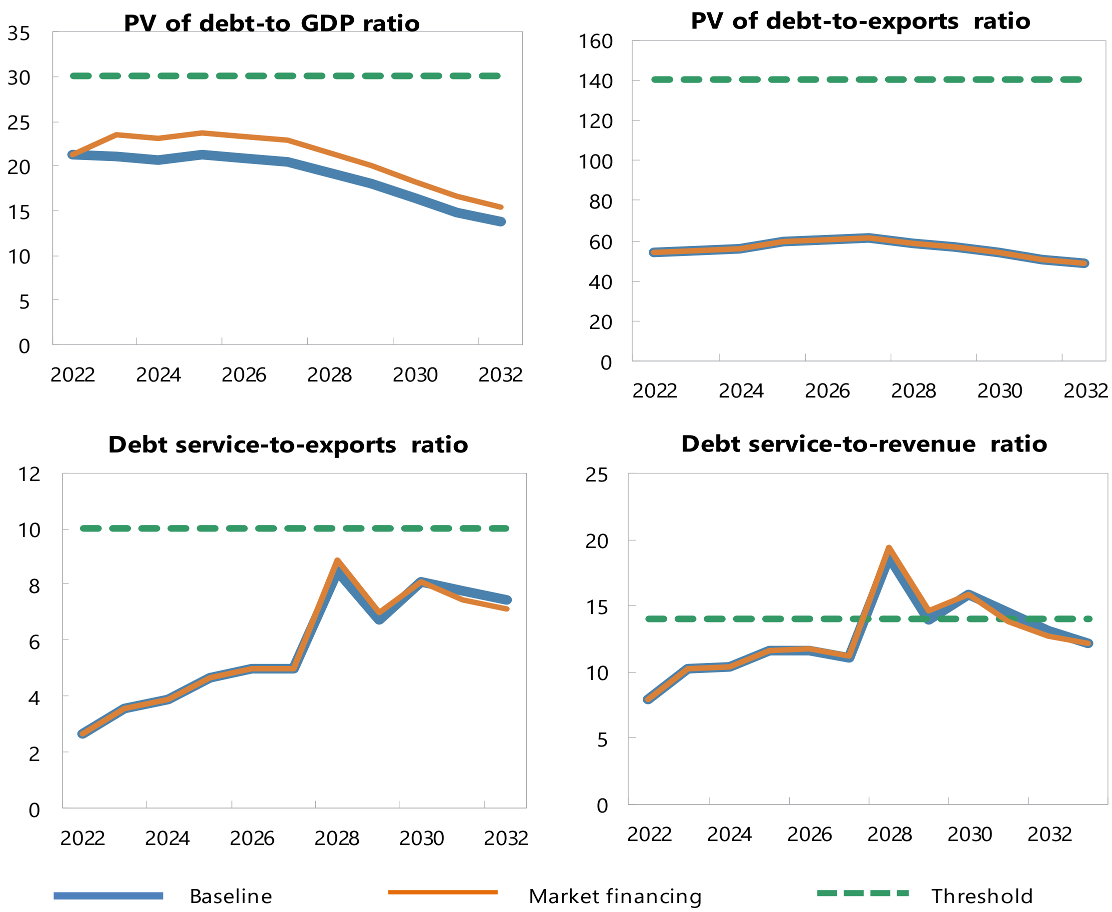


Figure 5. Papua New Guinea: Market-Financing Risk Indicators

	GFN 1/	EMBI 2/
Benchmarks	14	570
Values	11	854
Breach of benchmark	No	Yes
Potential heightened liquidity needs	Moderate	

1/ Maximum gross financing needs (GFN) over 3-year baseline projection horizon.
2/ EMBI spreads correspond to the latest available data.



Sources: Country authorities; and staff estimates and projections.

Statement by Chang Huh, Executive Director for Papua New Guinea
Laura Johnson, Senior Advisor to Executive Director, and Rhoda Karl, Advisor
June 13, 2022

Overview

The authorities' increased engagement with the Fund has supported the Government's key reforms and the authorities have demonstrated significant progress to achieve the reforms even during the COVID outbreak.

Significant reforms were delivered including positive steps towards the government's objective of budget repair, improving capital investment through an expenditure rule, reducing government arrears, enhancing information sharing and the implementation of key reforms including the Tax Administration Act, and the establishment of the Independent Commission of Anti-Corruption (ICAC) Act.

The most recent Staff Monitored Program (SMP) built on the previous reform priorities and the authorities have again demonstrated their commitment by meeting all the Quantitative Targets and all the Structural Benchmarks except one, as assessed by the IMF, and completing the review with the IMF. The budget deficit for 2021 was below the program target, including a lower than agreed planned deficit target for 2022, demonstrating the authorities continued commitment to budget repair. As noted in the staff report, PNG's planned fiscal adjustment places it in the top 12 percent of historical adjustments.

This marks the first successful completion of a program with the IMF in over two decades by PNG, and represents a strengthened engagement with international partners, and international bodies as well as a commitment to transparency and good governance.

Economic Conditions

The PNG Government began a process of budget repair, introducing a 2019 Supplementary Budget that included budget cuts equivalent to over 1 percentage point of GDP. The COVID-19 pandemic then had a severe impact on economic activities in 2020 and thereafter. Despite the challenges, PNG has weathered the pandemic relatively better than its peers reflecting the authority's swift response to contain COVID-19 in 2020.

Inflation is moderately above recent trends driven by international conditions, supply-chain disruptions, and higher commodities and oil prices resulting from the war in Ukraine. As the higher inflation outcome is expected to continue to be exacerbated by impacts of the war in Ukraine, the authorities have recently implemented short-term measures to provide temporary relief for its citizens. This includes removing excise and the Good and Services Tax on fuel while reducing prices on selected staple food items; increasing the tax-free threshold for Personal Income Tax; and supplementing further the Government's Tuition Fee Subsidy that allows for widespread transfers of cash to parents of children in schools. To ensure fiscal neutrality, the cost of these measures will be offset by the expected revenue increase from higher commodities prices. Targeting relief in this way is an effective way to provide relief to most people, including the most vulnerable, as PNG does not have a social security system, while also continuing the process of budget repair.

Over the medium-term, PNG's economic performance will be driven largely by growth in the non-resource sector reflecting the Government's commitment to achieve 5 percent growth in the non-resource sector. This is expected to generate jobs across the economy, most of it in the informal sector. The Government expects to return to a budget surplus by 2027, with debt to GDP ratios declining rapidly even before then.

There remain risks to this outlook, stemming from the following possibilities: new-COVID-19 variants; weaker external demand for PNG's exports; large volatility in commodity prices; higher inflation; or climate-related natural disasters.

Despite this, there are also notable upside risks that the authorities do not include in their baseline: relating to higher than-expected commodity prices; falling domestic interest costs, and the possibility of significantly larger LNG revenues in the medium term; and the commencement of several major extractive projects in the medium term (Papua LNG, P'nyang LNG or the Wafi Golpu mining project).

PNG is making notable progress on its planned fiscal consolidation path. The revised Medium Term Fiscal Strategy sets out the key elements of the authorities ongoing plan for budget repair and reconstruction, guided by the principles of 'spend the money we have more wisely', 'raise the revenues more fairly' and 'finance the debt more cheaply'. This will be supported by an updated Medium Term Debt Strategy and the Medium-Term Revenue Strategy. The authorities have seen some recent significant successes in reducing the cost of locally issued debt securities; bringing down near-end rates from over 10 percent (for securities around 4 year maturities) to around 6 percent in the most recent auction.

While staff assess that PNG's public and publicly guaranteed debt is sustainable but at high risk of debt distress, the authorities see their debt carrying capacity as more nuanced. The authorities agree that large financing requirements to dampen the effects of the COVID-19 pandemic have elevated debt levels and a $US500 million bullet bond repayment due in 2028 presents a risk to debt distress. However, the authorities perceive this risk to be manageable with expected increased revenues from the PNG LNG project in 2027 as its debt payments are completed, as well as continued efforts to restructure debt to cheaper financing and an updated public guarantee policy to strengthen oversight of SOE loans.

PNG has a sound financial sector dominated by commercial banks that are well-capitalized and profitable, with ample or indeed excessive liquidity, although non-performing loans have risen. More generally, financial sector inclusion is constrained by low urbanization, a large informal economy, and low financial literacy.

The authorities remain committed to strengthening governance and anti-corruption issues. The Financial Analysis Supervision Unit initiated swift regulatory actions against PNG's largest commercial bank, Bank South Pacific, to strengthen AML/CFT compliance and reduce risks of disrupting correspondent banking relationships. This has sent strong signals to the other banks to comply with the AML/CFT rules, and a positive signal world-wide on PNG's dedication to implement sensible and stringent AML/CFT rules. The authorities also successfully implemented the ICAC law, providing ICAC the power to investigate and pursue complex corruption cases. This has improved PNG's Corruption Perception Index for 2021 and PNG is working with developing partners including UN, EU, ADB and Australia to progress this important work.

PNG is highly vulnerable to climate change with large adaptation needs due to rising sea levels, coastal erosion, flooding, drought, and landslides. While the authorities have strived to make significant efforts to reduce emissions, protect the rainforest and adapt to climate change amidst limited financial support, the authorities welcome the focus the staff placed on climate issues in the staff report. This poses significant financing challenges for PNG, which will require the support from development partners and external sources.

Broad Program Performance

The PNG authorities approached the IMF in 2019, to strengthen the relationship through the development of a SMP. The Treasurer has set out to increase greater international engagement based around greater transparency, move to cheaper international concessional financing and direct engagement with the IMF on financing.

Under both these SMPs, a number of key reforms occurred including:

1) Establishing the Arrears Verification Committee, which has led to the identification of over K5 billion in pre-2019 arrears, that the authorities have made strides in clearing – validating and paying down the arrears of K255 million in 2020, and K419 million in 2021.

2) Improving information sharing between the Treasury and the Central Bank – particularly on liquidity management, and cash planning with the establishment of an observer position on the Central Bank board for Treasury and the review and formalization of TORs for the public debt committee, including the Central Bank's role.

3) The introduction of the new Tax Administration Act will strengthen the authorities' powers to enforce tax regulation.

4) The implementation of a new Small Business Tax, to simplify the tax code for small companies.

5) The passage of the ICAC Act, the establishment of the ICAC authority and the development of supporting regulation.

6) Instituting the Temporary Access Facility (TAF) for cash flow management with guidelines around its use, developed with IMF advice.

7) The approval of the consequential amendments around the Tax Administration Act, to prevent conflicts with other legislation.

8) The completion of a staffing and establishment review, that incorporated details on the issues the authorities face and sets out a plan to resolve them – including key issues like the proper recording of staff under the correct appropriation heads. This report is crucial to allow any other meaningful reforms to occur in this space.

9) The completion of the first stage of the Independent Advisory Group (IAG) report into the Central Bank Act, and the passage of some initial amendments to the act that will support the implementation of further reforms. This was passed by the PNG Parliament in December 2021.

Central Bank Reform

The PNG Government undertook an ambitious effort to strengthen and modernize the Central Bank Act which was originally written in 2000. The review was designed based on IMF advice and conducted by the IAG, composed of the former Central Bank Governor who oversaw the development of the 2000 Act, the former Chief Secretary to Government at the time of those reforms and current Chancellor of the University of PNG, and the head of the Development Policy Centre at the Australian National University. The IAG was grateful for advice from a number of sources, including the IMF. The eight recommendations on the Monetary Policy Committee (MPC) were deferred. As stated in PNG Parliament, PNG is inclined to move down an MPC path even though about half the countries in the world have monetary policy decided by the Board. The best structure for monetary policy decision-making, along with financial regulation, will be considered in more detail as part of the Phase 2 of the reforms.

The authorities are of the strong view that the first phase of the reforms, which were unanimously passed by the PNG Parliament, modernized and strengthened the independence, governance, accountability, and transparency of the Central Bank. Indeed, PNG considers it was a transformative set of reforms vital for PNG's future development and setting the groundwork for the next stage of reforms. The decision-making power for monetary policy and financial regulation was moved from a single person to a collegiate approach through a strengthened Board, which reduces the risk of undermining BPNG's independence. The Board has stronger merit-based appointment processes and removed the ex-officio positions that previously dominated the Board.

Transparency and reporting requirements to Parliament and the public were strengthened, as was coordination with Treasury while respecting the independence of the central bank. After careful deliberation, PNG moved towards a joint mandate for monetary policy in line with the other countries in the Asia-Pacific and Western Hemisphere regions. Consideration of this revised mandate was the major item in the IAG report to Government, taking up 31 pages of discussion. The change aimed at balancing the importance of price stability with the damage that had flowed from moving away from a market-based exchange rate in 2014. As noted by the IMF in Annex V of the staff report, the foreign exchange rate had become an informal anchor for price stability given the lack of influence of the official cash rate. The focus for the combined mandate was avoiding the negative impacts on growth of using the exchange rate as the monetary policy anchor, while simultaneously introducing strict fixed caps on any government exposure to avoid monetary financing of the budget deficit. The amendments closed down a loophole identified by the IAG as having been an issue in the past on funding the government and put absolute limits on the level of Central Bank purchases of government securities. The cash advance facility was designed to be of limited size, related to within year cash flows, and requiring repayment within the fiscal year to ensure it was not used for budget deficit financing. The weekly volatility of revenues and expenditures means the TAF can move weekly from being fully repaid to being drawn down, although in 2022 this has never exceeded half of the maximum drawdown and there is currently a surplus in the government cash accounts. PNG considers an effective TAF requires this automatic flexibility, all within a fixed limit and with a requirement that it is repaid in full by the end of the financial year and welcomes IMF advice on how this can be further improved.

As indicated in the LOI, the authorities have requested further Fund TA to continue the work on reviewing and amending the CBA, including further consideration of the objectives of BPNG, the role of the Board and the role of BPNG with regards to the government's cashflow management all within the understanding of PNG's circumstances. The authorities look forward to the continued support of the IMF during Phase 2 of the review and look forward to working with staff on a pathway forward. However, it will be important that there are no prior expectations or preconceived ideas from the Fund on the necessary reforms ahead of the TA mission.

Fund Relationship

The support from the IMF during COVID through the Rapid Credit Facility was greatly appreciated; and the decision by the IMF Board to undertake a General Allocation of SDR in 2021 helped stabilize economies worldwide including PNG. The authorities are grateful for this support and look forward to continued future engagement.

Under the SMPs the relationship with the Fund has been productive and the authorities have taken steps to strengthen the bilateral flow of information. More can be done, and the authorities look forward to the placement of a Resident Representative in PNG to aid this. In addition, communication will be further strengthened by greater TA engagement, which the authorities look forward to and support.

The authorities are looking forward to continuing a constructive partnership with the Fund that supports the Government's economic reform agenda and positive development outcomes for PNG.