**Papua New Guinea: 2019 Article IV Consultation
and Request for Staff Monitored Program-Press
Release; Staff Report; and Statement by the
Executive Director for Papua New Guinea**

PAPUA NEW GUINEA

April 2020

2019 ARTICLE IV CONSULTATION AND REQUEST FOR STAFF MONITORED PROGRAM—PRESS RELEASE; STAFF REPORT; AND STATEMENT BY THE EXECUTIVE DIRECTOR FOR PAPUA NEW GUINEA

Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. In the context of the 2019 Article IV consultation with Papua New Guinea, 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 March 9, 2020 consideration of the staff report that concluded the Article IV consultation with Papua New Guinea.
- The **Staff Report** prepared by a staff team of the IMF for the Executive Board's consideration on March 9, 2020, following discussions that ended on November 9, 2019, 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 February 24, 2020.
- 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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International Monetary Fund
Washington, D.C.

IMF Executive Board Concludes 2019 Article IV Consultation with Papua New Guinea

FOR IMMEDIATE RELEASE

WASHINGTON, DC – April 6, 2020 the Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation¹ with Papua New Guinea.

On February 20, 2020, the Managing Director of the International Monetary Fund (IMF) approved a Staff-Monitored Program in Papua New Guinea and, on March 9, 2020, the Executive Board of the IMF concluded the Article IV consultation² with Papua New Guinea.

The Papua New Guinea (PNG) economy is estimated to have rebounded in 2019 following the contraction triggered by the large earthquake in 2018. Real GDP is projected to have grown by 5.0 percent in 2019, underpinned by recovery in energy and mineral production following the earthquake. In 2019, inflation is projected to have slowed to 3.5 percent by year-end, reflecting limited exchange rate depreciation, lower commodity prices and trading-partner inflation. Despite a large current account surplus, PNG's non-resource sector continues to face a shortage of foreign exchange, hampering growth prospects. The current account surplus, estimated at 23 percent of GDP in 2019, is almost entirely offset by financial outflows associated with resource sector investments. In 2019 the fiscal balance deteriorated, despite higher revenues than expected, largely reflecting personnel cost over-runs. The public debt to GDP ratio has increased sharply, as the new government has recognized a large stock of payments arrears.

The challenge for the new government, which took office in June, is to resume fiscal consolidation while, at the same time, laying the foundations for raising sustainable growth and employment in the non-resource sector. Key elements of the policy framework being put in place include tightening expenditure controls, re-invigorating revenue reforms, restoring exchange rate flexibility, initiating reforms to state-owned enterprises, and addressing corruption.

To support their efforts and underscore their commitment to reform, the PNG authorities requested a 16-month IMF Staff-Monitored Program (SMP), which has been welcomed by the IMF Managing Director. The SMP provides the authorities with the opportunity to establish a track record of performance in implementation of reforms, and can also provide the basis for a Fund financially-supported program. SMPs are not accompanied by financial assistance nor endorsed by the IMF Executive Board. The reforms being undertaken by the PNG government are being supported with IMF capacity development and financial support from the Australian government.

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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.

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Disclaimer. The Staff Report was prepared by a staff team of the IMF for the Executive Board's consideration on March 9, 2020. The staff report reflects discussions with the PNG authorities in October 28-November 9, 2019 and is based on the information available as of November 21, 2019. It focuses on PNG near- and medium-term challenges and policy priorities and was prepared before COVID-19 became a global pandemic and resulted in unprecedented strains in global trade, commodity and financial markets. It, therefore, does not reflect the implications of these developments and related policy priorities. The outbreak has greatly amplified uncertainty and downside risks around the outlook. Staff is closely monitoring the situation and will continue to work on assessing its impact and the related policy response in PNG and globally.

Executive Board Assessment³

Executive Directors noted that while Papua New Guinea recovered in 2019 from the adverse impact of the 2018 earthquake, the economy is underperforming, with low trend growth, foreign exchange shortages, and rising public debt. Going forward, Directors emphasized the need to improve fiscal sustainability, enhance financial sector stability, restore exchange rate convertibility and flexibility, and boost sustainable, inclusive growth. In this context, they welcomed the new government's initiatives and noted that the authorities' request for a Staff Monitored Program sent a strong signal of their commitment to implement reforms.

Directors underscored that fiscal expenditure reforms need to focus on bringing personnel emoluments under control to make space for social spending and public investment. On the revenue side, the updated Medium-Term Revenue Strategy needs to be pursued vigorously, as increased domestic revenue mobilization is essential to achieve development objectives. Directors noted the sharp increase in public debt in 2019 which reflected recognition of state-owned enterprise debt and revaluation of external debt. However, Directors emphasized the need to reduce the debt-to-GDP ratio as a crucial anchor for fiscal policy, for which a strong and sustained program of expenditure and revenue reforms is essential.

Directors agreed that foreign exchange shortages were an impediment to private sector investment and competitiveness in the non-resource sector. They encouraged the authorities to restore exchange rate flexibility and currency convertibility and to strengthen the effectiveness of monetary operations.

Directors stressed the need for structural reforms. In particular, they urged the authorities to pursue governance reforms to enhance efficiency and equity in the delivery of public services, and state-owned enterprise reforms to strengthen their accountability and improve performance. In addition, Directors saw scope for improvements in AML/CFT compliance.

Directors agreed that the government's reform program is ambitious and will require support from development partners both financially and with technical assistance. They encouraged the authorities to fully engage in capacity development and utilize Fund technical assistance, including for improvements in data quality.

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³ 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>.

Table 1. Papua New Guinea: Selected Economic and Financial Indicators, 2016-202

Nominal GDP	US\$21.1 billion 1/								
Population (2016):	7.9 million								
GDP per capita	US\$2,568								
Quota:	SDR 131.6 millions (14 th Review: SDR 263.2 million)								
	2016	2017	2018	2019	2020	2021	2022	2023	2024
		Est.				Proj.			
(Percentage change)									
Real sector									
Real GDP growth	4.1	3.5	-0.8	5.0	2.0	2.8	2.9	3.2	3.3
Resource 2/	9.8	7.9	-9.3	9.7	-0.9	0.7	0.2	0.0	0.0
Non-resource	1.5	1.5	3.4	2.9	3.3	3.8	4.1	4.6	4.6
Mining and quarrying (share)	9.0	10.2	10.6	10.3	11.6	11.9	12.1	11.8	11.4
Oil and gas extraction (share)	14.8	16.5	16.8	17.7	16.8	16.6	16.0	15.8	15.2
CPI (annual average)	6.7	5.4	4.7	3.9	4.8	6.4	6.7	5.8	4.1
CPI (end-period)	6.6	4.7	4.8	3.5	5.7	6.6	6.7	5.0	3.9
(In percent of GDP)									
Central government operations									
Revenue and grants	16.1	15.9	17.8	15.4	15.1	14.9	15.0	15.0	15.0
Of which: Resource revenue	0.6	0.9	1.7	1.5	1.3	1.1	1.0	1.0	0.9
Expenditure and net lending	20.9	18.4	20.4	19.5	18.4	18.1	17.2	16.9	16.8
Net lending(+)/borrowing(-)	-4.7	-2.5	-2.6	-4.1	-3.3	-3.1	-2.2	-1.9	-1.9
Non-resource net lending(+)/borrowing(-)	-5.4	-3.4	-4.3	-5.7	-4.7	-4.2	-3.2	-2.9	-2.8
(Percentage change)									
Money and credit									
Domestic credit	24.6	-0.1	-7.9	8.2	4.9	8.7	7.8	8.3	8.7
Credit to the private sector	7.2	-3.8	7.4	10.5	8.2	8.4	10.6	8.2	8.0
Broad money	10.9	-0.9	-3.8	5.4	6.6	11.0	11.2	10.3	10.1
Interest rate (182-day T-bills; period average)	7.4	7.1	7.0	6.8	7.0	8.5	9.1	8.3	7.0
(In billions of U.S. dollars)									
Balance of payments									
Exports, f.o.b.	8.1	9.8	10.1	10.8	11.3	11.6	11.8	12.0	12.2
Of which: Resource sector	7.3	8.9	8.9	9.7	10.0	10.0	10.1	10.2	10.3
Imports, c.i.f.	-1.8	-2.5	-2.5	-3.3	-3.6	-3.7	-4.2	-4.3	-4.4
Current account (including grants)	5.5	6.2	6.3	6.1	6.3	6.3	6.0	5.9	5.9
(In percent of GDP)	26.6	27.2	25.9	24.2	25.0	24.9	23.2	22.3	21.4
Gross official international reserves	1.7	1.7	2.2	2.0	1.9	1.9	2.0	2.1	2.2
(In months of goods and services imports)	5.4	5.2	5.6	4.7	4.3	3.9	3.9	4.0	4.2
(In percent of GDP)									
Government debt									
Government gross debt	33.7	32.5	36.8	38.3	40.8	42.4	42.2	41.7	41.1
External debt-to-GDP ratio (in percent) 3/	8.5	8.8	15.2	16.1	20.1	22.2	23.4	24.4	24.9
External debt-service ratio (percent of exports) 3/	2.3	2.2	2.1	2.3	6.9	4.5	2.8	3.2	3.5
Exchange rates									
US\$/kina (end-period)	0.3150	0.3095	0.2970	...	...	...	...	...	...
NEER (2005=100, end-period)	101.2	98.6	95.5	...	...	...	...	...	...
REER (2005=100, end-period)	121.1	122.3	121.4	...	...	...	...	...	...
Terms of trade (2010=100, end-period)	12.2	12.8	13.7	13.9	14.8	15.3	15.6	15.9	0.0
Nominal GDP (in billions of kina)	65.0	72.5	79.2	84.7	92.2	101.0	110.9	119.3	126.9

Non-resource nominal GDP (in billions of kina)	49.5	53.1	57.4	61.0	66.0	72.2	79.8	86.4	93.2

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.

PAPUA NEW GUINEA

STAFF REPORT FOR THE 2019 ARTICLE IV CONSULTATION AND REQUEST FOR A STAFF-MONITORED PROGRAM

February 21, 2020

KEY ISSUES

Disclaimer. The Staff Report was prepared by a staff team of the IMF for the Executive Board's consideration on March 9, 2020. The staff report reflects discussions with the PNG authorities in October 28-November 9, 2019 and is based on the information available as of November 21, 2019. It focuses on PNG near- and medium-term challenges and policy priorities and was prepared before COVID-19 became a global pandemic and resulted in unprecedented strains in global trade, commodity and financial markets. It, therefore, does not reflect the implications of these developments and related policy priorities. The outbreak has greatly amplified uncertainty and downside risks around the outlook. Staff is closely monitoring the situation and will continue to work on assessing its impact and the related policy response in PNG and globally.

Since 2014 Papua New Guinea (PNG) has been affected by a series of adverse developments, including softer commodity export prices and natural disasters, which have weakened economic performance. These strains have exposed vulnerabilities in domestic macroeconomic policy management. As a consequence, PNG has experienced sluggish growth, shortages of foreign exchange, weak investment, and escalating public debt.

To address these challenges will require comprehensive measures to promote fiscal sustainability, exchange rate flexibility, state-owned enterprise (SOE) reform, and strong governance. Together, these measures can lay the foundation for a sustainable economic recovery and restore domestic and external investor confidence, and are reflected in the authorities' request for an IMF Staff-Monitored Program. Key elements include:

- Fiscal consolidation to gradually reverse the buildup of public debt. Personal emoluments need to be brought under strict control, while government arrears need to be cleared to support private sector growth;
- Restoring kina convertibility, exchange rate flexibility, and clearing the backlog of foreign exchange orders inhibiting activity in the non-resource sector.

Putting the PNG economy on a stronger, more sustainable and more inclusive growth path will require additional structural reforms:

- Vigorous implementation of the Medium-Term Revenue Strategy (MTRS) to finance PNG's large development needs;
- Comprehensive reforms in the SOE sector to strengthen performance in industries such as power generation and telecoms, which have a keystone role in enabling development of the non-resource sector;
- Governance issues and corruption also need to be addressed, as they hamper growth in all sectors of the economy by undermining investor confidence and efficiency.

Approved By
Jonathan D. Ostry
(APD) and Maria
Gonzalez (SPR)

Discussions were held in Port Moresby during September 2-13, and October 28-November 8, 2019. The staff team comprised Scott Roger (Head), Geoffrey Bannister, Aishath Sajny (all APD), Yeu Jin Jung (SPR), and Jacinta Hesaie (Pacific Res Rep Office). The mission was accompanied by Nigel Ray and Sali David (ED Office), Ilyas Sarsenov (World Bank), and Ed Faber (ADB). Paola Castillo and Nadine Dubost assisted from HQ.

CONTENTS

MACROECONOMIC DEVELOPMENTS AND OUTLOOK	5
A. Economic Activity, Inflation, and Balance of Payments	5
B. Fiscal Policies and Financing	6
C. Monetary and Foreign Exchange Policies	6
D. Risks	7
POLICIES FOR MACROECONOMIC STABILITY AND DEVELOPMENT	7
A. Staff-Monitored Program	8
B. Fiscal Policy	8
C. Monetary and Exchange Rate Policies	11
D. Financial Supervision and AML/CFT issues	12
DEVELOPMENT STRATEGY	12
OTHER ISSUES	14
STAFF APPRAISAL	15
BOX	
1. External Assessment	17
FIGURES	
1. Real Sector	18
2. Balance of Payments	19
3. Fiscal Sector	20
4. Monetary Sector	21

TABLES

1. Selected Economic and Financial Indicators, 2016-2024	<u>22</u>
2a. Summary Operations of the Central Government, 2016-2024 (In millions of Kina)	<u>23</u>
2b. Summary Operations of the Central Government, 2016-2024 (In percent of GDP)	<u>24</u>
3. Balance of Payments, 2016-2024	<u>25</u>
4. Monetary Developments, 2016-2024	<u>26</u>
5. Medium-Term Scenario, 2016-24	<u>27</u>
6. Financial Soundness Indicators, 2013-19	<u>28</u>

ANNEXES

I. Risk Assessment Matrix	<u>29</u>
II. Authorities' Responses to Fund Advice	<u>30</u>

APPENDIX

I. Letter of Intent	<u>32</u>
Attachment I. Memorandum of Economic and Financial Policies	<u>34</u>
Attachment II. Technical Memorandum of Understanding	<u>46</u>

MACROECONOMIC DEVELOPMENTS AND OUTLOOK

A. Economic Activity, Inflation, and Balance of Payments

1. Papua New Guinea (PNG), notwithstanding great natural resource wealth, remains a low-income country with significant vulnerability to shocks. Since 2014, PNG became an exporter of liquified natural gas (LNG), but has been hit by large shocks, including lower commodity prices, a severe drought in 2015-16 and a major earthquake in 2018, which cut growth, boosted inflation, and undermined public finances and the balance of payments. The end of the gas project boom in 2014 and lower commodity prices resulted in lower fiscal revenues, significant fiscal deficits and a shortage of foreign exchange (FX). Cuts in capital spending, to cover current spending slippages, and import compression from FX shortages, have inhibited investment and growth in the non-resource sector.

2. The economy is estimated to have rebounded in 2019 following the contraction triggered by the large earthquake in 2018. Real GDP is projected to have grown by 5.0 percent in 2019, underpinned by recovery in energy and mineral production following the earthquake. In the absence of major new resource projects, real GDP growth is projected at 2 percent in 2020 and an average of 3 percent in the medium term, largely driven by the non-resource sector, and supported by easing exchange restrictions. The prospects for major new gas and mining projects remain upside risks to the outlook.

3. Inflation is projected to fall in 2019 but to pick up temporarily thereafter. At end-2018, inflation was 4.8 percent, little changed from 2017, as pass-through from kina depreciation offset the impact of lower betelnut prices. In 2019, inflation is projected to have slowed further to 3.5 percent by year-end, reflecting limited exchange rate depreciation, lower commodity prices and trading-partner inflation. Going forward, and assuming a gradual adjustment in the kina to eliminate overvaluation, inflation is expected to pick up temporarily to 6.3 percent between 2020 to 2022 before tapering off to 3.9 percent by 2024.

4. Despite a large current account surplus, PNG's non-resource sector continues to face a shortage of foreign exchange (FX). In 2019, PNG's large exports of LNG and minerals are estimated to have generated a current account surplus of 24 percent of GDP, down slightly from 2018. However, as in the past, the current account surplus has been almost entirely offset by financial outflows associated with resource sector investments. As a result, the non-resource sector faces a chronic shortage of FX. Going forward, some improvement in FX inflows is projected, associated with external loans and a pickup in foreign investments around less uncertainty. This is expected to be reflected in some increase in imports as the foreign exchange orders backlog is gradually cleared, as well as an increase in international reserves that diminishes gradually over the projection horizon.

B. Fiscal Policies and Financing

5. Fiscal consolidation has stalled, and debt has been revised upwards. Despite higher-than-expected revenues in 2018, the fiscal deficit widened to 2.6 percent of GDP from 2.5 percent in 2017, largely reflecting personnel cost over-runs and higher spending on goods and services for the hosting of the APEC summit. The public debt-to-GDP ratio rose from 33 percent in 2017 to 38 percent in 2018, above the government's long-term target of 30 percent of GDP. This increase partly reflects revisions to public debt in line with the Fiscal Responsibility Act (FRA), which require the central government to recognize three SOE project loans for which it has taken over the servicing (Solwara, Motu-Kea Port, and NCD Roads), adding debt of about 1.4 percent of GDP. The authorities have also taken IMF advice to revalue foreign currency debt at current exchange rates, in line with best international practice, which raises the debt ratio by about 1.8 percent of GDP.

6. The budget deficit for 2019 is projected to have deteriorated significantly. This reflects a disappointing outcome for revenues, as well as significant spending over-runs. Tax revenues are well below 2018 levels, reflecting a subdued economy in 2018 and lower commodity prices. Non-tax revenue is also underperforming as dividends and Public Monies Management Regularization (PMMR) revenues are projected to come in below budget.¹ On the expenditure side, the main over-runs are due to personal emoluments, which are expected to come in at around 1 percent of GDP over the budget. In response, the authorities passed a Supplementary Budget in November 2019 including cuts in current spending, savings in the public investment program, and cuts in Service Improvement Program grants (SIPs), and additional payments on arrears in current and capital spending. The net effect is that the budget deficit for 2019 is expected to come in at 4.1 percent of GDP, significantly higher than the 2.3 percent in the original Budget. This larger deficit was financed through domestic borrowing, and multilateral and bilateral external loans.

C. Monetary and Foreign Exchange Policies

7. Progress on monetary and exchange rate policy reforms has been mixed. In 2018, the Bank of Papua New Guinea (BPNG) began to restore exchange rate flexibility, including by eliminating guidance to banks on the allocation of FX, allowing some depreciation of the kina, and supplying FX to banks to reduce the large backlog of unfilled FX orders. Since late 2018, however, the pace of depreciation has slowed and the kina remains overvalued. PNG's net international reserves rose to \$2.3 billion (5.6 months of imports) at end-2018, owing to a successful sovereign bond placement of \$500 million, commercial loans of \$180 million, and World Bank and ADB loans of \$250 million. Some of the external borrowings have been used to reduce the backlog of FX orders. This contributed to some reduction in the backlog and waiting times for FX orders in early 2019, but the backlog has increased again in recent months, to an estimated K1.2-1.3 billion for trade-related orders. Progress in strengthening liquidity management and the effectiveness of domestic interest rate transmission has been slow. Liquidity forecasting has been hampered by lack

¹ The Public Monies Management Regularization (PMMR) Act 2017 decrees that monies held in accounts by Ministries and other public entities should be swept into the Consolidated Revenue Fund.

of information on prospective government spending, and liquidity management has also been complicated by maldistribution of liquidity across institutions.

8. On current policies, the PNG financial system is likely to continue to see FX shortages, weak credit growth, and excess liquidity. Recent political turmoil, as well as uncertainties in the global trading environment, appear to have dampened local business confidence and reduced the likelihood of significant resource project-related investment inflows. In view of this, and the limited movement in the exchange rate, the shortage of FX is likely to continue, with adverse effects on investment and growth.² The FX shortage also contributes to the buildup of excess liquidity, as bank deposits have been bolstered by funds intended for imports or dividend payments abroad. In such circumstances, the BPNG's ability to affect monetary conditions is likely to remain very limited.

D. Risks

9. Risks surrounding the outlook are identified in Appendix I.

- Near-term risks are predominantly on the downside, stemming from possible declines in commodity export prices, a deterioration in the investment climate stemming from domestic or external political developments, or a deterioration in domestic or external financing conditions. Spread of the Corona virus to PNG would also have a large negative impact.
- Over the medium-term risks are mainly on the upside, reflecting the potential impact, from 2021, of major new natural resource project investments, and the beneficial effects of exchange rate adjustment and revenue reforms.

Authorities' Views

10. The authorities broadly agreed on the near-term outlook and risks in the absence of policy adjustments. They indicated that measures had been taken in the 2020 Budget to address the fiscal deterioration while meeting the need to pay down arrears and implement strong capital spending priorities to reignite growth.

POLICIES FOR MACROECONOMIC STABILITY AND DEVELOPMENT

11. Staff policy advice addresses both near-term and longer-term issues. In the near term, the focus should be on resuming fiscal consolidation and restoring exchange rate flexibility.

² Staff are assessing measures introduced by the BPNG Foreign Exchange Control Directives in March 2015 to address capital outflows and foreign exchange hoarding, including the cessation of Kina deposits in local accounts of foreign banks, repatriation requirement for exporters, ban on approval of new offshore and onshore foreign currency accounts based on the Fund's Institutional View on Liberalization and Management of Capital Flows.

Measures are also needed to strengthen policy frameworks to promote sustainable growth of the non-resource sector and to be well-positioned to manage the next resource boom.

A. Staff-Monitored Program (SMP)

12. In view of the deterioration in the fiscal situation, the authorities requested an SMP to help guide their policy response and catalyze financing. The SMP provides a broad macroeconomic framework within which to pursue reforms. It also allows the PNG authorities to build a track record of success in implementing reforms and laying the foundation for a Fund-supported program. To this end, the SMP includes a large number of structural benchmarks which reflect the authorities' reform priorities and their sense of urgency to begin cementing the reform process. The draft outline of the SMP was endorsed by the National Executive Council in late November. The text of the SMP is appended to this Report for information only.

B. Fiscal Policy

13. A sustained program of fiscal consolidation is needed to put the deficit on a downward path and reduce the public debt ratio, while protecting social spending and much needed public investment. The authorities' program aims to bring the core deficit down gradually from 4 percent of GDP in 2019 to 2 percent of GDP in 2023–24. The core deficit excludes expenditure in 2020 and 2021 to clear payments arrears from previous years, including separation

payments for retirees still on the government payroll (see below), and additional capital investment projects in 2020 financed by international development partners (Text Table 1). The authorities consider these contingency expenditures important for reinvigorating growth, as they restore private

sector liquidity, improve confidence in public finances, and allow space for well managed infrastructure investments. However, they will implement them only if arrears can be verified carefully and transparently, and if these expenditures can be appropriately financed at relatively low cost.³ Under the scenario with all contingent spending on arrears and capital investments, the public debt ratio is projected to rise to 45.4 percent of GDP in 2021 and then fall back to 44 percent of GDP by 2024. Continued fiscal consolidation will be required in the medium-term to reach their intermediate debt target of 35 percent under the revised Fiscal Responsibility Act (FRA) (see below).

Text Table 1. Papua New Guinea, Core and Non-core Fiscal Deficit (In percent of GDP)						
	2019	2020	2021	2022	2023	2024
Core fiscal deficit	-4.1	-3.3	-3.1	-2.2	-1.9	-1.9
Public debt	38.3	40.8	42.4	42.2	41.7	41.1
Planned arrears clearance 1/	0.0	1.1	0.6	0.0	0.0	0.0
Planned additional capital expenditure 2/	0.0	0.5	0.3	0.0	0.0	0.0
Overall fiscal deficit	-4.1	-5.0	-4.1	-2.2	-1.9	-1.9
Sources: PNG authorities and IMF staff calculations. 1/ Includes K430 million in separation arrears, K200 million in goods and services arrears in 2020 and 2021, and K300 million in capital spending arrears in 2020. 2/ Includes K500 million of IFI-financed capital project expenditures.						

³ The expected external financing includes multilateral budget support and project lending, and bilateral budget support from Australia, for the payment of arrears and for capital spending, and ADB partial credit guaranteed commercial borrowing to pay down more expensive commercial debt (see MEFP, paragraph 9).

14. There is some uncertainty as to the total stock of arrears outstanding. To this end, the authorities have established an interagency office in the Treasury dedicated to identification, verification and clearance of central government payments arrears (Memorandum on Economic and Financial Policies (MEFP) paragraph 8 bullet 3). Estimates of the overall envelope of arrears and their distribution are presented in Text Table 2. Arrears on compensation of employees consist of payments of previous year's salary increases and separation payments (retirement costs) for personnel over 65 (see below). Remaining arrears are on goods and services, and represent unpaid utility and rent bills, and arrears on capital expenditure.

Text Table 2. Estimated Stock of Arrears Outside the Core Program (In millions of kina)			
	2019	2020	2021
	est.	est.	est.
Compensation of Employees	120	552	430
of which:			
Previous year's salary increase	120	122	0
Separation payments	0	430	430
Goods and Services (Utilities and Rent)	200	200	200
Capital Expenditure	321	300	0
Total	641	1,052	630
in percent of GDP	0.8	1.1	0.6

Sources: PNG Authorities and IMF Staff calculations.

15. As the benefits of the MTRS will be small in the near term, fiscal adjustment will require bringing current expenditure under better control. In particular, this includes measures to limit the growth of the compensation of employees and expenditure on goods and services:

- Limiting the growth of compensation of employees** (MEFP paragraph 8 bullet 4). This will be achieved by linking the payroll process to the issuance of warrants in the Integrated Financial Management System (IFMS) to better control personal emoluments, including by placing a ceiling on payments for essential new staff, and the better control of non-salary payments, particularly supplements and allowances (Text Table 3). Reduction of overall personnel payments (and expenditure on goods and services) will also be achieved through the amalgamation/elimination of a number of agencies (MEFP paragraph 8 bullet 4).
- Paying down retirement costs to reduce public employment.** Currently there are approximately 4000 public workers over the retirement age still on the payroll because the authorities have not budgeted for the payment of separation costs. Allowing these workers to retire has an immediate budgetary cost (Text Table 1), but will result in savings going forward of about 0.1 percent of GDP in 2021 and 0.2 percent of GDP from 2022 onward.
- A detailed audit of government employment and payroll practices** by an independent organization (MEFP paragraph 8 bullet 5) to identify inappropriate hiring practices and

Text Table 3. Personnel Emoluments Payments in the Core Program 2019-2022 (In millions of kina)					
	2018	2019	2020	2021	2022
	Actual	est.	est.	est.	est.
Compensation of Employees	5,198	5,324	5,487	5,573	5,782
(percent of GDP)	6.6	6.3	6.0	5.5	5.2
Base salary	4,574	4,818	4,818	4,863	4,909
other payments	624	506	669	710	873
of which:					
Supplements and allowances	624	235	236	231	227
Essential staff onboarding ceiling	n.a.	n.a.	160	320	480
Arrears 1/	n.a.	271	273	159	166

Sources: PNG authorities and IMF staff calculations.

1/ Includes payments for previous year's salary increases and superannuation payments.

payments and to develop a program of reforms to better track and control public service hiring and compensation practices.

- **Limiting the growth of expenditure on goods and services.** This will be achieved through the amalgamation/elimination of a number of agencies (MEFP paragraph 8 bullet 4), as well as through elimination of waste and better control of current spending.

16. The authorities will redouble efforts to implement the updated MTRS. Measures include organizational and institutional arrangements for the Internal Revenue Commission (IRC), and the implementation of the new Tax Administration Act (TAA) which was passed in 2018 (MEFP paragraph 10). However, these measures may take some time to bear fruit, and to ensure that the revenue targets for 2020 under the program are met, the authorities will introduce the following measures (MEFP paragraph 8 bullet 7), which are expected to provide about 0.3 percent of GDP in revenue:

- A one-off increase in cigarette excise taxes and for alcohol and social drinks;
- Increased compliance for international taxes (imports) from the introduction of container examination facilities at the main Port of Lae;
- Capturing resource rents on export of unprocessed old-growth logs by increasing the progressive duty rate from the current average of 32 percent to an average of 50 percent;
- Compliance efforts in collecting fees and services, including rent due the central government.

17. Revising the fiscal framework to include an expenditure rule will help achieve the fiscal targets. The medium-term fiscal strategy is anchored by a debt target in the Fiscal Responsibility Act (FRA) of 30 percent of GDP over the long term. The recent amendment to the FRA raises the upper limit on debt temporarily to 45 percent of GDP to accommodate the absorption of recent contingent liabilities, but targets an intermediate debt ratio of 35 percent to be achieved in no more than ten years. To reduce the pro-cyclicality of fiscal policy, reconcile the debt target with revenue objectives under the MTRS, and encourage an integrated approach to development spending, the authorities have introduced a rule to limit current expenditure calibrated in terms of non-resource GDP in the 2020 Budget (MEFP paragraph 12). This rule will also serve as a guide in budget formulation.

18. An update of the debt sustainability analysis (DSA) to end-2018 indicates that PNG remains at moderate risk of debt distress. Nevertheless, risks have risen related to the large increase in debt in 2018, and the shift in debt towards external lending, without a proportionate reduction in domestic short-term debt. The main risks stem from significant increases in the ratio of debt servicing costs to revenue, the concentration of domestic debt in short-term instruments, unfunded superannuation liabilities, and government guarantees of SOE debt. This further underscores the need for the authorities to pursue sustained fiscal consolidation and, in particular, rein in current spending) to reduce the debt ratio and debt-servicing costs over the medium term. The authorities also need to improve their capacity for medium-term financial planning and debt management to lengthen maturities and lower interest rates to help reach their debt targets.

Authorities' Views

19. The authorities concurred on the need for fiscal consolidation and agreed that personal emoluments were an important challenge to fiscal management. They noted that the 2020 budget addresses the problem of retirees and wage arrears. They cautioned, however, that expenditure consolidation needed to leave room for social spending, infrastructure investments and the clearance of arrears.

C. Monetary and Exchange Rate Policies

20. The main challenges are to restore exchange rate flexibility and move towards money market operations to implement monetary policy. In parallel with measures to re-establish an interbank FX market, steps should be taken to enhance the effectiveness of BPNG money market operations. IMF technical assistance (TA) has been provided on these issues, but additional TA will be needed, preferably including a resident advisor. The mission recommends actions in the following areas:

- **Restoring exchange rate flexibility and eliminating overvaluation of the kina** (MEFP paragraph 14 and Table 2). The External Sector Assessment (Box 1) suggests that PNG's external is moderately weaker than implied by fundamentals and desirable policies, and that the kina is overvalued by around 11 to 18 percent. This overvaluation could be largely eliminated over the next three years without boosting inflation excessively.⁴
- **Continuing an orderly reduction in the FX orders backlog** (MEFP paragraph 14 and Table 1). Although the backlog in FX orders declined in early 2019, more recently it has been growing. BPNG should continue to provide monthly injections of FX until the backlog is substantially cleared, and consider introducing auctions of FX.
- **Strengthening liquidity and debt management** (MEFP paragraphs 14 and 15, and Table 2). To enhance functioning of the domestic interbank market and liquidity management, Treasury should improve its cooperation with BPNG on liquidity forecasting. In addition, BPNG should encourage banks to use the interbank market as their preferred source for meeting liquidity needs, by raising the spread between the rate on its overnight lending facility and the policy rate.

Authorities' Views

21. The authorities agreed with the need to restore exchange rate convertibility and to clear the FX orders backlog, but believe that the overvaluation of the kina is towards the lower end of the range estimated by IMF staff, and also believe that the true backlog of FX orders is smaller than reported by banks. BPNG also emphasized the importance of having on-the-ground technical

⁴ Estimates of the pace of depreciation needed and the exchange rate pass-through to inflation suggest that there would be only a modest impact on inflation.

assistance to support their efforts to strengthen the FX market and monetary operations. Staff will seek to assist in meeting this request.

D. Financial Supervision and AML/CFT issues

22. The financial system appears to be adequately capitalized, and non-performing loans moderate, but banks may be vulnerable (MEFP paragraph 16). As BPNG moves towards greater exchange rate flexibility, it is important to ensure that the banking system is able to manage exchange rate risks. Recent stress-testing by BPNG of banks' balance sheets suggests that they can manage significant exchange rate adjustment. A larger concern is with the financial health of large SOE clients of banks. Several SOEs are essentially bankrupt, and banks will need to be adequately provisioned to deal with insolvencies.

23. PNG has made substantial progress in strengthening its AML/CFT framework, but challenges remain (MEFP paragraph 17). In particular implementation of measures to mitigate money laundering (ML) and terrorism financing (TF) risks and maintain robust correspondent banking needs to be strengthened. Recent progress focused on upgrading the legislative and institutional framework through the establishment of the Financial Analysis and Supervision Unit (FASU) and improving domestic coordination through the National Coordinating Committee. The FASU should continue enhancing its risk-based supervision of banks to improve AML/CFT compliance. Law enforcement agencies should step up their efforts in prosecuting and sanctioning ML cases and confiscating ill-gotten proceeds.

DEVELOPMENT STRATEGY

24. PNG has ambitious objectives for economic development, diversification, and raising living standards. The authorities' Medium-Term Development Plan III, underscores their commitment to national development through infrastructure investment, improving law and order, and better education and health services. Staff agree with the strategy focusing on development of the non-resource sector, and would highlight the need for three complementary areas of reform:

- **A reinvigorated and updated Medium-Term Revenue Strategy is essential to achieve the government's fiscal and development targets in the medium term.** Development of the non-resource sector requires substantial public investment in infrastructure, education, healthcare, clean water, electricity, and telecommunications. Providing such public goods will require sustained increases in government revenues, underscoring the importance of the MTRS, and careful prioritization of projects. However, implementation of the MTRS has lagged and additional oversight is required by the Treasury to ensure progress. Important measures for the coming year include:
  - **Strengthening Internal Revenue Commission (IRC) management and accountability.** Appointment of a permanent Commissioner General (CG) will give the CG the necessary authority to drive the structural and management changes needed (MEFP paragraph 10 and Table 2). At the same time, the accountability of IRC for progress in reforms needs to be

strengthened through clarifying deliverables and reporting on progress to the MTRS Steering Committee on a monthly basis (MEFP paragraph 18 and Table 2).

- **Implementing tax legislation.** In particular, IRC should begin to implement the provisions of the new Tax Administration Act (TAA) from mid-2020 (MEFP paragraph 10 and Table 2). Adequate implementation will require the establishment of a separate implementation unit at the IRC with dedicated resources to lead and implement the program of reform. In addition, the Income Tax Act (ITA) should be passed by end-June 2020, and come into effect in 2021 (MEFP paragraph 10 and Table 2).
- **Strengthened oversight and accountability of SOEs and Statutory Authorities (SAs)** (MEFP paragraph 18).⁵ PNG's SOEs include companies in sectors that are crucial for development of the economy, including air transportation, telecommunications, and power generation. Poor performance in these companies hinders development. To promote efficient service delivery in SOEs, strong transparency and accountability is essential. Without these, incentives for efficiency and ethical conduct are greatly weakened, undermining implementation of government policies and squandering scarce resources. To this end, Staff recommend:
  - **Requiring that SAs and SOEs provide audited financial statements, as required by law,** and that the Auditor General have adequate resources to review and clear these statements promptly so that the Public Accounts Committee of Parliament can exercise meaningful oversight;
  - **Restoring strong, non-political oversight of SOEs** by Kumul Consolidated Holdings (KCH), while ensuring that KCH is held to high standards of transparency and accountability (MEFP paragraph 18 and Table 2). The effectiveness of KCH in exercising the government's shareholder rights in most SOEs (notably excepting the resource sector) has been undermined by the appointment of ministers to oversee individual companies, as well as by some KCH Board appointments. Restoring KCH's role, however, needs to be accompanied by enhanced accountability for its own performance.
- **Strengthening governance and reducing corruption** (MEFP paragraph 18 and Table 2). Weak governance and corruption undermine efficiency, equity, and the rule of law, undermining achievement of PNG's development objectives. Specific areas for action include:⁶
  - **Public investment procurement.** Enactment of the National Procurement Act (NPA) is welcome, but the National Procurement Commission will need adequate staffing and

⁵ The Statutory Authorities are government agencies with significant autonomy provided for in the legislation establishing them. Examples include the IRC, NSO, PNG Customs Service, and BPNG.

⁶ In addition to the recommended governance improvements noted earlier with respect to PFM (e.g. reforms to personal emoluments) and AML/CFT.

training to perform effectively. Efforts should also be made to bring bilateral aid projects into conformity with NPA requirements and national standards for construction.

- **Independent Commission Against Corruption (ICAC).** Passage of the revised legislation should be expedited as ICAC can become an important body for reducing corruption and promoting good governance in the public service.
- **Police Fraud and Anti-Corruption Directorate.** The Directorate has a key role in pursuing investigation and prosecution of fraud and corruption. To do its job properly it needs adequate resourcing and effective public oversight to limit scope for political interference.

Authorities' Views

25. The authorities agreed with the Staff's main recommendations. Both Treasury and IRC agreed that a reinvigorated implementation of a revenue strategy is needed, and that stronger IRC accountability will help in achieving this. With regard to addressing SOE performance issues, the authorities agreed and indicated that they have a very ambitious reform agenda including not only governance reforms, but divestiture of assets. With respect to governance issues, the authorities indicated that this is a high priority area and that they will be enunciating a comprehensive governance strategy.

OTHER ISSUES

26. The National Statistical Office (NSO) faces major governance challenges. Problems with management, accountability, and cooperation with key stakeholders have severely jeopardized NSO effectiveness and credibility, and the sustainability of NSO capacity. These management problems have undermined NSO's already weak capacity. Authorities are urged to 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. Staff support the NSO database management initiative to develop templates which can be replicated within various agencies for the collection of administrative data.

27. Staff encourage the authorities to eliminate all multiple currency practices (MCPs) and exchange restrictions.⁷ While the ending of guidance to banks on FX allocation priorities is welcome, FX rationing continues as BPNG provides only limited amounts to meet banks' FX requests for current international transactions. Staff does not recommend Fund approval of the retention of exchange restrictions arising from FX rationing and from the tax clearance certificate requirement, and of the MCPs, given that they are not temporary and in the absence of a timetable for their elimination.

28. Risks to the SMP program. The successful implementation of the SMP is subject to important risks. Macroeconomic risks and natural disasters could seriously disrupt the process of

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⁷ Information on exchange restrictions and MCPs may be found in the Informational Annex.

fiscal consolidation and impair the capacity to implement structural reforms. There are also important implementation risks. Many of the reforms will require capacity development to implement, which could lead to delays in implementation. Additionally, sustained political support is essential to maintaining momentum behind reforms.

STAFF APPRAISAL

29. Since 2014 Papua New Guinea (PNG) has been affected by a series of adverse developments, including softer export commodity prices and natural disasters, which have affected economic performance. These strains have exposed weaknesses in domestic macroeconomic policy management, leading to sluggish growth, shortages of foreign exchange, weak investment, and escalating public and external debt. The External Sector Assessment (Box 1) points to overvaluation of the kina, while the Debt Sustainability Analysis suggests that the risk of debt distress remains moderate. At the same time, Papua New Guinea faces significant structural challenges, including: large development spending needs; promoting economic and financial inclusion, especially for women; addressing widespread corruption and weaknesses in governance; and political volatility.

30. To address these macroeconomic and structural challenges, IMF staff propose that the authorities implement comprehensive measures to promote fiscal sustainability, exchange rate flexibility, state-owned enterprise (SOE) reform, and strong governance. Together, these can lay the foundation for a sustainable economic recovery and restore domestic and external investor confidence. This advice also forms the basis for the measures in the proposed SMP. Key elements of the package include:

- **Fiscal consolidation** to gradually reverse the buildup of public debt and reduce external debt risks. Personal emoluments need to be brought under strict control, while government and SOE arrears need to be cleared to support private sector growth, and social spending needs to be protected. At the same time, MTRS reforms need to be expedited to improve the revenue flows that can support much needed investments and social spending. These reforms need to be expedited and maintained over a sustained period of time to fully achieve the authorities' debt targets under the revised Fiscal Responsibility Act.
- **Restoring kina convertibility and flexibility** by clearing the backlog of foreign exchange orders and eliminating overvaluation of the kina, which inhibits competitiveness, employment, and growth in the non-resource sector;
- **Strengthening liquidity management** as the first step in reforming the monetary policy framework; and
- Structural reforms to ensure sustainable medium-term growth, including:
  - Vigorous **implementation of an updated Medium-Term Revenue Strategy** (MTRS) to finance PNG's development needs;

- **Extensive reform in the SOE sector** to strengthen performance in industries such as power generation and telecoms, which have a keystone role in enabling development of the non-resource sector;
- **Improving governance and reducing corruption**, as they hamper growth in all sectors of the economy by undermining investor confidence and efficiency.

31. The successful implementation of these policies under the SMP will open the door to additional development financing and further reforms. Bilateral donors have signaled their willingness to support PNG's transition to a more sustainable growth path, in the context of the SMP. In addition, the authorities have indicated their interest in seeking support under an IMF-supported program at the conclusion of the SMP. This would provide the opportunity to continue to strengthen the macroeconomic policy framework for medium-term growth. Throughout this process other development partners and financial institutions will remain fully engaged. Nonetheless, there are also important risks to the success of the program, both from exogenous developments with adverse macroeconomic consequences, and from slippages in implementation of reforms.

32. A critical element of the program continues to be the provision of TA and training. Papua New Guinea has received significant TA in the context of the updated MTRS, and this is expected to continue through 2022. There has also been TA in PFM, financial sector regulation and supervision, statistics and macroeconomic analysis from PFTAC. This is expected to be complemented by TA from MCM and/or other international partners on development of the monetary policy framework. On the authorities' side, the upgrading of capacity related to TA depends critically on implementation, which has been slow in some areas.

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

Box 1. External Assessment

Staff's judgement is that PNG's external position is moderately weaker than implied by fundamentals and desirable policies, given its weak gross foreign reserve position and overvalued real effective exchange rate (REER).

The External Balance Assessment methodology (EBA-lite) based on preliminary data for 2019 suggests that the currency is moderately overvalued. The unadjusted current account surplus of 24.2 percent of GDP suggests a large undervaluation. However, such an analysis is distorted by problems in classifying large income account outflows, including external debt service payments related to resource projects, under financial account rather than the current account. Staff estimates that adjusting the current account surplus for these flows should result in a current account deficit close to zero. In this case, the REER is assessed to be overvalued by around 12 percent according to the current account balance (CAB) analysis metric.¹ Alternatively, if the non-resource current account balance of -6.1 percent of GDP is used, the analysis indicates that the REER is overvalued by 18 percent. These results are supported by the EBA-lite REER index model, which suggests an overvaluation of 11 percent. Import compression, resulting from FX shortages, also implies a larger underlying current account deficit, and a higher degree of overvaluation. The assessment of an overvaluation is consistent with limited exchange rate adjustment to international inflation differentials or terms of trade movements.² In 2019, the real effective exchange rate (REER) appreciated by 3 percent as the nominal effective exchange rate (NEER) experienced little change throughout the year.

The reserves-to-import ratio declined to 4.7 months of imports at the end of 2019. Although well above the 3-months import cover norm, it is below the level of 6.9 months' cover considered appropriate for low-income countries.

Source: IMF staff estimates and projections.

¹ It is presumed that the misclassified outflows exceeded the current account surplus in 2019. A recent reclassification exercise by Fund staff and the authorities with 2015 data has resulted in a reduction in the current account surplus of almost 40 percent for that year, while the dividend and interest payments are estimated to have more than doubled since 2016 from company level data.

² Elasticities of exports (-0.44) and imports (0.29) are estimated in Nakatani (2017) "External Adjustment in a Resource-Rich Economy: The Case of Papua New Guinea" *IMF Working Paper* No.17/267.

Figure 1. Papua New Guinea: Real Sector*Real GDP recovered after the earthquake of 2018 ...***Real GDP Growth**

(Contributions to Percent Change)

Sources: IMF Staff Estimates

*Headline and underlying inflation are decelerating...***CPI Inflation**

(Year-on-Year Percent Change)

Sources: BPNG and IMF Staff Estimates

1/ Trimmed Mean by BPNG

*The REER has appreciated in recent months ...***Exchange Rates**

(Index; 2010=100)

Sources: IFS and IMF Staff Calculations

*as agriculture, construction and wholesale trade expanded.***Contribution to Growth of Non-Resource GDP**

(In Percent Change)

Sources: IMF Staff Calculations

*Due to a decline in prices of non-core items.***Contribution to CPI Inflation**

(In Percentage Points)

Sources: IMF Staff Calculations

*While commodity prices remain subdued.***Commodity Prices**

(Year-on-Year Percent Change)

Sources: IMF Primary Commodity Price System

Figure 2. Papua New Guinea: Balance of Payments

The current account remains in surplus...

Current Account

(In Percent of GDP)

Sources: IMF Staff Calculations

And import compression.

Exports and Imports

(In Percent of GDP)

Sources: IMF Staff Estimates

The real exchange rate has been driven by the economic cycle

Drivers of Exchange Rate

(In Percent Change)

Sources: IMF Calculations

driven mainly by commodity exports ...

Export Product Share, 2019

(In Percent)

Sources: BPNG

The current account surplus is offset by large capital outflows.

Capital and Financial Account

(In Billions of USD)

Sources: IMF Staff Calculations

Reserves were boosted in 2018 by sovereign bond issuance.

Gross Reserves

(LHS: In Months of Imports; RHS: In Billion US Dollars)

Sources: IMF Staff Estimation

Figure 3. Papua New Guinea: Fiscal Sector*Fiscal balances have worsened ...***Fiscal Balance**

(In Percent of GDP)

Sources: IMF Staff Calculations

*As revenue has declined ...***Revenue**

(In Percent of GDP)

Sources: IMF Staff Estimates

*While expenditure has remained stable.***Expenditure**

(In Percent of GDP)

Sources: IMF Staff Estimates

*Use of goods and services and compensation of employees account for a large part of recurrent expenditure.***Recurrent Spending**

(In Percent of GDP)

Sources: IMF Staff Estimates

*Deficit financing has turned to external sources***Financing**

(In Percent of GDP)

Sources: IMF Staff Calculations

*And debt has risen, particularly external loan obligations.***Public Debt**

(In Percent of GDP)

Sources: IMF Staff Estimates

Figure 4. Papua New Guinea: Monetary Sector

The policy rate has remained stable ...

Policy Rate
(In Percent)

Sources: IMF Staff Calculations

While the kina has depreciated slightly against the US\$

Exchange Rate
(Index; 2010=100)

Sources: IFS and IMF Staff Calculations

Real private sector credit has been weak ...

Money and Credit
(Year on Year Percent Change)

Sources: BPNG

With excess liquidity in the banking system.

Liquidity
(Billions of Kina)

Sources: BPNG

Banks have solid capital buffers and NPLs are stable

Financial Stability
(In Percent)

Sources: BPNG and IMF Staff Calculations

Commercial banks increased their holdings of government paper.

Holding of Government Securities by Commercial Banks
(In Percent of Broad Money)

Sources: IMF Staff Calculations

Table 1. Papua New Guinea: Selected Economic and Financial Indicators, 2016-2024

Nominal GDP (2016):	US\$21.1 billion 1/								
Population (2016):	7.9 million								
GDP per capita (2016):	US\$2,568								
Quota:	SDR 131.6 million (14th Review: SDR 263.2 million)								
	2016	2017	2018	2019	2020	2021	2022	2023	2024
	Est.	Est.	Proj.						
	(Percentage change)								
Real sector									
Real GDP growth	4.1	3.5	-0.8	5.0	2.0	2.8	2.9	3.2	3.3
Resource 2/	9.8	7.9	-9.3	9.7	-0.9	0.7	0.2	0.0	0.0
Non-resource	1.5	1.5	3.4	2.9	3.3	3.8	4.1	4.6	4.6
Mining and quarrying (share)	9.0	10.2	10.6	10.3	11.6	11.9	12.1	11.8	11.4
Oil and gas extraction (share)	14.8	16.5	16.8	17.7	16.8	16.6	16.0	15.8	15.2
CPI (annual average)	6.7	5.4	4.7	3.9	4.8	6.4	6.7	5.8	4.1
CPI (end-period)	6.6	4.7	4.8	3.5	5.7	6.6	6.7	5.0	3.9
	(In percent of GDP)								
Central government operations									
Revenue and grants	16.1	15.9	17.8	15.4	15.1	14.9	15.0	15.0	15.0
Of which : Resource revenue	0.6	0.9	1.7	1.5	1.3	1.1	1.0	1.0	0.9
Expenditure and net lending	20.9	18.4	20.4	19.5	18.4	18.1	17.2	16.9	16.8
Net lending(+)/borrowing(-)	-4.7	-2.5	-2.6	-4.1	-3.3	-3.1	-2.2	-1.9	-1.9
Non-resource net lending(+)/borrowing(-)	-5.4	-3.4	-4.3	-5.7	-4.7	-4.2	-3.2	-2.9	-2.8
	(Percentage change)								
Money and credit									
Domestic credit	24.6	-0.1	-7.9	8.2	4.9	8.7	7.8	8.3	8.7
Credit to the private sector	7.2	-3.8	7.4	10.5	8.2	8.4	10.6	8.2	8.0
Broad money	10.9	-0.9	-3.8	5.4	6.6	11.0	11.2	10.3	10.1
Interest rate (182-day T-bills; period average)	7.4	7.1	7.0	6.8	7.0	8.5	9.1	8.3	7.0
	(In billions of U.S. dollars)								
Balance of payments									
Exports, f.o.b.	8.1	9.8	10.1	10.8	11.3	11.6	11.8	12.0	12.2
Of which: Resource sector	7.3	8.9	8.9	9.7	10.0	10.0	10.1	10.2	10.3
Imports, c.i.f.	-1.8	-2.5	-2.5	-3.3	-3.6	-3.7	-4.2	-4.3	-4.4
Current account (including grants)	5.5	6.2	6.3	6.1	6.3	6.3	6.0	5.9	5.9
(In percent of GDP)	26.6	27.2	25.9	24.2	25.0	24.9	23.2	22.3	21.4
Gross official international reserves	1.7	1.7	2.2	2.0	1.9	1.9	2.0	2.1	2.2
(In months of goods and services imports)	5.4	5.2	5.6	4.7	4.3	3.9	3.9	4.0	4.2
	(In percent of GDP)								
Government debt									
Government gross debt	33.7	32.5	36.8	38.3	40.8	42.4	42.2	41.7	41.1
External debt-to-GDP ratio (in percent) 3/	8.5	8.8	15.2	16.1	20.1	22.2	23.4	24.4	24.9
External debt-service ratio (percent of exports) 3/	2.3	2.2	2.1	2.3	6.9	4.5	2.8	3.2	3.5
Exchange rates									
US\$/kina (end-period)	0.3150	0.3095	0.2970	...	...	...	...	...	...
NEER (2005=100, end-period)	101.2	98.6	95.5	...	...	...	...	...	...
REER (2005=100, end-period)	121.1	122.3	121.4	...	...	...	...	...	...
Terms of trade (2010=100, end-period)	12.2	12.8	13.7	13.9	14.8	15.3	15.6	15.9	0.0
Nominal GDP (in billions of kina)	65.0	72.5	79.2	84.7	92.2	101.0	110.9	119.3	126.9
Non-resource nominal GDP (in billions of kina)	49.5	53.1	57.4	61.0	66.0	72.2	79.8	86.4	93.2

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, 2016-2024
(In millions of Kina)

	2016	2017	2018 Prel.	2019 Proj.	2020 Proj.	2021 Proj.	2022 Proj.	2023 Proj.	2024 Proj.
Revenue and Grants	10,486	11,525	14,086	13,022	13,905	15,076	16,600	17,886	19,015
Taxes	8,422	9,141	10,435	10,448	11,242	12,105	13,505	14,755	15,755
Taxes on income, profits, and capital gains	5,286	5,317	6,119	5,984	6,422	7,129	7,920	8,612	9,234
Taxes on payroll and workforce	14	11	9	2	0	0	0	0	0
Taxes on goods and services	2,584	3,255	3,496	3,693	4,016	4,098	4,664	5,302	5,644
Taxes on international trade and transactions	537	558	811	770	804	879	920	841	877
Grants	1,430	1,440	1,836	943	932	1,021	1,121	1,106	1,177
Other Revenue 1/	634	944	1,685	1,631	1,732	1,950	1,975	2,025	2,083
Resource revenue	396	676	1,329	1,309	1,223	1,074	1,120	1,156	1,173
Mining and Petroleum Taxes	92	114	775	759	523	574	620	656	673
Mining and Petroleum and Gas Dividends	301	562	554	550	700	500	500	500	500
Other Dividends	3	0	0	0	0	0	0	0	0
Grants from other general government units 2/	0	0	0	0	0	0	0	0	0
Non-resource revenue	10,090	10,849	12,757	11,713	12,683	14,001	15,480	16,729	17,842
Expenditure 3/	13,572	13,320	16,134	16,526	16,984	18,236	19,048	20,199	21,383
Expense	12,157	12,005	14,543	13,856	14,287	14,323	14,965	15,585	16,472
Compensation of employees	4,463	4,376	5,198	5,324	5,365	5,573	5,782	5,992	6,353
Use of goods and services	4,103	4,138	4,879	4,332	4,050	4,223	4,416	4,578	4,821
Interest	1,248	1,525	1,853	2,073	2,207	2,205	2,289	2,500	2,622
Grants 4/	1,897	1,383	2,000	1,514	2,241	1,790	1,890	1,890	2,012
Social benefits	0	0	1	0	0	65	71	81	86
Other expenses	446	582	611	613	425	467	518	545	578
Net acquisition of non-financial assets	1,415	1,315	1,591	2,671	2,697	3,913	4,083	4,613	4,911
Gross operating balance	-1,672	-480	-457	-833	-382	752	1,635	2,301	2,543
Net lending (+)/borrowing (-)	-3,087	-1,795	-2,048	-3,504	-3,079	-3,161	-2,448	-2,313	-2,367
Primary balance	-1,839	-270	-195	-1,431	-872	-956	-158	187	255
Non-resource net lending (+)/borrowing (-)	-3,483	-2,471	-3,377	-4,813	-4,302	-4,235	-3,568	-3,469	-3,540
Non-resource primary balance	-2,235	-946	-1,524	-2,740	-2,095	-2,030	-1,279	-970	-918
Net financial transactions 5/	3,087	1,795	2,048	3,504	3,079	3,161	2,448	2,313	2,367
Net acquisition of financial assets	857	-180	1,229	-1,229	0	0	0	0	0
Net acquisition of financial liabilities	3,944	1,614	3,277	2,275	3,079	3,161	2,448	2,313	2,367
Domestic	2,495	736	-319	707	389	1,359	464	-196	-99
Treasury bills	1,934	531	-517	1,007	190	1,173	241	-102	-51
Treasury bonds	561	205	344	-300	300	611	223	-94	-47
Other accounts payable	0	0	-146	0	0	0	0	0	0
BPNG temporary advance	0	0	0	0	-101	-425	0	0	0
External	1,449	878	3,596	1,671	3,991	2,432	1,984	2,509	2,466
Debt securities	0	0	1,672	0	0	0	0	0	0
Loans	1,449	878	1,924	1,671	3,991	2,432	1,984	2,509	2,466
Unexplained Discrepancy 5/	0	0	0	0	0	0	0	0	0
Government deposits	2,793	2,184	3,714	3,822	3,935	4,054	4,178	4,310	4,447
Gross government debt	21,944	23,558	29,120	32,460	37,611	42,803	46,804	49,704	52,228
Domestic	16,437	17,173	17,103	18,853	19,039	20,398	20,861	20,665	20,566
Treasury bills	8,664	9,194	8,678	9,685	9,875	11,048	11,289	11,187	11,135
Treasury bonds	7,773	7,979	8,322	8,022	8,322	8,933	9,156	9,062	9,014
Loans	0	0	103	1,146	842	417	417	417	417
External	5,507	6,385	12,017	13,607	18,573	22,405	25,943	29,039	31,662
Debt securities	0	0	1,684	1,684	1,684	1,684	1,684	1,684	1,684
Loans	5,507	6,385	10,333	11,924	16,889	20,722	24,260	27,355	29,979
Memorandum items:									
Gross government debt, percentage of GDP	33.7	32.5	36.8	38.3	40.8	42.4	42.2	41.7	41.1
Contingent liabilities 6/	2,812	2,819	2,835	2,879	2,879	2,918	2,960	2,975	2,935
Future unfunded superannuation liabilities	2,431	2,431	2,431	2,431	2,431	2,431	2,431	2,431	2,381
SOE borrowing	381	388	404	448	448	487	529	544	554
Nonresource GDP at current prices	49,518	53,139	57,417	60,990	65,995	72,181	79,806	86,351	93,221
GDP at current prices	65,038	72,522	79,160	84,686	92,191	100,974	110,895	119,256	126,947

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

1/ The 2015 other revenue includes infrastructure tax credit, recoveries from former years (mainly fees and charges) and asset sale.

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

3/ As the authorities integrated the recurrent and development budgets from 2014 there is a discontinuity in the classification.

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

5/ Discrepancies between the overall balance and financing 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/ Contingent liabilities include future unfunded superannuation liabilities with Nambawan Super and SOE borrowing.

Table 2b. Papua New Guinea: Summary Operations of the Central Government, 2016-2024
(In percent of GDP)

	2016	2017	2018 Prel.	2019 Proj.	2020 Proj.	2021 Proj.	2022 Proj.	2023 Proj.	2024 Proj.
Revenue and Grants	16.1	15.9	17.8	15.4	15.1	14.9	15.0	15.0	15.0
Taxes	12.9	12.6	13.2	12.3	12.2	12.0	12.2	12.4	12.4
Taxes on income, profits, and capital gains	8.1	7.3	7.7	7.1	7.0	7.1	7.1	7.2	7.3
Taxes on payroll and workforce	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Taxes on goods and services	4.0	4.5	4.4	4.4	4.4	4.1	4.2	4.4	4.4
Taxes on international trade and transactions	0.8	0.8	1.0	0.9	0.9	0.9	0.8	0.7	0.7
Grants	2.2	2.0	2.3	1.1	1.0	1.0	1.0	0.9	0.9
Other Revenue 1/	1.0	1.3	2.1	1.9	1.9	1.9	1.8	1.7	1.6
Resource revenue	0.6	0.9	1.7	1.5	1.3	1.1	1.0	1.0	0.9
Mining and Petroleum Taxes	0.1	0.2	1.0	0.9	0.6	0.6	0.6	0.6	0.5
Mining and Petroleum and Gas Dividends	0.5	0.8	0.7	0.6	0.8	0.5	0.5	0.4	0.4
Other Dividends	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
Non-resource revenue	15.5	15.0	16.1	13.8	13.8	13.9	14.0	14.0	14.1
Expenditure 3/	20.9	18.4	20.4	19.5	18.4	18.1	17.2	16.9	16.8
Expense	18.7	16.6	18.4	16.4	15.5	14.2	13.5	13.1	13.0
Compensation of employees	6.9	6.0	6.6	6.3	5.8	5.5	5.2	5.0	5.0
Use of goods and services	6.3	5.7	6.2	5.1	4.4	4.2	4.0	3.8	3.8
Interest	1.9	2.1	2.3	2.4	2.4	2.2	2.1	2.1	2.1
Grants 4/	2.9	1.9	2.5	1.8	2.4	1.8	1.7	1.6	1.6
Social benefits	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1
Other expenses	0.7	0.8	0.8	0.7	0.5	0.5	0.5	0.5	0.5
Net acquisition of non-financial assets	2.2	1.8	2.0	3.2	2.9	3.9	3.7	3.9	3.9
Gross operating balance	-2.6	-0.7	-0.6	-1.0	-0.4	0.7	1.5	1.9	2.0
Net lending (+)/borrowing (-)	-4.7	-2.5	-2.6	-4.1	-3.3	-3.1	-2.2	-1.9	-1.9
Primary balance	-2.8	-0.4	-0.2	-1.7	-0.9	-0.9	-0.1	0.2	0.2
Non-resource net lending (+)/borrowing (-)	-5.4	-3.4	-4.3	-5.7	-4.7	-4.2	-3.2	-2.9	-2.8
Non-resource primary balance	-3.4	-1.3	-1.9	-3.2	-2.3	-2.0	-1.2	-0.8	-0.7
Net financial transactions 5/	4.7	2.5	2.6	4.1	3.3	3.1	2.2	1.9	1.9
Net acquisition of financial assets	1.3	-0.2	1.6	-1.5	0.0	0.0	0.0	0.0	0.0
Net acquisition of financial liabilities	6.1	2.2	4.1	2.7	3.3	3.1	2.2	1.9	1.9
Domestic	3.8	1.0	-0.4	0.8	0.4	1.3	0.4	-0.2	-0.1
Treasury bills	3.0	0.7	-0.7	1.2	0.2	1.2	0.2	-0.1	0.0
Treasury bonds	0.9	0.3	0.4	-0.4	0.3	0.6	0.2	-0.1	0.0
Other accounts payable	0.0	0.0	-0.2	0.0	0.0	0.0	0.0	0.0	0.0
External	2.2	1.2	4.5	2.0	4.3	2.4	1.8	2.1	1.9
Debt securities	0.0	0.0	2.1	0.0	0.0	0.0	0.0	0.0	0.0
Loans	2.2	1.2	2.4	2.0	4.3	2.4	1.8	2.1	1.9
Unexplained Discrepancy 5/	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Government deposits	4.3	3.0	4.7	4.5	4.3	4.0	3.8	3.6	3.5
Gross government debt	33.7	32.5	36.8	38.3	40.8	42.4	42.2	41.7	41.1
Domestic	25.3	23.7	21.6	22.3	20.7	20.2	18.8	17.3	16.2
Treasury bills	13.3	12.7	11.0	11.4	10.7	10.9	10.2	9.4	8.8
Treasury bonds	12.0	11.0	10.5	9.5	9.0	8.8	8.3	7.6	7.1
Loans			0.1	1.4	0.9	0.4	0.4	0.3	0.3
External	8.5	8.8	15.2	16.1	20.1	22.2	23.4	24.4	24.9
Debt securities	0.0	0.0	2.1	2.0	1.8	1.7	1.5	1.4	1.3
Loans	8.5	8.8	13.1	14.1	18.3	20.5	21.9	22.9	23.6
Memorandum items:									
Contingent liabilities 6/	4.3	3.9	3.6	3.4	3.1	2.9	2.7	2.5	2.3
Future unfunded superannuation liabilities	3.7	3.4	3.1	2.9	2.6	2.4	2.2	2.0	1.9
SOE borrowing	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4
Nonresource GDP at current prices	49,518	53,139	57,417	60,990	65,995	72,181	79,806	86,351	93,221
GDP at current prices	65,038	72,522	79,160	84,686	92,191	100,974	110,895	119,256	126,947

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

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

3/ As the authorities integrated the recurrent and development budgets from 2014 there is a discontinuity in the classification.

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

5/ Discrepancies between the overall balance and financing arise because of data coverage gaps in revenue and expenditure

extrabudgetary units, and payment arrears and cash withdrawals from trust accounts which are not fully accounted for due to data weaknesses.

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

Table 3. Papua New Guinea: Balance of Payments, 2016-2024
(In millions of U.S. dollars)

	2016	2017	2018	2019	2020	2021	2022	2023	2024
			Est.			Proj.			
Current account balance 1/	5,528	6,183	6,262	6,098	6,316	6,333	5,980	5,945	5,940
Resource	6,342	7,653	7,433	7,643	7,957	7,871	7,823	7,902	7,981
Nonresource	-611	-1,146	-1,171	-1,544	-1,641	-1,538	-1,843	-1,956	-2,041
Trade balance	6,290	7,333	7,573	7,473	7,756	7,872	7,650	7,726	7,754
Exports (f.o.b.)	8,126	9,832	10,105	10,788	11,316	11,555	11,815	12,009	12,161
Resource	7,261	8,853	8,869	9,650	10,038	10,028	10,069	10,170	10,272
Nonresource	866	979	1,236	1,138	1,278	1,527	1,745	1,839	1,889
Imports (f.o.b.)	-1,837	-2,499	-2,532	-3,315	-3,560	-3,683	-4,165	-4,284	-4,407
Resource	-918	-1,200	-1,436	-2,008	-2,081	-2,156	-2,246	-2,269	-2,291
Nonresource	-918	-1,299	-1,096	-1,307	-1,479	-1,527	-1,919	-2,015	-2,116
Services	-845	-1,069	-1,135	-1,235	-1,315	-1,418	-1,556	-1,587	-1,619
Income	-203	-324	-547	-729	-751	-787	-819	-837	-853
Current Transfers	286	243	371	589	626	666	706	643	658
Official	321	116	112	368	405	445	490	427	441
Private	-35	127	259	222	222	221	217	217	217
Capital and financial account balance	-5303	-5996	-5385	-6570	-6368	-6342	-5909	-5838	-5834
Capital account balance	6	28	28	29	28	28	28	28	28
Direct investment	-30	2	-7	-683	-756	-830	-946	-804	-834
Portfolio investment	-48	-333	282	-354	-364	-383	-404	-376	-382
Other investment	-5,231	-5,692	-5,687	-5,561	-5,276	-5,157	-4,587	-4,686	-4,647
Loans (Net)	-37	-1,056	-574	-359	-1,944	-3,378	-3,310	-3,244	-3,179
Official	357	149	431	379	-338	108	615	362	488
Private	-394	-1,205	-1,006	-738	-1,606	-3,486	-3,925	-3,605	-3,667
Commercial banks	-550	151	413	-225	-52	-8	74	95	105
Other private capital flows 2/	-4,251	-3,583	-4,520	-4,240	-1,674	1,715	2,575	2,068	2,094
Exceptional financing	0	0	0	0	0	0	0	0	0
Net errors and omissions	286	-285	-1425	0	0	0	0	0	0
Overall balance	511	-97	-547	472	51	8	-72	-107	-105
Financing	13	97	547	-472	-51	-8	72	107	105
Reserve assets	13	97	547	-472	-51	-8	72	107	105
Financing gap	-524	0	0	0	0	0	0	0	0
Memorandum items:									
Current account (in percent of GDP)	26.6	27.2	25.9	24.2	25.0	24.9	23.2	22.3	21.4
Resource	30.6	33.7	30.8	30.3	31.5	30.9	30.4	29.6	28.7
Nonresource	-2.9	-5.0	-4.8	-6.1	-6.5	-6.0	-7.2	-7.3	-7.3
Net international reserves (end-year)									
In millions of U.S. dollars	1,651	1,748	2,295	1,824	1,772	1,764	1,835	1,942	2,048
In months of nonmineral imports	15.5	18.8	20.5	16.2	15.3	12.1	12.0	12.0	12.4
In months of imports of goods and services	5.4	5.2	5.6	4.7	4.3	3.9	3.9	4.0	4.2
Public external debt-service-exports ratio (in percent)	2.3	2.2	2.1	2.3	6.9	4.5	2.8	3.2	3.5
Public external debt-GDP ratio (in percent) 3/	8.5	8.8	14.9	15.7	15.8	16.5	18.1	19.4	20.1

Sources: Data provided by the Papua New Guinea authorities; and IMF staff estimates and projections.

1/ Includes staff's estimates related to the PNG LNG project.

2/ Includes money transfer via offshore accounts.

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

Table 4. Papua New Guinea: Monetary Developments, 2016-2024

	2016	2017	2018	2019	2020	2021	2022	2023	2024
	Proj.								
Bank of Papua New Guinea	(In millions of kina; end of period)								
Net foreign assets	4,716	5,026	6,856	6,257	6,610	7,151	8,088	8,810	9,461
Foreign assets	5,258	5,606	7,450	6,863	7,268	7,866	8,866	9,610	10,276
Foreign liabilities	542	580	594	606	658	716	778	801	815
Net domestic assets	1,716	337	-1,595	-1,566	-1,538	-1,513	-1,491	-1,470	-1,451
Domestic credit	3,012	2,405	1,119	1,013	912	814	720	631	544
Net credit to government	2,858	2,369	1,088	982	880	783	689	599	513
Claims	3,567	2,852	2,646	2,540	2,438	2,341	2,247	2,157	2,071
Central government deposits	708	483	1,558	1,558	1,558	1,558	1,558	1,558	1,558
Credit to other sectors	154	36	31	31	31	31	31	31	31
Other items, net	-1,297	-2,068	-2,714	-2,579	-2,450	-2,327	-2,211	-2,100	-1,995
Of which: Central bank securities	-1,361	-2,092	-2,405	-2,284	-2,170	-2,062	-1,959	-1,861	-1,768
Reserve money	6,431	5,363	5,261	4,692	5,072	5,637	6,597	7,340	8,009
Currency in circulation	2,115	2,076	2,154	2,219	2,326	2,455	2,598	2,690	2,756
Deposits of other depository corporations	4,316	3,287	3,106	2,473	2,745	3,182	3,999	4,650	5,254
Required reserves	2,125	2,118	2,049	2,176	2,338	2,619	2,936	3,260	3,610
Excess reserves	2,191	1,169	1,058	297	408	563	1,063	1,390	1,644
Other deposits	0	0	0	0	0	0	0	0	0
Depository Corporations Survey	(In millions of kina; end of period)								
Net foreign assets	4,928	5,498	7,007	6,419	6,786	7,343	8,299	9,037	9,702
Net domestic assets	17,489	16,710	14,361	16,098	17,223	19,311	21,351	23,679	26,324
Domestic credit	22,929	22,907	21,100	22,837	23,962	26,049	28,090	30,418	33,062
Net credit to central government	9,009	9,147	6,806	7,300	7,344	8,236	8,645	9,573	10,746
Claims on other sectors	13,920	13,761	14,294	15,536	16,617	17,813	19,445	20,846	22,316
Claims on the private sector	11,379	10,945	11,759	12,991	14,057	15,234	16,843	18,224	19,674
Other items, net	-5,440	-6,198	-6,739	-6,739	-6,739	-6,739	-6,739	-6,739	-6,739
Broad money	22,417	22,208	21,368	22,517	24,009	26,653	29,650	32,716	36,026
Narrow money	16,032	16,283	15,780	17,150	18,854	21,702	24,895	28,149	31,638
Currency outside other depository corporat	1,580	1,523	1,579	1,516	1,455	1,397	1,341	1,288	1,236
Demand deposits	14,452	14,759	14,201	15,634	17,399	20,305	23,553	26,861	30,402
Quasi-money	6,323	5,863	5,526	5,305	5,093	4,889	4,693	4,506	4,325
Securities other than shares	62	62	62	62	62	62	62	62	62
	(Annual percentage change)								
Net foreign assets	-16.1	11.6	27.4	-8.4	5.7	8.2	13.0	8.9	7.4
Net domestic assets	21.9	-4.5	-14.1	12.1	7.0	12.1	10.6	10.9	11.2
Net domestic credit	24.6	-0.1	-7.9	8.2	4.9	8.7	7.8	8.3	8.7
Of which: Private sector	7.2	-3.8	7.4	10.5	8.2	8.4	10.6	8.2	8.0
Broad money	10.9	-0.9	-3.8	5.4	6.6	11.0	11.2	10.3	10.1
Memorandum items:									
Reserve money (percentage change)	24.4	-16.6	-1.9	-10.8	8.1	11.2	17.0	11.3	9.1
Gross international reserves (in millions of U.S	1,681	1,717	2,235	2,000	1,949	1,940	2,012	2,119	2,224
Nominal nonresource GDP/Broad money	2.2	2.4	2.7	2.7	2.7	2.7	2.7	2.6	2.6
Sources: Bank of Papua New Guinea; and IMF staff estimates and projections.									

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

Table 5. Papua New Guinea: Medium-Term Scenario, 2016-24

	2016	2017	2018	2019	2020	2021	2022	2023	2024
	Est.	Est.	Proj.						
	(Percentage change)								
Growth and prices									
Real GDP 1/	4.1	3.5	-0.8	5.0	2.0	2.8	2.9	3.2	3.3
Resource	9.8	7.9	-9.3	9.7	-0.9	0.7	0.2	0.0	0.0
Nonresource	1.5	1.5	3.4	2.9	3.3	3.8	4.1	4.6	4.6
CPI (period average)	6.7	5.4	4.7	3.9	4.8	6.4	6.7	5.8	4.1
CPI (end-period)	6.6	4.7	4.8	3.5	5.7	6.6	6.7	5.0	3.9
	(In percent of GDP, unless otherwise indicated)								
Central government operations									
Total revenue and grants	16.1	15.9	17.8	15.4	15.1	14.9	15.0	15.0	15.0
Total revenue	13.9	13.9	15.5	14.3	14.1	13.9	14.0	14.1	14.1
Of which: Resource revenue	0.6	0.9	1.7	1.5	1.3	1.1	1.0	1.0	0.9
Grants	2.2	2.0	2.3	1.1	1.0	1.0	1.0	0.9	0.9
Total expenditure	20.9	18.4	20.4	19.5	18.4	18.1	17.2	16.9	16.8
Expense	18.7	16.6	18.4	16.4	15.5	14.2	13.5	13.1	13.0
Net acquisition of nonfinancial assets	2.2	1.8	2.0	3.2	2.9	3.9	3.7	3.9	3.9
Primary balance	-2.8	-0.4	-0.2	-1.7	-0.9	-0.9	-0.1	0.2	0.2
Nonresource net lending(+)/borrowing(-) (Revenue - expenditure)	-5.4	-3.4	-4.3	-5.7	-4.7	-4.2	-3.2	-2.9	-2.8
Net lending(+)/borrowing(-) [Overall balance]	-4.7	-2.5	-2.6	-4.1	-3.3	-3.1	-2.2	-1.9	-1.9
Nonresource primary balance (in percent of nonresource GDP)	-3.4	-1.3	-1.9	-3.2	-2.3	-2.0	-1.2	-0.8	-0.7
Gross public debt 2/	33.7	32.5	36.8	38.3	40.8	42.4	42.2	41.7	41.1
Domestic	25.3	23.7	21.6	22.3	20.7	20.2	18.8	17.3	16.2
External	8.5	8.8	15.2	16.1	20.1	22.2	23.4	24.4	24.9
	(In millions of U.S. dollars, unless otherwise indicated)								
Balance of payments 3/									
Exports, f.o.b.	8,126	9,832	10,105	10,788	11,316	11,555	11,815	12,009	12,161
Of which: Resource	7,261	8,853	8,869	9,650	10,038	10,028	10,069	10,170	10,272
Imports, c.i.f.	-1,837	-2,499	-2,532	-3,315	-3,560	-3,683	-4,165	-4,284	-4,407
Current account	5,528	6,183	6,262	6,098	6,316	6,333	5,980	5,945	5,940
(In percent of GDP)	26.6	27.2	25.9	24.2	25.0	24.9	23.2	22.3	21.4
Overall balance (including exceptional financing)	511	-97	-547	472	51	8	-72	-107	-105
Gross official reserves	1,681	1,717	2,235	2,000	1,949	1,940	2,012	2,119	2,224
(In months of goods and services imports, c.i.f.)	5.4	5.2	5.6	4.7	4.3	3.9	3.9	4.0	4.2
(In months of nonmining imports, c.i.f.)	7.9	8.1	9.5	7.8	7.3	6.2	6.2	6.3	12.4
Public external debt service-export ratio (in percent) 4/	2.3	2.2	2.1	2.3	6.9	4.5	2.8	3.2	3.5
Memorandum items:									
Nominal GDP (in millions of kina)	65,038	72,522	79,160	84,686	92,191	100,974	110,895	119,256	126,947
Nominal GDP (change in percent)	8.1	11.5	9.2	7.0	8.9	9.5	9.8	7.5	6.4
Nominal GDP (in millions of U.S. dollars)	20,759	22,743	24,141	25,230	25,269	25,462	25,727	26,667	27,815
Assumed commodity prices: 5/									
Gold (U.S. dollars per ounce)	1,248	1,257	1,269	1,400	1,531	1,558	1,580	1,599	1,619
Copper (U.S. dollars per ton)	4,868	6,170	6,530	5,991	5,851	5,902	5,948	5,984	5,996
Liquefied Natural Gas Price Index (2005=100)	100	97	132	77	89	89	90	90	90
Oil (U.S. dollars per barrel)	42.84	52.81	68.33	61.78	57.94	55.30	54.60	54.72	55.29

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

1/ Real GDP growth projections are based on the chained Laspeyres measure.

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

3/ Includes staff's estimates related to the PNG LNG project.

4/ Public external debt service includes changes in check float.

5/ IMF World Economic Outlook. Liquefied Natural Gas (LNG) price index is Indonesian LNG in Japan.

Table 6. Papua New Guinea: Financial Soundness Indicators, 2013-19

	2013	2014	2015	2016	2017	2018	2019*
Capital Adequacy							
Capital to risk-weighted assets 2/	27.9	34.5	33.4	37.0	39.9	37.0	34.9
Tier 1 capital to risk-weighted assets	21.0	27.2	27.6	29.8	32.9	29.3	28.6
Asset Quality							
Nonperforming loans to total loans	1.2	1.4	2.6	2.7	2.7	3.6	4.0
Past due loans to total loans	2.2	2.7	3.9	6.7	5.4	5.1	5.5
Provision for losses to NPL	288.0	240.9	143.8	164.5	180.0	142.9	125.0
Earnings and Profitability							
Return on assets	2.4	2.0	1.7	2.2	2.2		
Return on equity 3/	21.2	26.2	21.4	16.7	24.3		
Liquidity							
Liquid assets to total assets	55.2	51.5	49.0	46.9	47.5	44.3	42.8
Loan-to-deposit ratio	50.3	57.2	60.5	63.3	65.6	71.4	73.4
Other							
Capital to total assets 2/	15.2	16.1	15.4	16.3	18.4	18.4	17.8
Risk-weighted assets to total assets	54.5	46.8	46.2	43.9	46.1	49.7	51.1

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

1/ Fourth quarter data for each year.

2/ Capital base includes Tier 1 and 2 capital.

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

* June 2019

Annex I. Risk Assessment Matrix¹

Potential Deviations from Baseline Expectations					
	Risk	Relative likelihood	Impact if realized	Potential impact	Staff advice on policy response
Upside risks	Major natural resource projects initiated	High	High	↑ Favorable impact on GDP, external balance and fiscal position.	• Maintain expenditure in line with medium-term rule. • Save surpluses in SWF and buffer funds.
	Sustained pick up in fiscal revenues from MTRS	Medium	Medium	↑ Favorable impact on fiscal position.	• Use additional funds to complete fiscal consolidation, then scale up public investment.
	A sharper pickup in activity associated with clearing of the FX orders backlog	High	Medium	↑ Favorable GDP impact, increased imports.	• May need to tighten monetary or fiscal policy stance to counter inflation pressures.
Downside risks	Domestic political turmoil, rising protectionism and retreats from multilateralism	High	Medium	↓ Adverse impact on foreign direct investment and confidence, negatively impacting growth.	• Continue gradual fiscal consolidation and monetary policy reforms.
	More difficult external and domestic financing conditions, including higher risk premia	High	Medium	↓ Higher debt service and refinancing risks. Pressure for government spending cuts.	• Front-load fiscal consolidation, with clear plan for further consolidation.
	Intensification of geopolitical tensions	Medium	High	↓ Adverse impact on investment and growth.	• Continue gradual fiscal consolidation. • Allow the Kina to depreciate vs. USD.
	Sustained decline in commodity prices	Medium	High	↓ Declines in major commodity export prices. Adverse BOP impact; moderate budget impact.	• Continue with gradual fiscal consolidation. • Allow Kina to depreciate vs. USD.
	Severe natural disasters including corona virus outbreak	Medium	High	↓ Negative impact on GDP growth, export and fiscal revenues, higher inflation.	• Allow Kina to depreciate vs. USD. • Maintain fiscal expenditure.

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.

Annex II. Authorities' Responses to Fund Advice

Fund Recommendation	Policy Actions
Fiscal Policies	
Financial management controls over the personal emoluments should be improved without delay with a view to reducing them by about K0.5 billion (0.7 percent of GDP)	The personal emoluments were not reduced and remain the main driver of budget over-runs. In the 2020 Budget, the government is planning to reduce the base salary to limit the growth of government payroll.
Scale back District and Provincial Service Improvement Program grants at least until the debt target is achieved.	The authority passed a Supplementary Budget which included cuts in Service Improvement Program grants by about 20 percent.
Eliminate payments delays and arrears as a priority in budget implementation.	The Treasury is planning to clear arrears in the 2020 Budget, and also working on improving budget control practices including by establishing arrears verification procedures.
Strengthen domestic revenue mobilization through implementation of the MTRS.	The authorities are working on institutional arrangements to implement MTRS including by appointing senior officials. Preparations for full implementation of TAA and revision of the ITA are ongoing, and new IT systems have been adopted.
Monetary, Financial and Exchange Rate Policies	
Clear the backlog of FX orders prior to floating the exchange rate.	BPNG has regularly provided FX injection and the backlog declined until early 2019, but more recently intervention slowed and the backlog is growing again.
Gradual elimination of exchange rate overvaluation should precede floating	BPNG has slowed down the pace of Kina depreciation, and very little depreciation was pursued in 2019.
Implement measures to boost the net supply of FX to the market, including measures to increase tax compliance by export earners.	Unauthorized overseas accounts are being identified and closed to increase FX supply. As a fundamental reform, efforts to strengthen competitiveness of non-resource sector exporters are ongoing, including revamping unprofitable SOEs and improving infrastructure.
Strengthen liquidity management by strengthening liquidity forecasting, ensuring market communication, and enhancing the monetary policy operational framework.	The BPNG is taking steps to establish a liquidity forecast framework, in coordination with Treasury. Measures to strengthen monetary operations are also being implemented, drawing from the Fund TA recommendations.
AML/CFT	
Publish the 2017 National Risk Assessment	Published in March 2019.

Fund Recommendation	Policy Actions
Structural Reform Develop a framework to better manage natural resource wealth, including a sovereign wealth Fund and aligning the terms of LNG project agreements with international best practices.	Legislation on a sovereign wealth fund has been passed, and the authorities are considering ways to channel resources from extractives sector to the fund. The authorities have put efforts to improve the terms of the Papua LNG Project more in line with international best practices, including the terms on royalties and production levies.
Build strategies to develop the non-resource sector by providing incentives to the private sector and infrastructure. Also address challenges in governance and corruption.	The authorities have established a comprehensive plan to strengthen SOEs to boost business confidence and infrastructure. Also, significant strides were made in AML/CFT framework, both through legislation and establishment of the FASU within BPNG.
Statistics Strengthen governance, management, and performance at the National Statistical Office (NSO).	Progress on the NSO reform has been limited. The authority is considering restoring a National Statistics Council or NSO reform committee to oversee reforms to NSO management.

Appendix I. Letter of Intent

17 February 2020

Ms. Kristalina Georgieva
Managing Director
International Monetary Fund
Washington, DC 20431

Dear Ms. Georgieva

Papua New Guinea is facing several economic crises. There is a budget crisis as years of economic mismanagement have left the new government with the largest deficit in PNG's history, a declining revenue base, declining levels of delivery of basic health and education services and significant government arrears to our businesses. There is a growth crisis, with a fall in living standards measured by non-resource GDP per capita over the last seven years of just under 10 per cent. Formal sector employment is actually more than 10 per cent lower than seven years ago. There is a monetary crisis. Foreign exchange shortages are damaging growth and have been identified by PNG businesses as the major constraint on doing business. Private sector lending has continued at low levels. While PNG has faced natural disasters in recent years, such as a major drought in 2015 which likely killed thousands of our people and a major earthquake in 2019 which killed a hundred more, the main reasons for our current situation are poor policies and poor implementation.

The new Marape-Steven Government, with its new Treasurer, are committed to implementing economic, social and governance reforms to turn the situation around. There is no quick fix – it will take many years to get out of the economic hole that the government finds itself in. As we undertake our reforms, we are seeking assistance from international partners.

An extensive reform program is already underway. The initial focus has been on budget repair. The first step required understanding the extent of the fiscal difficulties facing the country. A Due Diligence team identified major shortfalls in expected revenues and under-estimates of expenditures. These deficiencies were confirmed – and indeed increased – following an IMF verification. With only three months of the financial year remaining, the government initiated very large expenditure cuts – equivalent to nearly 10 per cent of previously budgeted expenditures in the 2019 Supplementary Budget.

The government continued its commitment to fixing the budget in the 2020 Budget Strategy which set out a fiscal consolidation path reducing the cash deficit from effectively 5.8 per cent of GDP in mid-2019 down to 4.1 per cent by end 2019, 2.2 per cent by 2022 and 1.9 per cent by 2023. Debt to GDP levels will fall from 42% at the time of the updated mid-year accounts down to under 38% by 2024. Within this reduction, the government has also introduced an expenditure rule which will

make a substantial shift in resources from the operational budget to the capital budget. These fiscal objectives were delivered in the 2020 Budget. Since the budget, an arrears verification interagency office has been created within the Treasury to identify, verify and clear the K2 billion in arrears clearance budgeted for over the next two years. The budget deficit will peak in 2020 with a rapid rate of fiscal consolidation in future years, especially as arrears payments are completed.

The fundamental problem facing the budget is a lack of revenue generation. Despite major increases in funding for our central tax agency in recent years, and giving them Statutory Authority independence, our combined tax collections in personal and company tax and our value added tax (GST) have fallen in nominal terms since 2014. Clearly, this must be turned around. The newly appointed Tax Commissioner, who comes from outside the organization, will be very active in lifting revenue collections. His recent workplan has many components drawing on the earlier Medium-Term Revenue Strategy which has been supported by the IMF.

The government is also pursuing major reforms in the way it sees the future of the PNG economy. Some have considered the resource sector as the backbone of the economy, and if one looks at indicators such as the share of international exports, they would be correct. However, with nearly 85% of our population still involved in subsistence agriculture and cash cropping, the actual backbone of our country is the agriculture sector. The government will do much more to encourage opportunities for our farmers including through improved extension services, transport to markets, fixing monetary policy and better access to finance through SME programs. Currently, PNG's foreign exchange market is broken as reflected in major shortages of foreign exchange which is severely damaging growth. We will take actions to move the Kina back to a fully convertible and flexible currency. We are also taking actions to increase the contribution to our economy from PNG's extraordinary natural resources including through a focus on tourism and more sustainable forestry with the planned phasing out of all round-log exports by 2024. Major reforms are planned for our State Owned Enterprises to lift growth. Although the P'nyang gas field may not be developed as quickly as hoped, the Papua LNG project will see the number of LNG trains increase from 2 to 4 with a major increase in planned LNG exports as well as increased domestic supply.

Action is also underway to improve governance and crack down on corruption. A Commission of Inquiry is holding hearings on a major UBS loan which was used to fund the acquisition of government shares in a resource company. Our Parliamentary Public Accounts Committee is holding well publicized hearings to scrutinize previous health procurement contracts. The long delayed Independent Commission Against Corruption legislation will be discussed in Parliament later this year. Additionally, new governance processes are reflected in smaller areas – such as the long Parliamentary debate on the 2020 Budget rather than rushing this vital policy document through, and the establishment of strong social and economic sub-committees of our National Executive Council.

In support of our reform agenda and program, the Government of Papua New Guinea hereby requests an International Monetary Fund (IMF) Staff-Monitored Program (SMP) commencing as soon as possible after the date of this letter. We consider the SMP to be essential in supporting our macroeconomic and stabilization efforts, building a track record of sound policy towards a future

Fund-supported program, and an indispensable further step for building confidence with the international community, including the mobilization of critical support from our Development Partners. The enclosed Memorandum of Economic and Financial Policies (MEFP) and the Technical Memorandum of Understanding (TMU) provide comprehensive details of our reform agenda and program.

We believe that the policies set out in the attached MEFP are adequate and robust enough to make substantial progress towards our overall medium-term objectives and stand ready to take further measures that may become necessary to achieve our goals. The Papua New Guinea authorities will consult with IMF staff, at our own initiative or whenever the Managing Director of the IMF requests, on the adoption of these measures and in advance of any revisions to the policies contained in our MEFP, in accordance with the IMF's policies.

The Government of Papua New Guinea will provide IMF staff with such information as may be requested in connection with the progress made in implementing the economic and financial policies and in achieving the objectives of the program. The Government of Papua New Guinea authorizes the IMF to publish this letter, the attached MEFP and TMU, and the related staff report, including placement of these documents on the IMF website, subject to the removal of market-sensitive information.

Yours Sincerely

/s/

.....
Hon. James Marape, MP
Prime Minister

/s/

.....
Hon. Ian Ling-Stuckey, CMG. MP
Minister for Treasury

/s/

.....
Mr. Loi Bakani, CMG
Governor, Bank of PNG

Attachment I. Memorandum of Economic and Financial Policies

This Memorandum of Economic and Financial Policies (MEFP) reviews economic developments, requests a 16-month Staff-Monitored Program (SMP), and describes policies that the Government of Papua New Guinea plans to implement in 2020-21.

A. Context

1. **Despite great natural resource wealth, Papua New Guinea (PNG) remains a low-income country with significant vulnerability to shocks.** Since 2014, PNG has become a significant exporter of liquefied natural gas (LNG), but has been hit by large shocks, including lower commodity prices, a severe drought, and a major earthquake, which cut growth, boosted inflation, and undermined the public finances and balance of payments.
2. **Efforts at fiscal consolidation, following the end of the resource boom in 2014, have stalled.** Cuts in many areas of expenditure, including development spending, have been offset by persistent overshoots on personnel costs, together with falling revenues. This has led to increasing deficits, the build-up of payments arrears, and an increase in the public debt-to-GDP ratio to well above the previous statutory limit.
3. **Since 2016, foreign exchange (FX) shortages and inflexibility of the kina have hindered economic recovery.** Reduced kina convertibility together with chronic shortages of FX, limited FX intervention, and uncertain availability of FX have severely hampered business confidence and investment. Limited flexibility in the exchange rate has also undermined the competitiveness and growth of the non-resource sector.
4. **Structural and institutional measures have also contributed to lackluster economic performance.** In recent years, PNG has converted several government departments into statutory authorities, weakening effective accountability, while other legislative changes have facilitated political interference in state-owned enterprises. These developments have led to a significant decrease in productivity, revenues and profitability, with adverse consequences for the fiscal position, public debt, financial stability and growth.
5. **Governance and corruption problems continue to harm PNG's prospects.** Although not new, corruption and governance weaknesses in PNG have been aggravated by weak economic performance in recent years and associated cuts in funding for law and order.

B. Medium-Term Objectives and Policies

6. **To put the PNG economy on a sound path to sustainable economic expansion requires near-term measures to promote macroeconomic adjustment.** The main measures needed include:

- **Addressing the large fiscal deficit and bringing public debt under control.** The authorities are committed to implementing a program of fiscal consolidation over the medium term to bring the deficit down and reduce the public debt-to-GDP ratio in conformity with the provisions of the recently revised Fiscal Responsibility Act (FRA). This adjustment will depend heavily on bringing personal emoluments under strict control in the short term, together with measures to increase revenues over the longer term.
- **At the same time, the authorities will need to start clearing central government and SOE payments arrears which hamper private sector growth.** Clearance will begin immediately, but the pace will depend on the availability of funds and verification of legitimate claims;
- **The authorities will also take steps to clear the backlog of FX orders and restore convertibility and flexibility of the kina to stimulate activity in the non-resource sector.** The pace of adjustment will be gradual in order to give businesses and households time to adjust, and to avoid an excessive impact on prices.

7. These measures can address the most immediate macroeconomic challenges, but putting the PNG economy on a stronger, more sustainable and more inclusive growth path will require additional structural reforms. These include:

- **Generating substantially more revenue through vigorous implementation of an updated Medium-Term Revenue Strategy** to be able to finance PNG's education, healthcare, and infrastructure spending needs;
- **Comprehensive reform in the SOE sector to strengthen economic performance in industries such as power generation and telecoms,** which have a keystone role to play in enabling development of the non-resource sector;
- **Reforms to improve governance and reduce corruption,** as they hamper growth in all sectors of the economy by undermining investor confidence and efficiency.

C. Fiscal Policy

8. The authorities' goal is to return fiscal policy to a sustainable path, while reorienting expenditure to support growth. Specific steps include: containing unproductive expenditure, paying off arrears and reorienting spending toward much-needed capital investment; increasing revenue through reforms in the updated Medium-Term Revenue Strategy (MTRS); and strengthening the medium-term fiscal framework.

- **Fiscal policy for 2020 (Prior Action).** The authorities commit to submit to the National Assembly a budget law for 2020 that meets the quantitative targets for the underlying core deficit and the levels of public spending defined in the macroeconomic framework linked to the SMP. The underlying core deficit is defined as the overall deficit of K4,631 million minus the payment of K1,022 million in arrears and K500 million in public investment projects that have not yet been identified, verified or funded. As arrears are properly identified and verified, and

financing is confirmed for public investment projects financed by International Financial Institutions, these will be included in the deficit through an adjustor.

- **Realistic budgeting for personnel costs.** The authorities commit to a more realistic process for budgeting for personnel costs to form a solid base from which to begin reforms. This includes taking into account pay increases related to fixation agreements with unions; accounting for the expected inflow of new staff on-boarding; better control of documentation and back pay for teachers; a realistic accounting for leave fares and supplements; and including severance pay and pension liabilities for employees retiring in the current year.
- **Establishing an interagency office in Treasury dedicated to the identification, verification and clearance of arrears and limiting the growth of new domestic payments arrears (Structural Benchmark).** Currently there are approximately 4000 public workers over the retirement age that have not retired (as is mandatory) because the authorities have not budgeted for the payment of separation costs. The Treasury office will verify these arrears in severance payments and pension liabilities, and complete the retirement of these public workers. These payment arrears will be expenditures outside the underlying core deficit. This office will also identify and confirm domestic payments arrears on current expenditures (rent and utilities) and on domestically-financed public investment projects and similar development budget arrears. The authorities commit to limit the growth of new domestic payments arrears to zero during the life of the program.
- **Limiting the growth of government payroll.** The authorities commit to limiting the growth of government base salaries agreements and to implement an efficiency cut of 2 percent in the overall base salary bill through better implementation of the government hiring freeze, including a limit on the number of new hires exempted from the freeze under the rubric of “essential service providers” and the number of unattached workers, and the elimination of unbudgeted and unlawful payments, particularly supplements and allowances. This will also be achieved through the amalgamation/elimination of a number of public agencies under the Public Sector Organization Reform, as specified in the Budget. For 2020, compensation of employees in the operational budget will be limited to the figure specified in the budget (K5,672.8 million).
- **A detailed independent audit of government employment and payroll practices (Structural Benchmark).** The authorities commit to completing a detailed audit of government employment and payroll practices by an independent organization to identify inappropriate hiring practices and payments and to develop a program of reforms to better track and control public service hiring and compensation practices.
- **Social spending.** In order to protect the level of social spending, the authorities will verify the composition of social spending (including current and capital spending on education, health and public safety, as well as income transfers) that will be protected from cuts in expenditure going forward. The authorities will abide by the expenditure floor on the definition of social spending that is included in the program as an indicative target.

- **Tax policy and compliance measures.** In addition to pursuing tax administration improvements under the updated MTRS, the authorities will institute additional measures to ensure that tax revenue targets are met. These measures are mentioned in the 2020 Budget, and provide an additional cushion to ensure the program targets are met in the face of disappointing revenue outcomes and/or wage slippages. The measures have been evaluated by the authorities to provide about 0.3 percent of GDP in additional revenue:
  - A one-off increase in excise taxes for cigarettes and alcohol drinks by 10 percent; a return to CPI-based indexation and an increase in excise on anti-social drinks by 400 percent;
  - Increased compliance with international taxes (imports) from the introduction of container examination facilities at the main Port of Lae;
  - Capturing resource rents on exports of unprocessed old-growth logs by increasing the progressive duty rate from the current average of 32 percent to an average of 50 percent;
  - Compliance efforts in collecting fees and services, including rent due the central government.

9. The authorities plan to finance the overall budget deficits in 2020 and 2021 largely with external financing. The financing scenario for 2020 assumes external financing including: ADB and World Bank budget support which will be used to pay off arrears and for health and SOE reforms; multilateral project support to finance project spending and capital investments; bilateral budget support from Australia to finance some arrears clearance and capital spending; and borrowing under the ADB Partial Credit Guarantee Facility to retire more expensive commercial debt. For 2021, the financing scenario assumes external financing including: ADB and World Bank budget support; multilateral project support; and additional bilateral budget support from Australia. This will help pay off arrears and support capital spending.

Medium-Term Fiscal Framework

10. The authorities will redouble efforts to implement an updated Medium-Term Revenue Strategy, including the following actions in 2020:

- **Appointing a permanent Commissioner General for the Internal Revenue Commission (IRC) (Structural Benchmark).** In order to allow for appropriate level of stability and to provide impetus for the implementation of the updated MTRS, the authorities will appoint a permanent Commissioner to the Internal Revenue Commission.
- **Institutional arrangements for revenue.** The Treasury will also lead an interagency team to review the best institutional arrangements for Tax and Customs revenue collection in PNG (Structural Benchmark).
- **Implementing the provisions of the new Tax Administration Act (TAA) and the updated MTRS.** The TAA, passed in 2018, is expected to become operational in July 2020 with full implementation by January 2021. Adequate implementation will require strengthening the Program Management unit in IRC with experienced tax experts to lead and implement the

program of reform (Structural Benchmark). The IRC and Treasury will also agree to specific MTRS implementation objectives and milestones to be achieved over the period of the SMP (Structural Benchmark). The Treasury and IRC will hold monthly meetings of the MTRS Steering Committee to review progress against agreed objectives and milestones (Structural Benchmark).

- **Passing of the Income Tax Act (ITA).** The ITA has been revised and is in the process of public comments. Final revisions are expected by March 2020. The authorities will submit the Act for passage in the Parliament in the June session, and publish the Act in the national gazette before September, so that the full provisions of the ITA would come into effect in January 2021 (Structural Benchmark).
- **Reviewing the government's SOE dividend policy.** The authorities are committed to developing and implementing a policy that would allow better control of the distribution of dividends to the central government (Structural Benchmark). This policy will go hand in hand with the reform of SOE finances, transparency and reporting policies discussed in paragraph 18 below.

11. Government financing and debt. The authorities will make the following commitments to contain public debt and improve the management of liquidity in the economy:

- **External financing arrears.** The authorities commit to keep the arrears on external debt service of the central government to zero during the life of the program.
- **Non-concessional financing.** The authorities commit to limiting new non-concessional debt, either contracted or guaranteed by the central government, with maturity of one-year or more, to the limits under the program and specified in Table 1, and as defined in the TMU. The new non-concessional debt consists of bilateral financing from Australia and debt contracted under the Asian Development Bank Partial Credit Guarantee facility (see paragraph 9).
- **Domestic debt issuance and liquidity.** In order to assist BPNG in its planning and control of liquidity in the economy, the Treasury will prepare a Treasury debt issuance and external debt disbursement plan early in 2020 based on cash forecasts, and share this with BPNG (Structural Benchmark). In addition, the Treasury debt office will coordinate with BPNG on issuance and provide weekly updates for the coming three months to BPNG.

12. The authorities are committed to improving the Medium-Term Fiscal Framework:

- **Medium-term debt target.** The recent amendment to the FRA raises the upper limit on debt temporarily to 45 percent of GDP to accommodate the absorption of new information on the actual size of the budget deficit, a revised definition of debt and the realization of former loan government guarantees. The government's long-term debt target continues to be a debt ratio of no more than 30 percent of GDP. The FRA provides for a transition to lower debt, with the debt ratio to move below 35 percent of GDP in 10 years. The authorities commit to a medium-term fiscal program in the SMP, that will match these quantitative limits. Reaching debt targets

will require continued efforts at fiscal consolidation in the medium-term, in particular, by reining in current spending.

- **An expenditure rule.** To reduce the pro-cyclicality of fiscal policy, reconcile the debt target with revenue objectives under the updated MTRS, and encourage an integrated approach to development spending, the authorities will incorporate an expenditure rule calibrated in terms of non-resource GDP in the fiscal strategy of the 2020 Budget (Prior Action). The proposed rule would reduce the combined PE and goods and services recurrent budget, as a share of non-resource GDP, until the long-term debt target of 30 percent of GDP is reached, while increasing public investment as a share of non-resource GDP.
- **Sovereign Wealth Fund (SWF).** As the benefits of future natural gas projects come on line, the government will want to use part of the proceeds from higher tax and non-tax revenue to create financial buffers for contingencies such as natural disasters, and to put some of the money aside for the benefit of future generations. The government has already passed a SWF Law. In order to further the process of establishing the SWF, the authorities will create a plan for the full implementation of the SWF when new gas projects come on line (Structural Benchmark). TA with operationalization will be requested. In addition, the disposition of revenues from resource sector SOEs (Kumul Petroleum and Kumul Mining) will be reviewed with a view to establishing a more direct and transparent flow of revenues through to the SWF.

D. Monetary and Exchange Rate Policies

13. The program includes measures aimed at eliminating unfilled orders for FX, restoring kina convertibility and exchange rate flexibility, and strengthening the effectiveness of the Bank of Papua New Guinea's money market operations. In recent years, excess demand for FX has led to the buildup of a backlog of unfilled FX orders and lengthy delays in obtaining FX. These are significant obstacles to business investment and growth. A gradual approach to eliminating the backlog and restoring exchange rate flexibility is considered appropriate, given uncertainties surrounding the appropriate level of the exchange rate and the true size of the FX backlog, as well as the need to maintain financial stability. At the same time BPNG will take steps to strengthen its liquidity management and influence over domestic interest rates.

Exchange Rate Policy Reforms

14. To eliminate the FX backlog and restore exchange rate flexibility, the BPNG will undertake the following measures:

- **Promote an orderly reduction in the backlog of unfilled FX orders.** To stabilize and reduce the backlog, the BPNG will provide FX to authorized FX dealers in the amount of at least \$60 million per month, on average, over the first six months of the program, and in each subsequent half year until the backlog is eliminated, subject to maintaining Net International Reserves (NIR) at a level of at least \$1.8 billion.

- **Implement a progressive restoration of kina convertibility and a fully market-determined exchange rate.** This will involve adjustment of regulatory measures affecting convertibility as well as facilitating a greater degree of flexibility in the exchange rate. Gradual restoration of exchange rate flexibility and sustained elimination of the FX orders backlog could involve some adjustment in the exchange rate, which will need to be market-determined.¹
- **BPNG will seek TA to help restore functioning of the interbank FX market.** Exchange rate adjustment and elimination of the FX orders backlog will provide the foundations for resumption of interbank FX trading, but TA will be sought to promote resumption of trading in the near future (Structural Benchmark).

Monetary Operations Reforms

15. At the same time, steps will be taken to strengthen liquidity management and the effectiveness of BPNG money market operations. As exchange rate flexibility is restored, BPNG will need to have effective tools to manage systemic liquidity and interest rates. Specific measures to be taken include:

- **Completion of a liquidity forecasting framework.** Department of Treasury will provide weekly updates to BPNG of its expected domestic debt issuance over the forthcoming three months. This information is needed to help guide BPNG liquidity management (Structural Benchmark).
- **Tightening of access to overnight lending by BPNG.** BPNG will raise the rate on its overnight lending facility to further encourage financial institutions to use the interbank money market as their preferred means of liquidity management (Structural Benchmark).
- **Halt BPNG financing of the public sector.** BPNG additional net lending to the government under the “slack” arrangement will be limited to zero (Quantitative Target).
- **Seek TA to support implementation of reforms to monetary operations (Structural Benchmark).** TA will be sought from the IMF, Australia, or New Zealand to assist with design and implementation of liquidity forecasting, modifications to commercial bank reserve requirements, and central bank liquidity management through money market operations.

E. Financial Sector Stability and Supervision

16. BPNG will continue to strengthen its risk-based banking supervision framework. As PNG moves towards greater exchange rate and interest rate flexibility, banks will need to be well-placed to manage both their direct exposure to FX and interest rate risks, as well as indirectly through the balance sheet vulnerabilities of corporate clients, including SOEs. BPNG will intensify its liquidity, foreign exchange, and market risk supervision, based on TA being provided by PFTAC.

¹ The IMF considers that the kina is overvalued by between 12 and 18 percent, based on current information. An adjustment in the exchange rate of this amount should be feasible over a 2-3 year period without putting excessive upward pressure on inflation.

BPNG will also strengthen its stress-testing capacity, including by making use of information on SOE balance sheets provided by Department of State Enterprises.

F. AML/CFT Policies

17. PNG will continue to strengthen effective implementation of its AML/CFT framework.

PNG has made substantial progress in strengthening its framework, but further improvements in implementation are needed to mitigate ML/TF risks and ease pressure on correspondent banking relationships. The National Coordinating Council should develop AML/CFT priorities based on the published results of the National Risk Assessment. The FASU should continue enhancing its risk-based supervision of banks to improve AMP/CFT compliance. Law enforcement agencies should step up their efforts in prosecuting and sanctioning ML cases and confiscate ill-gotten proceeds.

G. Structural Policies, Governance, and Transparency

18. PNG has ambitious objectives for economic development, diversification, and raising living standards. The Vision 2050 development strategy and the Medium-Term Development Plan III underscore the government's commitment to national development through infrastructure investment, improving law and order, and better education and health services. To be able to deliver on these commitments, a range of measures are needed, including:

- **Revitalization of the MTRS.** Development of the non-resource sector requires substantial public investment in infrastructure, education, healthcare, clean water, electricity, and telecommunications. Providing such public goods will require sustained increases in government revenues. Implementation of the updated MTRS is essential to this, but progress to-date has been too slow. To revitalize the MTRS, in addition to the revenue measures referred to in paragraph 9, above, the Treasury and IRC will: (i) agree to specific MTRS implementation objectives and milestones to be achieved in 2020, based on the PNG IRC Annual Plan and IMF TA recommendations (Structural Benchmark); (ii) strengthen the Program Management Office within IRC (Structural Benchmark); and hold regular meetings of the MTRS Steering Committee to review progress against these objectives and milestones (Structural Benchmark).
- **Comprehensive SOE reform.** Weak performance by many SOEs is a serious impediment to development of the entire PNG economy, is a burden on the government's fiscal position and ability to finance development, and is a real risk to financial stability. The authorities commit to implementing a comprehensive reform package, based on the reform plan approved by the National Executive Council (NEC) (Structural Benchmark). Key elements include: (i) strengthening SOE management; (ii) increasing transparency and accountability; (iii) improving investment procurement and planning processes; (iv) reforming the role of Kumul Consolidated Holdings (KCH) in SOE oversight; and (v) improving the financial viability of SOEs and divesting non-core assets. The authorities intend to work closely with the Asian Development Bank (ADB), and other development partners, on the implementation of these reforms.

- **Corruption** reduces the effectiveness and efficiency of government, undermining achievement of PNG's development objectives. The authorities will develop a comprehensive and prioritized strategy for reducing corruption and coordinating efforts across relevant government agencies, and TA will be sought in developing the strategy (Structural Benchmark). Passage of the Independent Commission Against Corruption (ICAC) Act is a priority to be completed in 2020 (Structural Benchmark), as is adequate resourcing and training for the National Procurement Commission, in order to implement the National Procurement Act (NPA).

H. Program Risks and Monitoring

19. Key risks to the program stem from potential exogenous events, as well as from slippages in implementation of reforms. External events, such as weakening of the external economic environment or a natural disaster could adversely affect PNG's economic performance, lowering growth and weakening the fiscal position. This would make fiscal consolidation more difficult. Access to external finance could also be more challenging than anticipated. This could force more difficult fiscal adjustment or, more likely, lead to slower clearance of arrears or cuts in capital spending than envisaged in the program. Domestic developments pose risks to program implementation. Implementation of the updated MTRS reforms and bringing personal emoluments under much better control are essential for medium-term fiscal consolidation, but both are at risk of slippage in implementation or loss of political support. Similarly, support for SOE and governance reforms could weaken, undermining medium-term growth prospects and increasing risks to public debt from contingent liabilities and fraud.

20. The first, second and third reviews will be based on end-June 2020, end-December 2020, and end-June 2021 quantitative targets and indicative targets (Table 1) and prior actions and structural benchmarks (Table 2). The performance criteria and indicative targets are defined in the Technical Memorandum of Understanding (TMU), which also specifies the nature and frequency of the information and data to be provided for program monitoring.

Table 1. Papua New Guinea: Quantitative Targets and Indicative Targets for 2020¹
(In billions of kina, unless otherwise indicated)

	2020			
	End-March	End-June	End-September	End-December
	Indicative Target Prog.	Quantitative Target Prog.	Indicative Target Prog.	Quantitative Target Prog.
Quantitative Targets				
Core fiscal deficit of the central government (cumulative ceiling within the year)	0.847	1.694	2.386	3.079
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	300	700	1,200
External debt service arrears of the central government (ceiling, US\$ millions)	0	0	0	0
Stock of net international reserves of the BPNG (floor, US\$ millions)	1,800	1,800	1,800	1,800
BPNG provision of foreign exchange to authorized FX dealers (cumulative floor within the year, US\$ million)	180	360	540	720
BPNG direct monetary financing of the public sector	0	0	0	0
Indicative targets				
Tax revenue of the central government (cumulative floor within the year)	2.417	4.834	8.038	11.242
Central government core current expenditure (cumulative ceiling within the year)	3.929	7.858	11.072	14.409
New domestic payments arrears of the central government (ceiling)	0	0	0	0
Social and other priority spending (cumulative floor within the year)	0.893	1.787	3.126	4.466
Central government clearance of arrears and additional capital spending (cumulative ceiling within the year)	0.388	0.820	1.156	1.552
Memorandum items:				
Overall deficit of the central government (core deficit plus payments of arrears and additional capital spending) (cumulative ceiling within the year)	1.235	2.514	3.542	4.631
Concessional borrowing (ceiling, millions of US\$)	620	620	620	620
Estimated stock of arrears to be cleared in 2020 (billions of kina)	1.052	0.852	0.352	0.000

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 Understandings.

Table 2. Papua New Guinea: Prior Actions and Structural Benchmarks for 2020

Measure	Purpose	Implementation date
Fiscal Measures		
Passing of a 2020 Budget targeting an underlying core fiscal deficit consistent with Table 1 of MEFP	Resume momentum of fiscal consolidation	Prior Action (met)
Establish an interagency office in Treasury responsible for the identification, verification and clearance of arrears	Improved control over government spending and clearance of arrears	Prior Action (met)
Complete a detailed independent audit of government employment and payroll practices and program of reform	Improved control over government hiring and payroll to contain employee compensation expenditures	End-April 2020
Appoint a permanent IRC Commissioner General	Support the implementation of the MTRS	End-March 2020
MTRS Steering Committee to set specific MTRS implementation objectives and milestones to be achieved in 2020, based on PNG IRC 2020 Annual Plan	Support the implementation of the MTRS and improve revenue collection	End-February 2020
Establish an adequately-staffed MTRS implementation unit within IRC	Support the implementation of the MTRS and improve revenue collection	End-April 2020
Hold monthly meetings of the MTRS Steering Committee to review progress against agreed objectives and milestones	Support the implementation of the MTRS and improve revenue collection	End-April 2020
Conclude revisions of the Income Tax Act and pass the Act in parliament and publish in the gazette	Support the implementation of the MTRS and improve revenue collection	End-December 2020
Begin implementation of the Tax Administration Act, with a dedicated project team to implement critical provisions on a staged basis so that full implementation is achieved by January 2021	Support the implementation of the MTRS and improve revenue collection	End-June 2020
Complete a review led by Treasury of the best institutional arrangements for Tax and Customs revenue collection in PNG	Support the implementation of the MTRS and improve revenue collection	End-September 2020
Complete a review of existing SOE dividend policies to clarify rules and timing for dividend payments to government	Better control over resource sector revenue	End-September 2020
Incorporate an expenditure rule calibrated in terms of non-resource GDP in the existing fiscal strategy in the 2020 Budget	Revise the medium-term fiscal framework to better control expenditures and reduce pro-cyclicality of fiscal policy	Prior Action (met)
Develop a plan for full implementation of the SWF, including consistency of the current arrangements with PNGs long-term development interests	Implementation of the medium-term fiscal framework to manage natural resource project revenue and reduce pro-cyclicality of fiscal policy	End-December 2020
Treasury to prepare a treasury debt issuance and external debt disbursement plan based on cash forecasts, and share regularly updated projections with BPNG	Strengthen liquidity management and budget execution	End-March 2020

Table 2. Papua New Guinea: Prior Actions and Structural Benchmarks for 2020 (concluded)

Measure	Purpose	Implementation date
Monetary and Exchange Rate Measures		
Complete a liquidity forecast framework at the BPNG in coordination with Treasury	Strengthen monetary operations of the BPNG to prepare for flexible exchange rate regime	End-June 2020
Increase the spread around the base rate for repo operations to 100 basis points	Promote development of the interbank money market	End-March 2020
BPNG to seek additional TA to implement measures to strengthen monetary and FX market operations, and re-establish a functioning interbank FX market	Promote development of the interbank money market	End-June 2020
Structural and Governance		
Implementing SOE reform plan approved by the National Executive Council (NEC) in consultation with international partners such as ADB and Australia	Promote public sector efficiency, promote non-resource sector development, and minimize risks to fiscal and financial stability	End-June 2020
Develop a comprehensive and prioritized strategy for reducing corruption, coordinating across relevant government agencies, with technical assistance	Safeguard public resources, improve transparency and create a better business climate	End-September 2020
Passage of the ICAC Act in the Legislature and publish the Act in the National Gazette	Safeguard public resources, improve transparency and create a better business climate	End-December 2020

Attachment II. 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 16-month Staff-Monitored Program (SMP) spanning from February 2020 to June 2021. It specifies the quantitative targets and indicative targets on which the implementation of the SMP will be monitored. In addition, the TMU establishes the terms and timeframe for transmitting the data that will enable IMF staff to assess program implementation and performance. The definitions are valid at the start of the program but may need to be revisited during the program reviews to ensure that the memorandum continues to reflect the best understanding of the Papua New Guinea authorities and IMF staff in monitoring the program.

A. Prior Actions

1. **The passing of a 2020 Budget targeting an underlying core fiscal deficit consistent with table 1 of the Memorandum of Economic and Financial Policies (MEFP) will be a prior action for the SMP.** The budget should include realistic budgeting for personnel costs, other operational expenditures and avoid further build-up of arrears.
2. **The overall fiscal balance will be adjusted to calculate the core fiscal deficit as follows:**
3. **The core fiscal deficit** will be defined as the **overall cash fiscal balance** as defined below, and (1) excluding expenditure for well-verified and authenticated central government payments arrears, as defined below and up to the limit indicated below; and (2) excluding capital expenditure (net acquisition of non-financial assets) financed through project loans from multilateral financial institutions, as defined below and up to the limit indicated below.
4. **Well-verified and authenticated central government domestic payments arrears** will be defined as central government domestic payment obligations due prior to January 1, 2020 but not paid, identified and verified by the interagency office in Treasury responsible for arrears identification and verification. See the definition of domestic payments arrears below. Verification constitutes the collection of documentation (i.e., contracts) that verify the central government obligation is legitimate and the confirmation that the contracted work has been undertaken consistent with the contract. Limits to arrears payments are as follows:
  - a. **For 2020, total arrears payments will be limited to K1.052 billion. An indicative allocation of these arrears is as follows:** K430 million for superannuation arrears for non-teachers; K122 million for 2019 public servant pay increases; K200 million for goods and services arrears (rent and utilities); K300 million for capital spending projects, and other outstanding development budget allocations.
  - b. **For 2021, total arrears payments will be limited to K930 million. An indicative allocation of these arrears is:** K430 million for superannuation arrears for teachers; K200

million for goods and services arrears (rent and utilities); K300 million for capital spending projects and other outstanding development budget allocations.

5. Capital expenditure exclusion. This includes the net acquisition of non-financial assets associated with projects financed by multilateral financial institutions (the World Bank and the Asian Development Bank) up to a limit of K500 million in 2020.

6. For the purpose 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.¹

B. Quantitative Targets

7. Quantitative Targets have been set for the end of March 2020, end of June 2020, end of September 2020, and end of December 2020.² Performance under the program in 2020 is assessed against quantitative targets for end-June 2020 and end-December 2020. End-March 2020 and end-September 2020 quantitative targets are treated as indicative targets. Unless otherwise specified, all quantitative targets and indicative targets will be evaluated in terms of cumulative flows from the beginning of each calendar year. The quantitative targets and indicative targets are specified in Table 1 of the MEFP. For the calculation, monitoring and evaluation of the quantitative targets, the following definitions will be used:

Definitions and Calculations

8. Overall fiscal balance, is calculated on a cash basis, and is defined as the difference between (1) the sum of government tax and non-tax revenue and budget grants; and (2) total current expenditure plus capital expenditure.

9. Debt is defined for the program purposes in accordance with Executive Board Decision No. 15688-(14/107), Point 8(a) and (b), as published on the IMF website (link:). 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 loans, suppliers’ credits and leases. 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

¹ The general government represents national and provincial governments, the Autonomous Bougainville government and commercial and statutory authorities

² Quantitative targets for 2021 will be set during the course of reviews in 2020.

obligation that is not considered debt under this definition (e.g., payment on delivery) will not give rise to debt.

10. External debt is defined by the residency of the creditor. A debt is considered as contracted for program monitoring purposes once all conditions for its entrance into effect have been met, including approval by the Treasury, if required. A debt is considered guaranteed when all the conditions for entry into effect, including ratification, have been met for both the debt and the guarantee. The contracting of credit lines with no predetermined disbursements schedules or with multiple disbursements will be also considered as contracting of debt.

11. Concessional debt for program purposes is the debt that includes a grant element of at least 35 percent, calculated as follows: the grant element of a debt is the difference between the present value (PV) of debt and its nominal value, expressed as a percentage of the nominal value of the debt. The PV of debt at the time of its contracting is calculated by discounting the future stream of payments of debt service due on this debt.³ For debts with a grant element equal or below zero, the PV will be set equal to the nominal value of the debt. The discount rate used for this purpose is the unified discount rate of 5 percent set forth in Executive Board Decision No. 15248-(13/97).

12. Contracting or guaranteeing of new external debt by the public sector applies to debt to non-residents with original maturity of one year or more. For the purposes of the program, the definition of “debt” is set forth in point No. 9 of the “Guidelines on Performance Criteria with Respect to External Debt” (see Decision No. 6230-(79/140) as revised on August 3, 2009 (Decision No. 14416-(09/91)).

13. Government debt guarantees means an explicit legal obligation of the central government to service a debt in the event of nonpayment by the borrower.

14. 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).

15. Net international reserves (stock) of the BPNG are defined as the difference between total gross official international reserves and official reserve liabilities.

- **Gross official international 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.

³ The calculation of concessionality takes into account all aspects of the debt agreement, including maturity, grace period, payment schedule, upfront commissions, and management fees.

- **Gross official international 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.
- **Gross official 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);

C. Indicative Targets

16. The indicative targets have been set for the end of March 2020, end of June 2020, end of September 2020, and end of December 2020. 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

17. Tax revenues of the government are defined in line with the GFSM 2014 and are classified into six major 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 taxes.

18. Current expenditure is defined as central government expenditure within the current year, which needs to be made recurrently. This is calculated by total expenditure less net acquisition of non-financial assets.

19. 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:

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

20. 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).

D. Program Monitoring and Data Reporting

21. 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 BPNG, 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. **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				
National government operations—revenue, expenditure, and financing	Budget operations	Treasury	Quarterly	1 month
Detailed data on the execution of the budget (by economic and administrative classification)			Bi-annual	1 month
The outstanding appropriation, allotment, commitment, vendor purchasing/payments, cash advances, and bank balances since the beginning of the calendar year			Quarterly	1 month
The monthly cash plan			Monthly	1 month
Payroll and non-payroll salary and allowance payments made by Treasury			Quarterly	1 month
Total stock of identified domestic arrears, with a breakdown between service providers	Domestic arrears	Treasury	Quarterly	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	Quarterly	1 month
Total volume of sovereign bond issued, with interest rate, maturity, and recipient			Bi-annual	1 month
The amount of new domestic debt contracted by Government			Quarterly	1 month
Details of disbursed external budget support and project grants and loans	External debt	Treasury	Quarterly	1 month
End of year external debt in U.S. dollars, by creditor, and originating currency.			Annually	1 month
The amount of new external debt contracted by Government			Quarterly	1 month
All guarantees provided by the government including guarantees to public corporations and private sector			Quarterly	1 month
Financial status of major SOEs	SOE data	Treasury	Quarterly	3 months

Table 1. Papua New Guinea: Data Reporting for Program Monitoring (continued)

Real Sector				
Consumer Price Index	Economic indicators	NSO	Quarterly	3 months
National Accounts (breakdown of production) in real and nominal terms				24 months (latest GDP figures are for 2016)
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 benchmarks 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 BPNG			Monthly	1 month
Data on the amounts of on-budget grants, including transfers to the government's accounts from the government's external accounts at the BPNG				
Depository Corporations Survey			Quarterly	3 months
Balance sheets and income statements by financial institutions (aggregate and by bank)			Quarterly	3 months
Prudential data of financial institutions as per BPNG regulations, and average interest and maturity information for private sector loans	Financial indicators	BPNG	Quarterly	3 months
Financial Soundness Indicators (aggregate and by bank)			Quarterly	3 months
Lending activity of banks (by sector)			Quarterly	3 months

Table 1. Papua New Guinea: Data Reporting for Program Monitoring (concluded)

External Sector				
Balance of Payments data in the reporting template	BOP	BPNG	Quarterly	3 months
Import and export data, for aggregated sectors			Quarterly	3 months
Net international reserves, including reserve assets/liabilities by currency			Monthly	1 month
Foreign exchange flow data (by type of flow)			Monthly	1 month
Bank's purchases and sales of foreign currency (specified by bank and by type of flow)			Monthly	1 month
List of the foreign exchange allocation pipeline			TBC	1 month

PAPUA NEW GUINEA

February 21, 2020

STAFF REPORT FOR THE 2019 ARTICLE IV CONSULTATION AND REQUEST FOR A STAFF-MONITORED PROGRAM— INFORMATIONAL ANNEX

Prepared By

Asia and Pacific Department
(In Consultation with Other Departments)

CONTENTS

FUND RELATIONS	<u>2</u>
RELATIONS WITH THE PACIFIC FINANCIAL TECHNICAL ASSISTANCE CENTRE	<u>5</u>
INFORMATION ON THE ACTIVITIES OF OTHER IFIS	<u>10</u>
STATISTICAL ISSUES	<u>11</u>

FUND RELATIONS

(As of January 31, 2020)

Membership Status

Joined: October 9, 1975; Article VIII

General Resources Account

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

SDR Department

	<u>SDR Million</u>	<u>Percent Allocation</u>
Net cumulative allocation	125.49	100.00
Holdings	6.31	5.03

Outstanding Purchases and Loans

<u>SDR Million</u>	<u>Percent Quota</u>
0.00	0.00

Latest Financial Arrangements

Type	<u>Approval Date</u>	<u>Expiration Date</u>	<u>Amount Approved (SDR million)</u>	<u>Amount Drawn (SDR million)</u>
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 Fund¹

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

	<u>Forthcoming</u>				
	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>
Principal					
Charges/interest	0.89	0.88	0.88	0.88	0.88
Total	0.89	0.88	0.88	0.88	0.88

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

Under the Fund's Safeguards Assessments policy, the Bank of Papua New Guinea (BPNG) was subject to a transitional assessment based on its Stand-By Arrangement with the Fund, which was approved in March 2000 and expired in September 2001. The transitional assessment was completed on May 4, 2001 and recommendations were made to alleviate identified weaknesses. Currently, the BPNG is not subject to the Safeguards Assessments policy.

Exchange Rate Arrangement

Papua New Guinea's de jure exchange rate arrangement is "floating". Because the Kina has followed a depreciating trend within a 2 percent band against the U.S. dollar, since August 2017, the de facto exchange rate arrangement is classified as "crawl-like".

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 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: (i) a MCP arising from the spread of more than 2 percent between the rates set by BPNG for its FX allocations to authorized FX dealers (AFEDs), and the rates used by AFEDs in transactions with their clients; and (ii) 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 2018 Article IV consultation discussions were held on September, 2018. It was concluded by the Executive Board on November 26, 2018 (IMF Country Report No. 18/352). Papua New Guinea is on the standard 12-month consultation cycle.

TA from Headquarters

FAD: A joint FAD/PFTAC mission visited PNG in August 2017 to help develop a medium-term revenue strategy (MTRS). An STX visited PNG from August to October to provide governance and capacity building advice on the MTRS implementation. Tax policy missions in September 2017 and August 2018 provided support for the design and implementation of tax policy reforms in the MTRS.

LEG: A mission in September 2018 assisted in planning legislative reforms for the MTRS.

MFD/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 monetary and financial statistics (February 2013); balance of payments and the international investment position (February 2014, July 2015); government finance statistics (April- May and October 2014, April 2015, September 2015, March 2016, February and October 2017); national accounts and price statistics (February and November 2014; October 2015; February 2016; February 2017; February 2018 and June 2018). A joint mission with the Australian Bureau of Statistics (ABS) discussed statistical capacity building and in particular reform of the National Statistical Office in July-August 2014. A mission to assist with the compilation of external sector statistics occurred in May 2018.

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. Ms. Leni Hunter is the current resident representative.

RELATIONS WITH THE PACIFIC FINANCIAL TECHNICAL ASSISTANCE CENTRE

(As of November 2019)

The Pacific Financial Technical Assistance Centre (PFTAC) in Suva, Fiji, is a regional TA institution operated by the IMF with financial support of the Asian Development Bank, Australia, the European Union, Korea, and New Zealand. 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.

A. Public Financial Management

PFTAC assisted PNG to implement the Integrated Financial Management System (IFMS) originally purchased in 2005, but by early 2014, only three ministries (Finance, Treasury, and Planning) had been connected to the system. A series of PFTAC missions from 2014 to 2016 saw IFMS deployed to 30 central government departments by July 2016.

A FAD Mission conducted a PEFA assessment in March 2015 leading to the development of a PFM Reform Roadmap in September 2015. The roadmap emphasizes the completion of the IFMS roll-out as a priority, recognizing many accounting, financial management, and reporting weaknesses could be overcome with full implementation of IFMS.

The Roadmap's tight prioritization of objectives under the leadership of the Finance Secretary played a significant role with expanded commitments from DFAT and the EU to provide greater TA support to the Department of Finance to ensure a sustainable roll-out and continued business process reforms.

PFTAC assistance in 2015 and 2016 led to the adoption of an improved cash management strategy and the development of standard procedures on bank reconciliation, creation of a Cash Management Unit (CMU), and coordinated planning among the Department of Finance, Department of Treasury, Internal Revenue Commission, and Bank of PNG for the adoption of a cash pooling/sweeping scheme.

In 2017 PFTAC provided training to DoF internal auditors on risk-based and systems auditing; and advice on improving current processes and reports in line with international standards. In 2019, PFTAC undertook a follow up mission to assist the PNG authorities with their move towards being IPSAS cash reporting compliant. PFTAC is currently finalizing advice on the transition to PNG for adopting IPSAS cash standards over a two-year time frame.

On PEFA, PFTAC assisted the PNG authorities in January 2019, to prepare for the forthcoming assessment and in July led a multilateral mission with colleagues from UNDP, World Bank, JICA, and the ADB to undertake fieldwork associated with collecting evidence and data for a full Public Expenditure Financial Accountability (PEFA) diagnostic assessment of the country's PFM systems. The mission collected most of the data required and it is expected the PEFA will be finalized by December 2019. Since the last PEFA assessment in 2015, PNG has undertaken a significant array of PFM reforms outlined in the PFM reform roadmap informed by the outcomes of the 2015 PEFA. These included: rollout of the Integrated Financial Management System (IFMS); legislative changes through amendments to the PFM Act and the Public Money Management and Regularization Act (PMMR); recentralizing and rationalization of procurement processes; and consolidation of public sector bank accounts. Additionally, the PNG government will be looking to ensure the national PEFA will be complementary to the four sub-national PEFA's they wish to undertake in 2019 that will examine PFM practice at the provincial level.

B. Tax Administration and Policy

The Department of the Treasury, with FAD assistance, has developed a Medium-Term Revenue Strategy (MTRS) of which a comprehensive Revenue Mobilization Framework is a key element. FAD missions¹ provided advice on the MTRS framework and content. PFTAC missions² 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 has been sourced through the multi-lateral Revenue Mobilization Trust Fund (RMTF) and includes the placement of an IMF resident advisor in Port Moresby with effect from mid-late August 2018.

C. Financial Sector Regulation and Supervision.

In early 2017, PFTAC initiated a medium-term strategic approach to assisting PFTAC member countries to enhance the structure and operational effectiveness of their Financial Sector Supervision (FSS) frameworks. Initial diagnostic missions and the establishment of enhancement strategies and TA plans were completed in 2017 for several countries, including PNG. To establish a medium-term supervision framework enhancement strategy and TA plan with PNG, PFTAC and the Bank of Papua New Guinea assessed the structure and operation of their supervision framework, in relation to the size and complexity of the financial sector, and against international supervision standards and practices. The strategy and TA plan focused on banking supervision, with the enhancement of supervision frameworks of other sectors (primarily insurance, pension, and credit union) to be based on the banking supervision work, and applied across industries where appropriate.

In implementing the strategy and plan with Bank PNG, PFTAC provided assistance to develop a risk rating and supervisory action planning framework; provided training on the assessment of IT risk,

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.

assisted in the development of an IT Risk On-site Examination framework; provided training on the assessment of market and liquidity risk, and assisted in the development of a Market and Liquidity Risk On-site Examination framework. Further work is to be undertaken to imbed the risk rating and supervisory action planning framework; finalize the on-site examination frameworks; and assist Bank PNG to develop an enhanced regulatory framework for banks and effective off-site supervision.

In continuation of the Supervision Framework Enhancement project initiated in June 2017, PFTAC assisted Bank PNG in January 2019 to enhance the effectiveness of their off-site supervision, with a focus on building capacity to undertake effective off-site financial risk analysis. It provided training on effective financial analysis and reviewed and provided recommendations on the off-site supervision process of Bank PNG. In May 2019, a PFTAC mission continued to build capacity of Bank PNG examiners on market and liquidity risk assessment that began with a PFTAC mission in July 2018 as part of the Bank PNG SFEP. Detailed guidance and on-the-job-training were provided to Bank PNG examiners in market risk and liquidity risk on-site examination. The mission also undertook a review of the SFEP and revised the TA plan for finalization of the program and a follow-up mission in July finalized the drafting of the new Bank PNG market and liquidity risk assessment module.

D. Economic and Financial Statistics

In February 2006, an advisor briefly assessed BOP compilation with a view to improving its quality, and to assess progress with the implementation of recommendations made by previous missions. A multi-sector statistics mission in September 2006 assessed the statistical systems (ESS, national accounts, prices statistics, government finance statistics, and monetary statistics), with the PFTAC advisor assessing the national accounts and providing overall coordination. In 2008 and 2009, the advisor undertook BOP statistics missions to review statistical prerequisites, progress in improving compilation methods and source data, as well as to assist BPNG statistics staff in assessing the feasibility of electronic data collection.

Since 2013, PFTAC has conducted eight TA missions to assist the National Statistical Office (NSO), BPNG, and Department of Treasury with improving national accounts statistics. PFTAC has increasingly focused its TA on improving capacities at the NSO in the broader context of the NSO reform process initiated by the authorities in 2014. Two PFTAC national accounts missions were scheduled in FY18 (November 2017; February 2018) while an ESS mission funded by the Technical Assistance Office Lao and Myanmar (TAOLAM) was scheduled for November 2017.

Support has been provided in close collaboration with the ABS, which has provided statistical leadership and management advice as well as TA on data collection issues including business and household surveys with the secondment of two ABS staff to the PNG NSO from June 2015 to May 2016. PNG NSO staff have also benefited from attending four annual sub-regional statistics workshops since 2013, centered around estimating GDP by expenditure, the use of household income and expenditure surveys, and their linkage to consumer price indices. One mission is scheduled for 2019 pending NSO's implementation of the reforms recommended by APD. From ABS and PFTAC input, the NSO was able to resume publication of estimates of GDP by production in

May 2016. In 2019, PFTAC assisted the NSO to disaggregate the Agriculture, Forestry and Fishing second into divisions – the second largest production activity in PNG and currently published as a single aggregate. Separate compilation and publication of division components will allow for more detailed and precise forecasts, necessary for public budget planning and is in line with the request from PNG Treasury and the Bank of PNG. Assistance was also provided to the NSO for the publication of the 2017 GDP estimates in November 2019.

Through February 2017, PNG received GFS TA under the Japan Administered Account (JSA2). The PFTAC funded GFS TA mission during October 2017 and September 2018 focused on improving GFS data for the national budget volumes I and II and further investigated source data for developing the financial balance sheet of the general government.

PNG has been one of the beneficiaries of the JSA Project (ended March 2016) on the improvement of external sector statistics (ESS). Commitment to participate in this project was low, and thus improvements were limited. Under this project, four TA missions were provided. Currently PNG is a beneficiary of STA's new three-year JSA project to improve ESS in the Asia-Pacific Region. One mission was conducted.

E. Macroeconomic Analysis

Following a request by BPNG for assistance in building financial programming capacity, the development of a PNG-specific financial programming framework started in 2011. Training in the use and updating of the framework was provided to staff of both the BPNG and Department of Treasury. A work program with the Department of Treasury and BPNG, in collaboration with the APD country team and the IMF's Research Department, developed modeling tools for exploring the macroeconomic impact of natural resource revenues. In 2014, work was undertaken to simplify and streamline the financial programming framework with a view to easing operational burden; these efforts resulted in weaknesses in capturing the relevant and complex inter-sectoral linkages of the PNG economy. In May 2017, an upgrade of the original financial programming framework to alleviate identified weaknesses commenced and the core structure of the new PNG Monetary and Fiscal Forecasting (MFF) Model was completed in July 2017. In August 2017 PFTAC and the BPNG hosted a workshop on practical applications of the PNG MFF Model with participants from the BPNG, the Department of Finance, the Department of Treasury, and the Internal Revenue Commission. The model was enhanced further in 2018 for scenario analysis and to incorporate public debt. In 2014 and 2015 work was also undertaken to improve the BPNG's inflation forecasting methodology following major revisions to the consumer price index (CPI) by the NSO.

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. The first two days of the workshop focused on gross domestic product (GDP)—understanding recent methodology changes, forecasting GDP, and developing an interagency plan for enhancing GDP compilation and forecasting. For the remainder of the workshop participants reviewed the sectors in the PNG Monetary and Fiscal Forecasting (MFF) Model and used the MFF Model for scenario

analysis. Building on earlier trainings, the Bank of Papua New Guinea (BPNG) and the Department of Treasury (DoT), with support from the Australian Department of Foreign Affairs and Trade and the Economic Governance and Inclusive Growth Partnership, co-hosted a five-day course on Macroeconomic Policy for Stabilization and Growth in April and 2019 and a sub-regional workshop on Fiscal Frameworks for Pacific Countries in August 2019.

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 November 2019)

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 estimation and publication had been stopped for many years, but restarted in 2016 after a 10-year break. In 2018, draft figures compiled for 2016 were challenged by the local Treasury Department. 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. During the latest PFTAC TA mission in April 2019, the NSO published revised national accounts data ranging from 2009 to 2016. Nevertheless, to increase user confidence in the NSO, proactive management and regular stakeholder engagement must improve.
Price Statistics: The NSO currently compiles an unpublished quarterly wholesale price index (WPI) and a quarterly CPI. In May 2014, the NSO began to publish a new CPI series based on data from the 2009–2010 Household Income Expenditure Survey, ending a 35-year period during which the CPI used a consumption basket from the late 1970s.
Government Finance Statistics (GFS): The Treasury started to report GFS data for the budgetary central government (BCG) to the IMF Statistics Department during 2016, after a 14-year absence. Even though reporting commenced, data suffers from insufficient coverage and timeliness. 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. Compiling, reconciling and disseminating full public sector debt statistics and government guarantees remain a challenge. These weaknesses contribute to discrepancies in financing between estimates from monetary and debt data and those derived from fiscal records. The Treasury aligned the national budget volume 1, in 2016, to adopt the guidelines presented in the Government Finance Statistics Manual 2014 (GFSM 2014) format. The authorities also prepared an accompanying 5-year historical time series of GFS data for the BCG. Further work is required to enhance both institutional and instrument coverage, and the authorities continue to work on improvements for budget volumes 1 and 2, on a GFSM 2014 basis. 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).

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. In December 2016, BPNG started reporting all core financial soundness and twelve additional encouraged indicators to STA, with quarterly data availability starting in 2008Q4. 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 2017 are disseminated on the IMF's website. IIP data are not available. Despite some recent developments, there is still a long way to go in improving the coverage, periodicity and timeliness of external sector statistics (ESS). The May 2018 ESS mission helped the authorities prepare an action plan to improve ESS scope and quality. Immediate priorities are to fill data gaps through the implementation of the international investment survey, improvements to the international transactions reporting system, and streamlining cross-border transactions/positions data of liquefied natural gas, other energy and mineral companies' activities.

II. Data Standards and Quality

PNG began to participate in the General Data Dissemination System in 2012. PNG has not yet implemented 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 December 9, 2019)

	Date of Latest Observation	Date Received	Frequency of Data ¹	Frequency of Reporting ¹	Frequency of Publication ¹
Exchange Rates	09/2019	10/2/2019	M	M	M
International Reserve Assets and Reserve Liabilities of the Monetary Authorities ²	05/2019	08/20/2019	M	M	M
Reserve/Base Money	05/2019	08/20/2019	M	M	M
Broad Money	05/2019	08/27/2019	M	M	M
Central Bank Balance Sheet	05/2019	08/20/2019	M	M	Q
Consolidated Balance Sheet of the Banking System	05/2019	08/27/2019	M		M
Interest Rates ³	06/2019	10/30/2019	W	W	
Consumer Price Index	03/2018	10/31/2018	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	2018	03/31/2018	A	A	A
Stocks of Central Government and Central Government-Guaranteed Debt ⁶	12/2018	07/03/2018	Q	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	2017	01/28/2019	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.

PAPUA NEW GUINEA

STAFF REPORT FOR THE 2019 ARTICLE IV CONSULTATION AND REQUEST FOR A STAFF-MONITORED PROGRAM — DEBT SUSTAINABILITY ANALYSIS

February 21, 2020

Approved By
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Prepared by the staffs of the International Monetary Fund (IMF) and the International Development Association (IDA)¹

Risk of external debt distress	<i>Moderate</i>
Overall risk of debt distress	<i>Moderate</i>
Granularity in the risk rating	<i>Limited space to absorb shocks</i>
Application of Judgement	<i>Two short-lived breaches of debt service-to-revenue ratio are discounted</i>

The Debt Sustainability Analysis (DSA) indicates that Papua New Guinea (PNG) faces moderate risk of debt distress based on an assessment of public external debt, with limited space to absorb shocks; and moderate overall risk of public debt distress. Under the baseline scenario there are two short-lived breaches of the debt service-to-revenue ratio threshold (2020 and 2028). The long-term breach is due to the bullet payment of sovereign bond issued in 2018, and can be discounted on the ground of the expected accumulation of revenue buffers from natural resource projects. The 2020 breach is acceptable, as the projected financing plan for 2020-21 is expected to eliminate the rollover risk. Examining the debt dynamics under alternative scenarios reveals that, under the most extreme shock (export growth shock), there are multiple breaches in the threshold for the debt service-to-revenue ratio. Although the assessment of moderate risk is unchanged from the previous DSA (end-2017 debt), the limited space to absorb shocks highlights the need for the government to strengthen its debt position through fiscal consolidation and to change the composition of its liabilities towards lower-cost and longer-term debt.

¹ This DSA was prepared jointly with 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 IDA in December 2017. PNG's Composite Indicator score based on the October World Economic Outlook and 2019 CPIA measure indicates that the debt-carrying capacity is 'medium'. Thresholds for external debt-burden indicators are set at levels compatible with the new framework: PV of PPG debt/exports (180), PV of PPG debt/GDP (40), debt service/exports (15) and debt service to revenue (18). PNG is classified as an IDA blend economy.

PUBLIC DEBT COVERAGE

1. Papua New Guinea (PNG)'s coverage of public sector debt includes the central government, local government debt, and debt explicitly guaranteed by the central government. The stock of central government guaranteed loans is estimated to have reached 14.1 billion Kina (18% of GDP) at the end of 2018 (Text Table 1). Although the government has recognized and taken over the servicing of three SOE project loans (Solwara, Motu-Kea Port and NCD Roads) as central government debt, the magnitude of all the debt obligations is uncertain. Also, the debt figure does not fully capture implicit government guaranteed debts of state-owned enterprises (SOEs) and unfunded superannuation liabilities, relating to pensions (Text Table 2 and 3). Thus, the contingent liability shock, equivalent to 17 percent of GDP (Text Table 3), is included in this analysis to account for risks from possible government guarantees.

Text Table 1. Government Guaranteed Loans 2018

(In millions of Kina)

Loan Details	Outstanding	Status
Domestic Loans	1,225.79	
Solwara Loan Guarantee	374.80	Materialized
KCH Motu Kea Port Relocation	600.00	Materialized
NCDC Roads (Original Facility)	105.50	Materialized
NCDC Roads (Extension 2017)	88.82	Materialized
NCDC Roads (2nd Extension 2017)	56.67	Materialized
External Loans	12,908.40	
PASO Loan Guarantee	1.26	Completed
Finance Contract Agreement - 26.04.95	80.80	Completed
Finance Contract Agreement - 28.06.96	96.19	Completed
Agreement 27.07.95	88.49	Completed
Completion Guarantee for PNG LNG	5,469.06	Completed
State Equity Financing for PNG LNG	6,146.41	In dispute
Counter Guarantee for PNG LNG	902.48	In dispute
Central Diary Limited (2016)	123.70	In dispute
Total Guaranteed Loans	14,134.19	

Source: Department of Treasury, Papua New Guinea

Text Table 2. Debt Coverage under Baseline Scenario

Subsectors of the public sector	Check box
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	

Text Table 3. Contingent Liability

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	Unfunded pension liabilities.
3 SoE's debt (guaranteed and not guaranteed by the government) 1/	2 percent of GDP	9	SOE sovereign guarantee in dispute.
4 PPP	35 percent of PPP stock	0.00	
5 Financial market (the default value of 5 percent of GDP is the minimum value)	5 percent of GDP	5	
Total (2+3+4+5) (in percent of GDP)		17.0	

1/ The default shock of 2% of GDP will be triggered for countries whose government-guaranteed debt is not fully captured under the country's public debt definition (1.). If it is already included in the government debt (1.) and risks associated with SoE's debt not guaranteed by the government is assessed to be negligible, a country team may reduce this to 0%.

2. This data coverage largely reflects the weakness in transparency and accountability of Statutory Authorities and SOEs. The authorities are currently reviewing the external loan guarantees and superannuation liabilities. In the context of the Staff Monitoring Program (SMP), the authorities are initiating a program to reform SOEs with a view to improving financial standing of the SOEs sector. This program will include a detailed review of SOE debt and government guarantees.

BACKGROUND ON DEBT

3. PNG's public and external debt burden remains moderate relative to peer countries, but debt and potential risks are increasing. Unanticipated revenue declines due to falling commodity prices and difficulties in controlling government expenditure in recent years, especially personnel emoluments, have led to larger budget deficits and higher public debt. Public debt rose from 32.5 percent of GDP in 2017 to 36.8 percent of GDP at the end of 2018 – well above the government's medium-term target of 30 percent – and interest payments increased by 22 percent in nominal terms. While spending over-runs and weak revenue collection contributed to fiscal slippage in 2018, the significant increase in debt stock largely reflected the revaluation of foreign currency debt in line with best international practice and the realization of state loan guaranteed loans for which interests were being paid from the central government. The budget may remain exposed to unfunded superannuation liabilities, relating to pensions, estimated at around 2 billion kina (3 percent of 2018 GDP) and government arrears. Since 2018, the deficit financing has turned to external sources as commercial banks and superannuation funds are nearing internal limits for holding government securities.

4. The recent increase in external debt is mainly due to accelerated borrowing from non-Paris Club bilateral and commercial creditors (Text Table 4). The share of Chinese loans (Bank of China and the Export-Import Bank of China) has increased sharply from 1.2 percent of total public external debt in 2010 to 20.0 percent in 2018. The syndicated loans from Credit Suisse and a sovereign bond issued in October 2018 have also increased the share of commercial debt. Two large creditors for external public debt as of end-2018 were the Asian Development Bank and the Export-Import Bank of China (Text Figure 1). Private sector external debt has declined continuously since the liquified natural gas (LNG) sector started to repay its debt. Despite a large current account surplus, which reflects LNG exports, these projects do not bring in enough foreign exchange to the country due to the project agreements. Therefore, the increased PPG external debt has posed a risk as the burden of external debt service has risen.

Text Table 4. External Public Debt by Creditor Groups
(In millions of U.S. dollars)

	2015	2016	2017	2018	2019	2020
	Est.	Est.	Est.	Est.	Proj.	
Multilateral	1,086	1,164	1,272	1,632	1,788	2,406
Bilateral Paris Club ¹	113	126	131	139	426	1,341
Bilateral Non-Paris Club	299	408	538	724	706	684
Commercial ²	-	229	348	1,075	1,082	846
Total	1,498	1,928	2,289	3,569	4,001	5,276

Source: Department of Treasury and IMF staff projections.

1/ 2019 includes \$300 million loan from Export Finance Australia with an interest rate of 2.5% and a maturity of 1 year.
2/ 2018 includes the sovereign bond issued in October 2018 (maturity of 10 years with an interest rate of 8.4% and the syndicated loans from Credit Suisse (maturity of 3 years with an interest rate of 9%.)

Text Figure 1. External Public Debt by Creditors in 2018

5. The increased issuance of external debt has not been matched by improvement in the domestic debt profile. Although the funds from the sovereign bond were intended to be used to reduce the government's short-term domestic debt, the stock of domestic debt showed only a marginal decline at the end of 2018 (Text Figure 2) and the debt profile continues to be exposed to interest rate, currency and rollover risks. The positive real GDP growth helped to more than offset the debt creating flows caused by unfavorable real interest rates over the past few years. However, the higher financing needs along with the increasing nominal interest rate as well as the wider interest rate spread (Text Figure 3) indicate that the trend may reverse and could create further pressure for the debt ratio to rise further in the near term. Meanwhile, refinancing risks and rollover risks remain high given the concentration of large external debt service payments in the short term and the shortening of the average maturity of government domestic financing.

Text Figure 2. Composition of Domestic Debt 2012-2020
(in millions of Kina)

Source: Department of Treasury and IMF staff projections.

Text Figure 3. Weighted Average Interest Rate and Spread 2013-2024

Source: Department of Treasury and IMF staff projections.

BACKGROUND ON MACRO FORECASTS

6. PNG's medium-term growth prospects will largely be driven by the non-resource sector and supported by easing exchange rate restrictions. Box 1 summarizes the medium-term macroeconomic framework underlying this Debt Sustainability Analysis (DSA), and Text Table 5 compares previous and current DSAs. Real GDP is projected to grow by 5 percent in 2019, underpinned by recovery in energy and mineral production following the earthquake in early 2018, while non-resource growth is expected to remain at 2.9 percent. In the absence of major new resource projects, real GDP growth is expected to moderate to around 3 percent in the medium-term. The expected easing of foreign exchange restrictions and the potential for major new gas and mining projects provide an upside risk to the outlook. The large current account surplus continues to be offset by debt service and dividend payments associated with resource sector investments, and is expected to narrow slightly in 2019, reflecting a weaker performance in non-resource sector exports, despite a compression in imports due to foreign exchange shortages. Going forward, a gradual narrowing is expected in the medium-term as the foreign exchange backlog is cleared, and imports recover to their normal levels.

7. Fiscal deficits are expected to have widened in 2019 before resuming a downward trend. The primary fiscal balance is projected to deteriorate significantly from a deficit of 0.2 percent of GDP in 2018 to a deficit of 1.7 percent of GDP in 2019 due to continued spending over-runs and a disappointing outcome for revenues. On the revenue side, collection of personal and corporate income taxes, and mining and petroleum taxes, is well below the level of last year, reflecting a subdued economy and lower commodity prices. Non-tax revenue is also expected to underperform as SOE dividends and other one-off sources of revenues are projected to come in below budget. On the expenditure side, the main over-runs are due to personnel emoluments, which are expected to come in at around 1 percent of GDP over budget. The large deficit is expected to be financed mainly through multilateral and bilateral external loans.

8. The weak fiscal position is expected to gradually reverse in the context of a sustained program of fiscal consolidation. The primary surplus is projected to move into balance by 2022 and to improve to a surplus of 0.2 percent of GDP by the end of the 2024 assuming the implementation of the proposed reforms aimed at restoring fiscal sustainability. Some of the key measure include:

- a. **Realistic budgeting for personnel costs.** Systematic underestimation of wage and personnel costs has resulted in arrears, budget over-runs, and the need for ad hoc spending cuts, often to the development budget.
- b. **Paying down retirement costs to reduce public employment.** Currently there are approximately 4000 public workers over the retirement age still on the payroll because the authorities have not budgeted for the payment of separation costs. Allowing these workers to retire has an immediate budgetary cost but will result in savings going forward.
- c. **Limiting the growth of government payroll.** This is to be achieved through strict implementation of the government hiring freeze, including limits on the number of

unattached workers and new hires exempted from the freeze, and the elimination of unbudgeted and unlawful payments, particularly supplements and allowances.

- d. **A detailed audit of government employment and payroll practices by an independent organization.** This is to identify inappropriate hiring practices and payments and to develop a program of reforms to better track and control public service hiring and compensation practices.

9. The baseline projections are reasonable (Figure 4). The growth projections are relatively higher than suggested by the alternative fiscal-growth multiplier analysis due to a strong rebound in growth following the earthquake in 2018. The baseline fiscal adjustment in the primary balance seems credible as it does not fall in the upper quartile of the distribution of past adjustments. Meanwhile, the contribution of public investment to growth also seems reasonable in comparison to historical contributions.

Text Table 5. Macroeconomic Forecast and Assumptions

Year	Real GDP Growth (percent)		GDP Deflator Inflation (percent)		Current Account (percent of GDP)		Primary Balance (percent of GDP)	
	Previous	Current	Previous	Current	Previous	Current	Previous	Current
2016	1.6	4.1	2.7	3.9	23.7	26.6	-3.1	-2.8
2017	2.5	3.5	7.1	7.7	23.9	27.2	-0.4	-0.4
2018	0.0	-0.8	8.1	10.1	22.8	25.9	-0.5	-0.2
2019	3.8	5.0	2.4	1.9	23.0	24.2	0.2	-1.7
2020	3.1	2.0	2.0	6.8	21.4	25.0	0.8	-2.7
2021	3.4	2.8	2.4	6.5	20.3	24.9	1.3	-1.9
2022	3.5	2.9	2.5	6.8	19.2	23.2	1.4	-0.1
2023	3.8	3.2	1.2	4.2	18.4	22.3	1.4	0.2
2024	3.9	3.3	7.8	3.0	15.5	21.4	1.1	0.2

COUNTRY CLASSIFICATION AND DETERMINATION OF SCENARIO STRESS TESTS

10. PNG's composite indicator index as calculated under the revised Low Income Country Debt Sustainability Framework (LIC-DSF) remained unchanged from past years with PNG's debt-carrying capacity classified as medium (Text Table 6). The current composite indicator is calculated based on the October 2019 World Economic Outlook and 2019 CPIA index. The medium classification implies that the benchmark for the present value of total public debt is at 55 percent of GDP (Table 7). Since PNG is a resource-rich economy relying on commodity exports, commodity price shocks are included in the tailored stress tests.

Text Table 6. Calculation of the Composite Indicator

Components	Coefficients (A)	10-year average values (B)	CI Score components (A*B) = (C)	Contribution of components
CPIA	0.385	3.013	1.16	42%
Real growth rate (in percent)	2.719	4.525	0.12	4%
Import coverage of reserves (in percent)	4.052	48.888	1.98	71%
Import coverage of reserves ² (in percent)	-3.990	23.900	-0.95	-34%
Remittances (in percent)	2.022	0.016	0.00	0%
World economic growth (in percent)	13.520	3.499	0.47	17%
CI Score			2.784	100%
CI rating			Medium	

Text Table 7. Public and Publicly Guaranteed (PPG) External Debt Thresholds and Total Public Benchmarks

EXTERNAL debt burden thresholds	Weak	Medium	Strong
PV of debt in % of			
Exports	140	180	240
GDP	30	40	55
Debt service in % of			
Exports	10	15	21
Revenue	14	18	23
TOTAL public debt benchmark	Weak	Medium	Strong
PV of total public debt in percent of GDP	35	55	70

EXTERNAL DEBT

11. The PPG external debt ratios point to a moderate risk of external debt distress.

Although the PPG external debt service-to-revenue ratio shows two breaches in the baseline scenario (Figure 1), reflecting large repayments in 2020 and repayment of the recently issued sovereign bond in 2028, the remaining indicators stay well below the indicative threshold. While the projected financing for 2020 is expected to reduce the rollover risk, the bullet payment falling in 2028 is a single short-lived breach (1-year) and is assumed to be discounted as it is highly likely to be supported by PNG's large revenue buffers from future expected resource projects. In addition, the historical scenario is not considered as an indication of future risks although it shows substantial threshold breaches, as has been the case in past DSAs. This is because the historical scenario is grounded in large current account deficits recorded in the past associated with the construction phase for PNG LNG project. The PNG LNG-related debt was largely backed by expected cash flows from the LNG project.

12. There are two breaches of thresholds under the most extreme shock scenario. For the present value of external debt to GDP ratio, the most extreme shock scenario corresponds to a shock to export growth. In this case, the threshold is breached in 2021 and the ratio descends slowly

towards the threshold starting from 2025. Similarly, for the debt service to revenue ratio, the most extreme shock is exports. In this case, the ratio breaches the threshold multiple times in the short-run and long-run. However, both the present value of external debt to export ratio and the external debt service to exports ratio remain well below the indicative threshold under the most extreme scenario. These results support the assessment of moderate-risk of debt distress. The relatively weak non-resource sector makes the economy more vulnerable to external shocks.

13. Meanwhile, market-financing risk indicators signal high rollover and liquidity risks.

The sovereign bond issued in October 2018 performed weaker than most frontier market bonds, with spread around 585 basis points in December 2019, indicating potential rollover risks amid tight global financial conditions (Figure 5). Furthermore, the growing share of external debt exposes PNG to external financing shocks and liquidity risks. Additionally, the three-year average Gross Financing Needs (GFN), which peaks at 20% of GDP in 2019–2021, surpasses the recommended threshold of 14% of GDP. This is due to the large external debt service payments in 2020 and 2021 as well as the large share of short-term domestic debt. While a large part of the external debt services is expected to be rolled over, as a frontier market, PNG's high gross financing needs along with the widening of EMBI spread and higher domestic borrowing costs pose significant market financing risks in the near term.

PUBLIC DEBT

14. PNG's total public debt-to-GDP ratio is projected to remain well below the indicative benchmark, while it marginally breaches the benchmark under the stress test. Under the baseline scenario, the PV of public debt-to-GDP ratio decreases towards 30 percent of GDP over the long term, below the benchmark (Figure 2). However, since PNG is a commodity exporter, in the alternative scenarios with shocks to exports or shocks to commodity prices, the public debt-to-GDP ratio will breach the benchmark in the medium term (Table 4). A negative commodity price shock could reduce commodity export revenues, resulting in lower mining taxes and dividends to the government in the long term. In addition, the most extreme shock for the public debt-to-GDP ratio is the export growth shock (Figure 2), which leads to a marginal breach of the indicative benchmark in the medium term. Furthermore, liquidity risks are present as elaborated above, and unfunded superannuation liabilities represent an implicit fiscal risk for PNG.

RISK RATING AND VULNERABILITIES

15. The DSA analysis suggests that PNG's risk of external public debt distress remains moderate and the risk of distress in the overall public debt is also moderate. The moderate risk of overall public debt distress is based on a strong assumption that commercial loans that fall due in the short term will be rolled over with favorable terms. It is also supported by the assumption on the primary surplus generated from fiscal consolidation efforts by the government in the long run in the context of the IMF Staff Monitored Program. Although an upward revision to nominal GDP partly helped to improve the debt position, a weak fiscal position, reflecting the continued spending over-

runs and lower revenue collection, has deteriorated the debt profile over the past few years. Meanwhile, the granular analysis in Figure 6 shows that while PNG has limited space to absorb shocks, the external debt service-to-revenue ratio breaches the threshold in 2028. Hence, the government needs to strengthen implementation of its fiscal consolidation framework, while implementing a sound debt management strategy to lower the cost of debt and extend maturities, as well as reconciling existing government liabilities and guarantees.

AUTHORITIES' VIEWS

16. The authorities took note of increasing risks to debt sustainability. They emphasized the need to retire a large portion of short-term domestic debt and to rely on cheaper external sources to finance the government budget, while at the same time taking into account foreign exchange risks. They also highlighted the importance of lengthening the maturity structure of domestic debts to reduce liquidity risks. Furthermore, they recognized the importance of reviewing contingent liabilities. In this regard, the authorities have specified that, in line with Fiscal Responsibility Act (FRA) requirements, they will recognize three SOE project loans for which the government has taken over the servicing as central government debt (about 1.4 percent of GDP). In addition, they highlighted the importance of including exchange rate valuation effects when calculating the value of the external debt stock in domestic currency terms and have taken on IMF advice to revalue foreign currency debt at current exchange rates, in line with best international practice.

Box 1. Macroeconomic Assumptions Underlying the DSA Update

The macroeconomic assumptions underpinning this DSA reflect a newly revised (higher) series for GDP in 2017 and a rebound from the 2018 earthquake.

Macro Indicators	Last Historic Year	First Forecast Year	Medium- and Long-Term Averages
GDP growth	The newly published GDP series for 2017 (in November 2019) are reflected. In 2018, GDP is estimated to have contracted marginally by 0.8 percent largely reflecting the negative impact of the earthquake earlier in the year. New industry information underpinned the change in estimate (from no growth) in the 2018 DSA.	Latest industry data has been incorporated into the framework. This resulted in the real growth rate adjusted up from 3.8 percent in the 2018 DSA to 5.0 percent in this DSA.	Real GDP growth is projected to average 3.1 percent in the medium/long run, which is lower than the long-term average growth rate used for the 2018 DSA. The resource projects (the Papua LNG and other resource projects like Wafi Golpu) are upside risks to these projections.
Inflation (GDP deflator)	The actual 2017 GDP deflator was 7.7 percent in 2017. In 2018, the GDP deflator is estimated at 10.1 percent higher than the projection in the 2018 DSA (8.1 percent) due to higher commodity prices and to some extent accounting for alignment of deflator methodology between the Fund and Authorities.	GDP deflator is projected at around 1.9 percent in 2019 reflecting lower fuel and commodity prices (revised from 2.4 percent in the 2018 DSA).	The overall GDP deflator is expected to converge to around 3.0 percent in the medium-long term, and assumes some depreciation of the Kina in the medium-term (2020-2022).
Current Account	The estimated current account surplus to GDP ratio in 2018 revised upward to 25.9 percent from 22.8 percent in the 2018 DSA, reflecting better-than-expected resource exports.	The surplus is expected to recover to historical level, while increased dividend and debt service outflows will continue to weigh on current account surplus.	Gradual erosion of the current account surplus is projected as FX backlog clears and imports recover.
Fiscal Position	The primary deficit in 2018 was 0.2 percent of GDP, a little bit smaller than 0.5 percent estimated in 2018 DSA.	The primary fiscal deficit is estimated to increase to 1.7 percent of GDP in 2019 due to lower revenue and higher overall primary spending.	The primary deficit will gradually improve to a surplus, assuming fiscal consolidation by improving tax revenues and controlling government expenditures.

Figure 1. Papua New Guinea: Indicators of Public and Publicly Guaranteed External Debt Under Alternative Scenarios, 2019-2029

Customization of Default Settings		
	Size	Interactions
Tailored Stress		
Combined CL	Yes	
Natural disaster	No	Yes
Commodity price ^{2/}	No	Yes
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	1.9%	1.9%
USD Discount rate	5.0%	5.0%
Avg. maturity (incl. grace period)	25	25
Avg. grace period	7	7

* 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 2029. 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 extreme shock even after disregarding the one-off breach, only that stress test (with a one-off breach) would be presented.

2/ The magnitude of shocks used for the commodity price shock stress test are based on the commodity prices outlook prepared by the IMF research department.

Figure 2. Papua New Guinea: Indicators of Public Debt Under Alternative Scenarios, 2019-2029

Borrowing assumptions on additional financing needs resulting from the stress tests*	Default	User defined
Shares of marginal debt		
External PPG medium and long-term	14%	14%
Domestic medium and long-term	17%	17%
Domestic short-term	69%	69%
Terms of marginal debt		
External MLT debt		
Avg. nominal interest rate on new borrowing in USD	1.9%	1.9%
Avg. maturity (incl. grace period)	25	25
Avg. grace period	7	7
Domestic MLT debt		
Avg. real interest rate on new borrowing	5.7%	5.7%
Avg. maturity (incl. grace period)	3	3
Avg. grace period	2	2
Domestic short-term debt		
Avg. real interest rate	4.0%	4.0%

* 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 2029. 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 extreme shock even after disregarding the one-off breach, only that stress test (with a one-off breach) would be presented.

**Table 1. Papua New Guinea: External Debt Sustainability Framework,
Baseline Scenario, 2016-2039**
(In percent of GDP, unless otherwise indicated)

	Actual			Projections								Average 8/ Historical Projections	
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2029	2039		
External debt (nominal) 1/	87.6	72.8	71.3	60.1	56.2	52.9	59.7	60.5	69.3	60.4	25.6	73.5	66.8
of which: public and publicly guaranteed (PPG)	8.5	8.8	15.2	16.5	21.1	23.3	24.6	24.9	25.0	19.4	17.9	7.8	22.2
Change in external debt	-4.6	-14.8	-1.5	-11.3	-3.8	-3.4	6.8	0.8	8.8	-7.5	-1.3		
Identified net debt-creating flows	-22.1	-33.4	-31.3	-26.2	-24.7	-24.9	-23.2	-22.7	-21.9	-11.6	-5.8	-4.1	-18.9
Non-interest current account deficit	-29.8	-30.2	-28.6	-26.7	-27.2	-26.8	-25.0	-23.7	-22.5	-11.2	-5.9	-1.5	-19.7
Deficit in balance of goods and services	-26.2	-27.5	-26.7	-24.7	-25.5	-25.3	-23.7	-23.0	-22.1	-17.3	-10.4	-2.3	-21.8
Exports	39.7	44.0	43.2	43.8	45.9	46.5	47.0	46.1	44.8	35.9	22.2		
Imports	13.5	16.5	16.5	19.1	20.4	21.1	23.3	23.1	22.7	18.5	11.9		
Net current transfers (negative = inflow)	-1.4	-1.1	-1.5	-2.3	-2.5	-2.6	-2.7	-2.4	-2.4	-1.8	-1.0	-1.1	-2.3
of which: official	-1.5	-0.5	-0.5	-1.5	-1.6	-1.7	-1.9	-1.6	-1.6	-1.2	-0.7		
Other current account flows (negative = net inflow)	-2.2	-1.6	-0.4	0.3	0.8	1.1	1.5	1.7	1.9	8.0	5.4	1.9	4.4
Net FDI (negative = inflow)	0.2	1.5	-1.2	1.4	1.4	1.5	1.6	1.4	1.4	1.0	0.6	-1.0	1.5
Endogenous debt dynamics 2/	7.4	-4.6	-1.5	-0.9	1.0	0.4	0.2	-0.4	-0.7	-1.5	-0.4		
Contribution from nominal interest rate	3.1	3.0	2.7	2.6	2.2	2.0	1.7	1.4	1.2	0.4	0.4		
Contribution from real GDP growth	-3.9	-2.8	0.6	-3.4	-1.2	-1.6	-1.5	-1.9	-1.9	-1.9	-0.8		
Contribution from price and exchange rate changes	8.2	-4.8	-4.8	...	...	...	...	...	...	...	...		
Residual 3/	17.5	18.6	29.8	14.9	20.9	21.6	30.0	23.6	30.7	4.1	4.5	9.5	17.9
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		
Sustainability indicators													
PV of PPG external debt-to-GDP ratio	...	...	14.7	15.7	19.0	20.3	20.8	20.5	19.9	12.8	9.3		
PV of PPG external debt-to-exports ratio	...	...	34.0	35.8	41.5	43.8	44.2	44.4	44.4	35.7	41.6		
PPG debt service-to-exports ratio	2.2	2.2	2.1	2.3	6.9	4.8	3.4	4.5	4.7	3.5	4.9		
PPG debt service-to-revenue ratio	6.4	6.9	5.9	7.1	22.6	15.9	11.5	14.6	14.9	8.2	6.5		
Gross external financing need (Million of U.S. dollars)	-2060.7	-3574.1	-4487.2	-3565.9	-4043.6	-4216.2	-4028.5	-3576.9	-3374.6	-378.9	-1656.2		
Key macroeconomic assumptions													
Real GDP growth (in percent)	4.1	3.5	-0.8	5.0	2.0	2.8	2.9	3.2	3.3	2.9	3.2	5.6	3.1
GDP deflator in US dollar terms (change in percent)	-8.2	5.8	7.1	-0.5	-1.8	-2.0	-1.8	0.4	1.0	3.0	3.1	2.5	0.9
Effective interest rate (percent) 4/	3.3	3.8	3.9	3.8	3.6	3.5	3.3	2.5	2.0	0.6	1.5	3.5	2.1
Growth of exports of G&S (US dollar terms, in percent)	-3.2	21.6	4.1	6.0	4.8	2.1	2.2	1.7	1.3	1.3	1.3	7.2	2.2
Growth of imports of G&S (US dollar terms, in percent)	-18.6	34.4	6.4	20.6	6.9	4.5	11.6	2.6	2.6	1.6	1.7	3.7	5.2
Grant element of new public sector borrowing (in percent)	...	...	...	21.6	19.6	31.1	46.7	45.3	46.0	27.2	33.7	...	38.0
Government revenues (excluding grants, in percent of GDP)	13.9	13.9	15.5	14.3	14.1	13.9	14.0	14.1	14.1	15.4	16.9	11.8	14.4
Aid flows (in Million of US dollars) 5/	987.8	861.0	1051.7	515.3	670.9	828.4	667.5	722.6	743.5	514.0	700.7		
Grant-equivalent financing (in percent of GDP) 6/	...	...	...	1.6	2.4	2.2	2.1	2.2	2.1	1.1	0.8	...	1.7
Grant-equivalent financing (in percent of external financing) 6/	...	...	...	46.2	29.5	45.2	62.7	59.2	60.5	53.7	49.7	...	58.1
Nominal GDP (Million of US dollars)	20,759	22,743	24,141	25,230	25,269	25,462	25,727	26,667	27,815	37,043	68,068		
Nominal dollar GDP growth	-4.4	9.6	6.1	4.5	0.2	0.8	1.0	3.7	4.3	6.0	6.4	8.1	4.0
Memorandum items:													
PV of external debt 7/	...	...	70.9	59.2	54.2	49.9	55.9	56.1	64.2	53.8	17.0		
In percent of exports	...	...	164.0	135.2	118.2	107.4	118.9	121.5	143.4	150.1	76.6		
Total external debt service-to-exports ratio	49.4	29.6	25.9	25.6	21.2	18.9	16.5	19.3	20.1	25.4	13.1		
PV of PPG external debt (in Million of US dollars)	...	...	3548.2	3952.6	4812.4	5177.4	5348.5	5463.8	5535.7	4743.6	6306.1		
(Pvt-Pvt-1)/GDPt-1 (in percent)	...	...	...	1.7	3.4	1.4	0.7	0.4	0.3	0.4	0.3		
Non-interest current account deficit that stabilizes debt ratio	-25.2	-15.5	-27.1	-15.5	-23.3	-23.5	-31.8	-24.5	-31.4	-3.6	-4.6		

Sources: Country authorities; and staff estimates and projections.

1/ Includes both public and private sector external debt.

2/ Derived as $[r - g - p(1+g) + \epsilon\alpha(1+r)]/(1+g+p+g\alpha)$ times previous period debt ratio, with r = nominal interest rate; g = real GDP growth rate; p = growth rate of GDP deflator in U.S. dollar terms; ϵ = 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.

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

**Table 2. Papua New Guinea: Public Sector Debt Sustainability Framework,
Baseline Scenario, 2016-2039**
(In percent of GDP unless otherwise indicated)

	Actual			Projections										Average 6/	
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2029	2039	Historical	Projections		
Public sector debt 1/	33.7	32.5	36.8	38.3	41.2	42.8	43.0	42.5	42.2	37.9	30.3	22.5	41.0		
of which: external debt	8.5	8.8	15.2	16.5	21.1	23.3	24.6	24.9	25.0	19.4	17.9	7.8	22.2		
Change in public sector debt	3.8	-1.3	4.3	1.5	2.9	1.6	0.2	-0.5	-0.3	-1.4	2.2				
Identified debt-creating flows	2.9	-0.9	0.1	1.2	2.2	0.8	-0.7	-0.7	-0.5	-1.6	2.3	1.2	-0.3		
Primary deficit	2.8	0.4	0.2	1.7	2.8	1.6	0.1	-0.2	-0.2	-1.8	2.1	1.7	0.0		
Revenue and grants	16.1	15.9	17.8	15.4	15.1	14.9	15.0	15.0	15.0	16.2	17.4	13.1	15.3		
of which: grants	2.2	2.0	2.3	1.1	1.0	1.0	1.0	0.9	0.9	0.8	0.4				
Primary (noninterest) expenditure	18.9	16.3	18.0	17.1	17.8	16.5	15.1	14.8	14.8	14.5	19.4	14.8	15.3		
Automatic debt dynamics	0.1	-1.3	-0.2	-1.2	-0.6	-0.8	-0.9	-0.5	-0.3	0.2	0.3				
Contribution from interest rate/growth differential	-0.1	-1.0	0.2	-1.2	-0.6	-0.8	-0.9	-0.5	-0.3	0.2	0.3				
of which: contribution from average real interest rate	1.1	0.2	-0.1	0.5	0.2	0.3	0.3	0.8	1.0	1.3	1.2				
of which: contribution from real GDP growth	-1.2	-1.2	0.3	-1.8	-0.7	-1.1	-1.2	-1.3	-1.4	-1.1	-0.9				
Contribution from real exchange rate depreciation	0.2	-0.3	-0.3	...	...	...	...	...	...	...	...				
Other identified debt-creating flows	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1		
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	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
Residual	0.9	-0.4	4.2	0.3	0.7	0.9	0.9	0.2	0.2	0.2	-0.1	1.6	0.4		
Sustainability indicators															
PV of public debt-to-GDP ratio 2/	...	...	36.7	37.8	39.6	40.3	39.7	38.4	37.3	32.9	25.3				
PV of public debt-to-revenue and grants ratio	...	...	206.2	246.1	262.6	270.1	265.1	255.8	249.2	202.9	146.0				
Debt service-to-revenue and grants ratio 3/	127.5	120.1	103.8	90.4	114.7	110.9	114.3	122.6	123.2	74.8	24.7				
Gross financing need 4/	23.4	19.5	18.7	16.3	20.1	18.1	17.2	18.2	18.2	10.4	6.3				
Key macroeconomic and fiscal assumptions															
Real GDP growth (in percent)	4.1	3.5	-0.8	5.0	2.0	2.8	2.9	3.2	3.3	2.9	3.2	5.6	3.1		
Average nominal interest rate on external debt (in percent)	2.9	2.8	3.2	3.8	3.0	3.2	3.2	3.1	3.0	2.2	3.1	2.0	3.0		
Average real interest rate on domestic debt (in percent)	4.3	0.5	-1.0	1.4	0.0	0.4	0.3	3.1	4.7	6.5	6.3	3.8	3.6		
Real exchange rate depreciation (in percent, + indicates depreciation)	2.9	-3.7	-3.6	...	...	...	...	...	...	...	...	0.7	...		
Inflation rate (GDP deflator, in percent)	3.9	7.7	10.1	1.9	6.8	6.5	6.8	4.2	3.0	3.0	3.1	4.0	4.0		
Growth of real primary spending (deflated by GDP deflator, in percent)	-6.7	-11.1	10.0	-0.6	6.6	-4.9	-5.8	1.4	2.9	2.9	10.6	3.4	1.1		
Primary deficit that stabilizes the debt-to-GDP ratio 5/	-1.0	1.6	-4.1	0.2	-0.1	-0.1	0.0	0.3	0.1	-0.4	-0.2	-1.1	-0.1		
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				

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 (i.e., a primary surplus), which would stabilize 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.

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

Public sector debt 1/

■ of which: local-currency denominated

■ of which: foreign-currency denominated

■ of which: held by residents
■ of which: held by non-residents

Table 3. Papua New Guinea: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2019-2029
(In percent)

	Projections 1/										
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
PV of debt-to GDP ratio											
Baseline	16	19	20	21	20	20	19	17	16	13	13
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2019-2029 2/	16	33	47	59	70	81	87	92	93	90	89
B. Bound Tests											
B1. Real GDP growth	16	20	23	24	24	23	22	20	18	15	15
B2. Primary balance	16	19	21	22	22	21	20	19	18	15	15
B3. Exports	16	27	42	44	43	43	41	39	37	33	32
B4. Other flows 3/	16	21	25	26	26	25	24	22	21	18	17
B5. Depreciation	16	24	29	30	29	29	27	25	23	20	19
B6. Combination of B1-B5	16	25	30	31	31	30	29	27	26	22	21
C. Tailored Tests											
C1. Combined contingent liabilities	16	21	23	24	25	25	24	23	23	20	20
C2. Natural disaster	16	21	23	24	24	24	24	22	22	19	19
C3. Commodity price	16	25	32	34	34	35	34	33	32	29	28
C4. Market Financing	16	21	23	23	23	22	21	19	18	15	14
Threshold	40	40	40	40	40	40	40	40	40	40	40
PV of debt-to-exports ratio											
Baseline	36	42	44	44	44	44	43	42	41	35	36
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2019-2029 2/	36	71	101	126	152	181	202	224	236	240	249
B. Bound Tests											
B1. Real GDP growth	36	42	44	44	44	44	43	42	41	35	36
B2. Primary balance	36	42	46	47	47	48	47	46	46	40	41
B3. Exports	36	69	128	130	132	133	134	132	133	125	123
B4. Other flows 3/	36	47	54	55	55	56	55	54	53	48	48
B5. Depreciation	36	42	49	50	50	50	49	47	47	42	42
B6. Combination of B1-B5	36	57	60	75	75	76	75	74	73	66	66
C. Tailored Tests											
C1. Combined contingent liabilities	36	45	50	52	54	56	57	57	58	54	56
C2. Natural disaster	36	44	48	50	52	53	54	53	54	50	53
C3. Commodity price	36	67	81	81	82	82	82	82	84	80	82
C4. Market Financing	36	42	44	44	44	44	43	41	41	35	36
Threshold	180	180	180	180	180	180	180	180	180	180	180
Debt service-to-exports ratio											
Baseline	2	7	5	3	4	5	5	5	3	8	4
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2019-2029 2/	2	6	5	4	6	7	7	8	7	13	11
B. Bound Tests											
B1. Real GDP growth	2	7	5	3	4	5	5	5	3	8	4
B2. Primary balance	2	7	5	4	5	5	5	5	4	9	4
B3. Exports	2	9	8	7	9	9	9	9	7	16	12
B4. Other flows 3/	2	7	5	4	5	5	5	5	4	9	5
B5. Depreciation	2	7	5	4	5	5	5	5	4	8	4
B6. Combination of B1-B5	2	8	6	5	6	6	6	6	5	12	6
C. Tailored Tests											
C1. Combined contingent liabilities	2	7	5	4	5	5	5	5	4	9	4
C2. Natural disaster	2	7	5	4	5	5	5	5	4	9	4
C3. Commodity price	2	9	6	5	6	6	6	6	5	11	7
C4. Market Financing	2	7	5	3	4	5	5	5	3	8	4
Threshold	15	15	15	15	15	15	15	15	15	15	15
Debt service-to-revenue ratio											
Baseline	7	23	16	11	15	15	14	13	9	21	8
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2019-2029 2/	7	21	17	15	19	21	22	22	19	31	26
B. Bound Tests											
B1. Real GDP growth	7	24	18	13	17	17	16	15	10	24	9
B2. Primary balance	7	23	16	12	15	15	14	14	9	21	9
B3. Exports	7	24	19	17	20	20	19	18	13	29	19
B4. Other flows 3/	7	23	16	12	16	16	15	14	10	22	11
B5. Depreciation	7	29	20	15	19	19	18	17	12	27	12
B6. Combination of B1-B5	7	24	18	14	18	18	17	16	11	26	13
C. Tailored Tests											
C1. Combined contingent liabilities	7	23	16	12	15	16	15	14	10	22	9
C2. Natural disaster	7	23	16	12	15	15	15	14	10	21	9
C3. Commodity price	7	24	19	15	18	19	17	16	12	26	15
C4. Market Financing	7	23	16	12	15	15	14	13	9	21	8
Threshold	18	18	18	18	18	18	18	18	18	18	18

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, 2019-2029
(In percent)

	Projections 1/										
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
PV of Debt-to-GDP Ratio											
Baseline	38	40	40	40	38	37	37	36	36	34	33
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2019-2029 2/	38	39	39	40	39	38	37	37	37	36	36
B. Bound Tests											
B1. Real GDP growth	38	43	49	50	51	51	53	54	55	55	56
B2. Primary balance	38	42	45	44	43	42	41	41	40	38	37
B3. Exports	38	46	58	58	57	56	55	55	54	52	50
B4. Other flows 3/	38	42	45	45	44	42	42	42	41	39	38
B5. Depreciation	38	40	40	39	36	35	33	32	31	28	27
B6. Combination of B1-B5	38	40	42	42	41	40	40	40	40	39	38
C. Tailored Tests											
C1. Combined contingent liabilities	38	56	56	55	54	53	52	51	50	49	48
C2. Natural disaster	38	51	52	52	51	50	50	50	50	49	48
C3. Commodity price	38	42	45	48	50	51	53	54	55	56	56
C4. Market Financing	38	40	40	40	38	37	37	36	36	34	33
TOTAL public debt benchmark	55	55	55	55	55	55	55	55	55	55	55
PV of Debt-to-Revenue Ratio											
Baseline	246	263	270	265	256	249	246	237	227	215	203
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2019-2029 2/	246	256	263	264	258	253	249	243	237	229	223
B. Bound Tests											
B1. Real GDP growth	246	286	326	333	335	340	348	349	349	345	342
B2. Primary balance	246	276	300	295	285	278	274	265	254	241	229
B3. Exports	246	304	390	388	378	371	368	358	346	329	309
B4. Other flows 3/	246	279	304	300	290	284	280	271	261	247	232
B5. Depreciation	246	268	270	260	244	231	223	210	197	179	164
B6. Combination of B1-B5	246	263	282	280	273	269	268	262	254	243	233
C. Tailored Tests											
C1. Combined contingent liabilities	246	370	376	370	359	351	346	335	322	307	293
C2. Natural disaster	246	339	350	347	340	336	335	327	318	307	296
C3. Commodity price	246	294	322	341	345	350	356	352	351	348	345
C4. Market Financing	246	263	270	265	256	249	246	237	227	215	203
Debt Service-to-Revenue Ratio											
Baseline	90	115	111	114	123	123	120	101	86	85	75
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2019-2029 2/	90	114	110	113	119	116	109	89	74	70	60
B. Bound Tests											
B1. Real GDP growth	90	122	131	143	160	168	171	154	143	146	139
B2. Primary balance	90	115	122	133	139	139	135	114	98	96	86
B3. Exports	90	115	112	117	126	126	123	104	89	90	83
B4. Other flows 3/	90	115	111	115	124	124	121	102	87	87	77
B5. Depreciation	90	109	107	109	117	118	115	97	82	86	72
B6. Combination of B1-B5	90	113	113	118	128	130	128	110	96	96	86
C. Tailored Tests											
C1. Combined contingent liabilities	90	115	193	175	184	180	171	147	129	124	110
C2. Natural disaster	90	119	166	159	170	170	165	144	128	125	114
C3. Commodity price	90	124	122	128	149	155	157	139	128	132	127
C4. Market Financing	90	115	111	114	123	123	121	101	86	85	75

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 External Debt

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)

Fiscal Adjustment and Possible Growth Paths 1/

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	20		585	
Breach of benchmark	Yes		Yes	
Potential heightened liquidity needs	High			
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.

Figure 6. Papua New Guinea: Qualification of the Moderate Category, 2019-2029 1/

Sources: Country authorities; and staff estimates and projections.

1/ For the PV debt/GDP and PV debt/exports thresholds, x is 20 percent and y is 40 percent. For debt service/Exports and debt service/revenue thresholds, x is 12 percent and y is 35 percent.

**Statement by Nigel Ray, Executive Director for Papua New Guinea
and Laura Johnson, Senior Advisor to Executive Director**

Papua New Guinea (PNG) comprises the eastern half of the island of New Guinea, the second largest island in the world. While larger than, for example, Germany, much of the country is steep and rugged mountains or swamp. PNG is one of the most culturally diverse countries in the world – over 800 different languages are spoken in the nation of over 8 million people. Most of the population lives in rural and remote areas, where access to government services and the formal monetized economy remains a challenge. Frequently occurring natural disasters and the effects of climate change also present challenges. There is an enclaved mining sector; the rest of the economy is based around agriculture, forestry and fisheries, and associated commerce and services. The country has a sound financial system and a stable political environment with a recent change in government in Parliament in May 2019. The new government remains committed to prudent macroeconomic management and is grateful for Fund support.

Staff Monitored Program (SMP)

PNG is facing a number of substantial economic challenges and the authorities have embarked upon a comprehensive reform agenda to promote fiscal sustainability, foreign exchange reforms, state-owned enterprise (SOE) reform and improved governance. To support its reform agenda and program, the PNG government requested a SMP, which was approved by the Managing Director on February 20, 2020. The SMP will support PNG's macroeconomic and stabilization efforts, including by assisting PNG to re-build credibility and confidence in its economic management. The SMP is a critical step to catalyze financial assistance from international donors and partners to fund the budget deficit and finance the country's development priorities.

The SMP provides a broad macroeconomic framework within which PNG can pursue reforms and focuses on a number of structural benchmarks supporting the authorities reform priorities. The SMP includes measures to gradually reverse the build-up of public debt and to redirect public spending to more productive uses, bring expenditure under control while expanding government revenue, restore the convertibility of the currency and clear the backlog of foreign exchange in the economy, and structural reforms to support stronger, more sustainable and inclusive growth.

The authorities are committed to building a track record of implementing economic and social reforms, with the support of the Fund, to facilitate a return to sustained growth and macroeconomic stability. The authorities thank the Fund for agreeing to enter into a program with PNG. They take it as a vote of confidence in the economic reform program that has been put in place by the new government and look forward to working with the Fund.

Economic outlook

The PNG authorities expect economic growth of 5.0 percent in 2019, similar to staff's estimates, following the recovery from the earthquake in 2018. They also agree with the forecast for the growth to slow down in 2020, owing to lower production in the oil and gas sector. The authorities are encouraged that growth in the non-mineral sector is expected to be resilient. This is the sector the government is focused on developing as the majority of the population is engaged in it. Despite a large current account surplus, PNG's non-resource sector continues to face a shortage of foreign exchange, as the surplus is almost entirely offset by financial outflows associated with resource sector investments.

Coronavirus is of course a major uncertainty facing the global community and especially countries such as PNG with weak health systems and close communal living. PNG is taking actions to prepare for the health risks, including through increased dedicated funding as well as clearing backlogs of unpaid medical bills. Broader economic actions are being prepared based on meetings of health and economic experts. These are likely to extend beyond usual fiscal and monetary responses and into areas such as encouraging more immediate planting of food crops and examining cultural practices such as funeral arrangements ("haus kraes"). International assistance in making the best preparations possible would be welcome.

Fiscal policy

The authorities remain committed to reestablishing fiscal consolidation. A 'due diligence' exercise was undertaken in September 2019 which identified a fiscal situation considerably worse than previously stated. The budget deficit and debt-to-GDP ratios increased as a result of lower-than-budgeted revenue in 2019 and adoption of some international reporting standards, while expenditure increased, due in part to funding to the priority areas of education, health and law and order, and payment of arrears. The authorities introduced a Supplementary Budget in October 2019 with cuts to both capital and operational expenditure, including the provincial and district grants, to help restore fiscal consolidation. There was also some re-appropriation of expenditure driven by wage cost over-runs. The debt-to-GDP ratio is projected to be above 40 percent, higher than the range of 30.0 to 35.0 percent specified in the Fiscal Responsibility Act (FRA). The FRA was amended as part of the 2019 Supplementary Budget process with the upper limit moved to 45.0 percent, which will be reduced back to 35.0 percent within 10 years.

The 2020 Budget was presented in November 2019 with the aim of continuing the fiscal consolidation efforts through expenditure efficiency, sustainable investments and broadening the revenue base, amongst other measures.

Revenue raising remains a challenge and several measures were introduced in the 2020 Budget. These measures include refinements to some tax administration processes, increases in a number of customs and excise duties, a proposed small business tax and higher tariffs on tobacco and alcohol. The recent appointment of a permanent Tax Commissioner should assist with the

implementation of an updated medium-term revenue strategy, supported by technical advice from the Fund.

On the expenditure side, the authorities have taken measures to reduce non-essential expenditure, improve accountability and increase expenditure in rural areas. In the 2020 Budget, wages and goods and services expenditure as a proportion of non-resource GDP were reduced. Over the next three years, the authorities are also allowing for the payment of arrears for wages and salaries from industrial agreement with civil servants, pension exit payments and various contractual commitments that were incurred over the years. Better control of operational expenditure is expected under a new expenditure rule which focuses attention on capital spending instead of the operating budget.

The 2020 Budget's financing also aims to repay part of the government's arrears. This remains a challenge with the authorities focused on seeking cheaper sources of financing. Apart from domestic financing, there have been negotiations with the Australian Government for possible budget support as well as discussions with the ADB and World Bank. Part of this strategy includes the SMP with the Fund to help build confidence and credibility in the country's economic management and provide a catalyst for international donor support.

Monetary and financial sector policies

The Bank of Papua New Guinea (BPNG) eased its monetary policy stance in 2019, reducing its policy rate from 6.25 percent to 5.0 percent, given low inflation, the relative stability of the kina exchange rate and weak global economic growth. The easing stance was to support lending by banks to the private sector. There were refinements to the monetary policy operations of BPNG to attempt to improve the transmission of monetary policy and liquidity management. These included securitizing borrowings under the Repurchase Agreement facility for government securities and Central Bank Bills. BPNG is also in the process of implementing a financial consumer protection framework that would address consumer concerns on financial services.

The authorities agree with the need to undertake measures to help eliminate the unfilled orders for FX and ensure exchange rate convertibility and are undertaking a review with an independent consultant examining how transitions from current arrangements can maximize benefits and minimize adjustment costs. The authorities consider that a gradual approach is needed given uncertainties over the size of the backlog as well as the appropriate level of the exchange rate. Efforts would also be made to strengthen liquidity management and effective monetary policy operations. The authorities will request technical assistance from the Fund and neighboring central banks to assist in these efforts.

PNG has a sound financial system dominated by commercial banks that are well-capitalized and profitable, with low non-performing loan ratios. BPNG continued to enhance the country's National Payment System (NPS). In 2019, as part of the National Switch project, the Retail Electronic Payment systems (REPS) was rolled-out, enabling second-tier financial institutions such as microfinance companies, micro-banks, savings and loan societies and other smaller

financial institutions to participate in the NPS. It connects the providers of electronic card and mobile phone payment services in PNG. REPS, together with the Kina Automated Transfer System for high value transactions by the commercial banks and BPNG, completes the modernization process of an efficient, secure and convenient payment system.

Structural policies

Reforms are needed to assist with the authorities' focus on developing the non-renewable resources sector. To this end, the authorities remain committed to establishing a sovereign wealth fund to invest proceeds from the non-renewable resources sector. The authorities prefer that their involvement in future resource projects should be tailored towards obtaining better returns to PNG in the early stages of a projects' life, rather than towards the end, including better tax returns based on production, and greater local content and employment opportunities. Several major resource projects are in the pipeline, including another LNG project, the Wafi-Golpu gold project, and expansion of the PNG LNG project, for which negotiations are continuing.

Outside the resources sector, the authorities' key reforms include improving the telecommunications and transport infrastructure, promoting labor mobility, supporting student loans for higher education, and improving efficiency and productivity in the public sector. The authorities plan to undertake SOE reforms in 2020 through enhancing institutional capacity and improving management with better returns to the State.

Access to secured land for development purpose is an ongoing challenge. The authorities will continue the land reform program aimed at ensuring better land administration and land dispute settlement, besides facilitating customary land registration.

The authorities remain committed to addressing governance and anti-corruption issues. Progress has been made in enhancing the AML/CFT framework with BPNG's Financial Analysis and Supervision Unit (FASU) undergoing training. FASU was admitted as a member of the Egmont Group (of Financial Intelligence Units) in July 2019 while the country's next mutual evaluation is scheduled for 2021. However, training is also needed for magistrates and judges who are unfamiliar with the laws dealing with AML/CFT and other financial crimes. The Parliamentary Public Accounts Committee has held widely publicized hearings into the procurement of health contracts for medicinal supplies. Legislation on an Independent Commission Against Corruption was tabled in Parliament in February 2020 and was unanimously supported to go through to the next step of the parliamentary process. A Whistleblower Act 2020 was also passed by Parliament in February. Adequate resourcing and training of staff in the National Procurement Commission is also planned for 2020.