INTERNATIONAL MONETARY FUND

IMF Country Report No. 17/411

PAPUA NEW GUINEA

December 2017

2017 ARTICLE IV CONSULTATION—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 2017 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 December 1, 2017, 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 December 1, 2017, following discussions that ended on September 14, 2017, 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 November 17, 2017.
- An **Informational Annex** prepared by the IMF staff.
- A **Debt Sustainability Analysis** prepared by the staffs of the IMF and the International Development Association (IDA).
- A **Statement by the Executive Director** for Papua New Guinea.

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Price: $18.00 per printed copy

International Monetary Fund
Washington, D.C.

Press Release No. 17/523
FOR IMMEDIATE RELEASE
December 29, 2017

International Monetary Fund
700 19th Street, NW
Washington, D. C. 20431 USA

IMF Executive Board Concludes 2017 Article IV Consultation with Papua New Guinea

On December 1, 2017, the Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation[1] with Papua New Guinea.

In 2015-16, growth of the Papua New Guinea (PNG) economy slowed sharply, to under 3 percent, in response to falls in major export commodity prices, the completion of the huge PNG LNG pipeline project, and a severe drought, and in 2017 economic activity has remained subdued. Slow growth, generous tax treatment of the LNG project, the drought and weak tax administration have all contributed to declining tax revenues and a substantial fiscal deficit and increasing debt-to-GDP ratio. Inflation was boosted to over 6 percent by drought effects, but is beginning to ease. Although PNG is running a large current account surplus, it is also experiencing large financial account outflows related to project debt repayments, resulting in a shortage of foreign exchange (FX). FX reserves have declined gradually to around $1.7 billion (covering 5 months of imports).

A new government, elected in July, is keen to address the immediate fiscal challenges as well as longer-term structural reform, and introduced a Supplementary Budget in September with bold measures to ensure a narrowing of the fiscal deficit. Nonetheless, on unchanged fiscal and monetary policies, PNG faces several more years of economic stagnation, with a growing risk of fiscal and financial instability as the debt-to-GDP ratio continues to rise and financing of deficits becomes increasingly difficult. In the absence of any major new resource project to spur investment, and with domestic activity depressed by FX shortages and import compression, the outlook is for growth to remain under 3 percent, while inflation continues to ease.

Near-term risks to the outlook are tilted to the downside, reflecting the potential for fiscal deficit financing difficulties to force a sharp consolidation, together with increasing distortions associated with the FX shortage. Over the medium term, risks are more balanced owing to the

[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.

upside potential of new resource sector projects and, possibly, a pickup in commodity export prices.

Executive Board Assessment[2]

Executive Directors noted that weak prices for major export commodities, a severe drought, and the end of a major investment project have led to weak growth since 2016, with adverse effects on the fiscal balance. Large financial account outflows related to project debt repayments have contributed to a shortage of foreign exchange. In these circumstances, Directors recommended that decisive steps be taken to strengthen Papua New Guinea's fiscal and balance of payments positions.

Directors underlined that a strong commitment to fiscal consolidation over the medium term is essential to reduce the debt-to-GDP ratio and lower the risk of debt distress. They welcomed steps taken by the authorities in 2017 to reduce the deficit. Going forward, fiscal consolidation should involve expenditure measures, including streamlining public sector employment and payroll as well as prioritizing spending on education, health care and infrastructure. The implementation of a medium-term strategy to increase revenues is also important to support higher and more inclusive growth.

Directors stressed that increased exchange rate flexibility is needed to address the foreign exchange shortage and to offset the output effects of fiscal consolidation. They recommended a gradual approach to exchange rate adjustment and flexibility to balance the impact on inflation in the short run.

Directors encouraged the authorities to implement structural reforms to strengthen Papua New Guinea's non-resource sectors. They noted that key elements of the development strategy needed to include measures to ensure that Papua New Guinea benefits more substantially from its natural wealth.

Directors welcomed improvements in macroeconomic statistics, but encouraged further efforts to improve data completeness, timeliness and accuracy. They also encouraged the authorities to continue to improve the effectiveness of the AML/CFT framework.

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

Table 1. Selected Economic and Financial Indicators, 2013-18

Nominal GDP (2016):	US$21.1. billion 1/
Population (2016):	7.9 million
GDP per capita (2016):	US$2,657
Quota:	SDR 131.6 million (14th Review: SDR 263.2 million)

	2013	2014	2015	2016	2017	2018
			Est.	Est.	Proj.	
			(Percentage change)			
Real sector						
Real GDP growth	3.8	12.5	8.0	2.4	2.2	2.5
Resource 2/	5.1	71.5	43.2	6.4	4.4	3.5
Non-resource	3.6	3.3	-1.2	0.9	1.4	2.1
Agriculture, forestry and fishing (share)	19.3	17.8	17.0	17.4	18.1	18.7
Mining and quarrying (share)	10.4	9.1	6.6	7.5	7.9	7.9
Oil and gas extraction (share)	3.2	11.3	19.7	17.6	15.4	14.5
CPI (annual average)	5.0	5.2	6.0	6.7	5.0	2.6
CPI (end-period)	2.9	6.7	6.3	6.6	3.4	2.6
			(In percent of GDP)			
Central government operations						
Revenue and grants	20.7	21.0	17.2	15.6	15.0	14.9
Of which: Resource revenue	1.4	2.3	1.0	0.6	0.6	0.5
Expenditure and net lending	27.6	27.3	21.2	20.2	18.2	18.0
Net lending(+)/borrowing(-)	-6.9	-6.3	-4.0	-4.6	-3.2	-3.1
Non-resource net lending(+)/borrowing(-)	-8.3	-8.6	-5.0	-5.2	-3.8	-3.6
			(Percentage change)			
Money and credit (percentage change)						
Domestic credit	40.9	23.5	15.8	24.6	7.9	5.8
Credit to the private sector	17.5	3.5	3.4	7.2	4.2	3.0
Broad money	6.7	3.4	8.0	10.9	9.0	8.5
Interest rate (182-day T-bills; period average)	5.0	5.3	7.1	7.4	6.4	4.8
			(In billions of U.S. dollars)			
Balance of payments						
Exports, f.o.b.	6.0	8.8	8.4	7.8	7.9	7.9
Of which: Resource sector	3.8	6.8	7.1	6.4	6.5	6.5
Imports, c.i.f.	-6.5	-4.5	-2.7	-2.4	-2.5	-2.6
Current account (including grants)	-6.5	0.3	3.1	3.3	3.1	3.3
(In percent of GDP)	-30.8	1.3	13.3	15.2	13.9	14.4
Gross official international reserves	2.8	2.3	1.9	1.7	1.7	1.9
(In months of goods and services imports)	4.3	5.9	5.5	4.8	5.1	5.4
			(In percent of GDP)			
Government debt						
Government gross debt	24.9	27.1	28.9	33.3	35.4	37.0
External debt-to-GDP ratio (in percent) 3/	6.4	6.2	7.1	8.9	9.1	10.2
External debt-service ratio (percent of exports) 3/	1.4	1.1	0.9	1.4	1.6	1.7
Exchange rates						
US$/kina (end-period)	0.4130	0.3855	0.3325	0.3150	...	...
NEER (2005=100, end-period)	120.6	114.2	116.4	104.2	...	...
REER (2005=100, end-period)	127.0	123.6	131.4	123.6	...	...
Terms of trade (2010=100, end-period)	99.3	86.1	70.6	94.9	85.0	84.8
Nominal GDP (in billions of kina)	47.7	56.6	63.6	67.3	70.2	73.2
Non-resource nominal GDP (in billions of kina)	41.2	45.0	46.8	50.4	53.8	56.8

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

1/ Based on period average exchange rate.

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

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

INTERNATIONAL MONETARY FUND

PAPUA NEW GUINEA

STAFF REPORT FOR THE 2017 ARTICLE IV CONSULTATION

November 17, 2017

KEY ISSUES

Outlook and risks

Papua New Guinea (PNG) is experiencing weak economic growth resulting from falls in major commodity export prices, the completion of the huge PNG LNG pipeline project, and a severe drought. These developments have led to fiscal deficits and increasing public debt as government revenues have declined. They have also led to foreign exchange (FX) shortages and import compression, partly owing to large private debt service outflows related to the LNG project. A new government, elected in July, is keen to address the immediate fiscal challenges as well as longer-term structural reform.

A credible government commitment to substantial fiscal consolidation through the medium term could mitigate the risk that financing of the fiscal deficit could become extremely difficult, leading to a fiscal and financial crisis. In such a crisis, a severe fiscal contraction would be likely and monetary and exchange policies would also be at risk.

Policy recommendations

- The 2017 Supplementary Budget has taken an important step forward in reducing expenditures, but significant additional consolidation is needed to bring spending in line with a realistic assessment of revenues that can be raised in the next few years, and begin to reverse the recent increases in the debt-to-GDP ratio.

- To support higher and more inclusive growth, PNG should mobilize additional revenues over the medium term, needed to finance essential infrastructure, education and healthcare spending.

- A gradual move towards greater exchange rate flexibility and elimination of overvaluation of the Kina should go hand-in-hand with adoption of a credible fiscal consolidation plan and medium-term fiscal strategy.

Approved By
Odd Per Brekk (APD) and Zeine Zeidane (SPR)

Discussions were held in Port Moresby during August 31-September 14, 2017. The staff team comprised Scott Roger (Head), Ryota Nakatani (both APD), Kara Rideout (STA), and Jacinta Hesaie (RR-Fiji). Heenam Choi and Nancy Lelang (both OED) joined the discussions. Cristina Arbelaez and Nadine Dubost assisted from HQ.

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RECENT DEVELOPMENTS, OUTLOOK, AND RISKS

1. **In 2015-16, the Papua New Guinea (PNG) economy slowed sharply in response to falls in major export commodity prices, the completion of the huge PNG LNG pipeline project, and a severe drought.** Although LNG production and exports increased, other minerals and agricultural sectors (including copper, gold, and coffee) were adversely affected by the drought and weak commodity prices. Moreover, increased LNG output has generated little direct increase in local employment, or additional government revenues to support spending. Rather, LNG earnings have mostly been used to repay project-related debt. Reflecting this, as well as the impact of the drought on non-LNG export revenues and insufficient exchange rate flexibility, PNG has experienced an ongoing shortage of foreign exchange (FX), which adversely affected activities dependent on imports. Consequently, aggregate growth declined to 2.4 percent in 2016, compared with estimated potential growth of 3.5 percent.

2. **In 2017, economic activity has remained subdued.** Supporting growth have been post-drought increases in production and exports of minerals and agricultural products, and spending related to the 2018 APEC Summit meeting in PNG. However, these have been largely offset by low business confidence, reflecting limited prospects for any major new resource project, reduced government spending, and the adverse impact of continuing foreign exchange shortages and overvaluation of the Kina. Aggregate growth is estimated at 2.2 percent.

3. **The slow pace of economic activity is reflected in financial sector developments.** During 2017, growth of money and credit aggregates all slowed. Private sector credit growth is projected to grow by 4.2 percent, shrinking in real terms, from 7.2 percent in 2016, while the non-performing loan ratio has remained at over 3 percent. Banks, however, are well-capitalized, and continue to hold excess liquidity; another indication of weak demand for loans.

4. **Inflation rose to 6.7 percent in 2016, but is beginning to ease.** The rise in the headline inflation rate in 2015-16 largely reflected the impact of the drought on fruit, vegetable and betelnut prices;[1] core measures of inflation remained under 3 percent. In 2017–18 inflation is projected to decline significantly, as drought effects dissipate and the exchange rate remains stable.

5. **Fiscal consolidation since 2015 has fallen short of the government's aims.** During the boom years of 2013-14, government spending was ramped up sharply, in anticipation of sustained increases in resource-based revenues. The fall in oil and gas prices, together with very favorable tax terms for the LNG project, have meant that since 2015, tax revenues from LNG exports have been very low, while revenues from other sectors were adversely affected by the drought and weak tax administration. On the expenditure side, it has proven difficult to unwind earlier increases in government spending. Cuts in non-wage costs have been largely offset by weak control over personnel costs. Consequently, while the government targeted cutting the fiscal deficit to

[1] Betelnut, a palm seed with narcotic properties like tobacco, is widely consumed in PNG and has a weight of 2.7 percent of the CPI. Its price has soared since late 2015. In June 2017, annual CPI inflation, including betelnut, was 5.9 percent, but only 3.2 percent excluding betelnut.

3.8 percent of GDP in 2016 (from 4.3 percent in 2015), instead it widened to 4.6 percent. In 2017, the government targeted a narrowing of the deficit to 2.5 percent of GDP, but as of mid-year, revenue shortfalls and expenditure over-runs threatened to keep the deficit little changed from 2016.

6. **Fiscal deficits together with slow growth have pushed the government debt-to-GDP ratio over the statutory ceiling of 30 percent**. The capacity of the domestic financial sector to finance the deficit is over-stretched, and external financing options are limited, so an important part of the budget deficit has been financed through central bank purchases of government securities and, to some extent, payments arrears.[2] Without corrective measures, the fiscal deficit is likely to narrow slowly, pushing the debt-to-GDP ratio above 40 percent and severely straining the capacity of the financial system to absorb government debt. The debt sustainability analysis indicates a moderate risk of external debt distress and the overall risk of public debt distress is heightened.

7. **The newly-elected government is taking bold steps to address the immediate fiscal challenges as well as put in place a longer-term strategy**. In early August, a new government was formed, like its predecessor, as a coalition headed by Prime Minister O'Neill. Mr. Abel, former Minister of National Planning, has been appointed as Treasurer and Deputy Prime Minister. In September, he announced a 100-Day Economic Stimulus Plan addressing both immediate fiscal imperatives and longer-term development strategy. The 2017 Supplementary Budget, presented to Parliament in late September, included large immediate cuts in constituency spending at the provincial and district levels, which will narrow the budget deficit to just over 3 percent of GDP this year (from over 4 percent without measures). The plan also includes a longer-term strategy focused on developing non-resource sectors by prioritizing spending and investment on education, health care, and key infrastructure projects.

8. **PNG continues to experience a significant shortage of foreign exchange (FX), despite a large current account surplus.** PNG's capital and financial account balance swung from a large surplus of $4.2 billion in 2013, reflecting inflows to finance the PNG LNG project, to a large deficit, following completion of the project, estimated at $3 billion in 2017. A large portion of this outflow has consisted of construction loan repayments. Part of this swing in the capital and financial account has been financed by a $1.7 billion increase in goods and services exports.[3] The most important counterpart for the large increase in capital and financial account outflows has been through reduced imports. As much as half may be attributable to the reduction of imports directly associated with the LNG project. In addition, however, import compression, and backlogged import demand, associated with FX restrictions is likely to have played an important part. This is reflected in the fall in the ratio of non-resource sector imports of goods and services from an average of 26 percent of GDP in 2009-2011 to around 10 percent in 2015-2017. Finally, outflows have been partly financed, or imports supported, through depletion of international reserves, by a total of $1.1 billion over the period since 2013.

[2] The BPNG has sterilized the purchase of government securities by issuing central bank bills.

[3] This includes LNG and condensate exports, which rose from zero in 2013 to $2.7 billion in 2017, partly offset by a $1.1 billion drought-induced decline in minerals and agricultural exports.

9. The Bank of Papua New Guinea (BPNG), concerned about inflation, sought to slow depreciation. Measures taken included restrictions on FX trading spreads and selective allocation of FX by BPNG. Since end-2014, the nominal effective exchange rate (NEER) has depreciated by 16 percent but by little in real terms, and since May 2016 the Kina has been stable against the US dollar.[4] Although non-LNG export revenues are recovering, the FX shortage persists, and a large backlog of unfilled orders has built up. BPNG intervention has been limited, and gross foreign reserves were US$1.7 billion (around 5 months of imports) as of mid-October, 2017.

A. Outlook and Risks

10. On unchanged fiscal and exchange rate policies, PNG faces several more years of economic stagnation, with a growing risk of a fiscal and financial crisis. Growth is projected to remain under 3 percent, in the absence of any major new resource project to spur investment, with domestic demand depressed by FX shortages, while inflation is projected to decline to around 2½ percent, as shown in the "passive" scenario in Text Table 1. However, this scenario depends critically on the ability of the government to finance a borrowing requirement of over 3 percent of GDP for several years, with the public debt-to-GDP ratio increasing to 40 percent over the medium term.

11. Near-term risks, on unchanged policies, are tilted to the downside (Annex I):

Downside:

- There is a significant risk that financing of the fiscal deficit could become extremely difficult, leading to a fiscal and financial crisis. In such a crisis, a severe fiscal contraction would be likely and monetary and exchange policies would also be at risk.

Upside:

- Projects to increase LNG export capacity, under negotiation, could begin somewhat sooner than assumed (early 2020s). These, or other minerals sector developments and commodity price upswings, could boost investment and growth in the near term, but would need to be well managed to have a sustained impact.

POLICIES TO FOSTER MACROECONOMIC STABILITY AND CONDITIONS FOR HIGHER GROWTH

A. Policy Challenges and Strategy

12. Macroeconomic policies need to adjust more decisively and systematically to an environment of lower commodity export earnings, and begin laying the foundations for

[4] Accordingly, the exchange rate arrangement has been reclassified by the IMF to stabilized from a crawl-like arrangement, effective May 18, 2016, while the de jure arrangement remains floating.

stable, inclusive growth over the longer term. In the early 2010s, government spending and the size of the public service were ramped up in the expectation of high future commodity prices and tax revenues. Now, with much weaker revenues than expected, PNG needs to commit to significant fiscal consolidation over the next few years. While the brunt of adjustment will need to be made by fiscal policy, monetary policy can help to mitigate the impact on activity. Over the longer term, the government also needs to increase revenues to finance crucial development spending, and both monetary and fiscal policies need to work to promote the competitiveness of the non-resource sector.

13. Challenges for fiscal policy:

- **Achieving further fiscal consolidation.** Until very recently, efforts to achieve substantial deficit reduction were insufficient, straining the ability of the private sector and the central bank to absorb government debt. The 2017 Supplementary Budget has taken an important step forward in reducing expenditures, but significant additional consolidation will be needed to bring spending in line with a realistic assessment of revenues that can be raised in the next few years, and begin to reverse the recent increases in the debt-to-GDP ratio.[5]

- **Mobilizing resources to finance development objectives.** To support higher and more inclusive growth, PNG needs to mobilize additional revenues over the medium term, especially from its enormous natural wealth, to finance essential infrastructure, education and healthcare spending, and development of the non-resource sector.

- **Coping with commodity price cycles.** In the 1990s and again in the 2010s, commodity price cycles have caused fiscal stress, amplifying domestic activity swings. A fiscal strategy is needed that would help insulate government spending from revenue volatility.

14. Challenges for monetary and exchange rate policy:

- **Increasing exchange rate flexibility.** The EBA analysis (Box 1) suggests that PNG's external position is moderately weaker than implied by fundamentals , and the Kina is overvalued. This overvaluation, together with associated FX restrictions and FX rationing by BPNG is contributing to weakness in business activity and growth. Over the longer term, sustained overvaluation of the currency will inhibit development of the non-resource sector.

- **Reducing excess financial system liquidity.** Both firms and banks currently hold large idle financial balances, partly because of FX rationing. Weak demand for credit means that the current macroeconomic impact is minimal and the current accommodative monetary policy stance is appropriate. Over the medium term, however, excess liquidity poses inflationary risks during an economic upswing and weakens BPNG policy effectiveness, which would be a major concern if exchange rate flexibility were increased.

[5] The authorities are aware of some contingent liabilities of state-owned enterprises, and are now reviewing their debt, with assistance from PFTAC.

B. Fiscal Policy Priorities

Near term

15. Accelerate fiscal consolidation. Reductions in district and provincial transfers in the 2017 Supplementary Budget will bring a welcome decrease in the fiscal deficit in 2017 to around 3 percent of GDP. Going forward, it is crucial to continue to narrow the deficit. The staff recommends that the authorities take steps to:

- **Reduce the fiscal deficit** from around 3 percent of GDP in 2017 to zero by 2020 (see below), including:
  - **Streamline the government payroll**. In 2016–17, the government reduced expenditure, partly thanks to good control over the expenditure warrant system. This consolidation was almost completely offset, however, by wage cost over-runs, at both central government and provincial levels, reflecting ineffective payroll monitoring and control. In recent years, the civil service has doubled in size from 80,000 to 155,000. Many of these positions are believed to consist of "ghost" workers rather than real people. Staff recommends a 30 percent reduction in government staffing over 2018–2020, to around 110,000, focusing on eliminating payroll fraud. This will require a rapid strengthening of payroll systems and related internal controls. Eliminating such unproductive and fraudulent public spending is the best way of protecting genuine employment in primary education and basic health services and reducing poverty.
  - **Continue to defer grants to provinces and districts.** Staff recommends that the cuts in the 2017 Supplementary Budget be maintained, at least until reforms yield increased revenues to support such spending on a sustainable basis. Moreover, restoration of such grants should be accompanied by much stronger procurement rules and accountability. While such delegated spending can, in principle, be beneficial, weak accountability makes such funds vulnerable to fraud and inefficient use. In such circumstances, it is better to use the budget space for well-targeted and accountable programs.
  - **Strengthen revenue collection.** Measures to enhance tax compliance and collection need to be stepped up, mainly by strengthening revenue administration. The Internal Revenue Commission (IRC) needs to be adequately resourced to carry out its functions effectively. The government should also consider implementing additional revenue generating measures proposed by a recent IMF TA mission.
- **Enhance monitoring by the Budget Management Committee.** This committee needs to coordinate implementation of revenue and expenditure policies and cash management. Staff recommends strengthening its role in ensuring that slippages are addressed quickly and avoid government payments arrears.

Medium term

16. Develop a new Medium-Term Fiscal Strategy (MTFS). A new MTFS is needed to better insulate fiscal policy from revenue volatility, and to ensure that PNG has enough revenues to finance key development objectives. The strategy should include a revenue mobilization framework and expenditure sustainability framework. Staff recommends:

- **Enhance revenue mobilization.** The staff strongly supports the authorities' request for IMF assistance in developing and implementing a Medium-Term Revenue Strategy (MTRS). It should be comprehensive, addressing issues of tax administration, policy, including customs, goods and services tax (GST), corporate income tax, and extractive industries taxation (Box 2), and governance. During the Annual Meetings, discussions reached agreement that, with external funding support, the IMF would provide a resident advisor over three years to provide strategic advice on MTRS implementation.

- **Strengthen the expenditure framework.** The authorities are examining alternatives to the current fiscal rule which specifies a ceiling of 30-35 percent for the debt-to-GDP ratio, but no guidance on how it should be achieved. Staff recommends developing a framework that takes both sustainability and volatility into account, and that is simple and easy to implement. Staff agreed to work with the authorities to develop an operational rule over coming months.

Authorities' views

17. The authorities share the view that fiscal consolidation is needed. A significant step towards fiscal consolidation was included in the 2017 Supplementary Budget, which includes strong both expenditure reductions and revenue increases, with a view to bringing the debt-to-GDP ratio down.[6] The authorities agreed that the next major effort on the expenditure side will need to be on cleaning up the government payroll, and steps were already underway to do so.

18. On the revenue side, the authorities and staff agreed that a twin track approach was needed, with a near-term focus on strengthening tax compliance, together with a more comprehensive strengthening of tax policies and administration under a MTRS, with IMF and other donor assistance. They agreed that domestic revenue mobilization is needed to strengthen the longer-term ability of the government to achieve its objectives vis-à-vis the Sustainable Development Goals.

19. The authorities and staff were also in general agreement on requirements for a MTFS. They underscored that the development of a MTFS is a priority and expressed interest in continued cooperation on this front. At the same time, the authorities highlighted that there needed to be political will to build a reputation for maintaining a credible fiscal framework.

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[6] The Supplementary Budget changed the debt-to-GDP target from under 30 percent to between 30 and 35 percent.

C. Monetary Policy Priorities

20. Increase exchange rate flexibility and promote external competitiveness. Adoption of a credible fiscal consolidation plan and MTFS (see below) needs to go hand-in-hand with greater exchange rate flexibility. Staff estimates that a significant exchange rate adjustment would be needed to eliminate overvaluation and restore a properly functioning FX market. However, a rapid adjustment of the exchange rate would have a large impact on inflation and could trigger capital flight. Therefore, staff recommends that BPNG accommodate gradual adjustment of the exchange rate over the medium term to eliminate its misalignment, which is estimated to keep headline inflation below 6 percent. This adjustment would boost growth and ease the FX shortage. Based on import and export elasticities for PNG (Nakatani, 2017),[7] a 10 percent depreciation of the Kina in real terms could increase net exports and the supply of FX by US$250 million annually.

21. Strengthen the effectiveness of monetary policy transmission. As PNG moves towards greater exchange rate flexibility, BPNG will need to clarify the monetary policy strategy or framework, as well as ensure that it has effective instruments to adjust the stance of policy and guide the exchange rate. To this end, Staff recommends that a move towards greater exchange rate flexibility be accompanied by:

- **BPNG clarification of the key objectives of the policy framework**, in order to anchor expectations;
- **Active measures to absorb excess liquidity**, including: (i) moving more government trust funds from the banks to the BPNG (some of this has been done, but many accounts remain with banks); (ii) increasing reserve requirements; and (iii) reducing BPNG holdings of government securities. Reducing excess liquidity will be needed to ensure that movements in the policy interest rate have a direct impact on market interest rates.
- **Active use of interest rates to implement monetary policy.** As exchange rate flexibility increases, BPNG will need to manage the overall stance of policy and smooth the evolution of the exchange rate, using interest rates. BPNG may need to review the current structure of its operational framework to ensure that it is able to conduct market-based policy efficiently and effectively.

Authorities' views

22. The authorities indicated that they will consider staff recommendations regarding monetary and exchange rate policy in the context of their broader policy objectives, but also emphasized the need to respect the BPNG's operational autonomy.

23. Regarding increasing the flexibility of the exchange rate, the BPNG authorities expressed reservations on three points. First, they are less confident than staff that a depreciation of the Kina would stimulate exports and the supply of FX. Second, they expressed concern that the

[7] Nakatani, Ryota (2017) "External Adjustment in a Resource-Rich Economy: The Case of Papua New Guinea", *IMF Working Paper No. 17/267*.

impact on the prices of traded goods and services would have harmful effects for those dependent on imports. Third, they are concerned about the impact that depreciation would have on the overall rate of inflation. Consequently, they do not favor a rapid or uncontrolled adjustment in the exchange rate.

24. With respect to excess liquidity, the BPNG explained that while liquidity remains high, it has not translated into high growth in private sector lending and rising inflation. This provides some comfort for the BPNG to maintain the accommodative monetary policy stance. The Bank remains vigilant over macroeconomic developments that could warrant a change in its stance. The authorities also agreed that the buildup of excess liquidity is partly related to the FX shortage, and so would be partly resolved if FX shortages were eliminated. They also welcomed proposed IMF TA on debt management, which would also be helpful in eliminating excess liquidity.

D. Implications of Policy Adjustments for the Outlook

25. Implementation of proposed fiscal consolidation plus greater exchange rate flexibility would ease fiscal and balance of payments pressures. The "passive" baseline projection summarized in Table 1 assumes unchanged fiscal policy and a flat exchange rate. The alternative "active" scenario incorporates a decline in the fiscal deficit over 2018–20 through spending cuts and revenue mobilization, together with gradual depreciation of the Kina. These policy actions lead to a temporary reduction in real GDP growth; higher but still moderate inflation; a significant narrowing of the fiscal deficit; and stronger current account and international reserves positions. The projections do not include the possible LNG development over 2018-20.

26. The reduction in the fiscal deficit and financing needs, as well as the gradual elimination of exchange rate overvaluation raise longer-term growth prospects and reduce downside risks to the projections. In the "active" scenario, longer-term growth, especially in the non-resource sector, benefits from the exchange rate adjustment and the completion of fiscal adjustment, whereas in the "passive" scenario ongoing fiscal constraints and exchange rate overvaluation continue to dampen growth. Additionally, as discussed earlier, there is a significant risk that the "passive" scenario is not feasible. If deficits on the scale shown in this scenario cannot be financed domestically or externally, a fiscal and financial crisis would likely ensue, leading to much worse outcomes for economic activity. Conversely, in the "active' scenario there is an upside risk that a reduction of FX market distortions and fiscal consolidation could give a larger stimulus to activity through confidence effects, particularly in sectors such as agriculture, promoting more inclusive growth.

Text Table 1. Summary of Passive and Active Policy Scenarios for PNG, 2017-20

Passive Scenario	2017	2018	2019	2020
GDP growth rate	2.2	2.5	2.3	2.9
Inflation rate	5.0	2.6	2.5	2.5
Net lending (+)/borrowing (-) (% of GDP)	-3.2	-3.1	-3.6	-3.4
Government Revenue (% of GDP)	15.0	14.9	14.9	14.9
Government Expenditure (% of GDP)	18.2	18.0	18.4	18.3
Government Debt (% of GDP)	35.4	37.0	38.7	40.3
Current account (% of GDP)	13.9	14.4	13.8	12.8
Gross international reserves (in months of imports)	5.1	5.4	5.8	6.0

Alternative Scenario	2017	2018	2019	2020
GDP growth rate	2.2	2.2	1.9	2.5
contribution from currency depreciation	-	0.2	0.3	0.4
contribution from fiscal consolidation	-	-0.5	-0.7	-0.8
contribution from higher revenue	-	-0.2	-0.3	-0.4
contribution from lower spending	-	-0.3	-0.4	-0.4
Inflation rate	5.0	3.5	5.4	5.6
Net lending (+)/borrowing (-) (% of GDP)	-3.2	-2.1	-1.2	-0.2
Government Revenue (% of GDP)	15.0	15.2	15.8	16.4
Government Expenditure (% of GDP)	18.2	17.3	17.0	16.6
Government Debt (% of GDP)	35.5	36.3	36.0	34.6
Current account (% of GDP)	13.9	14.9	14.5	13.6
Gross international reserves (in months of imports)	5.1	5.9	6.8	7.6

Source: IMF Staff calculations

E. Financial Sector Issues

27. The banking system is sound and profitable, but supervision needs strengthening. Three banks (two Australian and one domestic) dominate the financial system, and have maintained high capital adequacy, healthy return on assets, and moderate non-performing loan ratios, despite the weak economy. Nonetheless, a recent PFTAC diagnostic mission highlighted the need to enhance the quality of supervision, notably in risk identification and assessment, and a follow up mission is in process.

28. PNG has made progress on AML/CFT issues but additional efforts are needed. PNG successfully exited the Financial Action Task Force "gray" list in June 2016. The authorities seek to ensure the effectiveness of the AML/CFT regime through strengthening institutions and enhancing domestic cooperation. Staff followed up on reports of pressures on some correspondent banking relationships.

29. **BPNG efforts to promote financial inclusion are welcome**. Banks hold only around half of their assets as loans, with the rest held largely as short-term securities and cash. PNG remains among the most underbanked countries on several indicators (numbers of branches, ATMs, and loan penetration). BPNG is actively engaged in a program to strengthen financial inclusion and education. Staff welcomed the introduction of a new TAP facility by BPNG in April to sell small-denomination government securities to small firms and individuals as this should broaden savings options for the public.

Authorities' views

30. The authorities are taking steps to put in place a robust AML/CTF regime. The authorities have appointed a Financial Analysis and Supervision Unit (FASU) director and staff, and anticipate having a first national assessment of money laundering and terrorist financing risks report by end-2017.

31. The authorities also broadly agreed with the importance of promoting financial inclusion and improvement in the capital market. They agreed that the TAP facility should help promote financial inclusion and deepening, but noted that uptake has been fairly limited to date.

REFORMS FOR INCLUSIVE GROWTH

32. Despite its natural wealth, PNG is poor; wealth and opportunity is unequally distributed; and women suffer from discrimination and high levels of domestic violence. Important elements of a strategy to promote growth and greater inclusiveness include:

- **Ensuring that the country benefits more from the exploitation of its natural wealth**. Part of the revenue reform strategy should be focused on ensuring that PNG gets a better deal on future LNG and other minerals extraction projects than it has in the past. It will also be important to ensure that such revenues are used effectively to promote development of the non-resource sector.

- **Prioritizing public spending to enhance growth, inclusiveness, and fairness**, including: improving transportation and communications networks; and committing to stable, long-term funding of education, health care, and law and order. Achieving these objectives will require strengthening a range of public financial management (PFM) systems, notably in procurement processes, and budget execution, monitoring, and reporting. PFTAC is assisting.

33. The main impediment to private sector development is macroeconomic policies. The main obstacle to business activity and investment are difficulties in obtaining foreign exchange (reflected in the very weak rating on cross-border trading in figure 1). This is adversely affecting both current activity and the willingness of parent companies to continue investing in PNG. Macroeconomic policy uncertainty more broadly is also having an adverse impact on employment and investment. Regarding structural impediments to development, law and order issues, including contract enforcement, insolvency resolution, corruption and security are all identified as business obstacles. Inefficient government bureaucracy, slows setting up businesses, obtaining building permits, and even paying taxes. Outside of the main cities, lack of basic infrastructure, including roads, electricity, and telecommunications, are major obstacles to development.

Authorities' views

34. The new Government's 100-Day Economic Stimulus Plan aims to strengthen PNG's economic base by investing in non-resource sectors and key infrastructure projects, including hospitals, the highlands highway, power plants, and agriculture. The government also continues to prioritize spending on education and primary health care. The authorities indicated interest in continued TA collaboration on PFM systems. They are also mindful of the need to improve governance in managing resource revenues and have benefited from recent IMF TA on taxation of extractive industries.

STATISTICS AND OTHER ISSUES

35. Macroeconomic statistics are improving, but further progress is needed:

- The mission acknowledged marked improvements in national accounts and fiscal data since 2014 and that improvements are continuing in these areas with PFTAC and IMF assistance. BOP data remain an issue and in July 2017, STA launched a new JSA-funded project under which PNG is eligible for TA in external sector statistics.

- Nonetheless, weaknesses remain, hampering the assessment of economic performance and policies, and management of the economy. The team discussed plans for continued improvements in data completeness, timeliness, and accuracy.

- Debt numbers are incomplete and unreliable because of data gaps; arrears have been reported but not included in the fiscal data provided by the authorities. Data gaps with regard to disposition of LNG earnings are reflected in large gaps in external financial accounts.

Authorities' views

36. The authorities continue to show commitment to improving macroeconomic statistics. The authorities recognize that there is room for greater coordination among stakeholders and appropriate resourcing required for key institutions like the National Statistics Office (NSO) and government agencies involved with government finance statistics systems. The authorities indicated willingness to seek further technical assistance and support from the Fund in strengthening the statistical framework.

STAFF APPRAISAL

37. In 2015-16, the Papua New Guinea (PNG) economy slowed sharply in response to falls in major export commodity prices, the completion of the huge PNG LNG pipeline project, and a severe drought, and in 2017 economic activity has remained subdued. Slow growth, generous tax treatment of the LNG project, the drought and weak tax administration have all contributed to declining tax revenues and a substantial fiscal deficit and increasing debt-to-GDP ratio. Inflation was boosted to over 6 percent by drought effects, but is beginning to ease. Although PNG is running a large current account surplus, it is also experiencing large financial account outflows related to project debt repayments, resulting in a shortage of foreign exchange.

38. On unchanged fiscal and monetary policies, PNG faces several more years of economic stagnation, with a growing risk of a fiscal and financial crisis. In the absence of any major new resource project to spur investment, and with domestic demand depressed by FX shortages, the outlook is for growth to remain under 3 percent. A credible commitment to substantial fiscal consolidation through the medium term would significantly reduce the risk that financing of the fiscal deficit could become extremely difficult, leading to a fiscal and financial crisis. In such a crisis, a severe fiscal contraction would be likely and monetary and exchange policies would also be at risk.

39. With the expenditure reductions in the 2017 Supplementary Budget, PNG's new government has taken an important step toward fiscal consolidation, but significant additional effort will be needed to bring spending in line with a realistic assessment of revenues that can be raised in the next few years, and begin to reverse the recent increases in the debt-to-GDP ratio. Particular emphasis should be put on streamlining public sector employment and payroll costs, together with improvements in tax compliance.

40. PNG also needs to mobilize additional revenues to finance essential infrastructure, education and healthcare, needed to support higher and more inclusive growth. The government is to be commended for its commitment to developing a MTRS, to be supported with technical assistance from the IMF and development partners. A medium-term strategy on the expenditure side is also needed to help insulate government spending from revenue volatility associated with commodity cycles.

41. Increased exchange rate flexibility is needed both to begin addressing the foreign exchange shortage and as a complement to fiscal consolidation. Staff recommend that the Kina be allowed to depreciate to eliminate the current over-valuation of the currency, end the FX shortage, and promote external competitiveness. Since a rapid depreciation would have a large impact on inflation and could be unnecessarily disruptive in the short run, a gradual approach to exchange rate adjustment and increasing flexibility is recommended. Increasing the flexibility of the exchange rate should be accompanied by clarification of the monetary policy framework, measures to eliminate excess liquidity, and strengthening of the market-based operational framework.

42. Staff does not recommend Fund approval of the retention of the exchange restrictions arising from FX prioritization and rationing of FX 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.

43. The financial supervision framework needs to be strengthened.

44. Staff support the broad lines of the new government's development strategy. Key to fostering stronger, inclusive growth will be: (i) revenue measures to ensure that PNG benefits more substantially from its great natural wealth; (ii) prioritization of public spending on basic education and health care and infrastructure to support development of the non-resource sector; and (iii) avoiding a sustained over-valuation of the Kina.

45. Macroeconomic statistics are improving, but further progress is needed to improve data completeness, timeliness, and accuracy.

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

Box 1. External Balance Assessment

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.

PNG's real effective exchange rate (REER) is still overvalued. With current stable value of the Kina vis-à-vis the U.S. dollar, excess demand for FX persists due to low foreign currency inflows. Restricted access to FX has contributed to a sharp compression of imports.

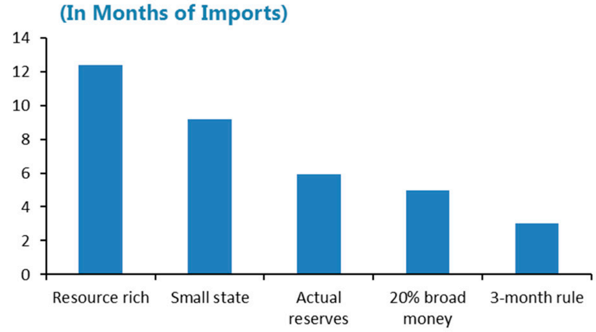
The extended External Balance Assessment (EBA) methodology, EBA-lite tool, provides mixed results.[1,2] The EBA-lite current account balance (CAB) analysis implies a current account norm of -3.6 percent of GDP, compared to an estimated surplus of 15.2 percent of GDP, suggesting that the REER is undervalued by around 59 percent. However, this result largely reflects the effect of FX restrictions compressing imports, especially in the non-resource sector, which distorts the CAB analysis. In contrast, the EBA-lite REER index model points to overvaluation of about 10 percent, consistent with the limited exchange rate adjustment thus far to the large terms of trade shock.

Despite a high CAB as percent of GDP, the reserves-to-import ratio is below the level implied by the reserve adequacy metric approach.[3] Both the CAB and the reserves-to-import ratio have increased as a result of sharp declines in imports, owing to the FX shortage. FX received in a massive LNG project is mostly held offshore, so the net FX inflow from the LNG exports is negligible.

EBA-lite Results

Model	CA panel regression	REER index
2016 CA/GDP	15.2%	
CA Norm/GDP	-3.6%	
CA Gap/GDP	18.9%	
o/w Policy Gap	1.5%	
ln(REER) Actual		4.8
ln(REER) Norm		4.7
o/w Policy Gap		0.0
REER Gap	**-59.3%**	**10.0%**

Reserve Adequacy
(In Months of Imports)



Source: IMF staff estimates and projections.

[1] The EBA-lite tool does not incorporate the structural break caused by the LNG project in the economy.

[2] Elasticities of exports (-0.43) and imports (0.98) are estimated in Nakatani, Ryota (2017) "External Adjustment in a Resource-Rich Economy: The Case of Papua New Guinea", *IMF Working Paper No. 17/267*.

[3] Central government data is used owing to data limitations. The assessment is based on staff judgement because there is a wide range of adequate levels of reserves, depending on methods used.

Box 2. The PNG LNG Project

Revenues from the LNG sector are composed of royalties, corporate income tax, additional profits tax, development levies, dividends, and various tax concessions aimed for investment incentives.

The extraction of PNG's natural resources should yield a fair return to the country, but government revenue from the LNG sector has been very limited due to the generous fiscal terms of the agreement. The fiscal regime should strike a balance between securing a substantial share of the value of these resources for the people of PNG, while also providing incentives for investment in PNG. Tax concessions given to the PNG LNG project include:

- 10-year depreciation allowance from 2015 until 2024
- Additional capital uplift provisions from 2025 until 2029
- Exemption from GST, import duties, and export levies
- If the development levy (which is tax deductible) is paid then the royalty becomes creditable for corporate income tax purposes (i.e., it becomes an advance payment of future corporate income tax).
- Calculation of royalties and development levies are based on a net concept: both are calculated as 2 percent of the wellhead value ($54 million = gross revenues $290 million – operational costs $46.2 million – amortization $75.8 million – capital allowance $114.5 million).
- Infrastructure tax credit, through which petroleum firms can charge a 100 percent deduction on capital expenditure on infrastructure projects, to a maximum of 2 percent of assessable income.

The current fiscal arrangements also include equity participation by PNG through the national oil company, which holds a 16.6 percent stake in PNG LNG. At the same time, however, the project enjoys a concessional additional profits tax (APT) which has high thresholds and low tax rates by international standards. The 2015 Taxation Review Committee (TRC) recommended that for future projects, a revamped APT be applied with a single threshold and a higher tax rate. The TRC also recommended reducing the government equity participation in future projects. These changes were introduced in the 2017 budget.

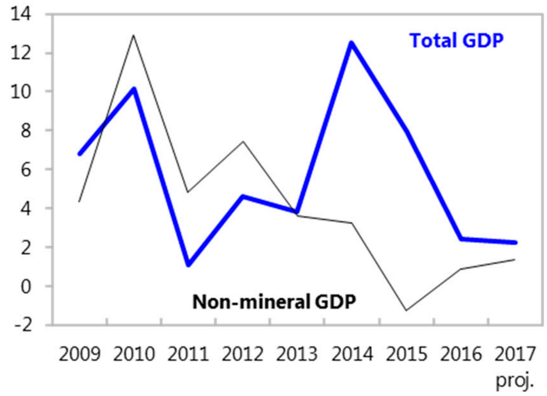
The current royalty and development levy scheme has yielded quite limited benefits; future agreements should apply specific levies based on volume or ad-valorem levies. Average monthly royalty payments have been around $1 million, and as of September 2017, K150 million had been received in trust accounts for each of the royalty and development levies. This is quite low and reflects the method of determining levies in the PNG LNG project. Levies are based on "wellhead" value, allowing generous deduction of various costs in the calculation. This significantly reduces the value of the royalties, especially in the early years of the project, partly defeating one of the normal purposes of royalties, which is to ensure that the government receives some benefits from the project from day one. In future LNG projects, it would be preferable to modify the royalty scheme to use a volume-based levy or a value based on a "field-gate" basis allowing fewer deductions.

In September, the Mineral Resources Development Company started first payment of K15 million to four plant site villages (Boera, Porebada, Papa and Lealea) where they finished clan-vetting process. Out of K15 million, 40 percent (K6 million) is paid to LNG plant landowners as per Section 176 of the Oil and Gas Act, 30 percent is kept for future generations, and 30 percent is used for community impact social projects.

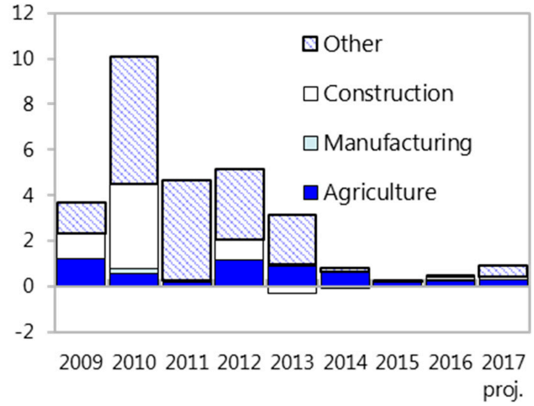
Figure 1. Papua New Guinea: Real Sector

Real GDP growth has slowed down from recent highs *in part due to modest growth in non-mineral sector.*

Real GDP Growth
(In percent)

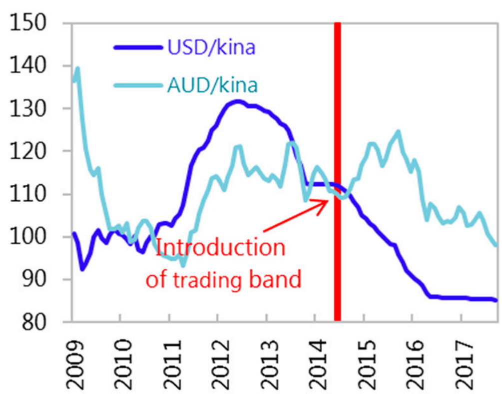


Non-Mineral Sectors Contribution
(In percent of GDP)

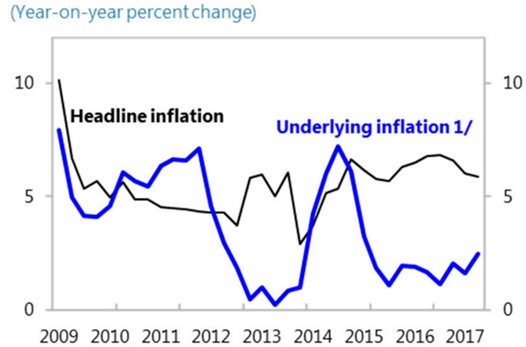


Pass-through of past exchange rate depreciation *increased inflation*

Exchange Rate
(2010=100)



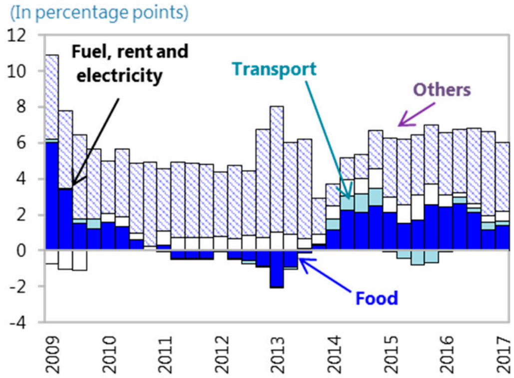
CPI Inflation
(Year-on-year percent change)



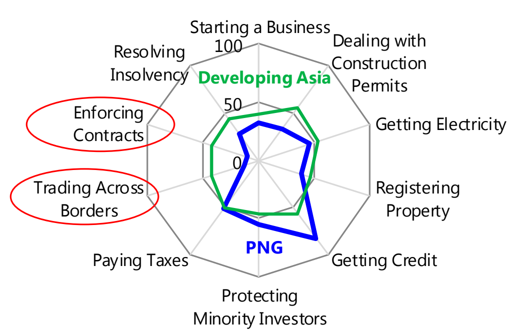
1/ Trimmed mean by BPNG.

coupled with drought effects. *Structural reform is needed for private sector development.*

Contribution to CPI Inflation
(In percentage points)



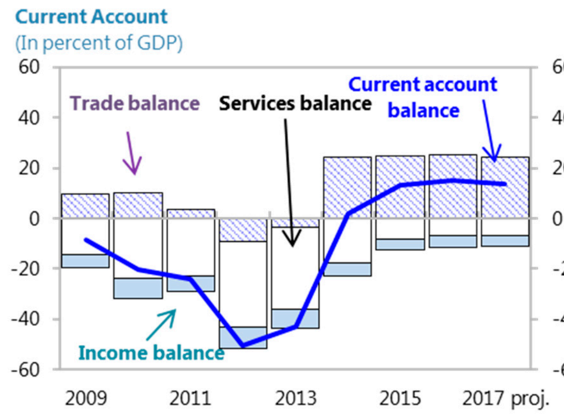
Doing Business Categories, 2017
(Percentile rank, higher is better)



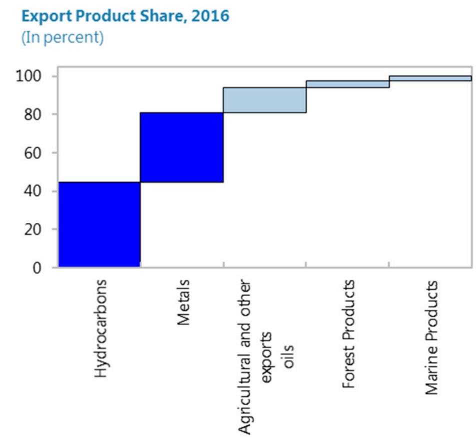
Sources: Country authorities; and IMF staff estimates and projections.

Figure 2. Papua New Guinea: External Sector

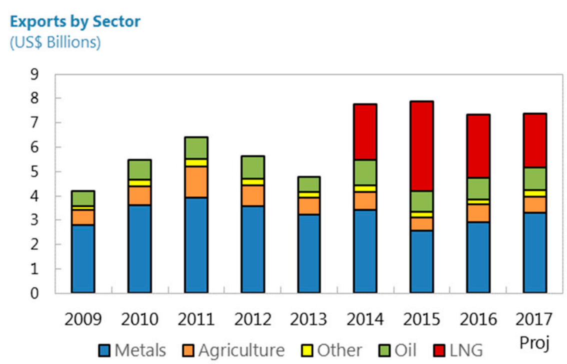
Current account surplus is driven by import compression



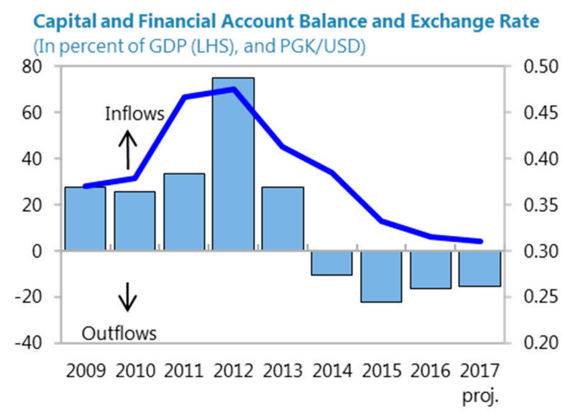
and commodity exports,



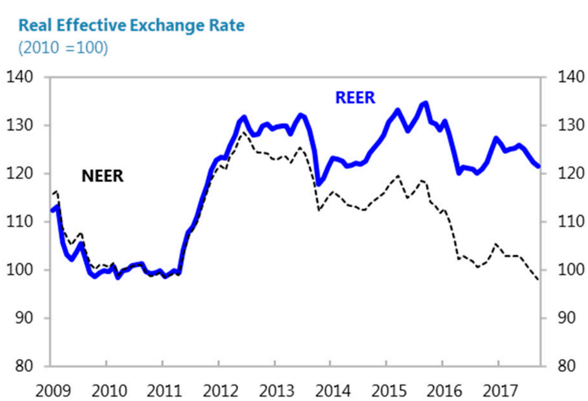
especially, by LNG exports since 2014,



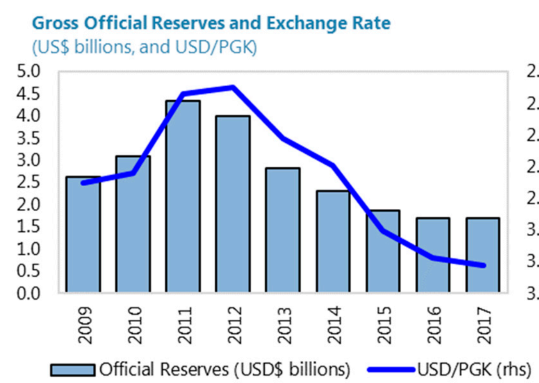
which is offset by financial account outflows.



The real effective exchange rate has not depreciated.



Foreign reserves have declined to $1.7 billion.

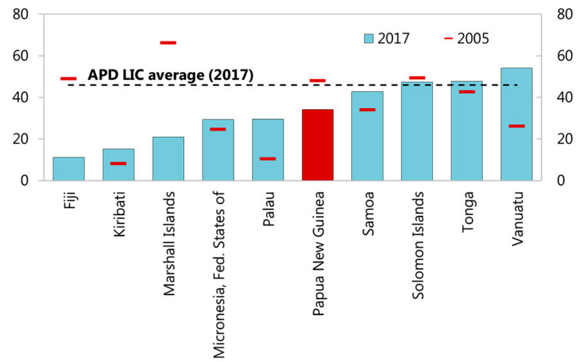


Sources: Country authorities; and IMF staff estimates and projections.

Figure 3. Papua New Guinea: Fiscal Sector

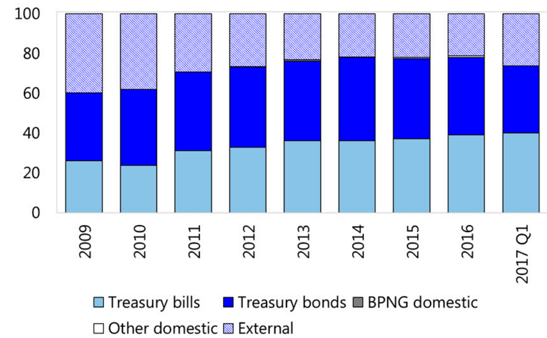
PNG has a moderate debt ratio compared to peers

Government Debt
(In percent of GDP)



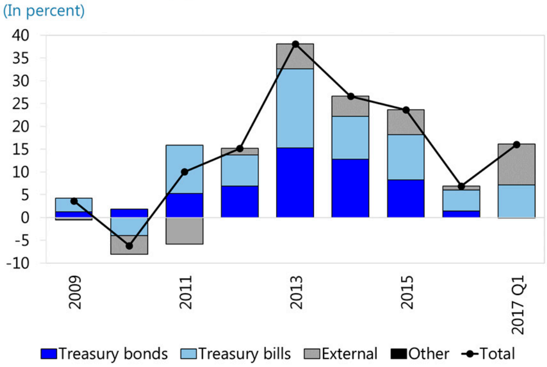
while the maturity is getting shorter.

Composition of public debt
(In percent)



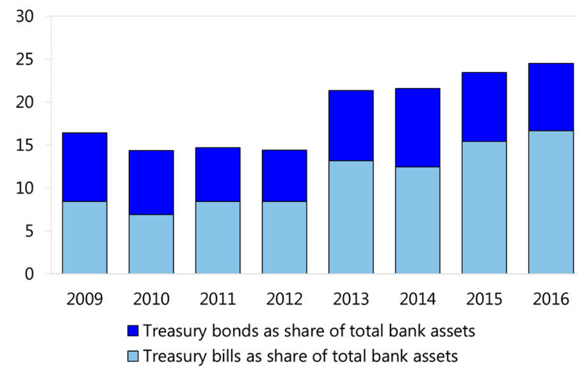
Budget deficit increased debt

Growth in public debt, by source
(In percent)



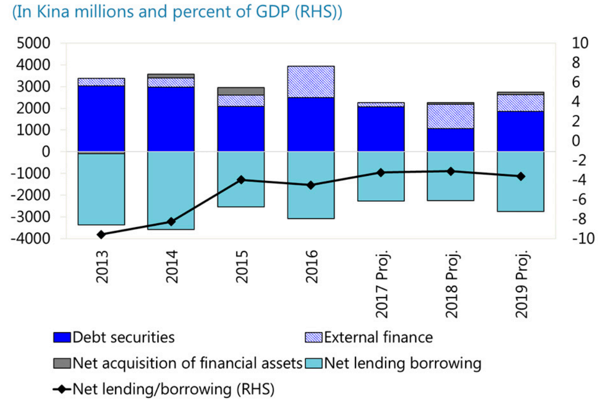
through issuance of Treasury bills.

Bank holdings of government securities as share of total assets
(In percent)



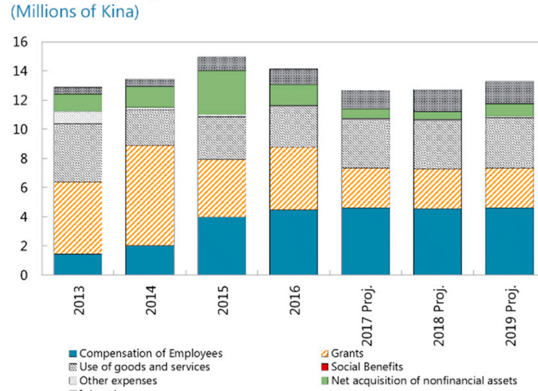
Recently, deficit financing turned to external sources.

Net Lending/Borrowing and Financing
(In Kina millions and percent of GDP (RHS))



Compensation of employees has increased dramatically.

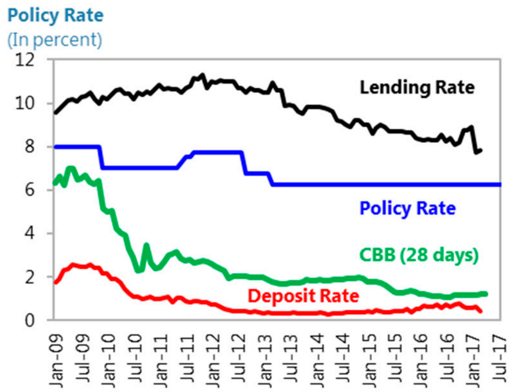
Expenditure Composition
(Millions of Kina)



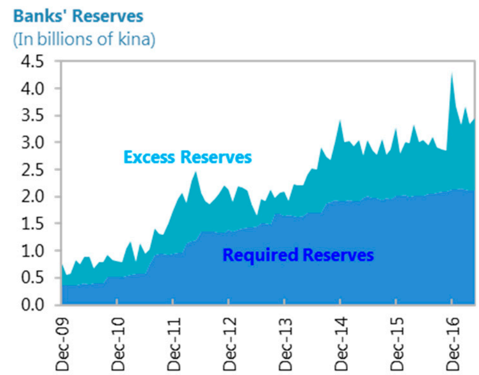
Sources: Country authorities; and IMF staff estimates and projections.

Figure 4. Papua New Guinea: Monetary Sector

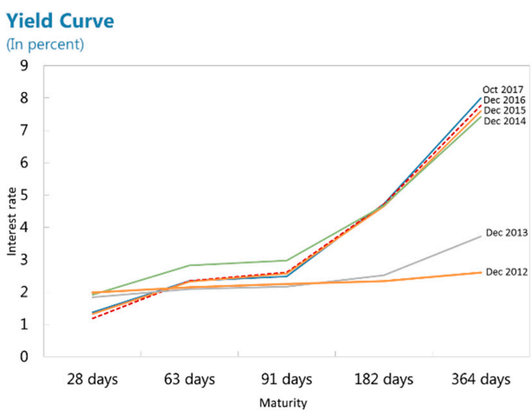
Monetary policy rate seems ineffective



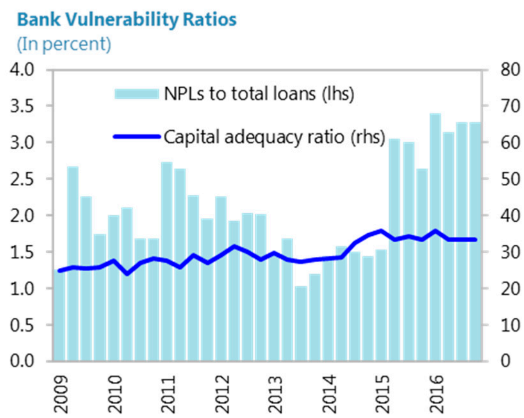
owing to large excess liquidity.



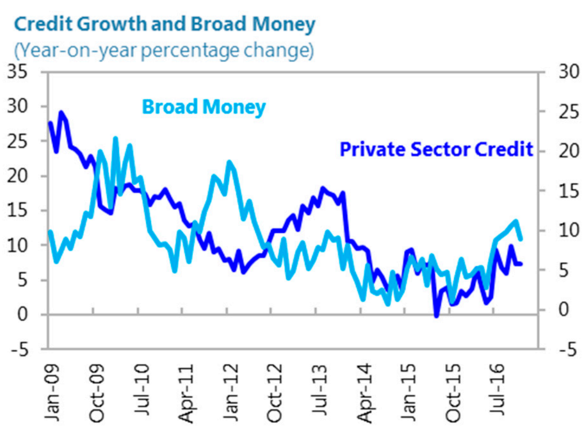
The yield curve has steepened after the commodity price declines.



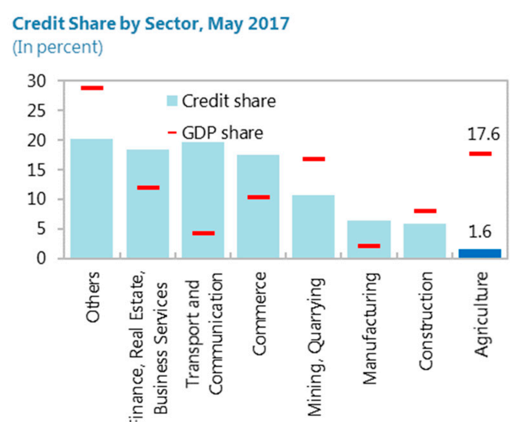
Banks have solid capital buffers



but private sector growth is weak in real term



because of difficulty in measuring agricultural credit risks.



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

Table 1. Papua New Guinea: Selected Economic and Financial Indicators, 2013–18

	2013	2014	2015	2016	2017	2018
			Est.	Est.	Proj.	
			(Percentage change)			
Real sector						
Real GDP growth	3.8	12.5	8.0	2.4	2.2	2.5
Resource 2/	5.1	71.5	43.2	6.4	4.4	3.5
Non-resource	3.6	3.3	-1.2	0.9	1.4	2.1
Agriculture, forestry and fishing (share)	19.3	17.8	17.0	17.4	18.1	18.7
Mining and quarrying (share)	10.4	9.1	6.6	7.5	7.9	7.9
Oil and gas extraction (share)	3.2	11.3	19.7	17.6	15.4	14.5
CPI (annual average)	5.0	5.2	6.0	6.7	5.0	2.6
CPI (end-period)	2.9	6.7	6.3	6.6	3.4	2.6
			(In percent of GDP)			
Central government operations						
Revenue and grants	20.7	21.0	17.2	15.6	15.0	14.9
Of which : Resource revenue	1.4	2.3	1.0	0.6	0.6	0.5
Expenditure and net lending	27.6	27.3	21.2	20.2	18.2	18.0
Net lending(+)/borrowing(-)	-6.9	-6.3	-4.0	-4.6	-3.2	-3.1
Non-resource net lending(+)/borrowing(-)	-8.3	-8.6	-5.0	-5.2	-3.8	-3.6
			(Percentage change)			
Money and credit (percentage change)						
Domestic credit	40.9	23.5	15.8	24.6	7.9	5.8
Credit to the private sector	17.5	3.5	3.4	7.2	4.2	3.0
Broad money	6.7	3.4	8.0	10.9	9.0	8.5
Interest rate (182-day T-bills; period average)	5.0	5.3	7.1	7.4	6.4	4.8
			(In billions of U.S. dollars)			
Balance of payments						
Exports, f.o.b.	6.0	8.8	8.4	7.8	7.9	7.9
Of which: Resource sector	3.8	6.8	7.1	6.4	6.5	6.5
Imports, c.i.f.	-6.5	-4.5	-2.7	-2.4	-2.5	-2.6
Current account (including grants)	-6.5	0.3	3.1	3.3	3.1	3.3
(In percent of GDP)	-30.8	1.3	13.3	15.2	13.9	14.4
Gross official international reserves	2.8	2.3	1.9	1.7	1.7	1.9
(In months of goods and services imports)	4.3	5.9	5.5	4.8	5.1	5.4
			(In percent of GDP)			
Government debt						
Government gross debt	24.9	27.1	28.9	33.3	35.4	37.0
External debt-to-GDP ratio (in percent) 3/	6.4	6.2	7.1	8.9	9.1	10.2
External debt-service ratio (percent of exports) 3/	1.4	1.1	0.9	1.4	1.6	1.7
Exchange rates						
US$/kina (end-period)	0.4130	0.3855	0.3325	0.3150	...	...
NEER (2005=100, end-period)	120.6	114.2	116.4	104.2	...	...
REER (2005=100, end-period)	127.0	123.6	131.4	123.6	...	...
Terms of trade (2010=100, end-period)	99.3	86.1	70.6	94.9	85.0	84.8
Nominal GDP (in billions of kina)	47.7	56.6	63.6	67.3	70.2	73.2
Non-resource nominal GDP (in billions of kina)	41.2	45.0	46.8	50.4	53.8	56.8

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, 2013–18

(In millions of Kina)

	2013	2014	2015	2016	2017 Proj.	2018 Proj.
Revenue and Grants	**9,897**	**11,875**	**10,963**	**10,486**	**10,519**	**10,893**
Taxes	8,880	10,232	8,804	8,422	8,579	9,180
Taxes on income, profits, and capital gains	5,848	6,779	5,894	5,286	5,245	5,545
Taxes on payroll and workforce	6	15	18	14	12	20
Taxes on goods and services	2,549	2,884	2,327	2,584	2,755	3,022
Taxes on international trade and transactions	476	555	565	537	568	593
Grants	878	868	820	1,430	968	974
Other Revenue 1/	140	775	1,026	634	972	739
Resource revenue	667	1,301	652	396	402	384
Mining and Petroleum Taxes	667	794	195	92	77	77
Mining and Petroleum and Gas Dividends	0	507	456	301	325	307
Other Dividends	0	0	0	3	0	0
Grants from other general government units 2/	0	0	0	0	0	0
Non-resource revenue	9,231	10,573	10,311	10,090	10,117	10,509
Expenditure 3/	**13,176**	**15,454**	**13,495**	**13,568**	**12,790**	**13,144**
Expense	11,741	12,427	12,067	12,890	12,263	12,273
Compensation of employees	1,448	2,026	3,993	4,463	4,600	4,600
Use of goods and services	3,964	2,469	2,960	2,782	3,318	3,312
Interest	521	933	1,070	1,248	1,524	1,535
Grants 4/	4,952	6,862	3,917	4,309	2,734	2,734
Social benefits	0	0	0	0	0	0
Other expenses	855	137	127	87	87	90
Net acquisition of non-financial assets	1,435	3,027	1,428	678	526	871
Gross operating balance	-1,844	-552	-1,103	-2,404	-1,744	-1,379
Net lending (+)/borrowing (-)	**-3,278**	**-3,579**	**-2,532**	**-3,082**	**-2,270**	**-2,251**
Primary balance	-2,757	-2,646	-1,462	-1,834	-746	-715
Non-resource net lending (+)/borrowing (-)	-3,945	-4,881	-3,184	-3,478	-2,673	-2,634
Non-resource primary balance	-3,424	-3,948	-2,114	-2,230	-1,148	-1,099
Net financial transactions 5/	**3,278**	**3,579**	**2,951**	**3,944**	**2,270**	**2,251**
Net acquisition of financial assets	97	-174	-349	0	0	-85
Net acquisition of financial liabilities	3,375	3,405	2,602	3,944	2,270	2,166
Domestic	3,032	2,983	2,081	2,495	2,071	1,082
Treasury bills	1,449	1,420	1,076	1,934	1,077	563
Treasury bonds	1,277	1,563	1,005	561	994	519
Other accounts payable	305	0	0	0	0	0
BPNG temporary advance	0	0	0	0	0	0
External	344	422	521	1,449	199	1,084
Debt securities	0	0	0	0	0	0
Loans	344	422	521	1,449	199	1,084
Unexplained Discrepancy 5/	0	0	419	862	0	0
Government deposits	3,952	4,338	3,490	2,793	2,793	2,793
Gross government debt	**11,878**	**15,365**	**18,000**	**21,944**	**24,833**	**27,053**
Domestic	8,845	11,828	13,942	16,437	18,475	19,557
Treasury bills	4,201	5,621	6,729	8,664	9,707	10,270
Treasury bonds	4,644	6,207	7,213	7,773	8,768	9,287
External	3,033	3,537	4,058	5,507	6,358	7,496
Debt securities	0	0	0	0	0	0
Loans	3,033	3,537	4,058	5,507	6,358	7,496
Memorandum items:						
Gross government debt, percentage of GDP	24.9	27.1	28.3	32.6	35.4	37.0
Contingent liabilities 6/	5,797	4,977	5,077	2,812	2,818	2,701
Future unfunded superannuation liabilities	2,100	2,100	2,100	2,431	2,431	2,311
SOE borrowing	3,697	2,877	2,977	381	387	390
Nonresource GDP at current prices	41,243	45,039	46,823	50,420	53,797	56,781
GDP at current prices	47,721	56,621	63,567	67,298	70,172	73,215

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, 2013–18

(In percent of GDP)

	2013	2014	2015	2016	2017 Proj.	2018 Proj.
Revenue and Grants	**20.7**	**21.0**	**17.2**	**15.6**	**15.0**	**14.9**
Taxes	18.6	18.1	13.9	12.5	12.2	12.5
Taxes on income, profits, and capital gains	12.3	12.0	9.3	7.9	7.5	7.6
Taxes on payroll and workforce	0.0	0.0	0.0	0.0	0.0	0.0
Taxes on goods and services	5.3	5.1	3.7	3.8	3.9	4.1
Taxes on international trade and transactions	1.0	1.0	0.9	0.8	0.8	0.8
Grants	1.8	1.5	1.3	2.1	1.4	1.3
Other Revenue 1/	0.3	1.4	1.6	0.9	1.4	1.0
Resource revenue	1.4	2.3	1.0	0.6	0.6	0.5
Mining and Petroleum Taxes	1.4	1.4	0.3	0.1	0.1	0.1
Mining and Petroleum and Gas Dividends	0.0	0.9	0.7	0.4	0.5	0.4
Other Dividends	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
Non-resource revenue	19.3	18.7	16.2	15.0	14.4	14.4
Expenditure 3/	**27.6**	**27.3**	**21.2**	**20.2**	**18.2**	**18.0**
Expense	24.6	21.9	19.0	19.2	17.5	16.8
Compensation of employees	3.0	3.6	6.3	6.6	6.6	6.3
Use of goods and services	8.3	4.4	4.7	4.1	4.7	4.5
Interest	1.1	1.6	1.7	1.9	2.2	2.1
Grants 4/	10.4	12.1	6.2	6.4	3.9	3.7
Social benefits	0.0	0.0	0.0	0.0	0.0	0.0
Other expenses	1.8	0.2	0.2	0.1	0.1	0.1
Net acquisition of non-financial assets	3.0	5.3	2.2	1.0	0.7	1.2
Gross operating balance	-3.9	-1.0	-1.7	-3.6	-2.5	-1.9
Net lending (+)/borrowing (-)	**-6.9**	**-6.3**	**-4.0**	**-4.6**	**-3.2**	**-3.1**
Primary balance	-5.8	-4.7	-2.3	-2.7	-1.1	-1.0
Non-resource net lending (+)/borrowing (-)	-8.3	-8.6	-5.0	-5.2	-3.8	-3.6
Non-resource primary balance	-7.2	-7.0	-3.3	-3.3	-1.6	-1.5
Net financial transactions 5/	**6.9**	**6.3**	**4.6**	**5.9**	**3.2**	**3.1**
Net acquisition of financial assets	0.2	-0.3	-0.5	0.0	0.0	-0.1
Net acquisition of financial liabilities	7.1	6.0	4.1	5.9	3.2	3.0
Domestic	6.4	5.3	3.3	3.7	3.0	1.5
Treasury bills	3.0	2.5	1.7	2.9	1.5	0.8
Treasury bonds	2.7	2.8	1.6	0.8	1.4	0.7
Other accounts payable	0.6	0.0	0.0	0.0	0.0	0.0
External	0.7	0.7	0.8	2.2	0.3	1.5
Debt securities	0.0	0.0	0.0	0.0	0.0	0.0
Loans	0.7	0.7	0.8	2.2	0.3	1.5
Unexplained Discrepancy 5/	0.0	0.0	0.7	1.3	0.0	0.0
Government deposits	8.3	7.7	5.5	4.1	4.0	3.8
Gross government debt	**24.9**	**27.1**	**28.3**	**32.6**	**35.4**	**37.0**
Domestic	18.5	20.9	21.9	24.4	26.3	26.7
Treasury bills	8.8	9.9	10.6	12.9	13.8	14.0
Treasury bonds	9.7	11.0	11.3	11.6	12.5	12.7
External	6.4	6.2	6.4	8.2	9.1	10.2
Debt securities	0.0	0.0	0.0	0.0	0.0	0.0
Loans	6.4	6.2	6.4	8.2	9.1	10.2
Memorandum items:						
Contingent liabilities 6/	12.1	8.8	8.0	4.2	4.0	3.7
Future unfunded superannuation liabilities	4.4	3.7	3.3	3.6	3.5	3.2
SOE borrowing	7.7	5.1	4.7	0.6	0.6	0.5
Nonresource GDP at current prices	41,243	45,039	46,823	50,420	53,797	56,781
GDP at current prices	47,721	56,621	63,567	67,298	70,172	73,215

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 3. Papua New Guinea: Balance of Payments, 2013–22

(In millions of U.S. Dollars)

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
				Est.			Proj.			
Current account balance 1/	-6,540	303	3,064	3,272	3,051	3,252	3,244	3,156	3,192	3,216
Resource	-2,327	2,939	4,634	4,164	4,296	4,568	4,614	4,616	4,699	4,743
Nonresource	-4,214	-2,636	-1,570	-892	-1,245	-1,315	-1,370	-1,460	-1,506	-1,527
Trade balance	-516	4,248	5,734	5,429	5,342	5,369	5,459	5,482	5,516	5,539
Exports (f.o.b.)	5,951	8,758	8,385	7,837	7,882	7,940	8,093	8,175	8,261	8,337
Resource	3,826	6,790	7,060	6,401	6,481	6,460	6,532	6,561	6,657	6,713
Nonresource	2,125	1,969	1,325	1,436	1,401	1,479	1,561	1,614	1,605	1,624
Imports (f.o.b.)	-6,468	-4,510	-2,650	-2,409	-2,540	-2,571	-2,633	-2,694	-2,745	-2,798
Resource	-2,930	-1,700	-1,168	-1,128	-1,172	-1,162	-1,182	-1,199	-1,206	-1,212
Nonresource	-3,538	-2,810	-1,483	-1,281	-1,368	-1,409	-1,451	-1,495	-1,539	-1,586
Services	-4,956	-3,104	-1,887	-1,490	-1,496	-1,293	-1,370	-1,456	-1,469	-1,482
Income	-1,200	-956	-944	-953	-962	-971	-981	-990	-1,000	-1,009
Current Transfers	132	115	160	286	167	148	136	121	145	168
Capital and financial account balance	4150	-2419	-4912	-3263	-3037	-3070	-3025	-3057	-3087	-3191
Capital account balance	15	10	8	14	10	11	12	11	11	11
Direct investment	904	864	584	602	591	606	621	637	653	670
Portfolio investment	-116	374	274	249	308	288	225	281	264	269
Other investment	3,346	-3,666	-5,778	-4,127	-3,946	-3,974	-3,883	-3,986	-4,015	-4,141
Medium- and long-term loans	512	-514	-2,047	-1,180	-1,659	-1,034	-1,202	-1,336	-1,525	-1,280
Official (net)	127	101	139	417	63	335	231	32	-188	-16
Private capital flows (net)	386	-615	-2,186	-1,597	-1,722	-1,368	-1,433	-1,367	-1,337	-1,264
Commercial banks	-6	-47	-13	-22	-20	-20	-20	-20	-20	-20
Other 2/	2,840	-3,105	-3,717	-2,926	-2,267	-2,920	-2,660	-2,630	-2,470	-2,840
Net errors and omissions	-1387	-715	792	-19	0	0	0	0	0	0
Overall balance	-1,176	-520	-440	10	15	182	219	99	105	25
Financing	1,176	520	440	-10	-15	-182	-219	-99	-105	-25
Reserve assets	1,176	520	440	-10	-15	-182	-219	-99	-105	-25
Memorandum items:										
Current account (in percent of GDP)	-30.8	1.3	13.3	15.2	13.9	14.4	13.8	12.8	12.3	11.8
Resource	-10.9	12.8	20.2	19.4	19.6	20.2	19.6	18.7	18.1	17.4
Nonresource	-19.8	-11.5	-6.8	-4.2	-5.7	-5.8	-5.8	-5.9	-5.8	-5.6
Net international reserves (end-year)										
In millions of U.S. dollars	2,826	2,305	1,865	1,681	1,696	1,878	2,097	2,196	2,302	2,327
Gross official reserves (end-year)										
In millions of U.S. dollars	2,826	2,305	1,865	1,681	1,696	1,878	2,097	2,196	2,302	2,327
In months of imports of goods and services	4.3	5.9	5.5	4.8	5.1	5.4	5.8	6.0	6.2	6.2
Public external debt-service-exports ratio (in percent) 3/	1.4	1.1	0.9	1.4	1.6	1.7	1.9	3.6	3.4	1.8
Public external debt-GDP ratio (in percent) 3/	5.9	5.9	6.5	8.9	9.0	10.2	10.8	10.4	9.2	8.7

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, 2013–18

	2013	2014	2015	2016	2017	2018
					Proj.	
Bank of Papua New Guinea	(In millions of kina; end of period)					
Net foreign assets	6,363	5,501	4,695	4,716	4,916	5,548
Foreign assets	6,842	5,980	5,226	5,258	5,466	6,102
Foreign liabilities	479	479	532	542	550	555
Net domestic assets	-2,510	-218	476	1,716	2,094	2,236
Domestic credit	-99	1,362	1,229	3,012	3,326	3,406
Net credit to government	-156	1,301	897	2,858	3,172	3,253
Claims	863	2,353	1,688	3,567	3,880	3,961
Central government deposits	1,019	1,052	791	708	708	708
Credit to other sectors	56	60	332	154	154	154
Other items, net	-2,411	-1,580	-753	-1,297	-1,232	-1,170
Of which: Central bank securities	-3,199	-2,312	-1,573	-1,361	-1,293	-1,228
Reserve money	3,853	5,283	5,171	6,431	7,010	7,784
Currency in circulation	1,749	1,852	1,891	2,115	2,121	2,128
Deposits of other depository corporations	2,101	3,431	3,280	4,316	4,889	5,655
Required reserves	1,652	1,910	2,025	2,125	2,316	2,510
Excess reserves	449	1,521	1,255	2,191	2,573	3,146
Other deposits	3	0	0	0	0	0
Depository Corporations Survey	(In millions of kina; end of period)					
Net foreign assets	8,269	6,826	5,876	4,928	5,137	5,779
Net domestic assets	9,835	11,891	14,342	17,489	19,289	20,713
Domestic credit	12,862	15,888	18,399	22,929	24,729	26,153
Net credit to central government	2,755	4,164	5,344	9,009	10,312	11,358
Claims on other sectors	10,107	11,724	13,055	13,920	14,417	14,794
Claims on the private sector	9,914	10,264	10,612	11,379	11,857	12,218
Other items, net	-3,028	-3,997	-4,056	-5,440	-5,440	-5,440
Broad money	18,104	18,716	20,219	22,417	24,426	26,491
Narrow money	12,047	13,440	14,845	16,032	17,421	18,805
Currency outside other depository corporations	1,300	1,392	1,443	1,580	1,736	1,906
Demand deposits	10,746	12,048	13,402	14,452	15,686	16,899
Quasi-money	5,995	5,215	5,312	6,323	6,943	7,624
Securities other than shares	62	62	62	62	62	62
	(Annual percentage change)					
Net foreign assets	-12.7	-17.5	-13.9	-16.1	4.2	12.5
Net domestic assets	31.3	20.9	20.6	21.9	10.3	7.4
Net domestic credit	41	23.5	15.8	24.6	7.9	5.8
Of which: Private sector	17.5	3.5	3.4	7.2	4.2	3.0
Broad money	6.7	3.4	8.0	10.9	9.0	8.5
Memorandum items:						
Reserve money (percentage change)	0.5	37.1	-2.1	24.4	9.0	11.0
Gross international reserves (in millions of U.S. dollars)	2,826	2,305	1,865	1,681	1,696	1,878
Nominal nonresource GDP/Broad money	2.3	2.4	2.3	2.2	2.2	2.1

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

Table 5. Papua New Guinea: Medium-Term Scenario, 2013–22

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
			Est.			Proj.				
Growth and prices (percentage change)										
Real GDP 1/	3.8	12.5	8.0	2.4	2.2	2.5	2.3	2.9	3.2	3.1
Resource	5.1	71.5	43.2	6.4	4.4	3.5	3.2	3.2	3.2	3.2
Nonresource	3.6	3.3	-1.2	0.9	1.4	2.1	1.9	2.8	3.2	3.0
CPI (period average)	5.0	5.2	6.0	6.7	5.0	2.6	2.5	2.5	2.4	2.4
CPI (end-period)	2.9	6.7	6.3	6.6	3.4	2.6	2.5	2.5	2.4	2.4
Central government operations (in percent of GDP)										
Total revenue and grants	20.7	21.0	17.2	15.6	15.0	14.9	14.9	14.9	15.0	15.0
Total revenue	18.9	19.4	16.0	13.5	13.6	13.5	13.6	13.7	13.8	13.9
Of which: Resource revenue	1.4	2.3	1.0	0.6	0.6	0.5	0.5	0.5	0.5	0.5
Grants	1.8	1.5	1.3	2.1	1.4	1.3	1.2	1.2	1.2	1.1
Total expenditure	27.6	27.3	21.2	20.2	18.2	18.0	18.4	18.3	18.4	18.4
Expense	24.6	21.9	19.0	19.2	17.5	16.8	16.6	16.2	16.3	16.3
Net acquisition of nonfinancial assets	3.0	5.3	2.2	1.0	0.7	1.2	1.9	2.1	2.2	2.2
Primary balance	-5.8	-4.7	-2.3	-2.7	-1.1	-1.0	-1.3	-1.0	-1.0	-0.9
Nonresource net lending(+)/borrowing(-) (Revenue - expenditure)	-8.3	-8.6	-5.0	-5.2	-3.8	-3.6	-4.1	-4.0	-4.0	-4.0
Net lending(+)/borrowing(-) [Overall balance]	-6.9	-6.3	-4.0	-4.6	-3.2	-3.1	-3.6	-3.4	-3.4	-3.4
Nonresource primary balance (in percent of nonresource GDP)	-7.2	-7.0	-3.3	-3.3	-1.6	-1.5	-1.8	-1.6	-1.5	-1.4
Gross public debt (in percent of GDP) 2/	24.9	27.1	28.9	33.3	35.4	37.0	38.7	40.3	41.6	42.9
Domestic	18.5	20.9	21.9	24.4	26.3	26.7	27.9	29.8	32.4	34.2
External	6.4	6.2	7.1	8.9	9.1	10.2	10.8	10.4	9.2	8.7
Balance of payments (in millions of U.S. dollars) 3/										
Exports, f.o.b.	5,951	8,758	8,385	7,837	7,882	7,940	8,093	8,175	8,261	8,337
Of which: Resource	3,826	6,790	7,060	6,401	6,481	6,460	6,532	6,561	6,657	6,713
Imports, c.i.f.	-6,468	-4,510	-2,650	-2,409	-2,540	-2,571	-2,633	-2,694	-2,745	-2,798
Current account	-6,540	303	3,064	3,272	3,051	3,252	3,244	3,156	3,192	3,216
(In percent of GDP)	-30.8	1.3	13.3	15.2	13.9	14.4	13.8	12.8	12.3	11.8
Overall balance (including exceptional financing)	-1,176	-520	-440	10	15	182	219	99	105	25
Gross official reserves (in millions of U.S. dollars)	2,826	2,305	1,865	1,681	1,696	1,878	2,097	2,196	2,302	2,327
(In months of goods and services imports, c.i.f.)	4.3	5.9	5.5	4.8	5.1	5.4	5.8	6.0	6.2	6.2
(In months of nonmining imports, c.i.f.)	8.3	11.2	11.4	9.8	10.8	11.2	11.8	12.0	12.3	12.1
Public external debt service-export ratio (in percent) 4/	1.4	1.1	0.9	1.4	1.6	1.7	1.9	3.6	3.4	1.8
Memorandum items:										
Nominal GDP (in millions of kina)	47,721	56,621	63,567	67,298	70,172	73,215	76,636	80,755	85,356	90,104
Nominal GDP (change in percent)	7.5	18.7	12.3	5.9	4.3	4.3	4.7	5.4	5.7	5.6
Nominal GDP (in millions of U.S. dollars)	21,261	23,004	22,962	21,480	21,938	22,626	23,539	24,695	25,987	27,329
Assumed commodity prices: 5/										
Gold (U.S. dollars per ounce)	1,411	1,266	1,160	1,248	1,254	1,291	1,313	1,341	1,367	1,393
Copper (U.S. dollars per ton)	7,331	6,863	5,510	4,868	6,030	6,430	6,462	6,471	6,469	6,469
Liquefied Natural Gas Price Index (2005=100)	247	242	156	106	86	80	80	80	80	80
Oil (U.S. dollars per barrel)	104.07	96.25	50.79	42.84	50.28	50.17	50.51	51.05	51.89	53.01

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, 2012–16 1/

(In percent)

	2012	2013	2014	2015	2016
Capital Adequacy					
Capital to risk-weighted assets 2/	28.0	27.9	34.5	33.4	37.0
Tier 1 capital to risk-weighted assets	20.1	21.0	27.2	27.6	29.8
Asset Quality					
Nonperforming loans to total loans	2.0	1.2	1.4	2.6	2.7
Past due loans to total loans	2.8	2.2	2.7	3.9	6.7
Provision for losses to NPL	170.9	288.0	240.9	143.8	164.5
Earnings and Profitability					
Return on assets	2.3	2.4	2.0	1.7	2.2
Return on equity 3/	23.7	21.2	26.2	21.4	16.7
Liquidity					
Liquid assets to total assets	56.6	55.2	51.5	49.0	46.9
Loan-to-deposit ratio	46.9	50.3	57.2	60.5	63.3
Other					
Capital to total assets 2/	13.6	15.2	16.1	15.4	16.3
Risk-weighted assets to total assets	48.7	54.5	46.8	46.2	43.9

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.

Table 7. Papua New Guinea: Financial Millennium Development Goals, 1991-2016

	1991	1996	2000	2005	2009	2013	2014	2015	2016
Goal 1: Eradicate extreme poverty and hunger									
Target 1.A: Halve, between 1990 and 2015, the proportion of people whose income is less than $1 a day									
Poverty gap at $1.90 a day (2011 PPP) (%)		28.1			14.8				
Poverty headcount ratio at $1.90 a day (2011 PPP) (% of population)		53.2			38.0				
Income share held by lowest 20%		2.2			5.1				
Target 1.B: Achieve full and productive employment and decent work for all, including women and young people									
Employment-to-population ratio, 15+, total (%) (modeled ILO estimate)	70.1	68.5	70.1	71.0	70.4	68.7	68.5	68.6	68.6
Employment-to-population ratio, ages 15-24, total (%) (modeled ILO estimate)	56.9	53.4	56.1	57.2	55.1	51.3	50.7	50.9	51.0
Target 1.C: Halve, between 1990 and 2015, the proportion of people who suffer from hunger				18.1					
Malnutrition prevalence, weight for age (% of children under 5)									
Goal 2: Achieve universal primary education									
Target 2.A: Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling									
Literacy rate, youth female (% of females ages 15-24)			50.9			64.1	64.1		
Literacy rate, youth male (% of males ages 15-24)			69.1			69.1	69.1		
Primary completion rate, total (% of relevant age group)	43.3	51.5	55.1			78.6			
Goal 3: Promote gender equality and empower women									
Target 3.A: Eliminate gender disparity in primary and secondary education, preferably by 2005, and in all levels of education no later than 2015									
Proportion of seats held by women in national parliament (%)			1.8	0.9	0.9	2.7	2.7	2.7	2.7
School enrollment, primary, female (% gross)	56.7	66.6	65.6	53.3	56.9	109.3			
School enrollment, secondary, female (% gross)	8.7	9.7				34.6			
School enrollment, tertiary (gross), gender parity index (GPI)		0.7							
Share of women in wage employed in the nonagricultural sector (% of total nonagricultural en	27.9		32.1						
Goal 4: Reduce child mortality									
Target 4.A: Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate									
Immunization, measles (% of children ages 12-23 months)	69.0	24.0	69.0	82.0	74.0	89.0	84.0	79.0	70.0
Mortality rate, infant (per 1,000 live births)	63.5	59.8	57.5	54.9	50.9	46.0	44.9	43.8	42.4
Mortality rate, under-5 (per 1,000 live births)	86.6	80.8	77.2	73.1	67.0	59.5	57.9	56.2	54.3
Goal 5: Improve maternal health									
Target 5.A: Reduce by three quarters, between 1990 and 2015, the maternal mortality ratio									
Maternal mortality ratio (modeled estimate, per 100,000 live births)	447	371	342	277	249	224	220	215	
Births attended by skilled health staff (% of total)		51.3	41.0	42.0					
Target 5.B: Achieve, by 2015, universal access to reproductive health care									
Contraceptive prevalence (% of women ages 15-49)		25.9							
Adolescent fertility rate (births per 1,000 women ages 15-19)	70.8	68.2	66.3	62.8	59.5	56.1	55.3	54.4	
Pregnant women receiving prenatal care (%)		76.7		78.8					
Goal 6: Combat HIV/AIDS, malaria, and other diseases									
Target 6.A: Have halted by 2015 and begun to reverse the spread of HIV/AIDS									
Prevalence of HIV, female (% ages 15-24)	0.1	0.3	0.5	0.5	0.4	0.3	0.3	0.3	
Prevalence of HIV, male (% ages 15-24)	0.1	0.2	0.3	0.3	0.2	0.1	0.2	0.2	0.2
Prevalence of HIV, total (% of population ages 15-49)	0.1	0.3	0.7	1.0	1.0	0.9	0.9	0.9	0.9
Target 6.C: Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases									
Incidence of tuberculosis (per 100,000 people)	370	392	432	432	432	432	432	432	432
Tuberculosis case detection rate (%, all forms)	22.0	17.0	45.0	48.0	43.0	72.0	81.0	80.0	
Goal 7: Ensure environmental sustainability									
Target 7.A: Integrate the principles of sustainable development into country policies and programs and reverse the loss of environmental resources									
Target 7.B: Reduce biodiversity loss, achieving, by 2010, a significant reduction in the rate of loss									
Forest area (% of land area)	74.2	74.2	74.2	74.2	74.1	74.1	74.1	74.1	
CO2 emissions (kg per 2011 PPP $ of GDP)	0.3	0.2	0.3	0.4	0.4	0.3	0.3		
CO2 emissions (metric tons per capita)	0.5	0.4	0.5	0.7	0.7	0.8	0.8		
Marine protected areas, (% of territorial waters)	0.3		0.4				0.4		
Terrestrial protected areas (% of total land area)	1.9		3.1				3.1		
Target 7.C: Halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation									
Improved sanitation facilities (% of population with access)	20.1	19.6	19.2	19.1	19.0	18.9	18.9	18.9	
Improved water source (% of population with access)	33.6	33.9	35.1	37.1	38.7	39.9	40.0	40.0	
Goal 8: Develop a global partnership for development									
Target 8: Various									
Net ODA received per capita (current US$)	90.1	76.1	49.4	42.2	57.8	86.7	74.8	74.5	
Debt service (% of exports of goods, services and primary income)	27.2	16.3	12.9	8.4	11.7	19.9	13.0	11.3	
Internet users (per 100 people)		0.0	0.8	1.7	1.6	5.1	6.5	7.9	9.6
Mobile cellular subscriptions (per 100 people)		0.0	0.2	1.2	21.1	41.0	44.9	46.6	48.6
Telephone lines (per 100 people)	0.8	1.0	1.2	1.0	1.4	1.9	1.9	2.0	2.0
Other									
Fertility rate, total (births per woman)	4.8	4.7	4.5	4.3	4.0	3.8	3.8	3.7	
GNI per capita, Atlas method (current US$)	840	990	600	670	1130	1970	2160		
GNI, Atlas method (current US$) (billions)	3.7	5.0	3.3	4.3	7.9	14.9	16.7		
Gross capital formation (% of GDP)	27.4	22.7	21.9						
Life expectancy at birth, total (years)	59.3	60.8	61.9	63.4	64.5	65.1	65.2	65.4	
Literacy rate, adult total (% of people ages 15 and above)			57.3						
Population, total (millions)	4.4	5.0	5.6	6.3	6.9	7.6	7.8	7.9	8.1
Trade (% of GDP)	94.4	107.8	115.4						

Source: World Bank, World Development Indicators database, 2017.

Annex I. Risk Assessment Matrix[1]

Potential Deviations from Baseline Expectations					
	Risk	**Relative likelihood**	**Impact if realized**	**Potential impact**	**Staff advice on policy response**
External risks	Tighter global financial conditions	High	M	↓ Decline in likelihood of external financing of fiscal deficit, putting more pressure on domestic financing sources	• Focus on cutting government expenditure • Allow Kina to depreciate vs. USD
	Significant China slowdown and its spillovers	Medium	H	↓ Declines in major commodity export prices. Adverse BOP impact; moderate budget impact	• Allow Kina to depreciate • Additional fiscal adjustment required
Domestic risks	Severe difficulty in financing fiscal deficit either externally or domestically	High	H	↓ Could lead either to sharper consolidation than expected, with adverse growth impact, or to increased reliance on central bank financing	• Additional fiscal adjustment required • Commit to unwinding central bank financing over 3-year period
	Projects to increase LNG (or other minerals) export capacity begin sooner than assumed (early 2020s).	Medium	H	↑ Favorable impact on GDP, external balance and fiscal position. Could induce government to end consolidation	• Continue with fiscal consolidation in line with fiscal rule • Eliminate FX restrictions and restore floating exchange rate

[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. Nonmutually 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
Monetary, Financial and Exchange Rate Policies	
• Remove excess liquidity to improve monetary policy effectiveness and reduce downside pressure on the kina exchange rate.	The increased issuance of government securities and the BPNG's intervention in FX market assisted in diffusing some of the excess liquidity. In addition, as per the 100-Day Economic Stimulus Plan, the BPNG intended to increase intervention in the FX market by US$100 million in 2017. While the CRR has kept at 10 percent since September 2014, the BPNG considers options to tighten monetary policy if necessary.
• Allow greater exchange rate flexibility to clear the FX market.	Although excess demand for foreign currency has persisted, the official interbank exchange rate has been stable since May 2016. BPNG is concerned with the inflation impact of depreciation, and is skeptical of the impact on FX supply or demand.
• Continue to implement AML/CFT legislation.	Authorities are taking steps to put in place a robust AML/CTF regime. FASU director and staff were appointed, and a first national assessment of money laundering and terrorist financing risks report is expected to finalized by end-2017.
Fiscal Policy	
• Adopt a fiscal policy stance consistent with putting public debt in line with the government's targets and ensuring debt sustainability.	The 2017 budget aimed to cut the deficit to 2.5 percent of GDP. A Supplementary Budget was introduced in September to address the revenue shortfalls and expenditure over-runs. To allow for flexibility in policy, the debt-to-GDP target was changed from under 30 percent to a range of 30 to 35 percent, targeting an average non-resource primary balance of zero over the medium term.
• Improve the quality of spending. Strengthen revenue collection through rationalizing tax exemptions and concessions and other measures recommended by the Tax Review Committee.	The 100-Day Economic Stimulus Plan and the 2017 Supplementary Budget show continuing efforts to improve tax compliance and effectiveness of tax administration, intentions to review a range of excise charges and fees, introduce compulsory Taxpayer Identification Number registration as well as implement regulations to compel the remittance of 90 percent of collected revenue to consolidated revenue fund by non-tax revenue agencies of government. Corrective measures to the expenditure side include the amalgamation of departments and agencies, freezes on recruitment, constraints on the high personnel emoluments costs, strengthening payroll management, and compulsory National Identity for public servants.

Fund Recommendation	Policy Actions
• Safeguard the integrity of the SWF for it to play a key role in managing PNG's resource revenues.	The government has sought external technical assistance on the establishment of the SWF Administrative Secretariat at the BPNG. The World Bank fielded a scoping mission from their RAMP, Financial Advisory and Banking Department in early 2017.
Structural Reform	
• Continue investments in health and education and improve infrastructure and law and order for the better business environment. Strengthen the SME sector by financial inclusion.	Tuition fee free education, free primary healthcare, transport infrastructure, and law and order remain policy priorities of the Government. The Government plans to publish a 5-year medium term development plan in mid-2018 incorporating the UN Sustainable Development Goals and Government's Alotau Accord 2.
• Strengthen PFM by implementing further reforms identified in the PEFA assessment and SOE reform to enhance transparency and governance.	The Government intends to review a number of Acts and Bills such as the National Procurement Authority Bill and table this with audited accounts of SOEs in Parliament, as well as ensure that there are boards for public bodies.
Statistics	
• Improve macroeconomic statistics and move forward with the publication of new GDP estimates.	The authorities have made notable improvements in national accounts and fiscal data since 2014 and continue to make progress with the TAs. The NSO plans to release new GDP estimates for 2015 in December 2017.

INTERNATIONAL MONETARY FUND

PAPUA NEW GUINEA

November 17, 2017

STAFF REPORT FOR THE 2017 ARTICLE IV CONSULTATION—INFORMATIONAL ANNEX

Prepared By

Asia and Pacific Department
(In Consultation with Other Departments)

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FUND RELATIONS

(As of October 31, 2017)

Membership Status

Joined: October 9, 1975; Article VIII

General Resources Account

	SDR Million	Percent Quota
Quota	131.60	100.00
Fund holdings of currency	131.16	99.66
Reserve position in Fund	0.45	0.34

SDR Department

	SDR Million	Percent Allocation
Net cumulative allocation	125.49	100.00
Holdings	8.74	6.96

Outstanding Purchases and Loans

	SDR Million	Percent Quota
	0.00	0.00

Latest Financial Arrangements

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

Projected Payments to Fund[1]

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

	Forthcoming				
	2017	2018	2019	2020	2021
Principal					
Charges/interest	0.17	0.74	0.74	0.74	0.74
Total	**0.17**	**0.74**	**0.74**	**0.74**	**0.74**

[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. From April 2014, the Kina has reduced its volatility and followed a trend within a 2 percent band against the U.S. dollar. Accordingly, the de facto exchange rate arrangement was reclassified to a crawl-like arrangement, effective April 11, 2014. Since May 2016, the exchange rate has stabilized within a 2 percent band against the U.S. dollar. Accordingly, the de facto exchange rate arrangement has been reclassified to stabilized from a crawl-like arrangement, effective May 18, 2016.

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 and its allocation by BPNG to certain priority items, 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 2016 Article IV consultation discussions were held during August 19-30, 2016. It was concluded by the Executive Board on November 29, 2016 (IMF Country Report No. 17/22). Papua New Guinea is on the standard 12–month consultation cycle.

TA from Headquarters

FAD: A joint FAD/PFTAC mission visited PNG to provide advice on the sovereign wealth fund management in May 2011. A mission in March 2013 provided advice on reform of the extractive industries fiscal regime. A mission in October 2015 provided advice on Land and Property Tax and Non-Tax Revenue Reforms.

LEG: A mission in November 2005 provided advice on the drafting of a tax administration law. A mission in July 2006 provided a comprehensive program of assistance in the development of the AML/CFT regime, including legislative drafting and capacity building. A mission in August-September 2007 assisted the authorities in finalizing the terms of the Revenue Administration Bill.

MFD/MCM: TA through peripatetic visits was delivered on bank regulation and supervision (February–March 2007, July–August 2009, February 2010), medium-term monetary policy formulation (October 2004 and September 2005), reserve management (June 2006, September 2007,

March/July–August 2009, January–February 2010), internal audits (2004, August 2007), accounting (September–October 2006, February 2007, February–March/June–July/November 2009), liquidity management (January 2009), monetary and forex operations (July–August 2009, February 2010, March 2015), macroprudential oversight and financial stability (September 2012), and the sovereign wealth fund (July 2013).

STA: A multisector statistics mission occurred in September 2006 followed by a high-level STA visit in December 2007, in collaboration with the ABS. TA was provided on monetary and financial statistics (April 2005, May 2006, April 2008, November 2009 May 2010, and February 2013); balance of payments and the international investment position (June 2008, November 2009, May-June 2013, February 2014, and July 2015); government finance statistics (2012, May and October 2013, 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); and GDDS metadata (January 2012). A joint mission with the ABS discussed statistical capacity building and in particular reform of the National Statistical Office in July-August 2014.

Resident Representative

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

RELATIONS WITH THE PACIFIC FINANCIAL TECHNICAL ASSISTANCE CENTRE

(As of October 2017)

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 Centre '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

The PFTAC assisted in the preparation of a ROSC, which was published in October 2000. The PFTAC PFM Advisor has participated in occasional FAD technical assistance missions, and an attachment of one PNG official to PFTAC was completed in April 2007. PNG participated, with four officials, in the U.S. Treasury study visit in September 2008. In May 2011, the PFTAC macroeconomic advisor participated in an FAD mission on advising PNG on the SWF. In July 2013, a PFTAC PFM Advisor visited PNG at the request of the Treasury Minister to review the budget preparation process, and discuss with authorities plans for training in the PEFA methodology. In May-June 2014, PFTAC provided information, communication, and technology (ICT) assessment mission and recommended a comprehensive reform strategy to better support of operation of the Department of Finance.

In 2014, however, PFTAC PFM assistance expanded greatly. Starting early in 2014, and continuing through early 2015, PFTAC began training PNG staff to carry out a PEFA Self-Assessment. Subsequently, in March 2015, PFTAC and a team from FAD conducted an external PEFA assessment which corroborated most of the findings of the self-assessment. PFTAC and FAD then worked with Department of Finance officials to develop a PFM Reform Roadmap to address major deficiencies identified by the PEFA Assessment.

PFTAC’s largest PFM project during the past two years has been assisting PNG in overcoming roadblocks to the implementation of its Integrated Financial Management System (IFMS) and recommending steps needed to speed up ministry/agency connection to the new system that PNG decided to purchase in 2005. By early 2014, only three ministries—Finance, Treasury, and Planning— were connected to the system.

In a series of missions beginning in May 2014, PFTAC’s expert on the PNG project examined a number of aspects of the implementation effort including highly technical matters, levels of cooperation from other ministries, IFMS project organizational issues, staffing, and local opportunities for out-sourcing some aspects of the IFMS support operations. Most of the PFTAC

Advisor's recommendations were accepted and, later in 2014, PNG's Department of Finance started the process of reforming its ICT delivery operations in order to accelerate the deployment of the IFMS system.

As of the end of July 2016, the TA had enabled expansion of the system to 30 central government departments (compared to the 3 connected when assistance commenced last year), with the remaining 30 due to be implemented by the end of 2016, depending on resource availability. The IFMS team has begun to plan their first implementation in a provincial and district environment, targeting East New Britain province and its districts as its first pilot. IFMS is currently used on a regular basis by over 2,000 users across government. PNG's September 2015 PFM Reform Roadmap, prepared with assistance from PFTAC, placed a high priority on completing the IFMS roll-out recognizing that many accounting, financial management, and reporting weaknesses could be overcome with full implementation of the system. The Roadmap's tight prioritization of objectives under the leadership of Finance Secretary Dr. Ken Ngangan played a significant role in expanded commitments from DFAT and the EU to provide more TA support to PNG's Department of Finance to ensure a sustainable roll- out and business process reform.

In addition, during 2015 PFTAC supported short-term missions to review cash management, reconciliation, and reporting processes.

B. Tax Administration and Policy

The Internal Revenue Commission has been supported by two Australian technical assistance programs: (1) the Strongim Gavman Program (SGP) which provided capacity development assistance and advice to counterpart PNG government agencies; and (2) the Economic Public Sector Program[1] (EPSP) which provided support for strategic, governance, integrity matters and IT support. These programs have been comprehensive and delivered through the placement of resident advisors sourced from the Australian Tax Office (ATO) and have also included twinning programs. A new technical assistance program, also with assistance provided through the Australian Tax Office, will be delivered through a twinning program where ATO advisors will spend up to 3 months in PNG with a focus on: (a) small and medium enterprise audits; (b) dealing with objections; (c) debt recovery; and (e) learning and development.

During the first half of 2017, several tax administration and revenue policy missions were undertaken by PFTAC and the IMF, with a view to developing an integrated medium term revenue strategy – including ramped-up reforms within and by the IRC. These missions have identified continuing key weaknesses (Management and Governance Arrangements, Resourcing, Focus of Work by IRC, Staffing, Information Technology, Complexity of Tax Law and Administration) and

[1] The Economic and Public Sector Program (EPSP) has been in operation since mid-2010. Its purpose was to strengthen the central agencies of the Government of PNG (GoPNG) in their support to service delivery. Its overall goal was - "*More equitable, effective, and accessible services for men, women, and children of PNG*".

assisted the authorities to draft both a medium-term revenue strategy and an intensive reform program.

Because of these missions and at the request of the authorities, PNG will embark on an ambitious five-year revenue and tax administration reform project starting early in 2018. These efforts will be supported by several donor partners and will be anchored and managed by the Fiscal Affairs department through the placement of a long-term expert in-county during the first quarter of 2018.

In the short term PFTAC technical assistance will be provided to: (a) assist in the development of an IT strategy; (b) finalize the IRC's new Corporate Strategy and ensure its alignment to the newly developed Medium Term Revenue Strategy; (c) facilitate the design of a Large Taxpayer Office; (d) implement a Design and Monitoring Unit: and (e) assist in the implementation of a Taxpayer Services Unit.

C. Financial Sector Regulation and Supervision.

In September 2014, BPNG hosted the annual meeting of the Association of Financial Supervisors of Pacific Countries, for which PFTAC is the secretariat. At the request of the authorities, PFTAC undertook three missions during the first half of 2017: in February, 20 new BPNG supervisory staff were provided training on the fundamentals of banking supervision; in March, a technical assistance mission assisted the authorities in developing a standardized financial account structure for the credit union sector, with a focus on prudential report forms; and in June a diagnostic assessment of the BPNG's supervision framework was conducted and a strategy for enhancement and TA work plane was developed as part of this mission.

D. Economic and Financial Statistics

In February 2006, an advisor briefly assessed BOP compilation with a view to improving its quality, and to assessing progress with the implementation of recommendations made by previous missions. A multi-sector statistics mission in September 2006 assessed the statistical systems (BOP, 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 a series of 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. 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 since July 2015 and until June 2016. PNG NSO staff have also benefited from attending three annual sub-regional statistics workshops since 2013, centered in particular around estimating GDP by expenditure, the use of household income and expenditure surveys, and their linkage to consumer price indices.

E. Macroeconomic Analysis

Following a request by the BPNG for assistance in building up 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 started 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 Macroeconomic and Fiscal Framework (MFF) was completed in July 2017. In August 2017 PFTAC and the BPNG hosted a workshop on practical applications of the PNG MFF with participants from the BPNG, the Department of Finance, the Department of Treasury, and the Internal Revenue Commission. 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 June 2014.

JOINT MATRIX OF BANK-FUND COLLABORATION

Papua New Guinea: JMAP Implementation Table			
Title	**Products**	**Provisional Timing of Missions**	**Delivery Date (tentative)**
A. Mutual Information on Relevant Work Programs			
World Bank program	Support for analysis and dissemination of the 2009-2010 Papua New Guinea Household Income and Expenditure Survey	Completed	March 2015
	Support for the development and implementation of the PNG Sovereign Wealth Fund	Completed	October 2012, January 2013.
	Social protection technical assistance	Completed	June 2014
	Cost of crime and violence	Completed	July 2014
	Education public expenditure review	Completed	January 2015
	Health financing and PFM analysis: (1) review of expenditure by provincial administrations on front line rural health; (2) analysis of health financing; and (3) health facility efficiency survey	Ongoing	Dissemination of policy notes on expenditure; health facility efficiency survey expected to be completed by March 2016. Health flagship course held in October 2016.
	PNG BOOST analytical tool for the analysis of public expenditure data	Completed	Demonstration conducted in January 2014, delivery and training expected in November 2014.
	Report on Observance of Standards and Codes (ROSC) - Accounting & Audit	Completed	March 2015
	Capacity building for building a medium-term debt management strategy	Completed	August 2016
	PNG #B020 Financial Services Development Strategy: developing a National Financial Services Strategy and Implementation Plan	Ongoing	June 20, 2017
	Social Protection NLTA 2: to help the Government of PNG to design and implement a national social pension/disability scheme	Ongoing	June 21, 2016 (P152008)
	Support to CSOs in Papua New Guinea: Extractive Industry Transparency Initiative (EITI)	Ongoing	December 31, 2017
	Urban Safety in Port Moresby and Lae	Ongoing	Initial findings presented in August 2015. Final delivery expected in May 2018.
	Renewable Energy Resource mapping and geospatial planning	Ongoing	November 30, 2019
	PG: Connectivity analysis	Completed	Final presentation shared with the PNG Government and stakeholders in September 2015.
	PNG – Debt Management Strategy and Sustainability	Ongoing	August 11, 2017
	PNG Health Programmatic AAA	Ongoing	Final delivery expected in June 2018
	PNG Systematic Country Diagnostic	Ongoing	Decision Meeting held in October 2017. Final delivery expected by June 2018
IMF work program	2016 Article IV mission	September 2016	Board consideration expected in December 2016
B. Request for Work Program Inputs			
Fund request to Bank	Information sharing	Semi-annual or more frequent	Ongoing
Bank request to Fund	Information sharing	Semi-annual or more frequent	Ongoing

RELATIONS WITH THE ASIAN DEVELOPMENT BANK

(As of October 31, 2017)

PNG joined the Asian Development Bank (ADB) in 1971. In line with the government's development agenda and ADB's Strategy 2020 midterm review priorities, the 2016 – 2018 Country Partnership Strategy, focuses on supporting rural populations by enhancing transport infrastructure, delivering health services, and reengaging in water and other urban infrastructure and services. The strategy was developed in close consultation with the government and other stakeholders, and is aligned with the government's Development Strategic Plan, 2010–2030 and National Strategy for Responsible Sustainable Development, 2014–2030. This focus is consistent with the Midterm Review of Strategy 2020 of the ADB.

ADB will continue to seek opportunities for cofinancing and to produce knowledge products that inform and influence national policy debates and support country operations. ADB support for private sector development—through state-owned enterprise reform—will lower business transaction costs, thereby helping to expand small and medium-sized enterprises and create jobs in the formal economy. ADB operations will focus on supporting climate proofing infrastructure and increasing the climate resilience of vulnerable sectors. ADB will mainstream gender in all general intervention projects.

The country operations business plan, 2018–2020 is the third under the country partnership strategy (CPS) 2016–2020 for PNG. The indicative lending program for 2018–2020 amounts to $1,241.0 million, comprising of $09.0 million in Concessional Ordinary Capital Resources lending (COL) and $1,142.0 million in Ordinary Capital Resources (OCR). The indicative nonlending program amounts to $4.5 million, which includes technical assistance. .

The current programming period includes new infrastructure development projects, particularly in the transport, health, energy sectors, that will help increase connectivity, electrification, and the delivery of basic services to the poorest and most remote parts of the country. In particular, the flagship transport project to rehabilitate, upgrade, and maintain the Highlands Highway will help create opportunities for inclusive economic growth, improve the delivery of basic services, increase regional connectivity with the rest of Asia, and build resilience to climate change.

PNG was able to withstand the impact of the global financial crisis in 2008; however, the recent global commodities downturn has worsened its fiscal position. PNG saw a sharp fall in public revenue (by 21 percent in 2015), necessitating a large fiscal adjustment. The economy remains exposed to global economic volatility. ADB will provide TA to strengthen the government's initiative to achieve calibrated fiscal consolidation, undertake expenditure reform, and strengthen PFM. At the request of the government, ADB has included a policy-based lending option for 2018 to safeguard critical social outlays. ADB will work closely with Australia, the European Union, the International Money Fund, the World Bank, and other donor partners to develop a coordinated response to the macroeconomic crisis and increase the country's resilience to external shocks.

ADB will increase partnerships with subnational provincial governments to implement infrastructure projects. Provincial governments have emerged as important stakeholders. The Department of Planning and ADB hosted an event on May 18, 2016, in Madang, PNG, to share knowledge concerning infrastructure projects with provincial governors and administrators. The event built upon ADB's study of partnering with subnational governments, and the outcome of the event provided a way forward for deepening the partnership.

Overall project implementation performance remains satisfactory. In 2015, contract awards amounted to $122.5 million and disbursements totaled $129.2 million. Total disbursements in 2016 were 1126.9, which surpassed projected targets. However, maintaining and improving portfolio performance requires continued capacity building of government counterpart agencies responsible for project implementation.

Table 1. Papua New Guinea: Public Sector Loan Approvals and Disbursements, 2011–2016

(US$ millions)

	2011	2012	2013	2014	2015	2016
Loan approvals	144.12	41.5	315.7	0	0	357.31
Loan disbursements	20.5	89.3	182.5	117.0	129.2	126.9

Source: Asian Development Bank.

STATISTICAL ISSUES

(As of October 2017)

I. Assessment of Data Adequacy for Surveillance
General: Data provision has some shortcomings, but is 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. The most recent official national accounts statistics were published by the NSO in May 2016, at which time nominal GDP estimates for 2006–2013 were released. These estimates were compiled using *the System of National Accounts 2008* and were released after an eight-year hiatus. Major improvements in methodology as well as inclusion of new sectors were reflected in this new data. Reforming the NSO is underway with support from the ABS and PFTAC. Source data remain a challenge, with significant gaps in extractive and financial industries data. While CPI weights are from 2010 HIES, these data are not useable for expenditure estimates of GDP.
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): GFS data were reported to STA in 2016 after a 14-year absence. 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 few records on the use of trust accounts are available. Tax revenues collected by authorities (extra-budgetary units) 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. These weaknesses contribute to discrepancies in domestic financing between estimates from monetary and debt data and those derived from fiscal records. Papua New Guinea officials have benefitted from STA GFS technical assistance since June 2012 and as a result, volume 1 of the 2016 national budget was 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. Further work is required to enhance both institutional and instrument coverage, as well as presenting the entire budget on a *GFSM 2014 basis*. For the migration, the authorities continue to participate in the Japan Administered Account (JSA)-funded three-year regional GFS capacity-building project since 2013.

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. Depository Corporations Survey and Survey of OFCs both have data coverage issues. Most of the monetary statistics published in *International Financial Statistics (IFS)* are currently aligned with the *Monetary and Financial Statistics Manual* (*MFSM*).
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. PNG participated in a three-year (FY2014–FY2016) TA project on FSIs for selected AFR and APD countries funded by the Government of Japan. As a result of the project, in December 2016, BPNG started reporting quarterly FSIs, which are currently posted on the IMF's FSI website, though only until 2016Q3.
External Sector Statistics: Annual balance of payments data are derived from the International Transactions Reporting System (ITRS), which is not tightly monitored despite the BPNG reporting requirements. There are marked differences between the official data on exports and imports of goods and those reported by trading partners. The financial accounts data are of poor quality because of major deficiencies in data collection, especially in the area of private external debt and direct investment. Quarterly data are also published by the BPNG. PNG has been one of the beneficiaries of the JSA Project on the improvement of external sector statistics (ESS). Commitment to participate in this project (ended March 2016) was low, and thus improvements were limited Under this project, TA missions were provided in May-June 2013, February 2014, and July 2015. In February 2017, a TA mission financed by the Pacific Financial Technical Assistance Center (PFTAC) was conducted and recommended immediate priorities to fill data gaps through the implementation of the international investment survey, improvements to ITRS, and streamlining cross-border transactions/positions data of liquefied natural gas. BPNG is largely under-equipped in terms of its capacity and collection framework vis-à-vis the volumes and nature of transactions and positions with nonresidents.

II. Data Standards and Quality	
PNG began to participate in the General Data Dissemination System (GDDS renamed eGDDS) in 2012.	

III. Reporting to STA
PNG last reported GFS for publication in *Government Finance Statistics Yearbook* and *IFS* for 2016, covering only the budgetary central government. Monetary data are reported to STA for publication in *IFS* on a regular monthly basis. BOP data for 2010 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 October 31, 2017)

	Date of Latest Observation	Date Received	Frequency of Data[1]	Frequency of Reporting[1]	Frequency of Publication[1]
Exchange Rates	09/2017	09/27/2017	D	D	D
International Reserve Assets and Reserve Liabilities of the Monetary Authorities[2]	10/2017	10/27/2017	W	W	Q
Reserve/Base Money	05/2017	07/17/2017	M	M	Q
Broad Money	05/2017	07/17/2017	M	M	Q
Central Bank Balance Sheet	05/2017	07/17/2017	M	M	Q
Consolidated Balance Sheet of the Banking System	05/2017	07/17/2017	M		Q
Interest Rates[3]	06/2017	10/30/2017	W	W	
Consumer Price Index	06/2017	9/07/2017	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	2016	03/31/2017	A	A	A
Stocks of Central Government and Central Government-Guaranteed Debt[6]	12/2016	07/03/2017	Q	A	
External Current Account Balance	2016	08/31/2017	Q	Q	Q
Exports and Imports of Goods and Services	2016	08/312017	Q	Q	Q
GDP/GNP	2014	01/12/2017	A	A	I
Gross External Debt	2016	07/03/2017	Q	A	A
International Investment Position[7, 8]	N/A	N/A	N/A	N/A	N/A

[1] Daily (D), Weekly (W), Monthly (M), Quarterly (Q), Annually (A), Irregular (I); and Not Available (N/A).
[2] Includes reserve assets pledged or otherwise encumbered as well as net derivative positions.
[3] Both market-based and officially-determined, including discount rates, money market rates, rates on treasury bills, notes, and bonds.
[4] Foreign, domestic bank, and domestic nonbank financing.
[5] The general government consists of the central government (budgetary funds, extra-budgetary funds, and social security funds) and state and local governments.
[6] Including currency and maturity composition.
[7] Includes external gross financial asset and liability positions vis-à-vis nonresidents.
[8] Lack of capacity prevented the authorities from providing the data.

INTERNATIONAL MONETARY FUND

PAPUA NEW GUINEA

STAFF REPORT FOR THE 2017 ARTICLE IV CONSULTATION—DEBT SUSTAINABILITY ANALYSIS

November 17, 2017

Approved By
Odd Per Brekk and Zeine Zeidane (IMF) and John Panzer (IDA)

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

The Debt Sustainability Analysis (DSA) indicates that Papua New Guinea (PNG) faces a moderate risk of debt distress–a markdown from the previous DSA– based on an assessment of public and publicly-guaranteed (PPG) external debt, but a heightened overall risk of debt distress, reflecting significant vulnerabilities related to domestic debt. A failure to consolidate the fiscal position – including through obtaining more cost-effective and longer-term financing – would worsen debt dynamics.

[1] This DSA was prepared jointly with the World Bank, in accordance with the Debt Sustainability Framework for low-income countries approved by the Executive Boards of the IMF and the IDA.

BACKGROUND

1. **PNG's public and external debt burdens remain low relative to peer countries and the risk of debt distress is moderate, but debt and risks are increasing.** The ratio of central government debt to GDP remains low, at 33.4 percent as of end-2016. However, central government debt has increased recently and interest payments have doubled between 2013 and 2016. In addition, liquidity risks remain high as central government domestic financing has become increasingly shorter-term. Private external debt has declined continuously since the LNG sector started to repay its debt, while PPG external debt risk is moderate.

UNDERLYING ASSUMPTIONS

2. **Over the medium term, PNG's growth prospects and current account developments will be heavily influenced by its extractive sector and the commodity price outlook.** Box 1 summarizes the medium-term macroeconomic framework underlying this DSA update. The long-term growth outlook has been revised down slightly by 0.3 percent, reflecting recent weak economic fundamentals. The current account surplus reflects steady LNG export growth and strong import compression. The current account surplus is projected to decline, as imports recover. The primary fiscal deficit is estimated to be around 0.7 percent of GDP in 2017, and thereafter the primary balance is projected to gradually improve to a surplus of around 1.3 percent. Issuing of a sovereign bond and future rolling over of a Credit Suisse loan were eliminated following the decisions made by the government. Although recent weak commodity prices pose downside risks to external and fiscal situations, the possibility of significant capacity expansion in the resource sector poses a key upside risk to the baseline outlook for the economy.

EXTERNAL DSA

3. **All PPG external debt ratios stay below the indicative thresholds under the baseline scenario, whilst stress tests show a moderate external risk.** The baseline scenario is heavily affected by a reported new loan from a commercial bank, taken in 2016 and 2017. However, it is only in the historical scenario that large breaches occur in all indicators (Figure 1). Although the historical shock scenario shows large threshold breaches as has been the case in past DSAs, this scenario is not considered indicative of future risks because the 10-year averages used for the underlying macroeconomic assumptions encompass the construction phase for PNG LNG and an extremely elevated current account deficit. High levels of private external debt reflect the fact that a large portion of the loans is adequately backed by expected cash flows from the LNG project. Nevertheless, the most extreme shock scenario, which corresponds to the case with shocks to export growth, shows a marginal breach in the ratio of PPG external debt to exports, indicating the moderate risk. Additional probability approach confirmed the moderate external risk, showing the breaches of several indicators (debt-to-GDP ratio, debt-to-exports ratio, and debt-to-revenue ratio) in the most extreme shock scenario. The relatively weak non-resource sector, partly due to the shortage of foreign exchange, made the economy more vulnerable to external shocks. There is an

upside risk that imports recover faster than the baseline scenario if a new resource project starts and triggers a boost to the economy as the historical shock scenario of PNG LNG construction phase indicates.

PUBLIC DSA

4. PNG's public debt is projected to reach 45 percent of GDP over the medium term, deviating above the benchmark. All scenarios show that public debt will be above the benchmark on public debt to GDP and increasing over time. For example, if the primary balance-to-GDP ratio is fixed at the 2016 value, all indicators show a risk of unsustainable debt dynamics, underscoring the need for further fiscal consolidation. This debt dynamics is driven by the increasing average real interest rate and cost over time (Table 2). Furthermore, liquidity risks are masked as the debt service-to-revenue ratio is calculated using medium- to long-term amortization projections. For example, Treasury bills (less than 1 year to maturity) increased as a share of total domestic financing, from 45 percent in 2012, to 53 percent in 2016. Using total PPG amortization, and including amortization of Treasury bills, would raise the debt service-to-revenue ratio to over 100 percent. In addition, the budget remains exposed to unfunded superannuation liabilities estimated at around K2 billion (3 percent of 2017 GDP). Moreover, although PNG's public debt burden does not appear high by comparison, it is important to recognize that the calculated debt burden understates the true level of debt by a significant margin, as the debt figures include only domestic central government debt and external public debt and do not capture debts of many statutory authorities and state-owned enterprises. These facts underscore the need for prudent debt management.

AUTHORITIES' VIEWS

5. The authorities initiated their first own DSA analysis, and agreed with our view that further fiscal consolidation is crucial for debt sustainability. Following the joint IMF-World Bank TA on a Medium-Term Debt Management Strategy conducted in 2016, the authorities started their own DSA exercise for the first time in 2017. This effort is commendable and important for achieving debt sustainability. They acknowledged that further fiscal consolidation is needed to put the debt-to-GDP ratio on a downward path. They also recognized the importance of more comprehensive data on debt and other liabilities, particularly off-budget and public enterprise debt, in assessing PNG's overall debt burden.

CONCLUSION

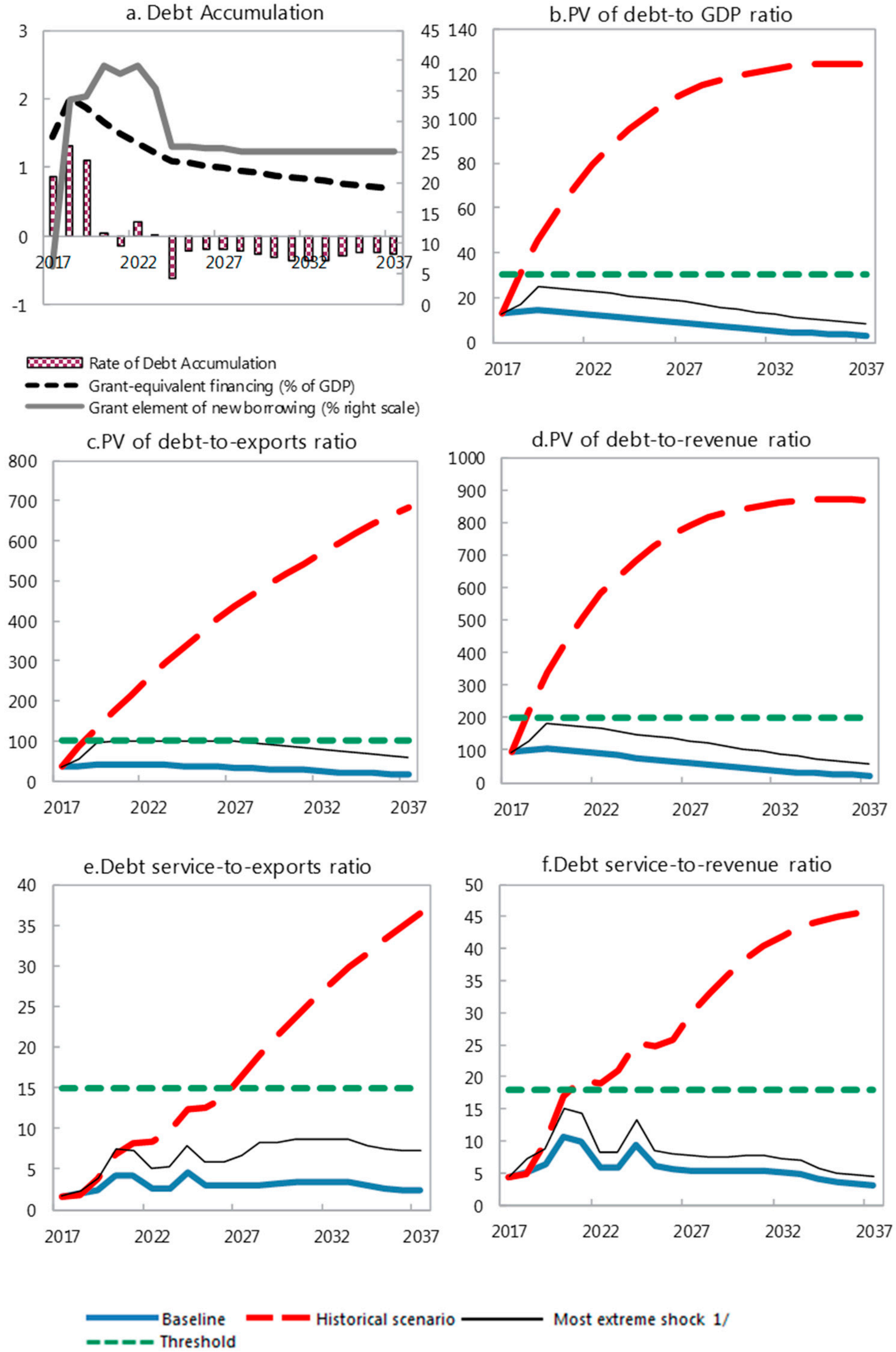
6. PNG's risk of external debt distress is moderate, and the overall risk of public debt distress is high. The heightened risk of overall public debt distress reflects the increased stock of domestic debt with a higher share of short-term Treasury bills. Although external debt distress remains low relative to peers, additional future external financing without being backed by expected foreign exchange inflows might increase the risk of the distress.

Box 1. Macroeconomic Assumptions Underlying the DSA Update

Compared to the 2016 DSA, the macroeconomic assumptions underpinning this DSA are largely unchanged in terms of the overall story, except elimination of rollover of the Credit Suisse loan and cancellation of sovereign bond issuance. Inflation rates are expected to converge to core inflation, given the current stable exchange rates. The current account is projected to be in surplus, mainly due to the downward revision in imports.

- **Real GDP growth** is projected to average 3.1 percent in the medium/long run, a slight decrease from the 3.4 percent long term average growth rate used for the 2016 DSA.
- **Inflation** is expected to be about 2 percent in 2017 reflecting worsening terms-of-trade, before going back to 2.4 percent in the medium term. This decrease of inflation from the previous medium/long term projection reflects the baseline projection of a stable nominal exchange rate.
- **The current account** (including grants) turned to surplus in 2014 due to the commencement of LNG exports. The recent strong current account is also supported by the import compression caused by the shortage of foreign exchange. In the medium/long term gradual erosion of the current account surplus is projected, as imports recover.
- **The primary fiscal deficit** is estimated to be around 0.7 percent of GDP in 2017. Thereafter the primary deficit is projected to gradually improve to a surplus of around 1.3 percent.
- **Credit Suisse loan** is assumed to be a bridge loan. Therefore, a future rollover of this loan, which was included in the past DSA, was eliminated.
- **Sovereign bond** issuance has been put on hold by the government, given the current market environment, and is not assumed in this DSA.

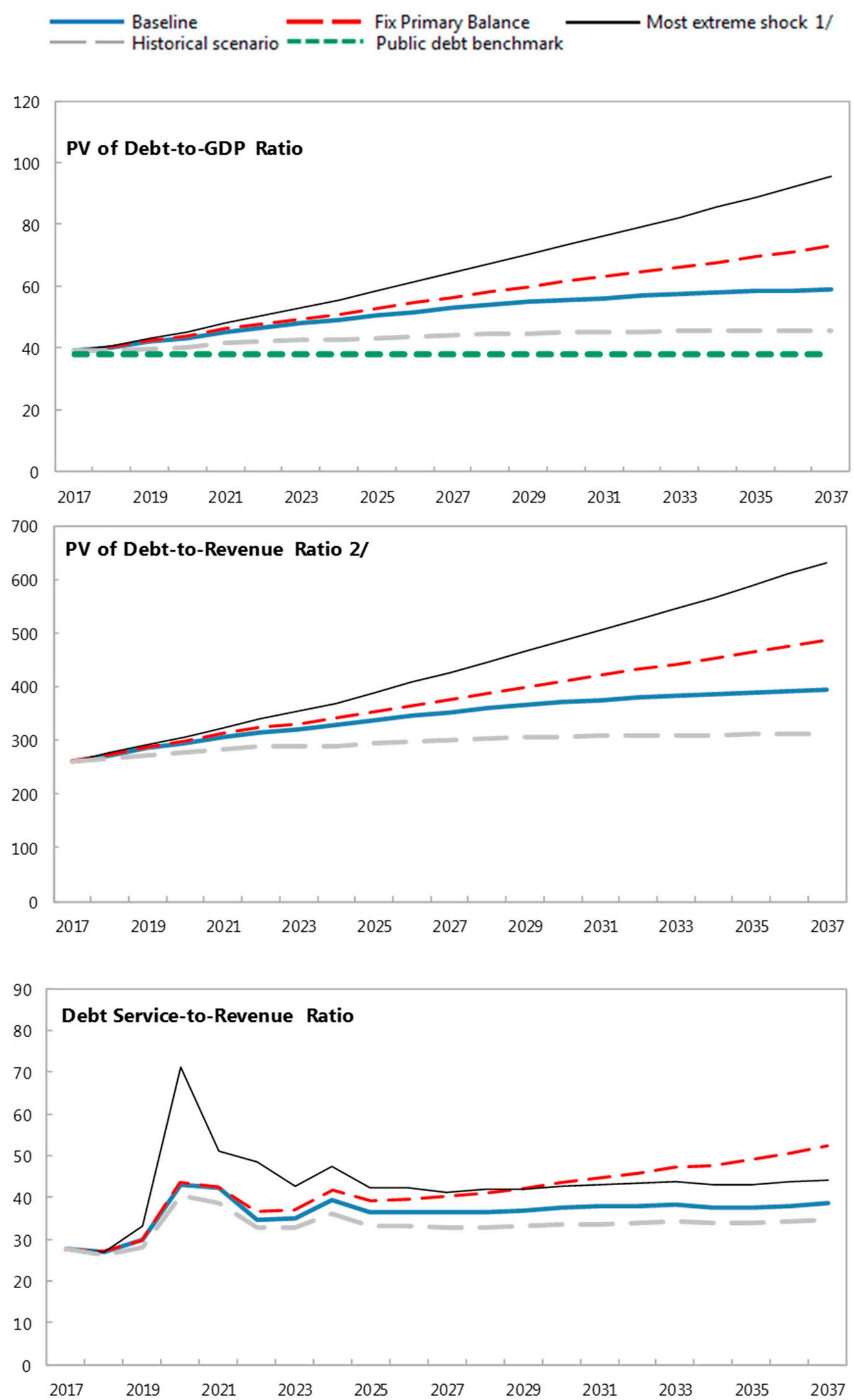
Figure 1. Papua New Guinea: Indicators of Public and Publicly Guaranteed External Debt Under Alternative Scenarios, 2017-2037



Sources: Country authorities; and staff estimates and projections.

1/ The most extreme stress test is the test that yields the highest ratio on or before 2027. In figure b. it corresponds to a Exports shock; in c. to a Exports shock; in d. to a Exports shock; in e. to a Exports shock and in figure f. to a One-time depreciation shock

Figure 2. Papua New Guinea: Indicators of Public Debt Under Alternative Scenarios, 2017-2037



Sources: Country authorities; and staff estimates and projections.
1/ The most extreme stress test is the test that yields the highest ratio on or before 2027.
2/ Revenues are defined inclusive of grants.

Table 1. Papua New Guinea: External Debt Sustainability Framework, Baseline Scenario, 2017-2037

(In percent of GDP, unless otherwise indicated)

	Actual			Historical 6/ Average	Standard 6/ Deviation	Projections									
	2014	2015	2016			2017	2018	2019	2020	2021	2022	2017-2022 Average	2027	2037	2023-2037 Average
External debt (nominal) 1/	**96.4**	**87.9**	**88.0**			**78.9**	**72.3**	**65.0**	**57.2**	**49.6**	**42.9**		**18.3**	**3.3**	
of which: public and publicly guaranteed (PPG)	6.2	7.1	9.0			9.4	11.0	12.1	12.3	12.1	11.9		8.5	3.2	
Change in external debt	-4.8	-8.5	0.1			-9.1	-6.6	-7.3	-7.8	-7.6	-6.7		-4.1	-0.4	
Identified net debt-creating flows	-10.6	-14.4	-10.3			-17.2	-17.5	-16.3	-15.7	-15.0	-14.2		-10.4	-6.7	
Non-interest current account deficit	**-3.5**	**-15.9**	**-18.2**	**6.5**	**18.8**	**-15.2**	**-15.7**	**-15.1**	**-14.3**	**-13.6**	**-12.7**		**-9.4**	**-6.3**	-8.6
Deficit in balance of goods and services	-5.0	-16.8	-18.3			-17.5	-18.0	-17.4	-16.3	-15.6	-14.8		-11.8	-8.3	
Exports	39.0	37.2	37.2			36.6	35.8	35.1	33.8	32.4	31.1		25.5	18.1	
Imports	34.0	20.4	18.8			19.1	17.8	17.7	17.5	16.9	16.3		13.7	9.7	
Net current transfers (negative = inflow)	-0.5	-0.7	-1.3	-1.2	0.6	-0.8	-0.7	-0.6	-0.5	-0.6	-0.6		-0.2	0.2	-0.1
of which: official	-1.5	-1.4	-1.5			-0.9	-0.9	-0.8	-0.8	-0.8	-0.8		-0.7	-0.6	
Other current account flows (negative = net inflow)	2.0	1.6	1.4			3.1	3.0	2.9	2.5	2.5	2.7		2.5	1.8	
Net FDI (negative = inflow)	**-1.6**	**-1.2**	**-1.2**	**-1.6**	**1.5**	**-1.4**	**-1.3**	**-1.0**	**-1.1**	**-1.0**	**-1.0**		**-0.8**	**-0.5**	-0.7
Endogenous debt dynamics 2/	**-5.5**	**2.7**	**9.1**			**-0.6**	**-0.6**	**-0.3**	**-0.3**	**-0.4**	**-0.5**		**-0.2**	**0.0**	
Contribution from nominal interest rate	2.1	2.5	3.0			1.3	1.3	1.3	1.5	1.3	1.0		0.5	0.2	
Contribution from real GDP growth	-11.7	-7.7	-2.3			-1.9	-1.9	-1.6	-1.8	-1.7	-1.4		-0.7	-0.1	
Contribution from price and exchange rate changes	4.1	7.9	8.3			...	...	...	...	...	...		...	...	
Residual (3-4) 3/	**5.8**	**5.9**	**10.4**			**8.2**	**10.9**	**9.0**	**7.9**	**7.4**	**7.5**		**6.3**	**6.3**	
of which: exceptional financing	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
PV of external debt 4/	...	...	91.2			82.3	75.0	67.0	58.4	50.2	43.3		18.2	2.9	
In percent of exports	...	...	245.4			224.7	209.5	191.1	172.9	154.7	139.0		71.6	16.1	
PV of PPG external debt	**...**	**...**	**12.3**			**12.8**	**13.6**	**14.1**	**13.5**	**12.7**	**12.3**		**8.5**	**2.8**	
In percent of exports	**...**	**...**	**33.0**			**35.0**	**38.1**	**40.4**	**40.1**	**39.2**	**39.4**		**33.2**	**15.7**	
In percent of government revenues	**...**	**...**	**91.2**			**94.1**	**100.7**	**103.8**	**98.5**	**91.8**	**88.4**		**60.2**	**19.8**	
Debt service-to-exports ratio (in percent)	**32.2**	**25.7**	**40.5**			**22.4**	**21.7**	**21.7**	**22.4**	**21.6**	**18.7**		**14.2**	**2.7**	
PPG debt service-to-exports ratio (in percent)	**1.0**	**0.9**	**1.3**			**1.6**	**1.9**	**2.4**	**4.2**	**4.2**	**2.5**		**2.9**	**2.4**	
PPG debt service-to-revenue ratio (in percent)	**2.1**	**2.1**	**3.7**			**4.4**	**5.1**	**6.1**	**10.4**	**9.8**	**5.6**		**5.3**	**3.0**	
Total gross financing need (Billions of U.S. dollars)	1.7	-1.7	-0.9			-1.8	-2.1	-2.0	-1.9	-2.0	-2.2		-2.3	-3.6	
Non-interest current account deficit that stabilizes debt ratio	1.3	-7.4	-18.3			-6.1	-9.0	-7.8	-6.4	-6.0	-6.0		-5.4	-5.9	
Key macroeconomic assumptions															
Real GDP growth (in percent)	12.5	8.0	2.4	6.0	4.4	2.2	2.5	2.3	2.9	3.2	3.1	2.7	3.1	3.1	3.1
GDP deflator in US dollar terms (change in percent)	-3.9	-7.5	-8.6	4.5	12.7	-0.1	0.6	1.7	2.0	2.0	2.0	1.4	2.1	2.1	2.1
Effective interest rate (percent) 5/	2.3	2.6	3.2	3.5	2.0	1.5	1.7	1.9	2.4	2.4	2.0	2.0	2.2	4.3	3.5
Growth of exports of G&S (US dollar terms, in percent)	40.8	-4.9	-6.4	7.6	21.0	0.6	0.8	1.9	1.0	1.1	0.9	1.1	1.6	1.7	1.5
Growth of imports of G&S (US dollar terms, in percent)	-33.9	-40.1	-13.6	4.1	30.1	3.5	-4.0	3.6	3.6	1.6	1.6	1.6	1.6	1.7	1.7
Grant element of new public sector borrowing (in percent)	...	...	...	...	...	6.1	33.6	34.1	39.1	38.0	39.2	31.7	25.7	25.0	25.9
Government revenues (excluding grants, in percent of GDP)	19.4	16.0	13.5			13.6	13.5	13.6	13.7	13.8	13.9		14.0	14.3	14.1
Aid flows (in Billions of US dollars) 7/	0.5	0.5	0.9			0.3	0.4	0.4	0.4	0.4	0.4		0.3	0.4	
of which: Grants	0.4	0.3	0.5			0.3	0.3	0.3	0.3	0.3	0.3		0.3	0.4	
of which: Concessional loans	0.2	0.2	0.5			0.0	0.1	0.1	0.1	0.1	0.1		0.0	0.0	
Grant-equivalent financing (in percent of GDP) 8/	...	...	...			1.4	2.0	1.9	1.7	1.5	1.4		1.0	0.7	0.9
Grant-equivalent financing (in percent of external financing) 8/	...	...	...			64.1	59.9	60.3	67.7	72.7	78.5		88.3	95.8	89.3
Memorandum items:															
Nominal GDP (Billions of US dollars)	23.0	23.0	21.5			21.9	22.6	23.5	24.7	26.0	27.3		35.2	58.4	
Nominal dollar GDP growth	8.2	-0.2	-6.5			2.1	3.1	4.0	4.9	5.2	5.2	4.1	5.2	5.2	5.2
PV of PPG external debt (in Billions of US dollars)			2.6			2.8	3.1	3.3	3.3	3.3	3.3		3.0	1.7	
(PVt-PVt-1)/GDPt-1 (in percent)						0.9	1.3	1.1	0.0	-0.2	0.2	0.6	-0.2	-0.3	-0.3
Gross workers' remittances (Billions of US dollars)	-0.2	-0.2	0.0			0.0	-0.1	-0.1	-0.1	-0.1	0.0		-0.2	-0.5	
PV of PPG external debt (in percent of GDP + remittances)	...	...	12.3			12.8	13.7	14.2	13.6	12.7	12.3		8.5	2.9	
PV of PPG external debt (in percent of exports + remittances)	...	...	33.2			35.1	38.4	40.7	40.4	39.4	39.6		33.9	16.5	
Debt service of PPG external debt (in percent of exports + remittances)	...	...	1.3			1.6	1.9	2.4	4.3	4.2	2.5		3.0	2.5	

Sources: Country authorities; and staff estimates and projections.

1/ Includes both public and private sector external debt.

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

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

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

6/ Historical averages and standard deviations are generally derived over the past 10 years, subject to data availability.

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

8/ 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).

Table 2. Papua New Guinea: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2017-2037

(In percent)

		Projections						
	2017	2018	2019	2020	2021	2022	**2027**	2037
PV of debt-to GDP ratio								
Baseline	13	14	14	14	13	12	**8**	3
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2017-2037 1/	13	29	42	54	64	72	**100**	109
A2. New public sector loans on less favorable terms in 2017-2037 2/	13	14	15	15	14	14	**10**	5
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2018-2019	13	14	14	14	13	12	**9**	3
B2. Export value growth at historical average minus one standard deviation in 2018-2019 3/	13	17	25	24	23	23	**18**	8
B3. US dollar GDP deflator at historical average minus one standard deviation in 2018-2019	13	15	17	16	15	15	**10**	3
B4. Net non-debt creating flows at historical average minus one standard deviation in 2018-2019 4/	13	15	16	15	14	14	**10**	4
B5. Combination of B1-B4 using one-half standard deviation shocks	13	15	18	17	16	16	**12**	5
B6. One-time 30 percent nominal depreciation relative to the baseline in 2018 5/	13	19	20	19	18	17	**12**	4
PV of debt-to-exports ratio								
Baseline	35	38	40	40	39	39	**33**	16
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2017-2037 1/	35	80	121	159	196	232	**392**	600
A2. New public sector loans on less favorable terms in 2017-2037 2/	35	39	43	44	44	45	**41**	28
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2018-2019	35	38	40	40	39	39	**33**	16
B2. Export value growth at historical average minus one standard deviation in 2018-2019 3/	35	56	97	98	98	99	**97**	61
B3. US dollar GDP deflator at historical average minus one standard deviation in 2018-2019	35	38	40	40	39	39	**33**	16
B4. Net non-debt creating flows at historical average minus one standard deviation in 2018-2019 4/	35	41	45	45	44	45	**39**	20
B5. Combination of B1-B4 using one-half standard deviation shocks	35	43	54	54	53	54	**48**	26
B6. One-time 30 percent nominal depreciation relative to the baseline in 2018 5/	35	38	40	40	39	39	**33**	16
PV of debt-to-revenue ratio								
Baseline	94	101	104	99	92	88	**60**	20
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2017-2037 1/	94	212	311	391	459	521	**712**	758
A2. New public sector loans on less favorable terms in 2017-2037 2/	94	104	111	108	103	100	**74**	35
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2018-2019	94	101	105	100	93	90	**61**	20
B2. Export value growth at historical average minus one standard deviation in 2018-2019 3/	94	128	182	176	168	163	**129**	56
B3. US dollar GDP deflator at historical average minus one standard deviation in 2018-2019	94	110	126	119	111	107	**73**	24
B4. Net non-debt creating flows at historical average minus one standard deviation in 2018-2019 4/	94	108	116	110	104	100	**71**	25
B5. Combination of B1-B4 using one-half standard deviation shocks	94	110	131	126	118	114	**83**	32
B6. One-time 30 percent nominal depreciation relative to the baseline in 2018 5/	94	143	147	140	131	126	**86**	28

Table 2. Papua New Guinea: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2017-2037 (concluded)

(In percent)

	Projections							
	2017	2018	2019	2020	2021	2022	2027	2037
Debt service-to-exports ratio								
Baseline	2	2	2	4	4	3	**3**	2
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2017-2037 1/	2	2	4	7	8	8	**15**	33
A2. New public sector loans on less favorable terms in 2017-2037 2/	2	2	2	4	4	3	**4**	3
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2018-2019	2	2	2	4	4	3	**3**	2
B2. Export value growth at historical average minus one standard deviation in 2018-2019 3/	2	2	4	7	7	5	**7**	7
B3. US dollar GDP deflator at historical average minus one standard deviation in 2018-2019	2	2	2	4	4	3	**3**	2
B4. Net non-debt creating flows at historical average minus one standard deviation in 2018-2019 4/	2	2	2	4	4	3	**3**	3
B5. Combination of B1-B4 using one-half standard deviation shocks	2	2	3	5	5	3	**4**	4
B6. One-time 30 percent nominal depreciation relative to the baseline in 2018 5/	2	2	2	4	4	3	**3**	2
Debt service-to-revenue ratio								
Baseline	4	5	6	10	10	6	**5**	3
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2017-2037 1/	4	5	9	16	18	17	**27**	41
A2. New public sector loans on less favorable terms in 2017-2037 2/	4	5	6	11	10	6	**6**	4
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2018-2019	4	5	6	11	10	6	**5**	3
B2. Export value growth at historical average minus one standard deviation in 2018-2019 3/	4	5	7	13	13	8	**9**	7
B3. US dollar GDP deflator at historical average minus one standard deviation in 2018-2019	4	6	7	13	12	7	**6**	4
B4. Net non-debt creating flows at historical average minus one standard deviation in 2018-2019 4/	4	5	6	11	10	6	**6**	4
B5. Combination of B1-B4 using one-half standard deviation shocks	4	5	7	12	11	7	**7**	4
B6. One-time 30 percent nominal depreciation relative to the baseline in 2018 5/	4	7	9	15	14	8	**8**	4
Memorandum item:								
Grant element assumed on residual financing (i.e., financing required above baseline) 6/	26	26	26	26	26	26	**26**	26

Sources: Country authorities; and staff estimates and projections.

1/ Variables include real GDP growth, growth of GDP deflator (in U.S. dollar terms), non-interest current account in percent of GDP, and non-debt creating flows.
2/ Assumes that the interest rate on new borrowing is by 2 percentage points higher than in the baseline., while grace and maturity periods are the same as in the baseline.
3/ Exports values are assumed to remain permanently at the lower level, but the current account as a share of GDP is assumed to return to its baseline level after the shock (implicitly assuming an offsetting adjustment in import levels).
4/ Includes official and private transfers and FDI.
5/ Depreciation is defined as percentage decline in dollar/local currency rate, such that it never exceeds 100 percent.
6/ Applies to all stress scenarios except for A2 (less favorable financing) in which the terms on all new financing are as specified in footnote 2.

Table 3. Papua New Guinea: Public Sector Debt Sustainability Framework, Baseline Scenario, 2017-2037

(In percent of GDP unless otherwise indicated)

	Actual			Average 5/	Standard Deviation 5/	Estimate	Projections								
	2014	2015	2016			2017	2018	2019	2020	2021	2022	2017-22 Average	2027	2037	2023-37 Average
Public sector debt 1/	27.1	28.9	33.4			35.8	37.7	40.1	42.2	44.5	46.1		52.4	58.5	
of which: foreign-currency denominated	6.2	7.1	9.0			9.4	11.0	12.1	12.3	12.1	11.9		8.5	3.2	
Change in public sector debt	2.2	1.9	4.4			2.4	1.9	2.4	2.1	2.3	1.6		1.2	0.3	
Identified debt-creating flows	11.6	9.9	15.7			13.9	12.9	12.5	11.2	10.4	9.8		7.2	3.9	
Primary deficit	4.6	2.2	2.6	0.5	4.3	0.7	0.5	0.7	0.1	0.1	0.3	0.4	-0.2	-1.3	-0.5
Revenue and grants	21.0	17.2	15.6			15.0	14.9	14.9	14.9	15.0	15.0		15.0	15.0	
of which: grants	1.5	1.3	2.1			1.4	1.3	1.2	1.2	1.2	1.1		0.9	0.7	
Primary (noninterest) expenditure	25.6	19.5	18.1			15.7	15.4	15.6	15.0	15.1	15.3		14.8	13.7	
Automatic debt dynamics	-1.8	-0.3	0.8			1.3	1.2	1.2	1.3	1.1	0.8		1.0	1.7	
Contribution from interest rate/growth differential	-2.0	-1.1	0.5			1.2	1.1	1.2	1.3	1.1	0.8		1.0	1.7	
of which: contribution from average real interest rate	0.8	0.9	1.2			1.9	2.0	2.0	2.4	2.4	2.1		2.5	3.4	
of which: contribution from real GDP growth	-2.8	-2.0	-0.7			-0.7	-0.9	-0.8	-1.1	-1.3	-1.3		-1.5	-1.7	
Contribution from real exchange rate depreciation	0.2	0.7	0.2			0.1	0.1	0.0	0.0	0.0	0.0		...	...	
Other identified debt-creating flows	8.8	8.0	12.3			11.9	11.2	10.5	9.8	9.2	8.7		6.4	3.5	
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 implicit or contingent liabilities	8.8	8.0	12.3			11.9	11.2	10.5	9.8	9.2	8.7		6.4	3.5	
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 (specify, 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	
Residual, including asset changes	-9.4	-8.1	-11.3			-11.5	-11.0	-10.1	-9.2	-8.1	-8.2		-6.0	-3.6	
Other Sustainability Indicators															
PV of public sector debt	...	...	36.7			39.1	40.4	42.1	43.3	45.1	46.5		52.4	58.2	
of which: foreign-currency denominated	...	...	12.3			12.8	13.6	14.1	13.5	12.7	12.3		8.5	2.8	
of which: external	...	...	12.3			12.8	13.6	14.1	13.5	12.7	12.3		8.5	2.8	
PV of contingent liabilities (not included in public sector debt)	...	...	...			...	...	...	...	...	...		...	...	
Gross financing need 2/	15.0	14.2	15.9			17.1	17.8	18.5	20.4	21.2	21.5		26.2	31.4	
PV of public sector debt-to-revenue and grants ratio (in percent)	...	...	235.2			261.0	271.3	283.1	291.3	300.9	310.1		349.8	388.2	
PV of public sector debt-to-revenue ratio (in percent)	...	...	272.4			287.5	297.9	308.7	315.8	326.1	335.0		373.2	406.3	
of which: external 3/	...	...	91.2			94.1	100.7	103.8	98.5	91.8	88.4		60.2	19.8	
Debt service-to-revenue and grants ratio (in percent) 4/	14.4	17.9	21.7			27.6	26.9	29.5	42.7	41.8	34.3		36.4	38.6	
Debt service-to-revenue ratio (in percent) 4/	15.5	19.3	25.2			30.4	29.6	32.1	46.3	45.2	37.1		38.9	40.4	
Primary deficit that stabilizes the debt-to-GDP ratio	2.4	0.4	-1.9			-1.7	-1.4	-1.7	-1.9	-2.2	-1.2		-1.4	-1.6	
Key macroeconomic and fiscal assumptions															
Real GDP growth (in percent)	12.5	8.0	2.4	6.0	4.4	2.2	2.5	2.3	2.9	3.2	3.1	2.7	3.1	3.1	3.1
Average nominal interest rate on forex debt (in percent)	4.6	2.6	3.9	2.9	1.0	6.8	7.7	7.7	9.0	8.0	5.5	7.4	5.9	4.4	5.4
Average real interest rate on domestic debt (in percent)	3.9	4.4	4.9	4.5	5.5	6.3	5.6	5.5	5.9	5.9	5.5	5.8	5.3	6.4	5.6
Real exchange rate depreciation (in percent, + indicates depreciation)	3.4	12.7	3.4	-1.2	11.9	1.4	...	...	...	...	...	...	...	...	...
Inflation rate (GDP deflator, in percent)	5.4	4.0	3.4	4.2	5.1	2.0	1.8	2.3	2.4	2.4	2.4	2.2	2.4	2.4	2.4
Growth of real primary spending (deflated by GDP deflator, in percent)	8.7	-17.7	-4.6	-1.3	6.6	-11.8	0.5	3.8	-0.8	3.8	4.5	0.0	2.5	1.9	2.3
Grant element of new external borrowing (in percent)	...	...	...	...	...	6.1	33.6	34.1	39.1	38.0	39.2	31.7	25.7	25.0	...

Sources: Country authorities; and staff estimates and projections.

1/ Public debt includes domestic central government debt and external public debt.

2/ 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.

3/ Revenues excluding grants.

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

5/ Historical averages and standard deviations are generally derived over the past 10 years, subject to data availability.

Statement by Heenam Choi, Executive Director for Papua New Guinea and Nancy Lelang, Advisor to Executive Director
December 1, 2017

Overview

On behalf of our authorities, we thank staff for the reports and their quality engagement with authorities.

As a natural resource-rich country, Papua New Guinea is adversely impacted by the sharp drop in commodity prices that coincided with a severe El Nino drought, 2017 National Elections and the end of a huge LNG pipeline investment project. The key challenge for the country is to restore macroeconomic stability, and at the same time, implement reforms that will foster inclusive growth over the medium term.

In response to these challenges, the newly-elected authorities are taking bold steps to restore macroeconomic stability. Efforts include consolidating spending, mobilizing revenue, containing public debt to prudent levels and improving public finance management governance. In addition, a neutral monetary policy stance is maintained to support inclusive growth with inflation considered manageable. At the same time, authorities continue to maintain the same exchange rate arrangements to avoid disorderly rapid depreciation of the currency. Structural reforms are also aimed at promoting inclusive growth and investments in non-resource sectors that will support sustainable and broader-based growth in the longer term.

Economic Developments

PNG's economic activity is anticipated to pick up in 2018. Real growth is projected at 2.4 percent in 2018, up from 2.2 percent in 2017, reflective of a pickup in the non-resource sectors and hosting of the 2018 APEC Summit. Inflation is projected at 6.9 percent in 2018 up from 5.9 percent in 2017 taking into consideration the impact of hosting the 2018 APEC Summit and revenue raising measures imposed by authorities.

PNG's economic forecast is deliberately held conservative over the medium term. According to authorities' projections, real growth will average 2.4 percent, with inflation expected to average 5.7 percent over the medium term. The growth projection assumes subdued commodity prices and excludes all potential major resource projects (Elk-Antelope project, Stanley gas project, expansion of the PNG LNG project, Papua LNG project, petrochemical projects, Frieda copper mine and Wafi-Golpu gold mine). The downside risks to the inflation projection, includes exogenous supply and demand shocks or further depreciation of the currency. The conservative economic outlook is to ensure authorities' macroeconomic policies are achievable over the projection horizon (2017-2020).

Fiscal Policy

The authorities are making bold spending reductions to contain public debt at prudent levels and remain committed to a credible pro-growth consolidation path over the medium term. Authorities upon moving into office in July passed a 100-day Plan. To date, the Plan has accomplished its macroeconomic stabilization objective with the passing of the 2017

Supplementary Budget in September. The Supplementary Budget took bold measures to narrowing the fiscal deficit. On wage bill control, the Supplementary Budget efforts included commencement of physical audit into the payroll, a freeze on new recruitments, ceasing use of the parallel payroll system and migration of all government employees onto the centralized government payroll and to have a national identification card, as well as, identifying list of offices and agencies for amalgamation in 2018. At the same time, to protect critical development spending on education, health, infrastructure, including law and order during protracted economic cycles, authorities have also amended its Fiscal Responsibility Act (FRA). The single target public debt to GDP ratio of 30 percent ceiling is replaced with a public debt to GDP range of 30-35 percent, targeting an average annual non-resource primary fiscal balance of zero over the medium term. Furthermore, authorities have also announced its new Medium Term Fiscal Strategy (MTFS), promoting revenue mobilizing and spending reduction to manage public debt at prudent levels. The 2018 Budget—the first budget under the new MTFS—has lifted capital spending, and involved the difficult task of reprioritization and reallocating limited public spending to higher value priorities that will enhance overall economic growth and still achieve strategic development goals over the medium term.

The authorities are also focused on strengthening revenue, together with a longer term more comprehensive approach under a Medium-Term Revenue Strategy (MTRS). **A**uthorities have taken significant steps to mobilize revenue. Through its 2017 Supplementary Budget, the authorities funded special task forces to increase tax collections and compliance, announced the amending of non-tax revenue regulations to compel 90 percent of remittances to consolidated revenue, and stopped all credit tax for projects until further notice. Authorities are also enforcing compulsory registration of businesses bank accounts and tax identification numbers with its Investment Promotion Authority. Recently, authorities also announced a Medium-Term Revenue Strategy (MTRS) with a holistic approach to increase revenues; rebalance the tax mix to make the tax regime more growth friendly but fair, widen the tax coverage, introduce some new taxes and provide more certainty through simpler and clearer legislation. Furthermore, the 2018 Budget—the first budget under the new revenue strategy—has approved a number of new tariff and excise rates, legislative amendments and administrative initiatives to strengthen revenue institutions.

Monetary Policy

Authorities have maintained a neutral monetary policy stance with inflation considered manageable. However, they are closely monitoring inflation trends and will adjust monetary policy stance as necessary. In addition, the authorities are confident of the neutral policy stance knowing that whilst liquidity levels remain high, it has not translated into high lending to the private sector.

The authorities also continue to diffuse liquidity using a range of monetary instruments. These include using open market operations issuing Central Bank Bills (CBB) and maintaining the cash reserve ratio at 10 percent since 2014. The new Tap Facility for Treasury bills[1] and bonds stands also to assist in the withdrawal of liquidity. It was introduced on April 2017 and

[1] The CBB Tap Facility is a short-term financial instrument issued by the Bank of PNG for the purpose of liquidity management.

eligible investors are those that are not able to participate in the primary auctions. Tap yields are 1.5 percent less than the primary auctions yields. Furthermore, as at end July 2017, noting the Central Bank had large total outstanding securities with the Government under the slack arrangement, the Central Bank issued CBB to withdraw the new money resulting in a small net amount still to diffuse. The practice is anticipated to cease given authorities commitment to credible fiscal consolidation in the medium term.

Financial Sector

PNG's financial sector is sound and stable. Commercial banks continue to record positive balance sheets against a low number of non-performing loans. Credit growth, on the other hand is low, but will pick up with the recovery in the economy. Commercial banks' exposure to the government through their holdings of government securities, accounts for nearly one third of their total assets and, although significant, is manageable. Loss of correspondent banking relationships on few occasions occurred over the last five years. However, these entities immediately established low tier banking relationships out of Europe.

Authorities also share staff's view of the need to strengthen the macro prudential supervision of its Central Bank. Authorities' three focus areas are: (1) establishing relevant data for macroprudential analysis, (2) ensuring availability of various macroprudential tools and (3) building the institutional and governance arrangements of the macroprudential authority. So far, the bulk of focus has been on establishing relevant data for macroprudential analysis, including, ongoing efforts to enable the Central Bank's Banking Supervision Department (which covers Savings and Loans Societies) to implement Base II and III principles. Furthermore, authorities are shifting to a risk based supervision regime for its banking industry and the superannuation and life insurance sectors. So far new prudential standards on corporate governance, capital adequacy and risk management have been released to the banking industry, savings and loans, superannuation and life insurance sectors.

Authorities continue to meeting international banking standards. Authorities have taken steps to put in place a robust AML/CTF regime. They have appointed a Financial Analysis and Supervision Unit (FASU) director and staff, and anticipate having a first national assessment of money laundering and terrorist financing risks report by end 2017.

Exchange Rate Regime

Authorities are supporting a slow depreciation of the local currency using the same exchange rate framework. The currency has depreciated by 16 percent in nominal terms since mid-2014 but since May 2016 the currency has been stable against the US dollar. Central Bank's intervention has also been limited, and gross foreign reserves were USD1.7 billion (around 5 months of imports) as of mid-October 2017. On a broader policy context, fiscal policy is also bearing the brunt of adjustment with accommodative monetary policy to help mitigate the impact on the economy. International multilateral agencies have indicated commitment to provide concessional financing, and the authorities intend to issue a 3-year bond to finance structural reforms with some financing used to mitigate the foreign exchange imbalances.

Structural reforms

Authorities are committed to promoting inclusive economic growth and boosting investments in the non-resources sectors of the economy a pre-condition to support diversified broad-based economic growth. A broad spectrum of legislative amendments has been introduced to create a growth friendly environment for private sector growth. These include amendments to the Lands & Physical Planning Act, Investment Promotion Act, Mining Act and the Mineral Resources Authority, the Agricultural Administration Adjustment Act, Agriculture Investment Act and the Biosecurity Act. Authorities continue to support small to medium enterprises (SME's) by providing training on financial literacy and entrepreneurial skills, and facilitating access to financial initiatives. This has led to a significant increase in new personal bank accounts and the education of a growing section of the population (including women) in financial education to support greater diversity in the economy. Authorities are investing in key infrastructure projects, including hospitals, the highlands highway, power plants, and agriculture. Most important, authorities remain committed to providing Free Education and Free Primary Health Care, aimed at ensuring all have equal opportunities in education and basic health care.