



PAPUA NEW GUINEA

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

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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

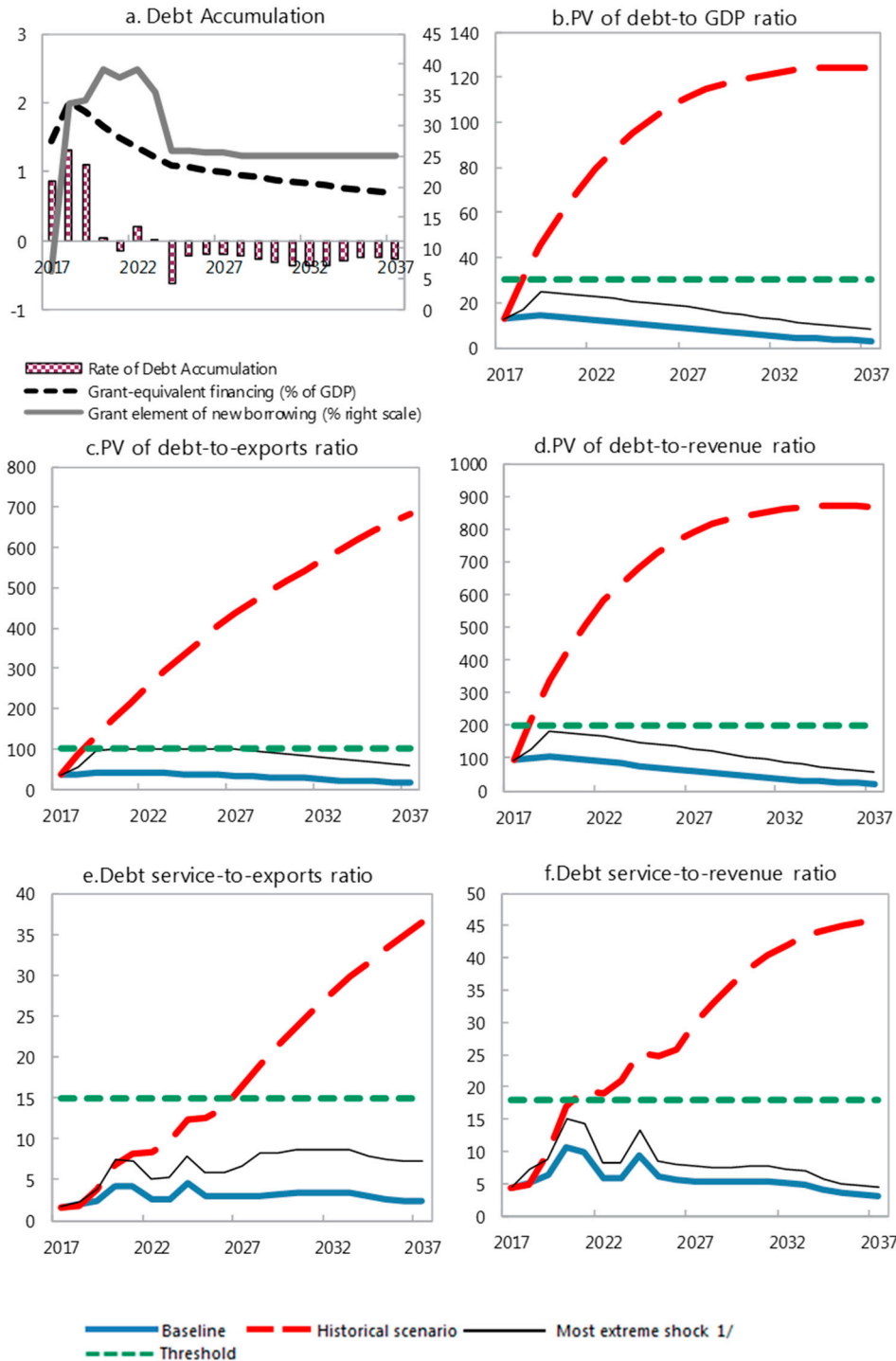
6. PNG's risk of external debt distress is moderate, and the overall risk of public debt distress is high. The heightened risk of overall public debt distress reflects the increased stock of domestic debt with a higher share of short-term Treasury bills. Although external debt distress remains low relative 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.

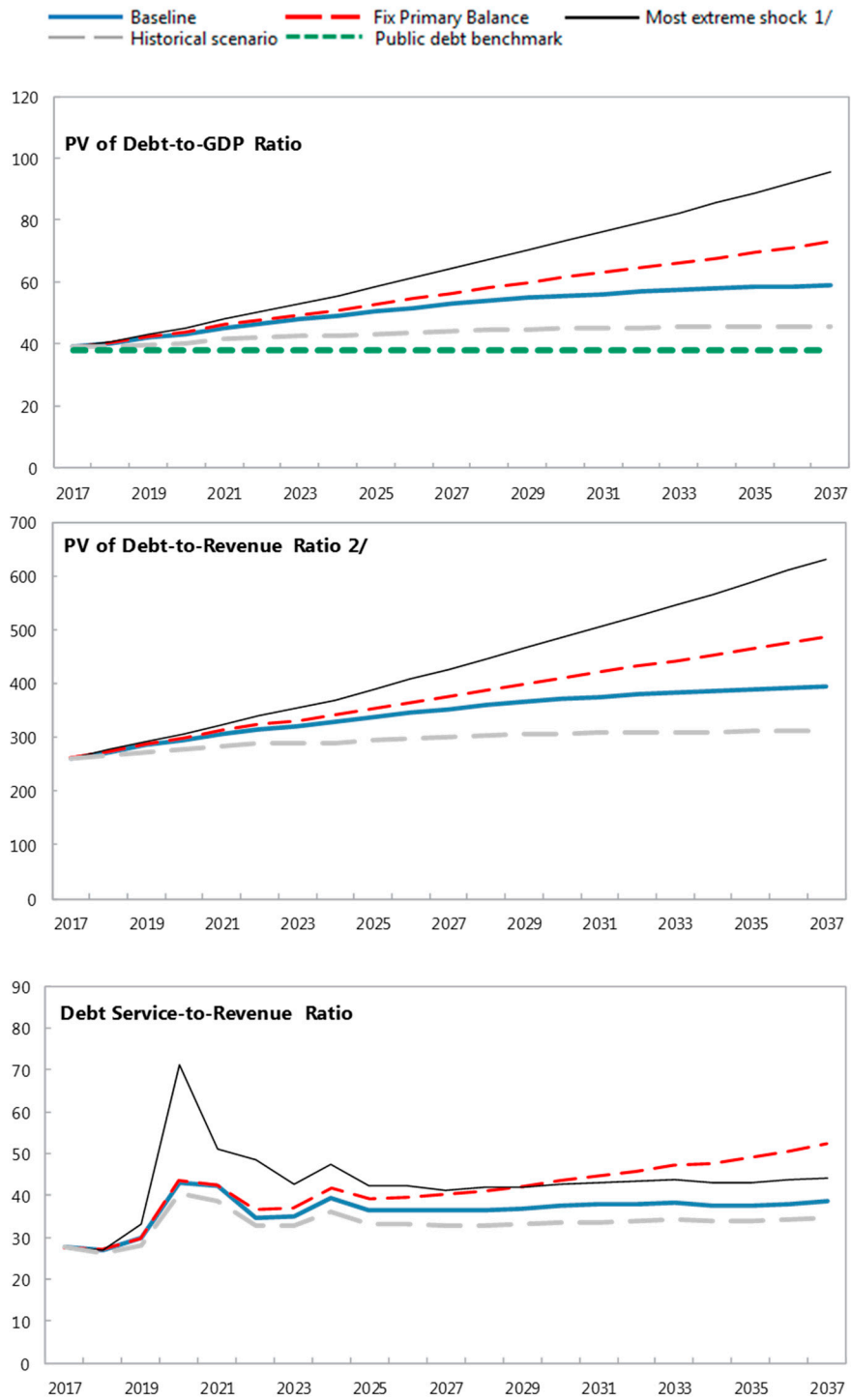
Figure 1. Papua New Guinea: Indicators of Public and Publicly Guaranteed External Debt Under Alternative Scenarios, 2017-2037



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 Average ^{6/}	Standard Deviation ^{6/}	Projections						2017-2022 Average	2027	2037	2023-2037 Average
	2014	2015	2016			2017	2018	2019	2020	2021	2022				
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	
<i>of which: public and publicly guaranteed (PPG)</i>	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
<i>of which: official</i>	-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	
<i>of which: exceptional financing</i>	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	...
<i>of which: Grants</i>	0.4	0.3	0.5	...	...	0.3	0.3	0.3	0.3	0.3	0.3	...	0.3	0.4	...
<i>of which: Concessional loans</i>	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 $[r - g - p(1+g)] / (1+g+p+gp)$ times previous period debt ratio, with r = nominal interest rate; g = real GDP growth rate, and p = 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							2037
	2017	2018	2019	2020	2021	2022	2027	
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
<i>Memorandum item:</i>								
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	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	
<i>of which: foreign-currency denominated</i>	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	
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	
<i>of which: grants</i>	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	
<i>of which: contribution from average real interest rate</i>	0.8	0.9	1.2			1.9	2.0	2.0	2.4	2.4	2.1		2.5	3.4	
<i>of which: contribution from real GDP growth</i>	-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	
<i>of which: foreign-currency denominated</i>			12.3			12.8	13.6	14.1	13.5	12.7	12.3		8.5	2.8	
<i>of which: external</i>			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	
<i>of which: external 3/</i>			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	
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	
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	
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	
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	
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.