INTERNATIONAL MONETARY FUND

CAMBODIA

August 30, 2017

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

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Prepared by Staff of the International Monetary Fund and the International Development Association.[1]

This Debt Sustainability Analysis (DSA) shows that Cambodia remains at low risk of external debt distress, with all debt burden indicators projected to remain below respective indicative thresholds.[2] *However, the results also indicate that debt sustainability is becoming increasingly vulnerable to adverse macroeconomic shocks, including a fall in exports and a disorderly adjustment in the exchange rate, fiscal revenue shocks, and the materialization of contingent liabilities. Although the present value (PV) of debt-to-GDP threshold is breached under two stress tests, staff continues to assess Cambodia's external risk as low given the unique features of its economy. Specifically, a large exchange rate shock and export shock both lead to a breach of the external debt to GDP threshold. However, the exchange rate shock is unlikely to be a significant risk to debt sustainability given the country's high degree of dollarization. Furthermore, accounting for the structural break in exports growth in 2011 confirms the low external debt risk rating. Overall, the findings suggest increasing risks to Cambodia's debt outlook and reinforce the need for continued reforms to increase the economy's resilience to shocks, and further efforts to mobilize fiscal revenues.*

[1] Prepared in consultation with the Cambodian authorities.

[2] Cambodia Country Policy and Institutional Assessment (CPIA) rating averaged 3.4 over 2014–2016 and the country is classified as having medium policy performance.

1. **Cambodia is at a low risk of debt distress.** The indicative debt distress thresholds remain unchanged from the 2016 Article IV DSA. Under the baseline scenario, the external and the public debt burden indicators never breach the policy-dependent indicative thresholds, and the present value (PV) of external debt follows a downward trend over the medium term. Downside risks to the baseline scenario include external arrears, macroeconomic shocks, such as a fall in exports and a disorderly adjustment in the exchange rate, and the materialization of contingent liabilities. The macroeconomic assumptions underlying the baseline scenario remain analogous to the 2016 DSA. Cambodia's Country Policy and Institutional Assessment (CPIA) rating remains unchanged at the level of a "medium performer."

CAMBODIA'S PUBLIC DEBT

2. **Cambodia's stock of external public debt, including arrears, stood at around US$6.45 billion or about 32 percent of GDP (26 percent of GDP in PV terms) as of end-2016.** The increase in external debt since the global financial crisis has been driven largely by disbursement of bilateral loans, particularly from China. The corresponding PV of external debt was 25.4 percent of GDP at end-2016.

Cambodia: External Public Debt

	U.S. dollar (U.S. millions)	Share of total External Debt	In percent of GDP
Total	6,457	100	31.9
Multilateral	2,088	35.9	10.3
Bilateral	4,369	64.1	21.7

Sources: Cambodia authorities; and World Bank estimates.

3. **Bilateral debt has been increasing since 2009, while the share of multilateral debt has continued to decline.** China remains the largest bilateral creditor, contributing to around 70 percent of the total bilateral debt stock, including arrears to the Russian Federation and the United States, as of end-2016. Cambodia remains in arrears to the Russian Federation and the United States (nearly 10 percent of total debt and about 3 percent of GDP), and the status of negotiations of these arrears has remained unchanged since the last DSA.[3] Cambodia is not servicing its debt with these two creditors and further efforts are needed to conclude agreements under the Paris Club framework. Since prospects for resolution remain unclear, this DSA continues to assume no debt restructuring.

4. **Public domestic debt remains negligible.** There is a small amount of bonds (US$3.2 million) issued in the early 2000s and some old claims on the government (the total equal to half percent of GDP, with no interest) that were carried over from the 1990s and remain to be recorded in the monetary survey.

[3] Based on Cambodia Public Debt Statistical Bulletin (see Table 13 "Old Debt Under Negotiation"). Data reflects principal amounts, i.e. excluding any accumulated interest.

5. The authorities have made considerable progress in monitoring contingent liabilities from PPPs through strengthening the institutional framework. In line with past Fund recommendations, reinforced by contingent liability management technical assistance provided by the Bank, the authorities adopted an annual ceiling at 4 percent of GDP on guaranteed payments for PPPs. With expected diminished access to concessional finance in the coming years (owing to the attainment of lower middle income status), and slow progress in developing domestic debt markets, the authorities have established a road map to have a full set of PPP mechanisms, including the necessary legal framework, in place by 2020. Although PPPs can increase efficiency and increase value for money relative to the public financing of investment, their fiscal implications can be sometimes hard to monitor and control. To enhance fiscal transparency, the authorities should list all contingent liabilities in the annual budget law.

MACROECONOMIC FRAMEWORK

6. The macroeconomic framework underlying the baseline scenario remains broadly in line with the previous DSA.

- **Growth and inflation**: Economic activity remains strong driven by robust exports, real estate, and construction. GDP growth is expected at around 7.0 percent in 2017 and is projected to slow to around 6.0 percent over the medium term (by 2022), assuming some product diversification and supportive policies. Inflation (CPI average) rose temporarily to 3.9 percent at end-2016 reflecting higher food and fuel prices, but is expected to decline over the medium-term.

- **External sector stability**: The current account deficit narrowed to 8.8 percent of GDP in 2016 from 9.3 percent in the preceding year. On the back of the lower current account deficit and strong FDI inflows, foreign reserves continued to grow, reaching $7.9 billion in June 2017, about 5.5 months of next year's imports. The current account deficit is projected to remain broadly stable in 2017 and over the medium-term. The trade balance is expected to improve with some product diversification amid ASEAN Economic Community integration, and a pickup in remittances is expected to compensate for some of the decline in official assistance. Gross official reserves are projected to rise to close to 6 months of prospective imports by 2022. Based on authorities' projections external bilateral debt disbursements are projected to average about US$1.16 billion annually during 2017–22 (about 6 percent of GDP on average), resulting in an external debt-to-GDP ratio of about 35.5 percent by 2022, after which the debt ratio is projected to decline.

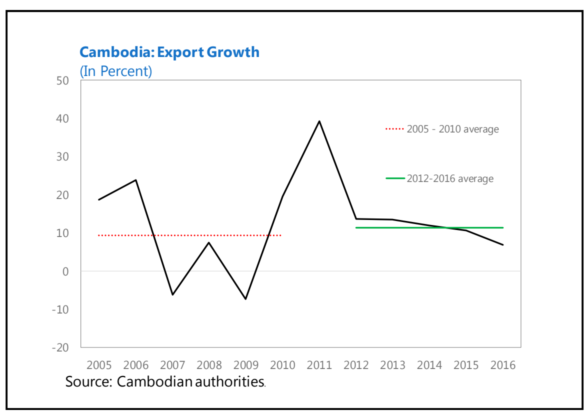
- **Fiscal sustainability**: Revenue performance, supported by the implementation of the Revenue Mobilization Strategy (RMS), saw tax revenues rise to 15.3 percent of GDP in 2016 from 14.6 in 2015. However, the fiscal deficit widened to 2.8 percent of GDP in 2016 (but remained well below the budget target) due to high public sector wages and increased social spending. The level of government deposits (as a share of GDP) rose to 10.1 percent of GDP by end-2016. The fiscal deficit is projected to widen to about 3.7 percent of GDP in 2017 due a rising public sector wage bill, higher capital and social spending, which will more than offset expected gains from tax revenue mobilization. Over the medium-term, fiscal pressures are expected to emerge due to wage pressures even though some improvement in revenue performance is projected to continue as the tax administration measures contained in the RMS generate revenue gains. Medium-term fiscal policy should be anchored to safeguarding government deposits and long-term fiscal debt sustainability, while striking a balance between providing resources for Cambodia's vast development needs and rising wage and social spending pressures.

- **Domestic debt**: As Cambodia's financial sector continues to develop, it is expected that the government will start issuing domestic government bonds to provide additional fiscal financing. By issuing debt starting from ¼ ppt of GDP annually in 2022 and gradually increasing to about ½ ppt of GDP in 2035, the total stock of domestic debt would reach about 3.7 percent of GDP by 2035. This remains low compared to the average domestic debt in low-income countries (LICs) of about 15 percent of GDP. However, this conservative estimate is in line with the authorities' intention of not issuing domestic debt over the medium term and to focus more on mobilizing domestic revenue and raising government deposits (i.e., saving, not borrowing).

EXTERNAL AND PUBLIC SUSTAINABILITY

7. Under the baseline scenario, the external DSA shows that Cambodia's risk of debt distress is low. The PV of key ratios never breach their respective policy-dependent indicative thresholds and are projected to decline over the projection period. Moreover, the debt service-to-exports and debt service-to-revenue ratios remain well below the thresholds throughout the projection period, partly due to the concessional nature of most debt.

8. Standard stress tests highlight potential adverse impact from large shocks to the exchange rate or exports. A decline in export growth remains an important risk to debt sustainability. As shown in Table 2, this shock would bring the PV of debt-to-GDP to 43 percent in 2019–20 and 42 percent in 2021–22 (above the indicative threshold of 40 percent), declining to 25 percent in the long-term. However, this mechanical breach of the threshold is strongly influenced by a single outlier observation. Specifically, Cambodian exports grew by 40 percent in 2011 (well above average export growth, see text chart on export growth), reflecting improvements in preferential access to the European Union market resulting in a positive structural change.[4] As shown in Figure 1, a large one-off depreciation would bring the PV of debt-to-GDP to about 40 percent in 2022 (the level of the indicative threshold) and, following a protracted breach of the threshold subsequently



Source: Cambodian authorities.

[4] Excluding the 2011 outlier year from the calculation of the export shock would imply a PV of debt-to-GDP that remains slightly below the threshold. Furthermore, applying the probability approach confirms the low rating in this case. The improvement in access to the European Union market reflected more favorable rules of origin for manufactured goods and new preferential access to milled rice (a key agricultural export product) (see WTO, (2011): *Cambodia Trade Policy Review*).

declining to 32 percent in the long-term. However, risks related to a disorderly adjustment in the exchange rate are mitigated by the high degree of dollarization (more than 90 percent of banking sector assets and most transactions are in dollars) which is expected to mitigate the impact of a depreciation on the debt to GDP ratio. Revenues accruing to the government principally in US dollars and significant buffers in the form of US dollar denominated government deposits and international reserves provide further protection against abrupt changes in the exchange rate. Finally, the authorities are committed to a closely managed exchange rate regime, as evidenced in the historically stable bilateral exchange rate. While these factors play a mitigating role and PV of external debt declines over the projection period, the deteriorating debt dynamics since the last DSA suggest the need for continuous monitoring, especially as Cambodia over time moves to greater use of its local currency.

9. Public debt is vulnerable to a large exchange rate depreciation shock and to weak revenue growth. Under a one-off real depreciation shock, the PV of total public debt-to-GDP would reach 37 percent in 2022, and then decline over time reaching 30 percent of GDP in the long-term. If the primary balance were to remain unchanged at the 2016 level, the PV of public debt-to-GDP would increase to about 32 percent by 2025, with debt projected to modestly decline over the long-term. While public debt is projected to decline over the medium-term in the baseline and extreme shock scenarios, and do not present any major vulnerability at present, the analysis implies that efforts to mobilize revenues to guarantee long-term debt sustainability should continue.

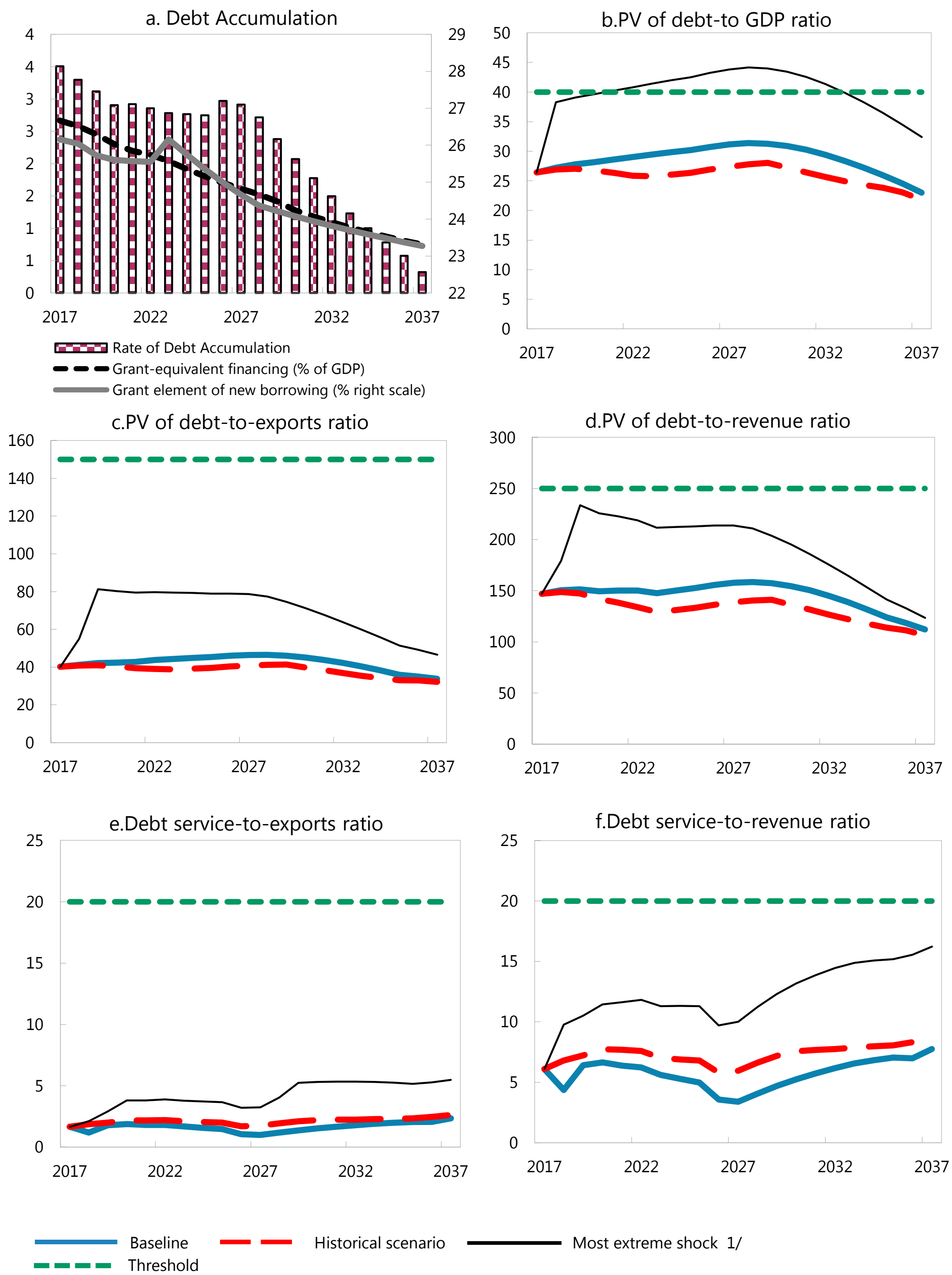
10. Public debt sustainability is at risk from a rise in contingent liabilities related to PPPs and potential financial stress. PPP investments in power generation and distribution projects are large, and in case of adverse scenarios, associated fiscal risks could arise and potentially add substantial liabilities to the debt stock. Other potential contingent liabilities include the fiscal costs to support the financial sector during a banking crisis.

11. The authorities broadly agree with the findings of the DSA exercise. The debt management unit at the Ministry of Economy and Finance (MEF) conducts its own internal DSA analysis, and has reached the same conclusion of low risk of debt distress. They use the results of these analyses to propose annual ceilings of new net debt disbursements. The authorities assume a similar loan disbursement profile and current account deficits, but are slightly more optimistic than staff on the medium-term real GDP growth assumption. The MEF expressed concern about the accumulation of contingent liabilities from PPPs and have imposed annual ceilings on PPP guarantees.

CONCLUSION

12. Cambodia remains at low risk of debt distress. While the risk of debt distress is currently assessed to be low, the baseline projections and the standard stress tests show increasing risks to external debt outlook. Downside risks to the baseline scenario include the materialization of contingent liabilities and issues arising from external arrears. The most extreme stress tests indicate that Cambodia’s debt sustainability remains vulnerable to shocks to the exchange rate, economic growth, exports, and the fiscal position. This reinforces the importance of preserving macroeconomic stability and diversifying the economy and exports to increase resilience to external shocks, improving spending efficiency and the successful implementation of the revenue mobilization strategy.

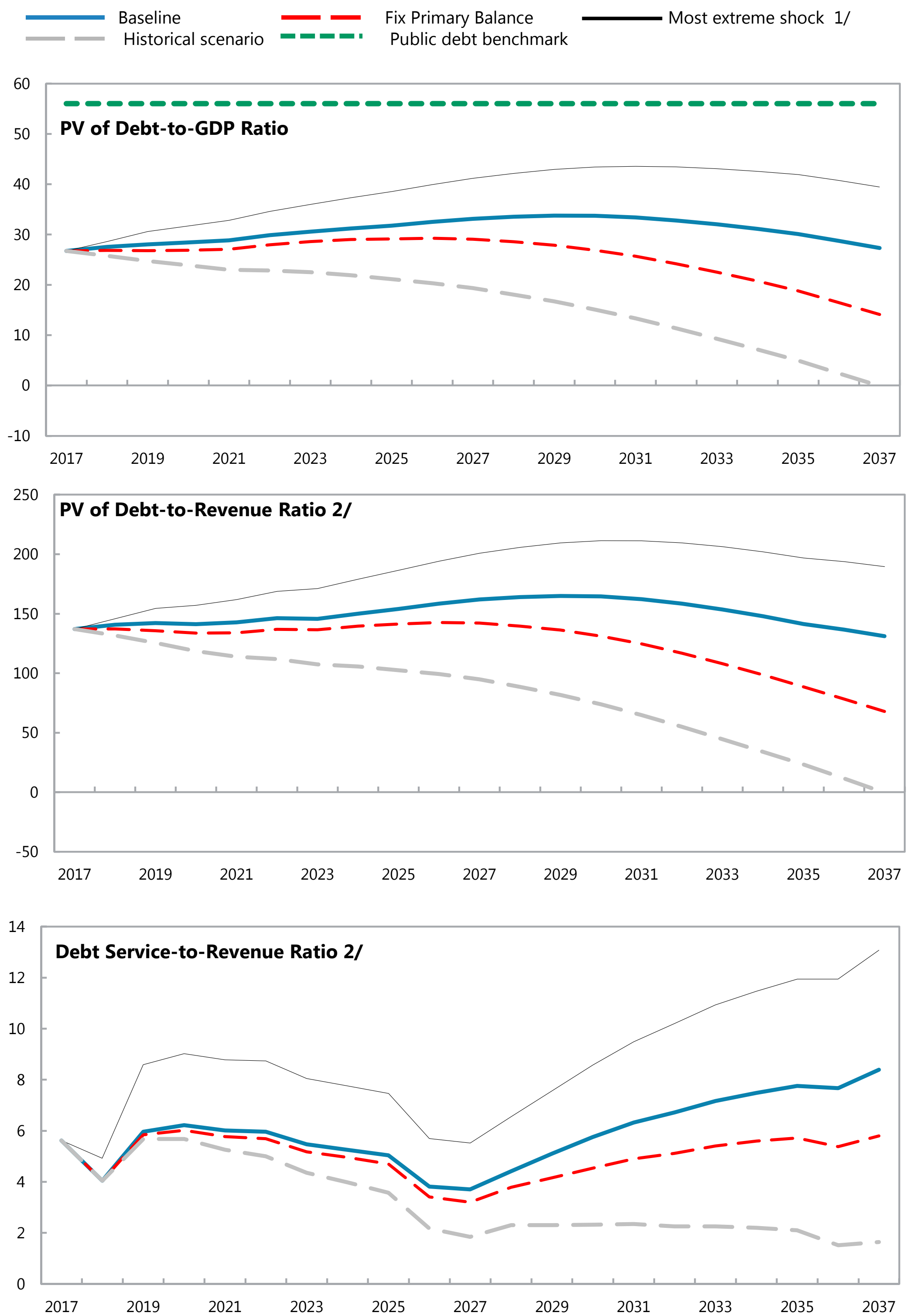
Figure 1a. Cambodia: Indicators of Public and Publicly Guaranteed External Debt under Alternative Scenarios, 2017–2037 1/



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 One-time depreciation 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 1b. Cambodia: Indicators of Public Debt Under Alternative Scenarios, 2017–2037 1/



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. Cambodia: External Debt Sustainability Framework, Baseline Scenario, 2014–¬2037 1/

(In percent of GDP, unless otherwise indicated)

	Actual					Estimate	Projections								
	2014	2015	2016	Average 5/	Standard Deviation 5/	2017	2018	2019	2020	2021	2022	2017-22 Average	2027	2037	2023-37 Average
Public sector debt 1/	32.3	31.2	32.3			33.2	34.3	34.7	35.0	35.4	36.4		39.4	31.9	
of which: foreign-currency denominated	31.8	30.8	31.9			32.8	34.0	34.4	34.8	35.1	35.5		37.5	27.6	
Change in public sector debt	0.2	-1.0	1.0			0.9	1.1	0.4	0.3	0.4	1.0		0.6	-1.7	
Identified debt-creating flows	-1.2	-1.3	-0.3			0.9	1.7	1.5	1.2	1.1	1.1		1.8	2.7	
Primary deficit	0.8	1.2	2.5	1.8	1.7	3.3	4.2	4.1	3.7	3.7	3.6	3.7	4.5	4.9	4.6
Revenue and grants	19.8	18.8	19.8			19.5	19.6	19.7	20.1	20.2	20.4		20.5	20.8	
of which: grants	3.0	2.1	2.0			1.5	1.5	1.4	1.3	1.1	1.1		0.7	0.3	
Primary (noninterest) expenditure	20.6	20.0	22.3			22.8	23.7	23.8	23.8	23.9	24.0		24.9	25.7	
Automatic debt dynamics	-1.9	-2.5	-2.8			-2.3	-2.4	-2.6	-2.5	-2.6	-2.5		-2.7	-2.2	
Contribution from interest rate/growth differential	-2.7	-2.6	-2.2			-2.3	-2.3	-2.4	-2.4	-2.4	-2.4		-2.7	-1.9	
of which: contribution from average real interest rate	-0.6	-0.4	-0.1			-0.2	-0.2	-0.3	-0.3	-0.3	-0.4		-0.5	0.0	
of which: contribution from real GDP growth	-2.1	-2.2	-2.1			-2.1	-2.1	-2.2	-2.1	-2.1	-2.0		-2.2	-1.9	
Contribution from real exchange rate depreciation	0.7	0.0	-0.6			-0.1	-0.1	-0.1	-0.1	-0.1	-0.1		...	...	
Other identified debt-creating flows	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
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	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Debt relief (HIPC and other)	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Other (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	1.4	0.3	1.4			0.0	-0.6	-1.1	-0.9	-0.8	-0.1		-1.2	-4.4	
Other Sustainability Indicators															
PV of public sector debt	...	...	25.8			26.7	27.5	28.0	28.4	28.8	29.9		33.1	27.3	
of which: foreign-currency denominated	...	...	25.4			26.4	27.2	27.8	28.2	28.6	29.0		31.2	23.0	
of which: external	...	...	25.4			26.4	27.2	27.8	28.2	28.6	29.0		31.2	23.0	
PV of contingent liabilities (not included in public sector debt)	...	...	...			...	...	...	...	...	...		...	...	
Gross financing need 2/	2.0	2.5	4.0			4.7	5.2	5.5	5.2	5.1	5.0		5.3	6.7	
PV of public sector debt-to-revenue and grants ratio (in percent)	...	...	129.8			137.1	140.7	142.1	141.2	142.7	146.3		161.9	131.2	
PV of public sector debt-to-revenue ratio (in percent)	...	...	144.3			148.9	152.0	152.8	150.7	151.3	154.6		167.8	133.0	
of which: external 3/	...	...	142.3			147.1	150.4	151.3	149.4	150.1	150.3		157.8	112.2	
Debt service-to-revenue and grants ratio (in percent) 4/	4.3	5.0	6.1			5.6	4.0	6.0	6.2	6.0	6.0		3.7	8.4	
Debt service-to-revenue ratio (in percent) 4/	5.1	5.7	6.8			6.1	4.4	6.4	6.6	6.4	6.3		3.8	8.5	
Primary deficit that stabilizes the debt-to-GDP ratio	0.6	2.2	1.5			2.4	3.1	3.6	3.4	3.3	2.6		3.9	6.6	
Key macroeconomic and fiscal assumptions															
Real GDP growth (in percent)	7.1	7.2	7.0	6.6	2.5	6.9	6.8	6.8	6.5	6.3	6.0	6.6	6.0	6.0	6.0
Average nominal interest rate on forex debt (in percent)	1.2	1.2	1.2	1.0	0.2	1.4	1.3	1.1	1.0	0.9	0.7	1.1	0.4	0.0	0.3
Average real interest rate on domestic debt (in percent)	-2.3	-1.6	-3.2	-3.3	2.9	-3.0	-3.1	-3.1	-3.1	-3.1	4.4	-1.8	2.5	0.9	1.9
Real exchange rate depreciation (in percent, + indicates depreciation)	2.5	0.1	-2.2	-1.4	3.5	-0.3	...	...	...	...	...	...	...	...	...
Inflation rate (GDP deflator, in percent)	2.6	1.9	3.6	3.8	3.3	3.4	3.4	3.5	3.4	3.5	3.4	3.4	3.0	3.0	3.0
Growth of real primary spending (deflated by GDP deflator, in percent)	8.6	4.0	19.6	3.3	6.4	9.0	11.3	7.1	6.6	6.6	6.3	7.8	6.8	4.9	6.5
Grant element of new external borrowing (in percent)	...	...	...	...	...	26.2	26.0	25.7	25.6	25.6	25.5	25.8	24.7	23.3	...

Sources: Country authorities; and staff estimates and projections.

1/ [Indicate coverage of public sector, e.g., general government or nonfinancial public sector. Also whether net or gross debt is used.]

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.

Table 2. Cambodia: 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	26	27	28	28	29	29	**31**	23
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2017-2037 1/	26	27	27	27	26	26	**27**	22
A2. New public sector loans on less favorable terms in 2017-2037 2	26	28	29	31	32	33	**39**	34
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2018-2019	26	28	29	29	30	30	**33**	24
B2. Export value growth at historical average minus one standard deviation in 2018-2019 3/	26	32	43	43	42	42	**42**	25
B3. US dollar GDP deflator at historical average minus one standard deviation in 2018-2019	26	28	29	29	30	30	**32**	24
B4. Net non-debt creating flows at historical average minus one standard deviation in 2018-2019 4/	26	29	32	32	32	33	**34**	24
B5. Combination of B1-B4 using one-half standard deviation shocks	26	31	38	38	38	38	**39**	25
B6. One-time 30 percent nominal depreciation relative to the baseline in 2018 5/	26	38	39	40	40	41	**44**	32
PV of debt-to-exports ratio								
Baseline	40	41	42	42	43	44	**46**	34
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2017-2037 1/	40	41	41	40	39	39	**41**	32
A2. New public sector loans on less favorable terms in 2017-2037 2	40	42	45	46	48	50	**57**	49
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2018-2019	40	41	42	42	43	44	**46**	34
B2. Export value growth at historical average minus one standard deviation in 2018-2019 3/	40	55	81	80	79	80	**79**	47
B3. US dollar GDP deflator at historical average minus one standard deviation in 2018-2019	40	41	42	42	43	44	**46**	34
B4. Net non-debt creating flows at historical average minus one standard deviation in 2018-2019 4/	40	45	48	48	49	49	**51**	35
B5. Combination of B1-B4 using one-half standard deviation shocks	40	48	61	60	60	61	**61**	39
B6. One-time 30 percent nominal depreciation relative to the baseline in 2018 5/	40	41	42	42	43	44	**46**	34
PV of debt-to-revenue ratio								
Baseline	147	150	151	149	150	150	**158**	112
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2017-2037 1/	147	149	147	142	138	134	**139**	107
A2. New public sector loans on less favorable terms in 2017-2037 2	147	155	160	163	168	172	**196**	164
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2018-2019	147	153	158	156	157	157	**165**	117
B2. Export value growth at historical average minus one standard deviation in 2018-2019 3/	147	179	234	226	223	219	**214**	124
B3. US dollar GDP deflator at historical average minus one standard deviation in 2018-2019	147	153	157	155	156	156	**164**	116
B4. Net non-debt creating flows at historical average minus one standard deviation in 2018-2019 4/	147	163	174	171	170	169	**173**	115
B5. Combination of B1-B4 using one-half standard deviation shocks	147	171	205	199	198	196	**196**	122
B6. One-time 30 percent nominal depreciation relative to the baseline in 2018 5/	147	212	213	210	211	211	**222**	158

Table 2. Cambodia: 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
PV of debt-to GDP ratio								
Debt service-to-exports ratio								
Baseline	2	1	2	2	2	2	**1**	2
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2017-2037 1/	2	2	2	2	2	2	**2**	3
A2. New public sector loans on less favorable terms in 2017-2037 2	2	2	2	2	2	3	**3**	5
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2018-2019	2	2	2	2	2	2	**2**	3
B2. Export value growth at historical average minus one standard deviation in 2018-2019 3/	2	2	3	4	4	4	**3**	5
B3. US dollar GDP deflator at historical average minus one standard deviation in 2018-2019	2	2	2	2	2	2	**2**	3
B4. Net non-debt creating flows at historical average minus one standard deviation in 2018-2019 4/	2	2	2	3	3	3	**2**	4
B5. Combination of B1-B4 using one-half standard deviation shocks	2	2	2	3	3	3	**3**	4
B6. One-time 30 percent nominal depreciation relative to the baseline in 2018 5/	2	2	2	2	2	2	**2**	3
Debt service-to-revenue ratio								
Baseline	6	4	6	7	6	6	**3**	8
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2017-2037 1/	6	7	7	8	8	8	**6**	9
A2. New public sector loans on less favorable terms in 2017-2037 2	6	7	7	8	9	9	**10**	16
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2018-2019	6	7	8	9	9	9	**7**	12
B2. Export value growth at historical average minus one standard deviation in 2018-2019 3/	6	7	8	11	11	11	**9**	15
B3. US dollar GDP deflator at historical average minus one standard deviation in 2018-2019	6	7	8	8	9	9	**7**	12
B4. Net non-debt creating flows at historical average minus one standard deviation in 2018-2019 4/	6	7	8	9	9	9	**8**	12
B5. Combination of B1-B4 using one-half standard deviation shocks	6	7	8	10	10	10	**8**	14
B6. One-time 30 percent nominal depreciation relative to the baseline in 2018 5/	6	10	10	11	12	12	**10**	16
Memorandum item:								
Grant element assumed on residual financing (i.e., financing required above baseline) 6/	23	23	23	23	23	23	**23**	23

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 a
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. Cambodia: Public Sector Debt Sustainability Framework, Baseline Scenario, 2014–2037

(In percent of GDP unless otherwise indicated)

	Actual					Estimate	Projections								
	2014	2015	2016	Average 5/	Standard Deviation 5/	2017	2018	2019	2020	2021	2022	2017-22 Average	2027	2037	2023-37 Average
Public sector debt 1/	32.3	31.2	32.3			33.2	34.3	34.7	35.0	35.4	36.4		39.4	31.9	
of which: foreign-currency denominated	31.8	30.8	31.9			32.8	34.0	34.4	34.8	35.1	35.5		37.5	27.6	
Change in public sector debt	0.2	-1.0	1.0			0.9	1.1	0.4	0.3	0.4	1.0		0.6	-1.7	
Identified debt-creating flows	-1.2	-1.3	-0.3			0.9	1.7	1.5	1.2	1.1	1.1		1.8	2.7	
Primary deficit	0.8	1.2	2.5	1.8	1.7	3.3	4.2	4.1	3.7	3.7	3.6	3.7	4.5	4.9	4.6
Revenue and grants	19.8	18.8	19.8			19.5	19.6	19.7	20.1	20.2	20.4		20.5	20.8	
of which: grants	3.0	2.1	2.0			1.5	1.5	1.4	1.3	1.1	1.1		0.7	0.3	
Primary (noninterest) expenditure	20.6	20.0	22.3			22.8	23.7	23.8	23.8	23.9	24.0		24.9	25.7	
Automatic debt dynamics	-1.9	-2.5	-2.8			-2.3	-2.4	-2.6	-2.5	-2.6	-2.5		-2.7	-2.2	
Contribution from interest rate/growth differential	-2.7	-2.6	-2.2			-2.3	-2.3	-2.4	-2.4	-2.4	-2.4		-2.7	-1.9	
of which: contribution from average real interest rate	-0.6	-0.4	-0.1			-0.2	-0.2	-0.3	-0.3	-0.3	-0.4		-0.5	0.0	
of which: contribution from real GDP growth	-2.1	-2.2	-2.1			-2.1	-2.1	-2.2	-2.1	-2.1	-2.0		-2.2	-1.9	
Contribution from real exchange rate depreciation	0.7	0.0	-0.6			-0.1	-0.1	-0.1	-0.1	-0.1	-0.1		...	...	
Other identified debt-creating flows	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
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	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Debt relief (HIPC and other)	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Other (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	1.4	0.3	1.4			0.0	-0.6	-1.1	-0.9	-0.8	-0.1		-1.2	-4.4	
Other Sustainability Indicators															
PV of public sector debt	...	...	25.8			26.7	27.5	28.0	28.4	28.8	29.9		33.1	27.3	
of which: foreign-currency denominated	...	...	25.4			26.4	27.2	27.8	28.2	28.6	29.0		31.2	23.0	
of which: external	...	...	25.4			26.4	27.2	27.8	28.2	28.6	29.0		31.2	23.0	
PV of contingent liabilities (not included in public sector debt)	...	...	...			...	...	...	...	...	...		...	...	
Gross financing need 2/	2.0	2.5	4.0			4.7	5.2	5.5	5.2	5.1	5.0		5.3	6.7	
PV of public sector debt-to-revenue and grants ratio (in percent)	...	...	129.8			137.1	140.7	142.1	141.2	142.7	146.3		161.9	131.2	
PV of public sector debt-to-revenue ratio (in percent)	...	...	144.3			148.9	152.0	152.8	150.7	151.3	154.6		167.8	133.0	
of which: external 3/	...	...	142.3			147.1	150.4	151.3	149.4	150.1	150.3		157.8	112.2	
Debt service-to-revenue and grants ratio (in percent) 4/	4.3	5.0	6.1			5.6	4.0	6.0	6.2	6.0	6.0		3.7	8.4	
Debt service-to-revenue ratio (in percent) 4/	5.1	5.7	6.8			6.1	4.4	6.4	6.6	6.4	6.3		3.8	8.5	
Primary deficit that stabilizes the debt-to-GDP ratio	0.6	2.2	1.5			2.4	3.1	3.6	3.4	3.3	2.6		3.9	6.6	
Key macroeconomic and fiscal assumptions															
Real GDP growth (in percent)	7.1	7.2	7.0	6.6	2.5	6.9	6.8	6.8	6.5	6.3	6.0	6.6	6.0	6.0	6.0
Average nominal interest rate on forex debt (in percent)	1.2	1.2	1.2	1.0	0.2	1.4	1.3	1.1	1.0	0.9	0.7	1.1	0.4	0.0	0.3
Average real interest rate on domestic debt (in percent)	-2.3	-1.6	-3.2	-3.3	2.9	-3.0	-3.1	-3.1	-3.1	-3.1	4.4	-1.8	2.5	0.9	1.9
Real exchange rate depreciation (in percent, + indicates depreciation)	2.5	0.1	-2.2	-1.4	3.5	-0.3	...	...	...	...	...		...	...	...
Inflation rate (GDP deflator, in percent)	2.6	1.9	3.6	3.8	3.3	3.4	3.4	3.5	3.4	3.5	3.4	3.4	3.0	3.0	3.0
Growth of real primary spending (deflated by GDP deflator, in percent)	8.6	4.0	19.6	3.3	6.4	9.0	11.3	7.1	6.6	6.6	6.3	7.8	6.8	4.9	6.5
Grant element of new external borrowing (in percent)	...	...	...	...	...	26.2	26.0	25.7	25.6	25.6	25.5	25.8	24.7	23.3	...

Sources: Country authorities; and staff estimates and projections.

1/ [Indicate coverage of public sector, e.g., general government or nonfinancial public sector. Also whether net or gross debt is used.]

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.