

INTERNATIONAL DEVELOPMENT ASSOCIATION

INTERNATIONAL MONETARY FUND

## CAMBODIA

### Joint World Bank-IMF Debt Sustainability Analysis

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Prepared jointly by the staffs of the International Development Association (IDA)

and the International Monetary Fund (IMF)

Approved by Marcello Estevão (IDA), Anne-Marie Gulde-Wolf (IMF) and Yan Sun (IMF)

<b>Cambodia: Joint Bank-Fund Debt Sustainability Analysis</b>	
Risk of external debt distress	Low
Overall risk of debt distress	Low
Granularity in the risk rating	Not Applicable
Application of judgment	No

The Debt Sustainability Analysis (DSA) using the joint IMF/WB Debt Sustainability Framework for Low Income Countries (LIC-DSF) shows that Cambodia remains at low risk of external debt distress. All debt burden indicators are projected to remain under their indicative thresholds under the baseline and the shock scenarios.<sup>1</sup>The overall risk of debt distress is low, but the analysis indicates that debt sustainability is vulnerable to export and growth shocks, and the materialization of contingent liabilities. The public and publicly guaranteed (PPG) debt-to-GDP ratio is projected to rise by 6½ percentage points during the next decade due to projected larger fiscal deficits in the medium term. These findings reinforce the importance of implementing reforms to increase the economy's resilience to external shocks and encourage diversification. Further efforts to mobilize fiscal revenue, increase efficiency of public expenditure, strengthen fiscal governance and enhance monitoring of risks related to contingent liabilities are necessary to ensure debt sustainability in the medium term.

<sup>1</sup> Cambodia's Composite Indicator (CI) index, which has been calculated based on the October 2019 and April 2019 WEO update and the World Bank's 2018 CPIA indicates that the country's debt-carrying capacity is strong. This classification is improved compared to the 2018 DSA. For the PV of PPG external debt, thresholds are increased from 40 to 55% (GDP) and from 180 to 240% (exports); external debt service-to exports and to revenue from 15% to 21% and 18% to 23%, respectively.

## PUBLIC DEBT COVERAGE

1. **The DSA covers central government debt as well as debt to state-owned enterprises (SOEs) guaranteed by the central government.** By law, state and local governments and the central bank do not engage in external borrowing, and SOEs do not contract non-guaranteed external loans. There are no extra budgetary funds and the National Social Security Fund is funded by deposits and does not constitute a liability for the general government. External debt is defined on a “currency basis”.

Subsectors of the public sector	Sub-sectors covered
Central government	X
State and local government	
Other elements in the general government	
o/w: Social security fund	
o/w: Extra budgetary funds (EBFs)	
Guarantees (to other entities in the public and private sector, including to SOEs)	X
Central bank (borrowed on behalf of the government)	X
Non-guaranteed SOE debt	X

The contingent liability stress test includes contingent liabilities stemming from PPPs (8.8 percent of GDP) and financial market (5 percent of GDP).<sup>2</sup>

The country's coverage of public debt	The central government, government-guaranteed debt		
	Default	Used for the analysis	Reasons for deviations from the default settings
Other elements of the general government not captured in 1.	0 percent of GDP	0.0	
SoE's debt (guaranteed and not guaranteed by the government) 1/	2 percent of GDP	0.0	Not allowed by law
PPP	35 percent of PPP stock	8.8	Staff estimates
Financial market (the default value of 5 percent of GDP is the minimum value)	5 percent of GDP	5.0	
Total (2+3+4+5) (in percent of GDP)		13.8	

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

## BACKGROUND ON DEBT

2. **Cambodia's external public debt, including arrears, amounted to US\$7.0 billion (28.6 percent of GDP) at end-2018.** The external debt-to-GDP ratio declined by 1.4 percentage point since end-2017. The composition of the debt stock is about 70 percent bilateral debt, with the remaining 30 percent multilateral debt. About half of the outstanding public debt is owed to China. External debt has been accrued on mostly concessional terms, and the average grant element of public external debt is 28 percent in end-2018. The debt stock includes legacy arrears to the Russian

	In million of U.S. dollars	In percent of GDP	In percent of external debt
Total	7021.5	28.6	100
Multilateral	1981.0	8.1	28.2
Bilateral	5,040.5	20.6	71.8
of which: China	3,418.9	14.0	48.7

Sources: Cambodia authorities; and IMF estimates.

<sup>2</sup> The PPP stock is estimated using IMF's Investment and Capital Stock Dataset and information provided by the authorities.

Federation and the United States of about 3 percent of GDP.<sup>3</sup> The status of negotiations of these arrears remains unchanged compared to the last DSA and this analysis continues to assume no debt restructuring.

**3. Public domestic debt is currently negligible.** The stock as of end-2018 was US\$2.8 million. To support financial market development, the government is preparing to issue, for the first time, local-currency government bonds over the next few years. Further strengthening of debt management practices is required, including improving the quality of the debt management strategy and the annual borrowing plan, as well as medium-term domestic market development activities plan.

**4. The PPP framework continues to be strengthened while the stock of PPP has increased.** With expected diminished access to concessional financing and slow progress in developing domestic debt markets, PPPs have been identified as a way to finance necessary investment projects. The PPP stock grew more than twofold between 2010 and 2015, when it was estimated at 17 percent of GDP. There is no recent estimation of the Cambodian PPP stock. The authorities have established a roadmap to have a full set of PPP mechanisms by 2020, including the legal framework and system for risk assessment. Technical assistance provided by the IMF, the World Bank and ADB has focused on developing capacity to analyze fiscal risks from PPPs, integrating PPP risks in the assessment of fiscal sustainability and strengthening the legal, regulatory and institutional framework of PPP management. A central PPP unit has been established under the Ministry and the authorities adopted an annual ceiling. A new PPP law is being drafted and is expected to be submitted to the National Assembly in 2020.

**5. Private external debt.** The stock of private external debt in Cambodia is not published by the authorities and is excluded from this analysis.<sup>4</sup> Staff estimates private external debt at about 25 percent of GDP, up from 19.5 percent last year. Risks emerging from excessive external borrowing by the private sector could increase the government's exposure.

## BACKGROUND ON MACRO FORECASTS

**6. Growth and inflation.** Economic activity is expected to moderate slightly in 2019 and 2020, due to the deterioration of external conditions. Real GDP growth is projected at 7 percent in 2019 and expected to decline towards its potential of 6.5 percent over the medium term. Inflation was low at 2.4 percent in 2018 and is expected to remain at the same level in 2019.

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<sup>3</sup> Based on Cambodia Public Debt Statistical Bulletin (see Table 13 "Old Debt Under Negotiation"). Data reflects principal amounts, i.e. excluding any accumulated interest. The arrears relate to borrowing prior to 1993.

<sup>4</sup> According to CEIC data, sourced from the NBC, Cambodia's total external debt amounted to US\$13.1 billion in 2018. Although the database does not publish the public/private breakdown, private debt can be estimated at about US\$6.1 billion (25.4 percent of GDP) by deducting PPG external debt.

**7. External sector.** The current account deficit was 12.2 percent of GDP in 2018. On the back of strong FDI inflows and robust remittances, foreign reserves reached US\$14.6 billion (7 months of imports).<sup>5</sup> Exports growth was robust in 2018 but is projected to moderate due to the deterioration of the external environment. The current account deficit is expected to widen further in 2019 due to sustained import growth of construction materials and consumption goods, and to narrow over the medium term as the real estate and credit cycles mature. External debt disbursements are expected to increase gradually between 2019–24, in line with wider fiscal deficits, and to reduce gradually in the long term, as access to ODA declines as Cambodia reaches a higher level of development and domestic financing increases. Nevertheless, external borrowing is projected to remain largely concessional over the next decade and external debt is projected to reach 29.5 percent of GDP by 2024 and to stabilize at 32.3 percent of GDP in 2029.

**8. Fiscal.** The fiscal balance was in surplus of 0.7 percent of GDP in 2018, compared to 4.0 percent deficit in the budget law, due to significant tax revenue overperformance.<sup>6</sup> Consequently, the level of government deposits rose to 15 percent of GDP by end-2018. The fiscal balance is projected to narrow to about 0.5 percent of GDP in 2019 and to post a deficit in 2020, -1.7 percent of GDP, due to a scale up in capital expenditure. The fiscal deficit is projected to widen further over the medium-term, as revenue growth moderates—absent tax policy reforms—while capital and other development spending to address still large development needs are expected to increase.

**9. Domestic debt.** As Cambodia’s financial sector continues to develop and access to concessional financing declines, the government is expected to start issuing domestic government bonds that will provide additional fiscal financing. Hence, this analysis assumes that the government will issue long-term domestic bonds starting in 2022. The annual issuance of domestic bonds of medium-term maturity is projected to increase gradually, from 0.4 percent of GDP in 2022 to 1 percent in 2039. Domestic PPG debt is therefore expected to increase from 0 to 4.1 percent of GDP by 2039.

**10. Realism of the baseline (Figure 4).** Cross-country experience suggests that the baseline fiscal adjustment is feasible. The maximum adjustment over the next 3-year period is a 2.1 percentage point increase in the primary deficit-to-GDP ratio. The projected slowdown in near-term growth is mainly driven by external factors, and the growth path projection is lower than suggested by fiscal multipliers. Finally, the contribution of public capital to GDP growth in the baseline scenario is in line with historical values. The main difference in assumptions with respect to last year are a smaller primary fiscal deficit, a higher current account deficit, and higher FDI inflows.

Cambodia: Key Macroeconomic Assumptions, 2018-24 (average)		
	Baseline	Previous DSA
Real GDP growth (in percent)	6.8	6.5
GDP deflator (change, in percent)	1.8	1.8
Primary fiscal balance (in percent of GDP)	-1.2	-2.6
Current account (in percent of GDP)	-12.2	-8.7
FDI (in percent of GDP)	12.5	10.6

<sup>5</sup> The definition of international reserves has been modified to include foreign currency reserve assets from commercial bank’s unrestricted deposits with the central bank, in line with BPM6. These deposits amounted to about US\$4.5 billion in 2018.

<sup>6</sup> Revisions reflect authorities’ transition to Government Finance Statistics Manual 2014 (GFSM 2014) reporting format with support from IMF TA.

## COUNTRY CLASSIFICATION AND DETERMINATION OF SCENARIO STRESS TESTS

**11. Country classification.** The revised LIC-DSF determines the debt sustainability thresholds by calculating a *composite indicator* (CI). The CI captures the impact of the different factors through a weighted average of the country’s real GDP growth, remittances, international reserves, world growth and the CPIA score.<sup>7</sup> The calculation of the CI is based on 10-year averages of the variables, across 5 years of historical data and 5 years of projections. For Cambodia, the CI score based on the 2019 October WEO data and the World Bank’s 2018 CPIA, corresponds to a *strong* rating. Because the previous rating was also *strong* (using the 2019 April WEO data), the final classification is changed to *strong*.<sup>8</sup> The corresponding thresholds are noted in the table below. PV of debt-to-exports threshold is set at 240 percent. Debt service-to-exports and to-revenue thresholds are set respectively to 21 percent and 23 percent.

<b>Cambodia: Debt Carrying Capacity and Thresholds</b>		
<b>Debt Carrying Capacity</b>		
<b>Final</b>	Classification based on current vintage	Classification based on the previous vintage
<b>Strong</b>	Strong	Strong
	3.08	3.08
<b>Applicable thresholds</b>		
<b>EXTERNAL debt burden thresholds</b>		
PV of debt in % of		
Exports	240	
GDP	55	
Debt service in % of		
Exports	21	
Revenue	23	
<b>TOTAL public debt benchmark</b>		
PV of total public debt in percent of GDP		
	70	

**12. Tailored stress test.** Cambodia is highly vulnerable to climate change and is likely to experience an increase in temperatures, as well as longer and more intense droughts and flooding. The cost of natural disasters is estimated at USD 235 million per year (World Bank, 2018).<sup>9</sup> In addition to the six standardized stress tests, the analysis includes a large natural disaster scenario, calibrated using the template’s default settings, including a significant mitigation cost of 10 percent of GDP (USD 24 billion) and lowering growth and exports using an interaction coefficient of 1.5 and 3.5, respectively.

<sup>7</sup> The details on the methodology can be found in the LIC-DSF guidance note: <https://www.imf.org/en/Publications/Policy-Papers/Issues/2018/02/14/pp122617guidance-note-on-lic-dsf>

<sup>8</sup> The CI rating for the 2018 Article IV consultation Debt Sustainability Analysis was *medium*. Country classification are revised if two consecutive signals suggest an upgrade or downgrade.

<sup>9</sup> Cambodia; Sustaining Strong Growth for the Benefit of All. World Bank, 2018.

## EXTERNAL AND PUBLIC SUSTAINABILITY

**13. The external DSA shows that Cambodia’s risk of debt distress is low.** Under the baseline scenario, the PV of public external debt ratios never breach their respective thresholds and are projected to remain flat 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 (Figure 1).

**14. Stress tests suggest vulnerability to export shocks.**<sup>10</sup> For all four indicators, the export shock is identified as the most extreme one, leading to a rise of the ratios larger than for shocks to real growth, fiscal primary balance, exchange rate depreciation and external flows. Under the export scenario, the PV of public external debt-to-GDP ratio would increase quickly from 22.3 percent in 2019 to 39.9 in 2020, but would remain well under the 55 percent threshold.

**15. The overall risk of public debt distress is low.** Under the baseline, total PPG debt is projected to rise from 28.6 percent of GDP in 2018 to 32 percent in 2039 (Table 2). The PV of total debt-to-GDP ratio is expected to increase to 25.4 percent in 2029, as the share of concessional external debt to total debt decreases, but to remain well below the 70 percent benchmark (Figure 2). Debt-to-revenue and debt service-to-revenue ratios are also expected to increase over the next decade.

**16. PPG debt is vulnerable to growth and contingent liabilities shocks.** A growth shock (calibrated at 1 standard deviation of historical performance) would lead to a rise of the PV of total debt-to-GDP ratio to 39 percent in 2029. The realization of contingent liabilities related to PPPs and financial stress could increase the debt service-to-revenue ratio from 5 percent in 2019 to 16 in 2022.

## CONCLUSION

**17. Cambodia remains at low risk of debt distress.** PPG debt-to-GDP ratio is expected to rise by 6½ percentage points during the next decade due to projected scale-up in infrastructure investment. To preserve public debt sustainability in the medium-term, the government should establish a fiscal anchor by introducing a debt ceiling and fully developing a medium-term budget framework. The baseline projections and the standard stress tests show increasing risks. Stress tests indicate that Cambodia’s debt sustainability remains vulnerable to shocks to exports, economic growth and contingent liabilities. 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

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<sup>10</sup> The standardized export shock assumes an export growth at baseline value minus 1 standard deviation and lower GDP growth in 2020-21. This translates into export growth at 2½ percent and GDP growth at 0 percent.

mobilization strategy. Further efforts to implement sound public investment management and PPP frameworks and strengthen analysis of PPP risks are needed. Finally, the authorities should focus on closing data gaps, in particular regarding data on external private debt and the PPP stock.

**Table 1. Cambodia: Debt Sustainability Framework, Baseline Scenario, 2016–2039**  
(In percent of GDP, unless otherwise indicated)

	Actual			Projections								Average 8/	
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2029	2039	Historical	Projections
External debt (nominal) 1/ of which: public and publicly guaranteed (PPG)	29.1	30.0	28.6	28.5	28.3	28.2	28.2	28.6	29.5	32.3	32.0	30.1	29.9
Change in external debt	-2.0	0.9	-1.4	-0.1	-0.2	-0.1	0.0	0.4	0.9	0.4	-0.4	30.1	29.9
Identified net debt-creating flows	-6.4	-6.8	-3.2	-1.1	-0.9	-0.9	-1.7	-3.2	-4.5	-2.3	-3.0	-5.1	-2.3
Non-interest current account deficit	8.3	7.8	12.1	13.2	13.3	13.1	12.1	10.6	9.2	9.2	4.0	8.7	10.9
Deficit in balance of goods and services	11.2	10.9	14.1	14.8	14.7	14.3	13.2	11.4	9.8	9.3	5.7	12.7	11.6
Exports	71.4	71.4	75.3	79.5	83.4	86.8	89.4	91.7	93.8	94.8	94.4		
Imports	82.6	82.2	89.4	94.4	98.1	101.1	102.6	103.1	103.7	104.1	100.0		
Net current transfers (negative = inflow)	-7.8	-7.9	-7.0	-6.7	-6.7	-6.7	-6.6	-6.6	-6.5	-6.3	-6.1	-8.6	-6.5
of which: official	-2.5	-2.5	-1.8	-1.7	-1.6	-1.6	-1.5	-1.5	-1.4	-1.2	-1.0		
Other current account flows (negative = net inflow)	4.9	4.8	5.1	5.0	5.2	5.4	5.6	5.7	5.9	6.3	4.4	4.6	5.8
Net FDI (negative = inflow)	-12.0	-12.1	-12.6	-12.8	-12.7	-12.6	-12.5	-12.4	-12.3	-10.0	-5.5	-11.7	-11.8
Endogenous debt dynamics 2/	-2.7	-2.5	-2.6	-1.5	-1.5	-1.4	-1.4	-1.4	-1.4	-1.5	-1.5		
Contribution from nominal interest rate	0.4	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.5		
Contribution from real GDP growth	-1.9	-1.8	-2.1	-1.8	-1.8	-1.8	-1.7	-1.7	-1.7	-1.9	-1.9		
Contribution from price and exchange rate changes	-1.1	-1.0	-0.7	—	—	—	—	—	—	—	—		
Residual 3/	4.3	7.6	1.8	1.0	0.6	0.8	1.7	3.6	5.4	2.7	2.6	5.3	2.6
of which: exceptional financing	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
<b>Sustainability indicators</b>													
PV of PPG external debt-to-GDP ratio	...	...	22.9	22.3	21.9	21.6	21.2	21.1	21.4	22.7	22.9	6.3	6.6
PV of PPG external debt-to-exports ratio	...	...	30.4	28.0	26.3	24.9	23.7	23.1	22.8	24.0	24.2	2.5	2.0
Total external debt service-to-exports ratio	...	...	105.4	99.3	98.8	97.1	96.5	96.9	97.7	100.9	98.6	1.0	1.2
PPG debt service-to-exports ratio	1.3	1.3	1.4	1.6	1.7	1.6	1.6	1.5	1.4	1.1	1.1	14.3	11.0
PPG debt service-to-revenue ratio	5.1	4.8	5.0	5.7	6.3	6.2	6.4	6.1	5.9	4.7	6.1	14.0	10.2
Gross external financing need (Million of U.S. dollars)	-552.2	-738.3	128.4	455.7	578.2	599.3	361.6	-163.8	-715.8	169.8	-135.5		
<b>Key macroeconomic assumptions</b>													
Real GDP growth (in percent)	6.9	7.0	7.5	7.0	6.8	6.7	6.6	6.6	6.5	6.5	6.5	6.3	6.6
GDP deflator in US dollar terms (change in percent)	3.7	3.5	2.4	2.0	1.2	1.6	1.8	1.9	1.9	2.4	3.0	2.5	2.0
Effective interest rate (percent) 4/	1.3	1.2	0.6	1.2	1.2	1.2	1.2	1.2	1.2	1.3	1.5	1.0	1.2
Growth of exports of G&S (US dollar terms, in percent)	7.6	10.7	16.3	15.3	13.3	12.9	11.8	11.3	11.1	9.4	9.3	14.3	11.0
Growth of imports of G&S (US dollar terms, in percent)	6.6	10.3	19.7	15.3	12.3	11.8	10.1	9.1	9.2	9.0	9.0	14.0	10.2
Grant element of new public sector borrowing (in percent)	...	...	...	42.0	41.2	42.9	44.5	43.6	43.6	41.0	35.6	...	42.7
Government revenues (excluding grants, in percent of GDP)	18.3	19.7	21.7	22.4	22.2	22.2	22.0	21.8	21.9	22.5	23.2	15.9	22.2
Aid flows (in Million of US dollars) 5/	496.0	421.9	527.7	865.3	753.1	816.4	908.7	935.4	1033.4	940.6	838.5		
Grant-equivalent financing (in percent of GDP) 6/	...	...	...	3.2	2.7	2.5	2.4	2.4	2.4	1.7	1.3	...	2.3
Grant-equivalent financing (in percent of external financing) 6/	...	...	...	65.4	60.1	58.4	57.3	53.6	51.4	44.6	36.2	...	53.1
Nominal GDP (Million of US dollars)	20,043	22,189	24,444	26,688	28,850	31,272	33,935	36,851	39,992	61,287	151,350		
Nominal dollar GDP growth	10.8	10.7	10.2	9.2	8.1	8.4	8.5	8.6	8.5	9.1	9.7	9.0	8.7
<b>Memorandum items:</b>													
PV of external debt 7/	...	...	22.9	22.3	21.9	21.6	21.2	21.1	21.4	22.7	22.9		
In percent of exports	...	...	30.4	28.0	26.3	24.9	23.7	23.1	22.8	24.0	24.2		
Total external debt service-to-exports ratio	1.3	1.3	1.4	1.6	1.7	1.6	1.6	1.5	1.4	1.1	1.1		
PV of PPG external debt (in Million of US dollars)	...	...	5588.8	5948.4	6328.9	6747.4	7189.3	7789.8	8556.2	13934.0	34614.4		
(PVt-PVt-1)/GDPt-1 (in percent)	...	...	1.5	1.4	1.5	1.4	1.4	1.8	2.1	2.3	2.0		
Non-interest current account deficit that stabilizes debt ratio	10.3	6.9	13.4	13.3	13.5	13.2	12.2	10.1	8.3	8.9	4.4		

Sources: Country authorities; and staff estimates and projections.

1/ Includes public 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/ Current-year interest payments divided by previous period debt stock.

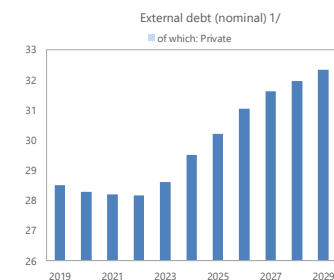
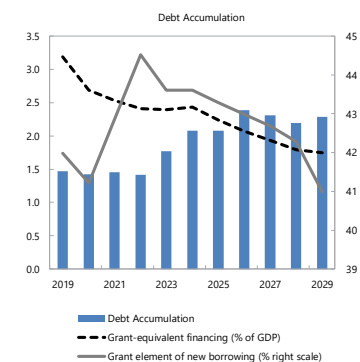
5/ Defined as grants, concessional loans, and debt relief.

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

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

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

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





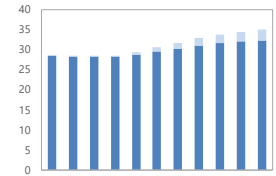
**Table 2. Cambodia: Public Sector Debt Sustainability Framework, Baseline Scenario, 2016–2039**  
(In percent of GDP, unless otherwise indicated)

	Actual			Projections								Average 6/	
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2029	2039	Historical	Projections
<b>Public sector debt 1/</b>	29.1	30.0	28.6	28.5	28.3	28.2	28.5	29.3	30.6	34.9	36.1	30.1	31.0
of which: external debt	29.1	30.0	28.6	28.5	28.3	28.2	28.2	28.6	29.5	32.3	32.0	30.1	29.9
<b>Change in public sector debt</b>	-2.0	0.9	-1.4	-0.1	-0.2	-0.1	0.3	0.8	1.3	0.5	-0.2	-0.2	0.1
<b>Identified debt-creating flows</b>	-2.8	-2.0	-3.7	-3.0	-0.7	-0.9	0.1	0.6	1.1	0.6	0.1	-0.2	0.1
Primary deficit	-0.1	0.5	-1.1	-0.9	1.4	1.1	2.1	2.6	3.1	2.9	2.4	2.0	2.2
Revenue and grants	20.8	21.6	23.9	24.4	23.6	23.4	22.9	22.6	22.5	22.8	23.2	19.1	23.0
of which: grants	2.5	1.9	2.2	2.0	1.4	1.2	1.0	0.8	0.7	0.2	0.0		
Primary (noninterest) expenditure	20.8	22.1	22.8	23.5	25.0	24.5	25.0	25.2	25.6	25.6	25.6	21.1	25.2
<b>Automatic debt dynamics</b>	-2.7	-2.4	-2.6	-2.1	-2.1	-2.0	-2.0	-2.0	-2.0	-2.3	-2.3		
Contribution from interest rate/growth differential	-1.9	-2.1	-2.6	-2.1	-2.1	-2.0	-2.0	-2.0	-2.0	-2.0	-2.3		
of which: contribution from average real interest rate	0.1	-0.2	-0.5	-0.2	-0.3	-0.2	-0.2	-0.2	-0.2	-0.2	-0.1		
of which: contribution from real GDP growth	-2.0	-1.9	-2.1	-1.9	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-2.2		
Contribution from real exchange rate depreciation	-0.8	-0.4	0.0	...	...	...	...	...	...	...	...		
<b>Other identified debt-creating flows</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Privatization receipts (negative)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Recognition of contingent liabilities (e.g., bank recapitalization)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Debt relief (HIPC and other)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Other debt creating or reducing flow (please specify)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
<b>Residual</b>	0.8	2.9	2.3	2.8	0.5	0.8	0.2	0.2	0.1	-0.1	-0.3	0.4	0.4
<b>Sustainability indicators</b>													
<b>PV of public debt-to-GDP ratio 2/</b>	...	...	22.8	22.5	22.1	21.7	21.6	22.0	22.6	25.4	27.1		
<b>PV of public debt-to-revenue and grants ratio</b>	...	...	95.6	92.1	93.4	92.8	94.3	97.1	100.1	111.6	116.5		
<b>PV of public debt-to-revenue ratio</b>	...	...	105.1	100.2	99.4	97.7	98.5	100.6	103.1	112.7	116.7		
<b>Debt service-to-revenue and grants ratio 3/</b>	4.5	4.4	4.6	5.3	5.9	5.9	6.1	6.0	5.8	5.8	8.2		
<b>Debt service-to-revenue ratio 3/</b>	5.1	4.8	5.0	5.7	6.3	6.2	6.4	6.2	6.0	5.9	8.2		
Gross financing need 4/	0.9	1.4	0.0	0.4	2.8	2.5	3.5	3.9	4.4	4.2	4.3		
in billions of U.S. dollars	174.2	311.3	5.7	105.5	793.8	770.5	1181.7	1438.8	1766.2	2583.2	6550.0		
<b>Key macroeconomic and fiscal assumptions</b>													
Real GDP growth (in percent)	6.9	7.0	7.5	7.0	6.8	6.7	6.6	6.6	6.5	6.5	6.5	6.3	6.6
Average nominal interest rate on external debt (in percent)	1.3	1.2	0.6	1.2	1.2	1.2	1.2	1.2	1.2	1.3	1.5	1.0	1.3
Average real interest rate on domestic debt (in percent)	-2.2	-2.0	-1.8	-2.5	-2.6	-2.6	-2.8	1.8	1.9	1.4	0.8	-1.4	0.1
Real exchange rate depreciation (in percent, + indicates depreciation)	-2.7	-1.3	-0.2	...	...	...	...	...	...	...	...	-1.0	...
Inflation rate (GDP deflator, in percent)	3.5	3.3	2.5	2.5	2.7	2.7	2.9	3.0	3.0	3.5	4.2	2.5	3.1
Growth of real primary spending (deflated by GDP deflator, in percent)	11.1	13.7	11.1	10.5	13.4	4.5	9.0	7.2	8.6	6.5	6.5	14.9	7.8
Primary deficit that stabilizes the debt-to-GDP ratio 5/	2.0	-0.4	0.3	-0.8	1.6	1.2	1.8	1.7	1.8	2.4	2.6	0.6	1.6
PV of contingent liabilities (not included in public sector debt)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		

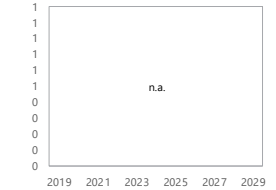
Definition of external/domestic debt	Currency-based
Is there a material difference between the two criteria?	No

Public sector debt 1/

■ of which: local-currency denominated  
■ of which: foreign-currency denominated



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



Sources: Country authorities; and staff estimates and projections.

1/ Coverage of debt: The central government, central bank, government-guaranteed debt, non-guaranteed SOE debt. Definition of external debt is Currency-based.

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

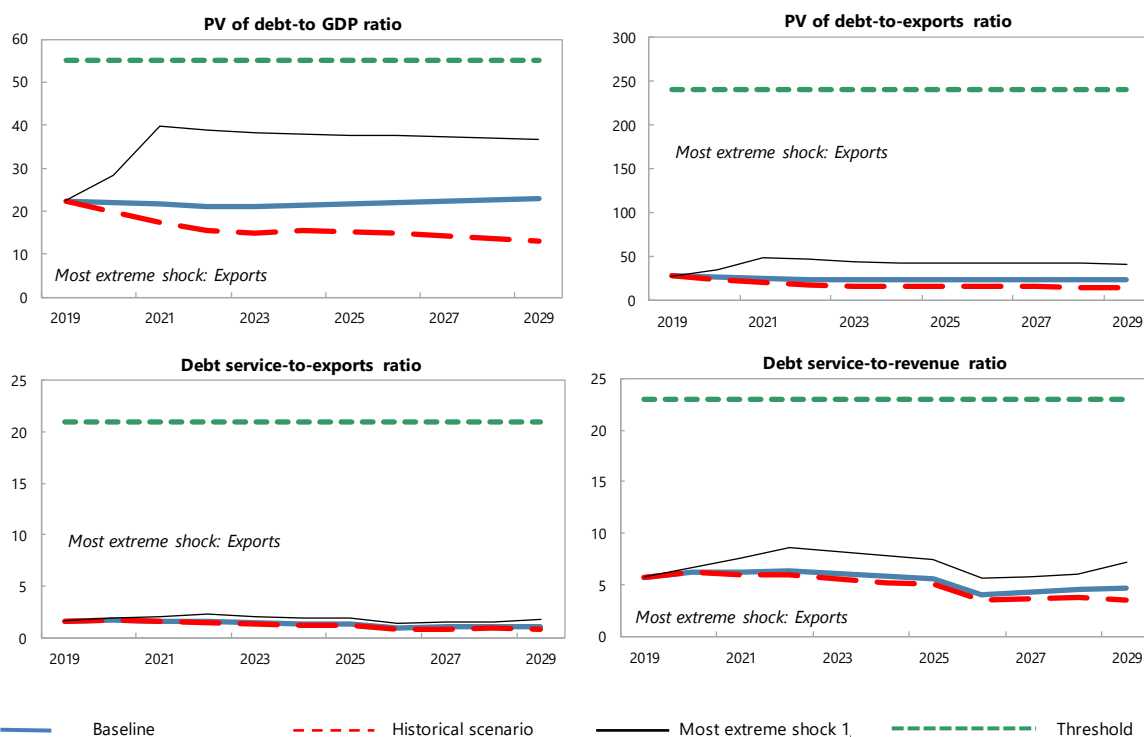
3/ Debt service is defined as the sum of interest and amortization of medium and long-term, and short-term debt.

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

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

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

**Figure 1. Cambodia: Indicators of Public and Publicly Guaranteed External Debt under Alternatives Scenarios, 2019–2029 1/**



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

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

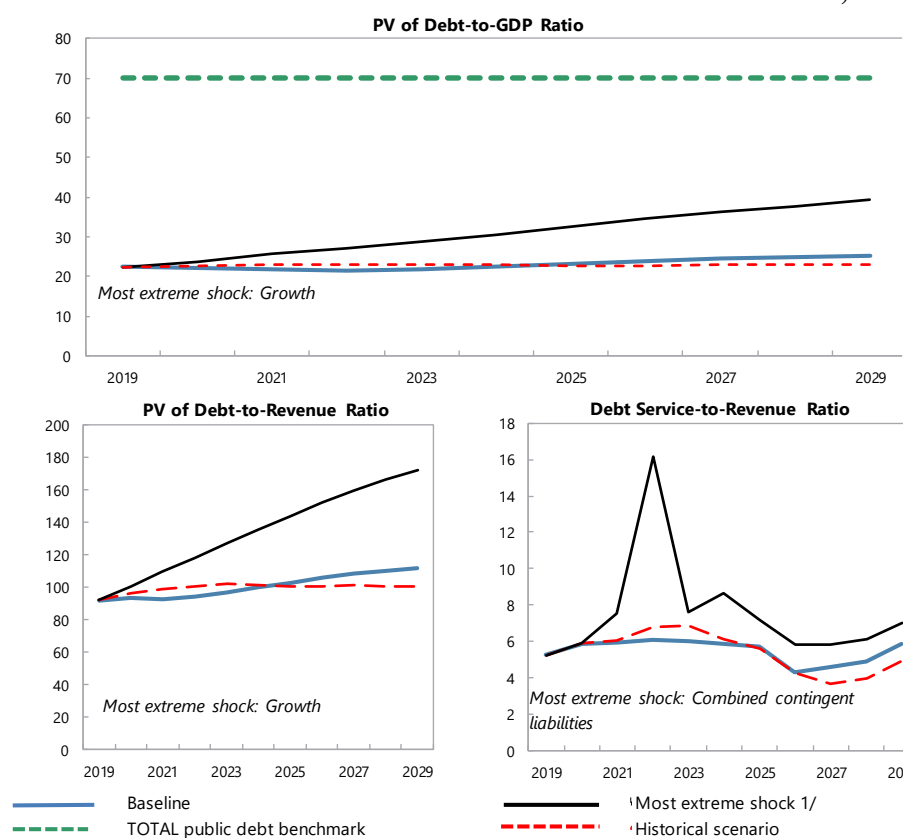
Borrowing assumptions on additional financing needs resulting from the stress tests*		
	Default	User defined
<b>Shares of marginal debt</b>		
External PPG MLT debt	100%	
<b>Terms of marginal debt</b>		
Avg. nominal interest rate on new borrowing in USD	1.2%	1.2%
USD Discount rate	5.0%	5.0%
Avg. maturity (incl. grace period)	25	25
Avg. grace period	8	8

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

Sources: Country authorities; and staff estimates and projections.

1/ The most extreme stress test is the test that yields the highest ratio in or before 2029. The stress test with a one-off breach is also presented (if any), while the one-off breach is deemed away for mechanical signals. When a stress test with a one-off breach happens to be the most extreme shock even after disregarding the one-off breach, only that stress test (with a one-off breach) would be presented.

**Figure 2. Cambodia: Indicators of Public Debt Under Alternative Scenarios, 2019–2029 1/**



Borrowing assumptions on additional financing needs resulting from the stress tests*	Default	User defined
<b>Shares of marginal debt</b>		
External PPG medium and long-term	92%	83%
Domestic medium and long-term	8%	17%
Domestic short-term	0%	0%
<b>Terms of marginal debt</b>		
<b>External MLT debt</b>		
Avg. nominal interest rate on new borrowing in USD	1.2%	2.7%
Avg. maturity (incl. grace period)	25	20
Avg. grace period	8	8
<b>Domestic MLT debt</b>		
Avg. real interest rate on new borrowing	1.8%	2.0%
Avg. maturity (incl. grace period)	7	3
Avg. grace period	6	1
<b>Domestic short-term debt</b>		
Avg. real interest rate	0.0%	3.0%

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

Sources: Country authorities; and staff estimates and projections.

1/ The most extreme stress test is the test that yields the highest ratio in or before 2029. The stress test with a one-off breach is also presented (if any), while the one-off breach is deemed away for mechanical signals. When a stress test with a one-off breach happens to be the most extreme shock even after disregarding the one-off breach, only that stress test (with a one-off breach) would be presented.

**Table 3. Cambodia Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2019–2029**  
(In Percent)

	Projections 1/										
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
<b>PV of debt-to GDP ratio</b>											
<b>Baseline</b>	22	22	22	21	21	21	22	22	22	23	23
<b>A. Alternative Scenarios</b>											
A1. Key variables at their historical averages in 2019-2029 2/	22	20	17	15	15	15	15	15	14	14	13
<b>B. Bound Tests</b>											
B1. Real GDP growth	22	23	23	23	23	23	23	24	24	24	25
B2. Primary balance	22	24	25	25	25	25	25	26	26	26	26
B3. Exports	22	28	40	39	38	38	38	37	37	37	37
B4. Other flows 3/	22	24	26	26	25	25	25	26	26	26	26
B5. Depreciation	22	28	23	23	23	24	24	25	25	26	26
B6. Combination of B1-B5	22	28	29	28	28	28	28	28	29	29	28
<b>C. Tailored Tests</b>											
C1. Combined contingent liabilities	22	31	30	31	30	30	30	30	30	30	30
C2. Natural disaster	22	29	28	29	29	29	29	30	30	30	30
C3. Commodity price	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
<b>Threshold</b>	55	55	55	55	55	55	55	55	55	55	55
<b>PV of debt-to-exports ratio</b>											
<b>Baseline</b>	28	26	25	24	23	23	23	23	24	24	24
<b>A. Alternative Scenarios</b>											
A1. Key variables at their historical averages in 2019-2029 2/	28	24	20	17	16	16	16	16	15	14	14
<b>B. Bound Tests</b>											
B1. Real GDP growth	28	26	25	24	23	23	23	23	24	24	24
B2. Primary balance	28	28	29	28	27	27	27	27	27	27	27
B3. Exports	28	35	49	46	44	43	43	43	42	42	41
B4. Other flows 3/	28	29	30	29	28	27	27	27	27	27	27
B5. Depreciation	28	26	21	20	20	20	20	21	21	21	22
B6. Combination of B1-B5	28	33	30	32	31	30	30	30	31	30	30
<b>C. Tailored Tests</b>											
C1. Combined contingent liabilities	28	37	35	34	33	32	32	32	32	32	32
C2. Natural disaster	28	35	33	33	32	32	32	32	32	32	32
C3. Commodity price	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
<b>Threshold</b>	240	240	240	240	240	240	240	240	240	240	240
<b>Debt service-to-exports ratio</b>											
<b>Baseline</b>	2	2	2	2	1	1	1	1	1	1	1
<b>A. Alternative Scenarios</b>											
A1. Key variables at their historical averages in 2019-2029 2/	2	2	2	1	1	1	1	1	1	1	1
<b>B. Bound Tests</b>											
B1. Real GDP growth	2	2	2	2	1	1	1	1	1	1	1
B2. Primary balance	2	2	2	2	2	1	1	1	1	1	1
B3. Exports	2	2	2	2	2	2	2	1	1	2	2
B4. Other flows 3/	2	2	2	2	2	1	1	1	1	1	1
B5. Depreciation	2	2	2	2	1	1	1	1	1	1	1
B6. Combination of B1-B5	2	2	2	2	2	2	2	1	1	1	2
<b>C. Tailored Tests</b>											
C1. Combined contingent liabilities	2	2	2	2	2	2	2	1	1	1	1
C2. Natural disaster	2	2	2	2	2	2	2	1	1	1	1
C3. Commodity price	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
<b>Threshold</b>	21	21	21	21	21	21	21	21	21	21	21
<b>Debt service-to-revenue ratio</b>											
<b>Baseline</b>	6	6	6	6	6	6	6	4	4	5	5
<b>A. Alternative Scenarios</b>											
A1. Key variables at their historical averages in 2019-2029 2/	6	6	6	6	6	5	5	4	4	4	3
<b>B. Bound Tests</b>											
B1. Real GDP growth	6	7	7	7	7	6	6	4	5	5	5
B2. Primary balance	6	6	6	7	7	6	6	5	5	5	5
B3. Exports	6	7	8	9	8	8	7	6	6	6	7
B4. Other flows 3/	6	6	6	7	6	6	6	4	5	5	5
B5. Depreciation	6	8	8	8	7	7	7	5	5	5	6
B6. Combination of B1-B5	6	7	7	7	7	7	7	5	5	5	6
<b>C. Tailored Tests</b>											
C1. Combined contingent liabilities	6	6	8	8	7	7	7	5	5	6	6
C2. Natural disaster	6	6	7	7	7	7	7	5	5	5	6
C3. Commodity price	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
<b>Threshold</b>	23	23	23	23	23	23	23	23	23	23	23

Sources: Country authorities; and staff estimates and projections.

1/ A bold value indicates a breach of the threshold.

2/ Variables include real GDP growth, GDP deflator (in U.S. dollar terms), non-interest current account in percent of GDP, and non-debt creating flows.

3/ Includes official and private transfers and FDI.

**Table 4. Cambodia Sensitivity Analysis for Key Indicators of Public Debt, 2019–2029**  
(In percent)

	2019	2020	2021	2022	Projections 1/					2028	2029
					2023	2024	2025	2026	2027		
<b>PV of Debt-to-GDP Ratio</b>											
<b>Baseline</b>	22	22	22	22	22	23	23	24	25	25	25
<b>A. Alternative Scenarios</b>											
A1. Key variables at their historical averages in 2019-2029 2/	22	23	23	23	23	23	23	23	23	23	23
<b>B. Bound Tests</b>											
B1. Real GDP growth	22	24	26	27	29	31	32	34	36	38	39
B2. Primary balance	22	24	26	26	26	26	27	27	28	28	28
B3. Exports	22	27	35	35	34	34	34	35	35	35	35
B4. Other flows 3/	22	24	26	26	26	27	27	28	28	28	29
B5. Depreciation	22	27	24	22	21	19	18	17	16	15	14
B6. Combination of B1-B5	22	23	23	21	22	22	22	23	24	24	25
<b>C. Tailored Tests</b>											
C1. Combined contingent liabilities	22	33	32	31	31	32	32	32	32	33	33
C2. Natural disaster	22	31	30	30	30	31	31	32	32	33	33
C3. Commodity price	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
<b>TOTAL public debt benchmark</b>	70	70	70	70	70	70	70	70	70	70	70
<b>PV of Debt-to-Revenue Ratio</b>											
<b>Baseline</b>	92	93	93	94	97	100	102	106	108	110	112
<b>A. Alternative Scenarios</b>											
A1. Key variables at their historical averages in 2019-2029 2/	92	96	99	101	102	101	101	101	101	101	100
<b>B. Bound Tests</b>											
B1. Real GDP growth	92	100	110	118	127	136	144	152	160	167	172
B2. Primary balance	92	103	112	113	115	117	119	121	123	125	125
B3. Exports	92	113	150	151	152	153	153	154	155	154	153
B4. Other flows 3/	92	103	112	114	116	118	120	122	124	125	125
B5. Depreciation	92	114	104	97	92	86	80	76	72	68	64
B6. Combination of B1-B5	92	98	100	93	96	97	100	103	106	107	109
<b>C. Tailored Tests</b>											
C1. Combined contingent liabilities	92	140	138	137	139	140	141	142	143	144	143
C2. Natural disaster	92	130	129	130	133	136	138	141	143	144	145
C3. Commodity price	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
<b>Debt Service-to-Revenue Ratio</b>											
<b>Baseline</b>	5	6	6	6	6	6	6	4	5	5	6
<b>A. Alternative Scenarios</b>											
A1. Key variables at their historical averages in 2019-2029 2/	5	6	6	7	7	6	6	4	4	4	5
<b>B. Bound Tests</b>											
B1. Real GDP growth	5	6	7	8	8	8	8	7	8	8	10
B2. Primary balance	5	6	6	9	9	7	7	5	5	5	7
B3. Exports	5	6	6	7	7	7	7	5	5	6	7
B4. Other flows 3/	5	6	6	6	6	6	6	5	5	5	7
B5. Depreciation	5	7	7	8	6	7	6	4	5	5	5
B6. Combination of B1-B5	5	6	6	6	7	6	6	4	5	5	6
<b>C. Tailored Tests</b>											
C1. Combined contingent liabilities	5	6	8	16	8	9	7	6	6	6	7
C2. Natural disaster	5	6	7	14	8	8	7	6	6	6	7
C3. Commodity price	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

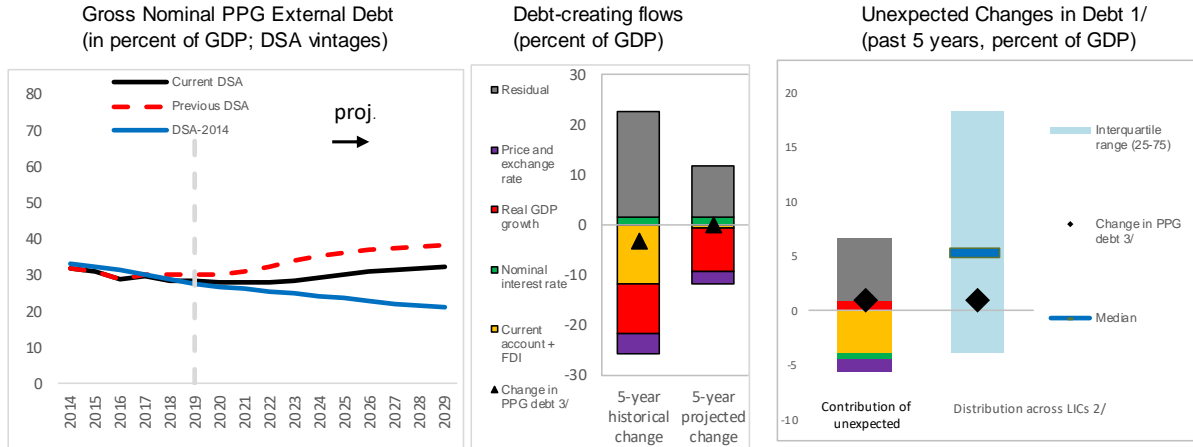
Sources: Country authorities; and staff estimates and projections.

1/ A bold value indicates a breach of the benchmark.

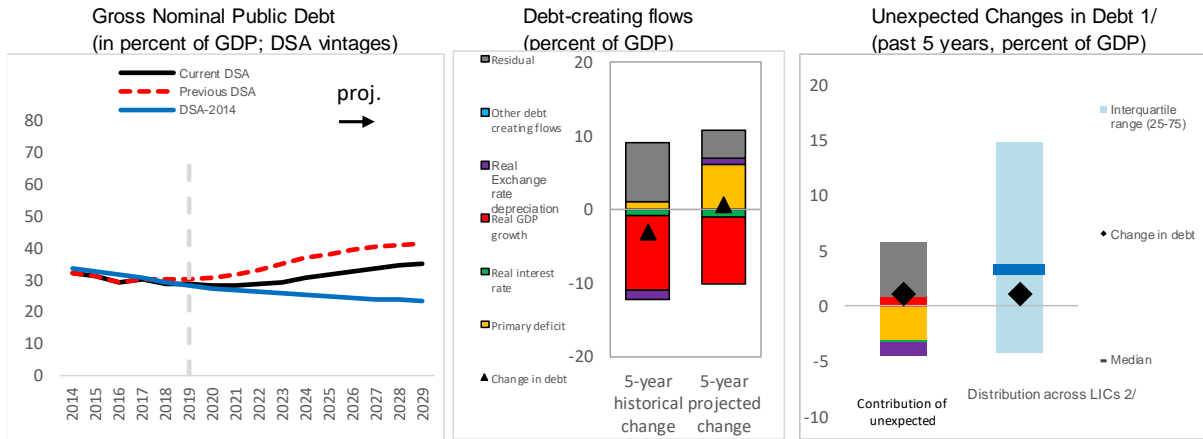
2/ Variables include real GDP growth, GDP deflator and primary deficit in percent of GDP.

3/ Includes official and private transfers and FDI.

**Figure 3. Cambodia: Drivers of Debt Dynamics – Baseline Scenario External Debt**



**Public debt**



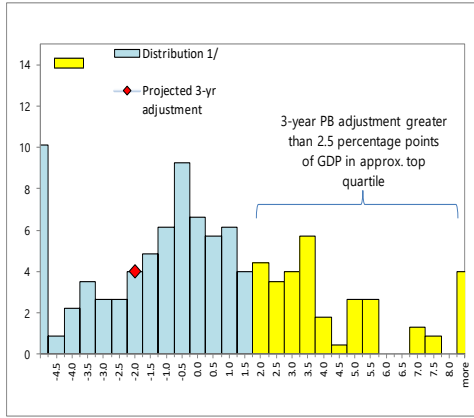
1/ Difference between anticipated and actual contributions on debt ratios.

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

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

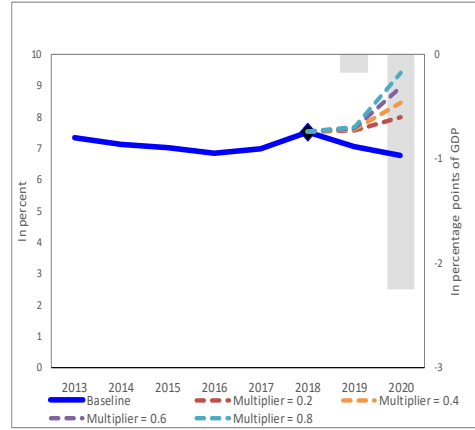
**Figure 4. Cambodia: Realism Tools**

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



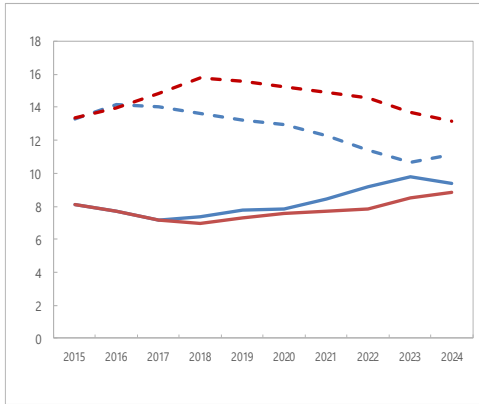
1/ Data cover Fund-supported programs for LICs (excluding emergency financing) approved since 1990. The size of 3-year adjustment from program inception is found on the horizontal axis; the percent of sample is found on the vertical axis.

**Fiscal Adjustment and Possible Growth Paths 1/**



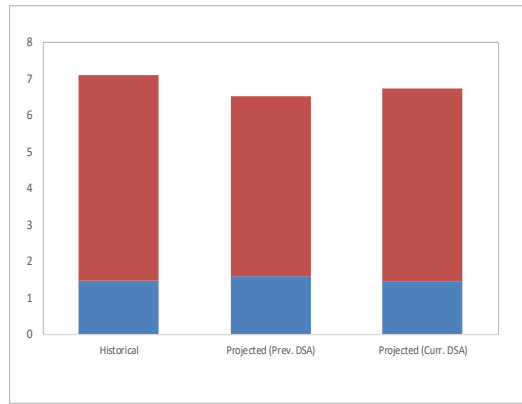
1/ Bars refer to annual projected fiscal adjustment (right-hand side scale) and lines show possible real GDP growth paths under different fiscal multipliers (left-hand side scale).

**Public and Private Investment Rates  
(percent of GDP)**



— Gov. Invest. - Prev. DSA      — Gov. Invest. - Curr. DSA  
 - - - Priv. Invest. - Prev. DSA      - - - Priv. Invest. - Curr. DSA

**Contribution to Real GDP growth  
(percent, 5-year average)**



■ Contribution of other factors  
 ■ Contribution of government capital