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CAMBODIA

JOINT WORLD BANK-IMF DEBT SUSTAINABILITY ANALYSIS

Approved by:

Hassan Zaman and Marcello Estevão (IDA); Anne-Marie Gulde Wolf and Andrea Schaechter (IMF)

Prepared by the staff of the International Development Association (IDA) and the International Monetary Fund (IMF).

CAMBODIA: JOINT BANK-FUND DEBT SUSTAINABILITY ANALYSIS	
Risk of external debt distress	Low
Overall risk of debt distress	Low
Granularity in the risk rating	Not applicable
Application of judgment	Yes: the breach of the export shock stress test is small and temporary.

Cambodia remains at low risk of external and overall debt distress under the Low-Income Countries Debt Sustainability Framework (LIC-DSF).[1] The current debt-carrying capacity[2] remains consistent with a medium classification. The baseline scenario assumes steady economic recovery, largely driven by exports of tourism services and, to a lesser extent, manufacturing goods, notwithstanding pressures on external demand in the near term. The total PPG debt-to-GDP ratio is projected to rise by around 4 percentage points during the next decade. The present value of the external debt-to-GDP ratio breaches its threshold in the exports stress test, which would imply a moderate risk rating. However, the breaches are small, short-lived (only four periods, the last barely), and driven by the exceptional volatility of exports in 2020 that has increased the sample volatility for the standardized shock. Moreover, other debt burden indicators are projected to remain well below their thresholds under the baseline and the shock scenarios. Given the expectation of a steady and solid recovery, and because the breaches for one of the tests are small, temporary, and driven by the exceptional volatility of exports in 2020, judgment has been applied that the external risk of debt distress remains low. Nonetheless, the analysis shows that debt sustainability remains vulnerable to shocks in exports and growth. These findings reinforce the importance of implementing reforms to increase the economy's resilience to external shocks and

[1] This DSA follows the Guidance Note on the Bank-Fund Debt Sustainability Framework for Low Income Countries (imf.org), February 2018 (GN).

[2] Cambodia's Composite Indicator (CI) index, based on the April 2022 WEO update and the World Bank's 2020 CPIA, indicates that the country's debt-carrying capacity remains medium (2.968), the same as in the 2021 DSA (in which the CI index was 2.966).

to facilitate export and economic diversification. Efforts to mobilize fiscal revenue, strengthen the Public Investment Management Framework, and further enhance monitoring of Public-Private partnerships (PPP) and financial sector risks are needed to ensure debt sustainability over the medium term.

PUBLIC DEBT COVERAGE

1. **The DSA covers central government debt and debt guaranteed by the central government to state-owned enterprises (SOEs).** By law, state and local governments and the central bank do not engage in borrowing, and SOEs do not contract non-guaranteed loans. Currently, 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 (text table 1). Consistent with the previous DSA, external debt is defined on a currency basis.

Text Table 1. Public Sector Debt Coverage

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

Text Table 2. Design of Contingent Liability Stress Test

The country's coverage of public debt	The central government, central bank, government-guaranteed debt, non-guaranteed SOE 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	5.8	Staff estimates
Financial market (the default value of 5 percent of GDP is the minimum value)	5	percent of GDP	10.0	Giving risks emerging from private external borrowing
Total (2+3+4+5) (in percent of GDP)			15.8	

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%.

2. **The DSA includes contingent liability stress tests for PPPs and a financial market shock** (text table 2).

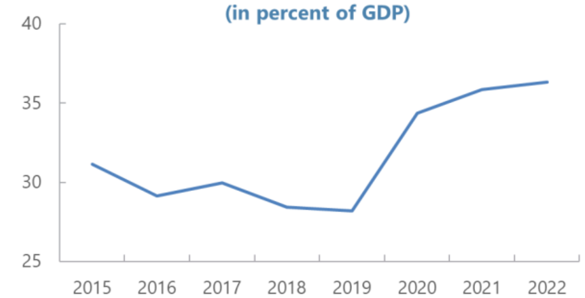
- The shock scenario for the SOE debt is set to 0 percent of GDP because, by law, SOEs do not engage in non-guaranteed external borrowing, and guarantees to SOEs are included in public debt. According to the IMF's Investment and Capital Stock Dataset and information provided by the authorities, the capital stock of PPPs is estimated at 16.5 percent of GDP as end of 2021, corresponding to a contingent liability of 5.8 percent of GDP.

- The standard financial market shock is intensified in this DSA. Specifically, the financial market shock assumes contingent liabilities from financial markets to be 10 percent of GDP, twice the default value of 5 percent of GDP. This change is included to account for the risks emerging from private sector debt that has grown steadily as a share of nominal GDP. Around 7 percent of the total stock of outstanding credit has been restructured (amounting to 13 percent of GDP; given the current stock of restructured loans, further losses may yet have to be recognized by banks.

BACKGROUND ON DEBT

3. **Cambodia's external public debt amounted to around US$ 9.5 billion (36 percent of GDP) by end 2021.** The external debt-to-GDP ratio increased slightly in 2021, by 1.5 percentage points, following a more sizable increase in 2020 and given slack in the economy and extended fiscal responses to the COVID-19 pandemic (text figure 1). Bilateral debt continues to account for around 70 percent of total external debt, with more than half owed to China (text table 3).[3] External debt has been accrued on concessional terms, with a present value of around 24 percent of GDP at end-2021. The debt stock includes legacy arrears to the Russian Federation and the United States of about 2.4 percent of GDP. As the status of negotiations of these arrears remains unchanged compared to the previous DSA, this analysis assumes no debt restructuring.[4] In addition, as the arrears reflect diplomatic disagreements, they do not trigger an "in debt distress" rating.

Text Figure 1. External Public Debt (in percent of GDP)



Sources: Cambodian authorities; and IMF estimates.

Text Table 3. External Public Debt (2021)

	In million of U.S. dollars	In percent of GDP	In percent of external debt
Total	9502.7	35.7	100.0
Multilateral	2892.2	10.9	30.4
Bilateral	6,610.5	24.9	69.6
of which: China	4,054.1	15.2	42.7

Sources: Cambodia authorities; and IMF estimates.

4. **Public domestic debt remains negligible.** Public domestic debt comprised only non-marketable bonds issued by SOEs, and the outstanding debt (about US$ 1.6 million by end 2019) had been fully repaid in early 2020. To support financial market development, the authorities started to issue local-currency government bonds in 2022,[5] while strengthening market infrastructure to manage issuance, registration, and trading of domestic securities.

[3] According to Cambodia Public Debt Statistical Bulletin, (see Table 3 "Debt Stock"), the multilateral debt in the text table 3 is breakdown by the Asian Development Bank as US$ 1,943 million, the World Bank as US$ 730 million, and others. (Nothing is owed to the IMF.)

[4] See Cambodia Public Debt Statistical Bulletin, Table 13 ("Old Debt Under Negotiation"). The data reflect principal amounts, i.e. excluding any accumulated interest. The arrears relate to obligations made by the then-government in the early 1970s, which have been refuted by subsequent governments. There has been no progress at resolving this issue during Paris Club negotiations.

[5] The authorities drafted the preliminary "Policy Framework of Development on the Government Securities" in September 2021, which aimed at (i) the first securities issuance in 2022, (ii) setting principles for the usage of fund from government securities, and (iii) appointing the NBC as a fiscal agent and arranging the issuance operations. In September 2022, the authorities issued a local-currency bond for the first time, floating KHR 41.7 billion (around US$ 10 million) at a 2.2 percent yield with a tenor of 1 year. The authorities plan further issuances up to US$ 300 million during the rest of 2022, including at longer maturities.

5. PPPs are assumed to continue to play an important role in financing investment projects, in expectation of diminishing access to concessional financing and slow progress in developing domestic debt markets. The PPP stock more than doubled between 2010 and 2015, and was estimated at around 16.5 percent of GDP by end-2021. The authorities have been taking welcome steps to strengthen the PPP framework in line with past Fund recommendations, including a system for risk assessment and the necessary legal, regulatory, and institutional arrangement for PPP management.[6]

6. Private external debts in Cambodia are excluded from this analysis. Staff estimates private external debt at about 39 percent of GDP in 2021, broadly unchanged since last year.[7] Risks emerging from excessive external borrowing by the private sector could increase the government's exposure to contingent liabilities.

BACKGROUND ON MACRO FORECASTS

7. The Cambodian economy was hit hard by the COVID-19 pandemic, but damage was mitigated by policy measures. Cambodia was hit first by external shocks, such as the loss of tourism from early 2020 and a collapse in demand for manufactured goods, and then community spread of the virus in in 2021. However, large fiscal buffers provided room for increased spending on health care, employment support, and cash transfers to households; and substantial foreign exchange reserves kept the exchange rate from coming under significant pressure.

8. From the second half of 2021, the Cambodian economy showed stronger signs of recovery from COVID-19 pandemic stresses. Growth was driven mainly by exports of goods, while growth in construction and real estate—large contributors to growth before the crisis—was relatively weak.

9. Credit growth has continued to be strong, and private sector indebtedness is now very high.

- Credit growth averaged around 24 percent y/y from 2013 to 2019 and slowed only mildly during the pandemic. Private sector debt growth has consistently outstripped growth in nominal GDP; outstanding private sector credit reached 170 percent of GDP by end 2021, a ratio above those of other countries in the region, suggesting that the level cannot be safely dismissed as driven by financial deepening. Moreover, these numbers do not account for credit issued by unsupervised lenders (such as real estate developers and pawn shops), which could be sizeable. Restructured loans in June 2022 are estimated to be about 7 percent of lending (13 percent of GDP), and non-performing loans have risen to 2.8 percent of outstanding loans (nearly 4½ percent of GDP).

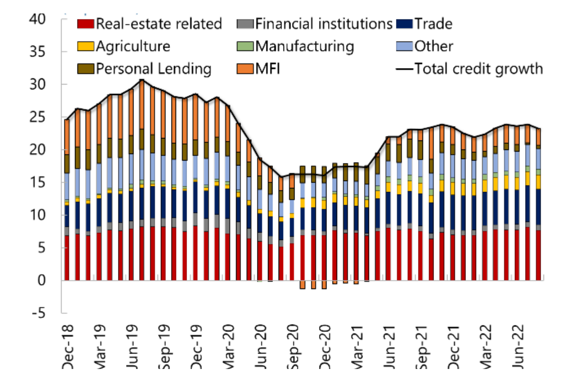
[6] For example, a central PPP unit had been established under the Ministry of Economy and Finance, and a new law on PPP was enacted in November 2021.

[7] According to CEIC data, the total external debt amounted to US$ 20 billion in 2021, and private debt can be estimated at about US$ 11 billion after deducting PPG external debt.

- Credit growth has not been driven by only one or two sectors of the economy (e.g. overheating in real estate and construction) but has been strong across all sectors, with retail and wholesale trade accounting for the largest share of total debt outstanding, followed by commercial real estate and construction.[8] Roughly two thirds of loans are corporate. A substantial portion of loans classified as to households might be personal borrowing for small businesses. The number of loans has increased but the number of borrowers has increased at a slower pace, suggesting that some borrowers are becoming more leveraged.

Text Figure 2. Contribution to Private Credit Growth

(In percent)



- Credit growth was associated in 2020 and 2021 with growth in broad money that, although lower than that in 2019, was still stronger than growth in nominal GDP, driven in part by the expansion in the central bank's balance sheet as the government drew down on deposits at the central bank to finance fiscal support during the pandemic. It was also supported by the steady inflow of FX deposits in commercial banks,[9] and a steady increase in the loan-to-deposit ratio.

10. There are signs of damage from the crisis. Lack of employment data make it difficult to assess scarring effects in the labor market. But test scores indicate that lost schooling hours during the COVID-19 pandemic has damaged human capital attainment. Approvals of large (foreign-financed) projects remain lower than before the crisis and falling lease yields indicate excess supply of commercial property; business registrations appear to be recovering, but liquidations are have been increasing.

11. 2022 has brought new stresses:

- China is a significant source of foreign investment, particularly in real estate, and the major supplier of textiles to the garments industry. The slowdown in China and further lockdowns therefore have the potential to slow the Cambodian economy. Continued restrictions on movement mean that a quick return to pre-crisis tourist numbers is unlikely, given the importance of Chinese tourists to Cambodia.

- Although Cambodia has limited export and financial exposure to Ukraine and Russia, Europe is a major market for its manufactures.

- The tightening of monetary conditions in advanced economies will have mostly indirect effects, through external demand. However, although the financial system is mostly reliant on deposit

[8] The growth in credit is almost entirely to the private sector—that to government was less than one percent.

[9] The expansion in the central bank's balance sheet was only partially offset by reductions in FX reserves and liquidity operations.

funding, demand for wholesale funding by some institutions has been increasing. The plans to increase issuance of sovereign debt will face a more competitive environment for funding.

12. These new stresses have been associated with a surge in inflation. Cambodia's reliance on imported fuel is higher than many other regional comparators; the recent increases in global fuel and fertilizer prices have resulted in historically high inflation rates. Headline inflation hit 7.8 percent y/y in June 2022 but has subsequently fallen to 4.9 percent y/y in August. The contribution of core items has increased, but remains muted so far.

13. The authorities' have largely continued with crisis policy responses, such as loans and guarantees, tax breaks, and wage subsidies and retraining. The authorities plan to fold the system of cash transfers introduced in 2020 into a broader social protection program. The National Bank of Cambodia (NBC) has maintained reserve requirements and the capital conservation buffer at current levels but has issued instructions for the end of loan forbearance.

14. The recovery is assumed to continue in the baseline projections. The Cambodian economy is projected to grow at 5 percent in 2022, nearly 5½ percent in 2023, reflecting external pressures and some drag from real estate and construction. Growth is expected to increase to just over 6 percent in 2024, and to gradually return to trend growth rates of around 6½ percent over the medium term, in line with projections in the previous DSA (text table 4). The trend growth rate is somewhat below pre-COVID-19 rates of 7 to 7½ percent, but comparable with those seen in neighboring countries at similar stages of development, and reflects a judgment that, although the COVID-19 crisis will have some lingering effects, the authorities' ongoing reforms (e.g. the new investment law) and new trade agreements (specifically, the RCEP and an FTA with China) will support growth over the medium term.

Text Table 4. Baseline Macroeconomic Assumptions (2021-2030)

	Previous DSA (2021)				Current DSA (2022)			
	2021	**2022**	**2023**	**2024-2030**	**2021**	**2022**	**2023**	**2024-2030**
Real GDP (%, YOY)	2.2	5.1	5.9	6.4	3.0	5.0	5.4	6.4
Inflation (%, YOY)	2.9	3.0	3.0	3.2	2.9	5.8	3.5	3.0
Primary Deficit (% to GDP)	5.2	3.6	3.4	2.9	6.7	3.8	4.7	2.6
Current Account Deficit (% to GDP)	26.9	16.7	9.2	8.8	47.5	30.0	14.1	7.2

Sources: staff estimates and projections

- *Growth and inflation.* The baseline outlook is for stronger growth, notwithstanding external pressures and risks. Growth is supported by relatively moderate but nonetheless solid goods exports, continued recovery of tourism, and ongoing policy support. It is dampened by the impact of inflation on real disposal income and the slowdowns in external demand growth. Inflation is expected to peak this year, be lower in 2023, and then decline further, assuming it remains mostly confined to imported goods.

- *External sector.* The current account deficit is expected to narrow in 2022 as energy prices and gold imports recede. Over the medium term, the current account deficit is estimated to narrow further as the tourism sector normalizes. Given the sizable current account deficit was partially offset by financial inflows, gross reserves decreased slightly in 2021, to US$ 21 billion. They are expected to remain at around 8 months of projected imports over the projection horizon.

- *Fiscal sector*. Staff projects the fiscal deficit to narrow to 4 percent of GDP in 2022, from 7 percent in 2021, on the back of broad-based tax revenue rebound and lower spending, increase somewhat in 2023, and to decline steadily thereafter. Staff expects that fiscal support will be contained in 2022 because of winding back emergency COVID-19 healthcare spending. In 2023, current spending is expected to increase slightly, reflecting planned wage increases and some decompression of government operations (e.g., travel), and social protection and capital spending levels are to be maintained. The overall deficit is then expected to narrow and to stabilize at around 3 percent of GDP over the long run, consistent with debt stabilizing at 40 percent of GDP.

15. Uncertainty around the outlook is particularly high; risks are tilted to the downside.

- *Credit:* The level of private debt raises concerns about the drag on the economy if borrowers struggle to meet repayments and large amounts of non-interest-paying assets in banks' balance sheets.

- *Conditions in key large economies:* Cambodia is highly export oriented. Further lockdowns in China could lead Cambodian manufacturers to suspend production for want of supplies, while a further slowdown could slow inward investment. Demand in advanced countries is vulnerable to tightening financial conditions; vulnerabilities in Europe are accentuated by energy supply risks.

- *Inflation:* Global food and fuel price inflation could prove to be more persistent, and inflation expectations could de-anchor in advanced countries, incurring further and more rapid tightening of monetary conditions and borrowing costs, and lower growth in advanced economies. Imported food and fuel price increases could generate second-round effects in domestic inflation that would damage aggregate demand, which would be accentuated if the currency depreciated, given extensive dollarization.

Over the medium term, the economy faces ongoing risks from a resurgence of COVID-19 or other epidemics, and the country is especially vulnerable to natural disasters arising from drought, floods, and tropical storms.

16. Financing assumptions reflect growing domestic debt issuance, while external debt remains the dominant source. The level of external borrowing is set at around 3.5-4 percent of GDP over the medium term, before declining to 2.8 percent of GDP by 2030 as the fiscal deficit narrows and domestic financing increases. For the purposes of this DSA, new external debt is expected to remain largely concessional, with an average maturity of 24 years and a nominal interest rate of less than or equal to 2 percent. Consistent with the authorities' plans, the analysis assumes that the authorities start to issue domestic debt from the second half of 2022 onward; the annual amount issued increases gradually, from 0.4 percent of GDP in 2022 to about 2 percent of GDP in 2042. Demand for domestic securities is supported by the growing insurance and pension industry.[10] Outstanding domestic PPG debt is therefore estimated to reach around 10 percent of GDP by 2042, accounting for about 25 percent of the total outstanding PPG debt.

17. Macroeconomic and fiscal assumptions are broadly reasonable, although subject to uncertainty, especially about external balances (figure 4).

- The projected growth path is higher than suggested by standard fiscal multipliers, mainly reflecting the recovery from the COVID-19 shock and growth convergence. The contribution of public capital to GDP growth in the baseline scenario is broadly in line with historical values. The primary deficit-to-GDP ratio improves by 3.5 percentage points over the next three years in the baseline projection—although this adjustment falls in the top quartile of the distribution for LICs, it is feasible, as the 2021 fiscal deficit was exceptionally large due to temporary measures taken to address the COVID-19 pandemic.

- The current account deficit is assumed to steadily shrink in the baseline projection. The services balance is assumed to recover because of growth in tourism and other exports. Crucially, the surge in gold imports seen in 2021 is assumed to be temporary. The deficit remains mostly financed in the baseline, as in previous years—as a result, reserves are expected to remain high and stable, at about 8 months of imports throughout the projection period. There is high uncertainty about the prospects for gold imports and financing of the deficit. A large component of the inflows that have financed the current account deficits has been from unidentified other short-term inflows, rather than FDI (as reflected in the large residuals identified in Table 1).[11] The large share of unidentified inflows in turn reflects measurement issues in the BoP data, which complicate the assessment of external sustainability.

COUNTRY CLASSIFICATION AND DETERMINATION OF SCENARIO STRESS TESTS

18. Cambodia's debt-carrying capacity is classified as medium, same as that in the previous DSA. Cambodia's composite indicator (CI)[12] score based on the 2022 April WEO and 2020 CPIA data corresponds to a medium rating. There has not been further deterioration of debt-carrying capacity since the 2021 DSA (text tables 5 and 6).

[10] Should demand for domestic issuance be less than expected, the government could choose to further draw down domestic deposits it holds at the central bank.

[11] Table 1 shows that external debt increased by only 1.5 percentage points of GDP between 2020 and 2021, despite a non-interest current account deficit of 47.1 percent of GDP. Only 13.1 percentage points were financed by net FDI inflows.

[12] The revised LIC-DSF determines the debt sustainability thresholds by calculating a Composite Indicator. The CI is a function of the World Bank's Country Policy and Institutional Assessment (CPIA) score, international reserves, remittances, individual country and global economic growth. The calculation is based on 10-year averages of the variables, across 5 years of historical data and 5 years of projection.

Text Table 5. Cambodia's CI Index

Debt Carrying Capacity	Medium		
Final	Classification based on current vintage	Classification based on the previous vintage	Classification based on the two previous vintages
Medium	Medium 2.968	Medium 2.974	Medium 2.966

Text Table 6. Debt Burden Thresholds

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

19. Stress tests include additional tailored stress tests. 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. Hence, in addition to the six standardized stress tests, the analysis includes a natural disaster scenario, calibrated assuming a significant mitigation cost of 10 percent of GDP (around US$ 2.6 billion) and a fall in GDP growth and exports using interaction coefficients of 1.5 and 3.5, respectively. The contingent liability stress test is based on the quantification of potential risks stemming from PPPs (5.8 percent of GDP) and financial markets (10 percent of GDP).

EXTERNAL AND PUBLIC DEBT SUSTAINABILITY

20. The external debt indicators show that Cambodia's risk of debt distress remains low. External debt is projected to increase marginally by 2025, from 36 percent of GDP in 2022, falling to 33 percent by 2032 and 30 percent by 2042 (table 1). In present value terms, the external debt-to-GDP ratio also falls, from 24 percent to 21 percent over the same timeframe (table 1). The large share of concessional loans means the debt service-to-exports and debt service-to-revenue ratios remain far below their indicative benchmarks throughout the forecast horizon.

21. Stress tests suggests that Cambodia's external debt is vulnerable to shocks to exports. Compared to shocks to real growth, the fiscal balance, exchange rate depreciation, and external flows, the impact of an exports shock is the most severe—the present value of the external debt-to-GDP ratio[13]

[13] The baseline scenario's results for this ratio deviate from the historical scenario because the baseline scenario treats the large current account deficit in 2021 as temporary, albeit with some persistence.

increases sharply, from 24 percent of GDP in 2022 to just over the 40 percent threshold of GDP,[14] and gradually falls back to about 35 percent over the medium term (figure 1).[15]

22. Public debt broadly follows external debt. Under the baseline, the total PPG debt level increases from 36 percent of GDP in 2021 to 41 percent of GDP in 2032, with an increased domestic financing mix. The present value of the total debt-to-GDP ratio is estimated to reach 30 percent in 2032, but remains well below the 55 percent benchmark. The debt service-to-revenue ratio is estimated to pick up briefly over the long term, along with a rising share of domestic debt[16] (figure 2). The stress tests indicate that PPG debt is vulnerable to shocks to growth: under the growth shock scenario, the present value of the total debt-to-GDP ratio rises to 53 percent by 2032, but does not breach the indicative threshold of 55 percent. The contingent liability stress test is the most extreme shock for the debt service-to-revenue ratio, which results in a noticeable spike in 2025 (figure 2), as the stress from the financial market (10 percent of GDP) results in temporary borrowing needs, increasing debt servicing.

RISK RATING AND VULNERABILITIES

23. Cambodia overall remains at low risk of both external and overall debt distress. Public debt is projected to rise by around 4 percentage points during the next decade. The present value of the external debt-to-GDP ratio breaches its threshold in the exports stress test, which would imply a moderate risk rating. However, the breaches are small, short-lived (only four periods, the last barely) and driven by the exceptional volatility of exports through the COVID-19 pandemic that has increased the sample volatility for the standardized shock. Moreover, other debt burden indicators are projected to remain well below their thresholds under the baseline and the shock scenarios. Against the expectation of a steady and solid recovery, coupled with the small and temporary nature of the breaches, judgment has therefore been applied that the external risk of debt distress remains low. However, the analysis shows that debt sustainability remains vulnerable to shocks in exports and growth.

24. Potential vulnerabilities to growth and external shocks highlight the importance of maintaining fiscal discipline and public debt management while promoting long-term growth. In light of heightened global risks, targeted and managed fiscal measures are important to safeguard near-term recovery. This reinforces the need to preserve macroeconomic stability, diversify the economy and exports to increase resilience to external shocks, and improve spending efficiency and the successful implementation of the revenue mobilization strategy. Further efforts to implement sound public investment management and PPP frameworks and strengthen analysis of PPP risks are needed. Finally, the

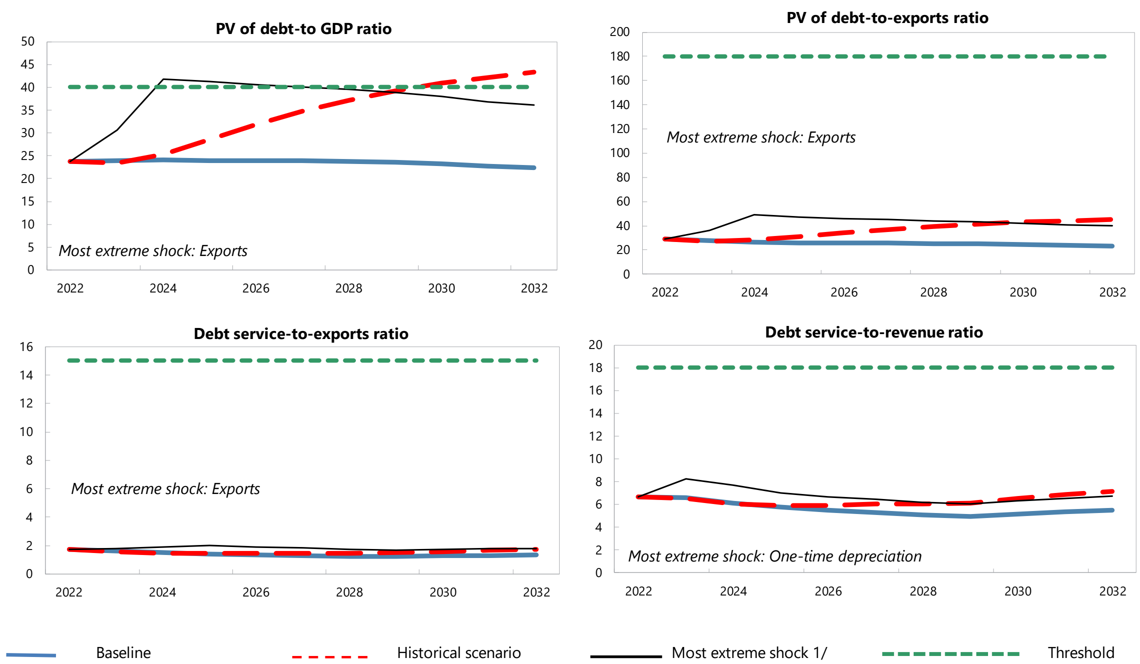
[14] The breaches are 1.81 percentage points in 2024, 1.21 in 2025, 0.63 in 2026, and 0.08 in 2027.

[15] This mechanical breach of the threshold is driven by transitory factors stemming from the COVID-19 crisis: Cambodia's exports fell by over 8 percent in 2020, substantially due to travel restrictions, compared with growth of over 15 percent y/y on average from 2011 to 2019. As a result, the standard deviation of exports used to scale the standardized shock increases significantly. Tourism remained moribund in 2021, but has bounced back with the relaxation of travel restrictions in 2022. On this basis, the large shocks to exports during 2020 and 2021 are viewed as exceptional and temporary.

[16] The stress test financing parameters have been customized to reflect domestic public debt issuing conditions (footnote 6) and the current tighter financing conditions than the DSA default.

authorities should focus on closing data gaps, in particular regarding data on external private debt and the PPP stock.

Figure 1. Cambodia: Indicators of Public and Publicly Guaranteed External Debt under Alternatives Scenarios, 2022–2032



Customization of Default Settings 2/	Size	Interactions
Tailored Stress		
Combined CL	Yes	
Natural disaster	No	No
Commodity price	n.a.	n.a.
Market financing	No	No

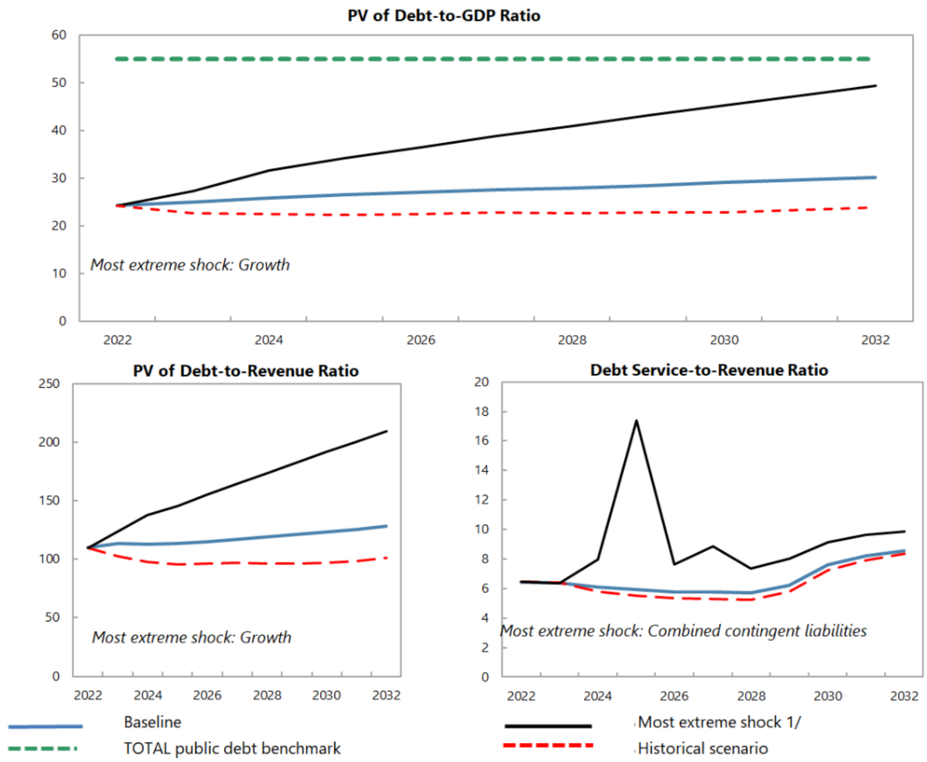
Note: "Yes" indicates any change to the size or interactions of the default settings for the stress tests. "n.a." indicates that the stress test does not apply.

Borrowing assumptions on additional financing needs resulting from the stress tests*	Default	User defined
Shares of marginal debt		
External PPG MLT debt	100%	
Terms of marginal debt		
Avg. nominal interest rate on new borrowing in USD	1.2%	1.2%
USD Discount rate	5.0%	5.0%
Avg. maturity (incl. grace period)	26	26
Avg. grace period	9	9

* 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 2032. 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 exterme shock even after disregarding the one-off breach, only that stress test (with a one-off breach) would be presented.
2/ The magnitude of shocks used for the commodity price shock stress test are based on the commodity prices outlook prepared by the IMF research department.

Figure 2. Cambodia: Indicators of Public Debt Under Alternative Scenarios, 2022-2032



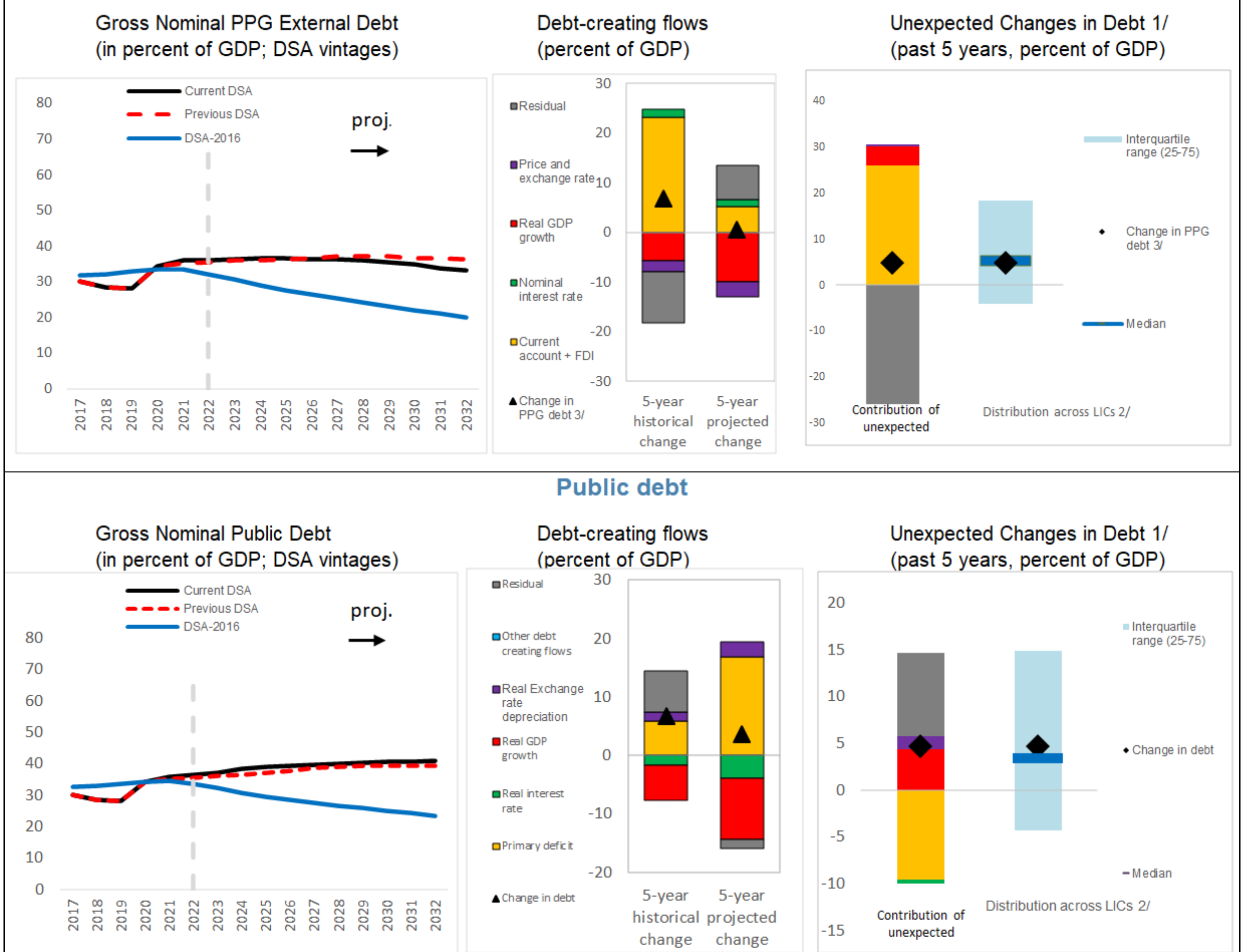
Borrowing assumptions on additional financing needs resulting from the stress tests*	Default	User defined
Shares of marginal debt		
External PPG medium and long-term	76%	83%
Domestic medium and long-term	24%	17%
Domestic short-term	0%	0%
Terms of marginal debt		
External MLT debt		
Avg. nominal interest rate on new borrowing in USD	1.2%	2.7%
Avg. maturity (incl. grace period)	26	20
Avg. grace period	9	9
Domestic MLT debt		
Avg. real interest rate on new borrowing	2.2%	2.0%
Avg. maturity (incl. grace period)	7	3
Avg. grace period	6	1
Domestic short-term debt		
Avg. real interest rate	-3.7%	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 2032. 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 exterme shock even after disregarding the one-off breach, only that stress test (with a one-off breach) would be presented.

Figure 3. Cambodia: Drivers of Debt Dynamics - Baseline Scenario

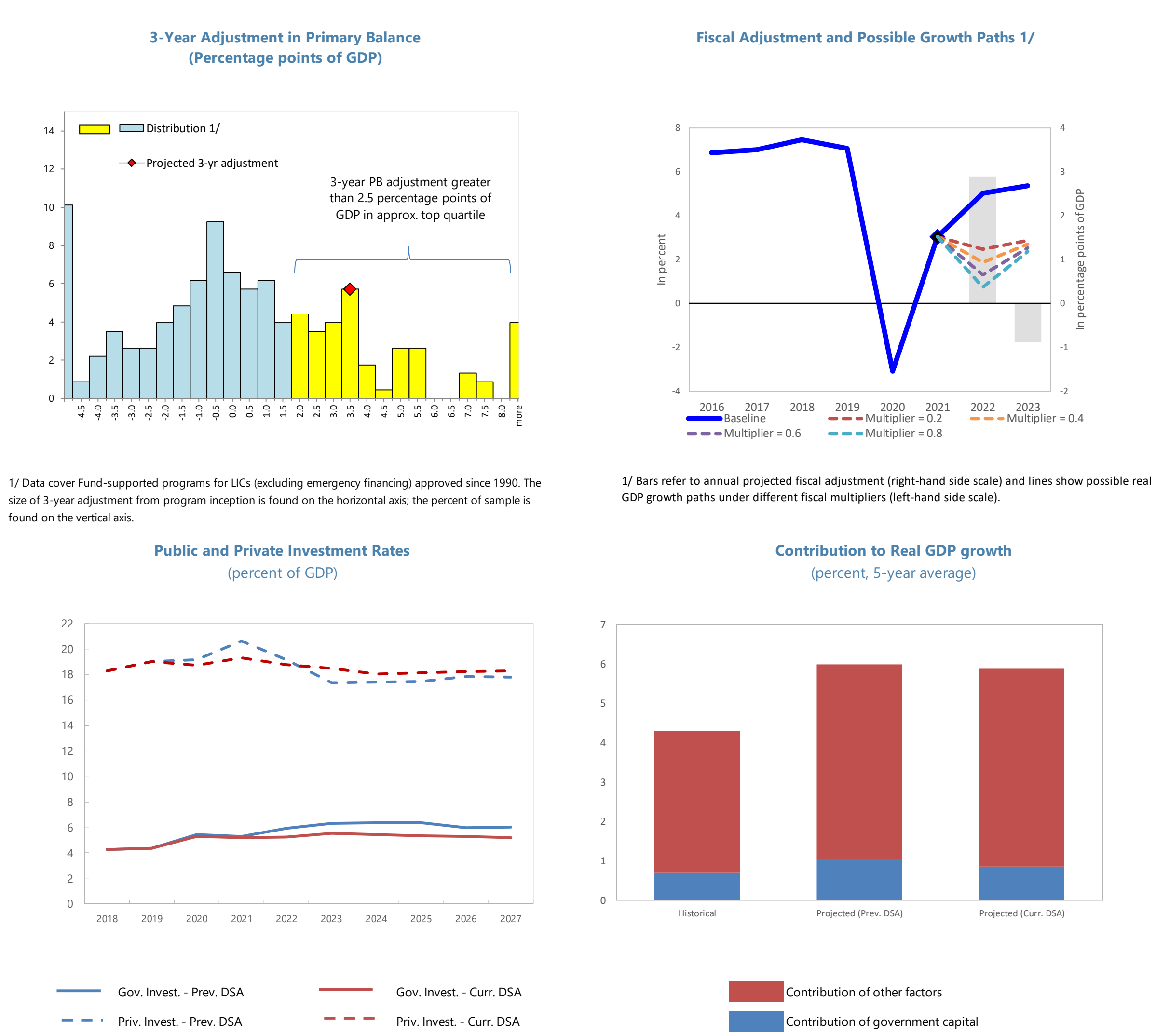


1/ Difference between anticipated and actual contributions on debt ratios.

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



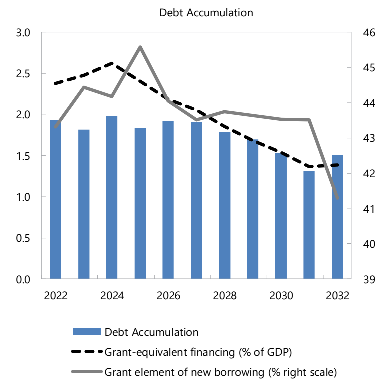
1/ Data cover Fund-supported programs for LICs (excluding emergency financing) approved since 1990. The size of 3-year adjustment from program inception is found on the horizontal axis; the percent of sample is found on the vertical axis.

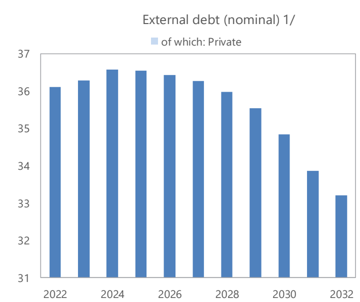
1/ Bars refer to annual projected fiscal adjustment (right-hand side scale) and lines show possible real GDP growth paths under different fiscal multipliers (left-hand side scale).

Table 1. Cambodia: External Debt Sustainability Framework, Baseline Scenario, 2019-2042
(In percent of GDP, unless otherwise indicated)

	Actual			Projections								Average 8/	
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2032	2042	Historical	Projections
External debt (nominal) 1/	**28.2**	**34.4**	**35.9**	**36.1**	**36.3**	**36.6**	**36.5**	**36.4**	**36.3**	**33.2**	**30.1**	**31.2**	**35.6**
of which: public and publicly guaranteed (PPG)	**28.2**	**34.4**	**35.9**	**36.1**	**36.3**	**36.6**	**36.5**	**36.4**	**36.3**	**33.2**	**30.1**	**31.2**	**35.6**
Change in external debt	-0.2	6.2	1.5	0.2	0.2	0.3	0.0	-0.1	-0.2	-0.7	-0.5		
Identified net debt-creating flows	**-1.1**	**-4.1**	**33.3**	**15.5**	**-0.3**	**-4.4**	**-7.1**	**-7.1**	**-6.9**	**-4.8**	**-1.9**	**-1.3**	**-3.5**
Non-interest current account deficit	**14.7**	**8.1**	**47.1**	**29.7**	**13.8**	**9.6**	**6.6**	**6.3**	**6.2**	**6.6**	**6.6**	**13.0**	**9.5**
Deficit in balance of goods and services	16.4	10.8	47.8	30.4	14.2	10.1	7.1	6.7	6.7	7.3	8.2	**16.3**	**10.0**
Exports	77.8	78.5	75.7	82.4	87.2	90.4	92.6	93.6	94.0	95.8	95.6		
Imports	94.2	89.3	123.4	112.9	101.5	100.4	99.8	100.3	100.7	103.1	103.9		
Net current transfers (negative = inflow)	-7.2	-6.4	-5.7	-5.5	-5.1	-5.0	-4.8	-4.6	-4.6	-4.0	-3.2	**-8.1**	**-4.6**
of which: official	-2.0	-1.7	-2.1	-2.0	-2.0	-1.9	-1.9	-1.8	-1.8	-1.6	-1.5		
Other current account flows (negative = net inflow)	5.4	3.7	5.0	4.8	4.6	4.5	4.3	4.2	4.1	3.3	1.5	**4.8**	**4.0**
Net FDI (negative = inflow)	**-13.5**	**-14.0**	**-13.1**	**-12.8**	**-12.5**	**-12.2**	**-11.9**	**-11.5**	**-11.2**	**-9.7**	**-6.9**	**-12.5**	**-11.2**
Endogenous debt dynamics 2/	**-2.3**	**1.8**	**-0.7**	**-1.4**	**-1.5**	**-1.8**	**-1.9**	**-1.9**	**-1.9**	**-1.7**	**-1.6**		
Contribution from nominal interest rate	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4		
Contribution from real GDP growth	-1.8	0.9	-1.0	-1.7	-1.8	-2.1	-2.2	-2.2	-2.2	-2.0	-2.0		
Contribution from price and exchange rate changes	-0.8	0.5	-0.1	...	...	...	...	...	...	...	...		
Residual 3/	**0.9**	**10.3**	**-31.8**	**-15.3**	**0.4**	**4.7**	**7.0**	**7.0**	**6.7**	**4.1**	**1.3**	**1.9**	**3.2**
of which: exceptional financing	0.0	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Sustainability indicators													
PV of PPG external debt-to-GDP ratio	**...**	**...**	**23.7**	**23.8**	**23.9**	**24.1**	**24.0**	**24.0**	**23.9**	**22.3**	**20.9**		
PV of PPG external debt-to-exports ratio	**...**	**...**	**31.4**	**28.9**	**27.4**	**26.6**	**25.9**	**25.6**	**25.5**	**23.3**	**21.9**		
Total external debt service-to-exports ratio	**...**	**...**	**118.6**	**111.5**	**113.2**	**109.6**	**106.2**	**104.9**	**104.5**	**95.7**	**88.1**		
PPG debt service-to-exports ratio	**1.5**	**1.8**	**1.9**	**1.7**	**1.6**	**1.5**	**1.4**	**1.3**	**1.3**	**1.3**	**1.5**		
PPG debt service-to-revenue ratio	**4.6**	**6.3**	**7.2**	**6.7**	**6.6**	**6.1**	**5.8**	**5.5**	**5.3**	**5.5**	**6.0**		
Gross external financing need (Million of U.S. dollars)	622.5	-1155.6	9436.5	5259.6	820.5	-416.3	-1397.1	-1550.8	-1584.0	-1109.6	1571.9		
Key macroeconomic assumptions													
Real GDP growth (in percent)	7.1	-3.1	3.0	5.0	5.4	6.1	6.4	6.5	6.6	6.6	7.1	**5.7**	**6.2**
GDP deflator in US dollar terms (change in percent)	2.9	-1.8	0.2	2.6	1.8	1.3	1.5	1.6	1.5	1.7	1.7	**1.8**	**1.7**
Effective interest rate (percent) 4/	1.3	1.1	1.0	0.8	0.8	0.9	0.9	1.0	1.0	1.2	1.6	**1.2**	**1.0**
Growth of exports of G&S (US dollar terms, in percent)	14.4	-4.1	-0.5	17.4	13.5	11.4	10.6	9.3	8.6	8.6	8.6	**10.2**	**10.3**
Growth of imports of G&S (US dollar terms, in percent)	16.7	-9.9	42.7	-1.5	-3.6	6.5	7.2	8.7	8.6	8.7	8.7	**13.8**	**6.3**
Grant element of new public sector borrowing (in percent)	...	...	...	43.3	44.4	44.2	45.6	44.1	43.5	41.3	35.6	**...**	**43.7**
Government revenues (excluding grants, in percent of GDP)	24.8	22.0	20.0	21.4	21.1	22.0	22.6	22.8	22.9	23.3	23.7	**19.0**	**22.6**
Aid flows (in Million of US dollars) 5/	544.1	497.4	416.4	719.2	868.5	991.1	1073.2	987.7	989.8	866.5	774.6		
Grant-equivalent financing (in percent of GDP) 6/	...	...	...	2.4	2.5	2.6	2.4	2.2	2.1	1.4	1.1	**...**	**2.0**
Grant-equivalent financing (in percent of external financing) 6/	...	...	...	51.8	54.5	54.7	54.9	52.3	51.5	45.4	36.2	**...**	**51.3**
Nominal GDP (Million of US dollars)	27,087	25,771	26,601	28,647	30,729	33,047	35,673	38,592	41,736	61,743	141,194		
Nominal dollar GDP growth	10.1	-4.9	3.2	7.7	7.3	7.5	7.9	8.2	8.1	8.3	9.0	**7.7**	**8.0**
Memorandum items:													
PV of external debt 7/	...	...	23.7	23.8	23.9	24.1	24.0	24.0	23.9	22.3	20.9		
In percent of exports	...	...	31.4	28.9	27.4	26.6	25.9	25.6	25.5	23.3	21.9		
Total external debt service-to-exports ratio	1.5	1.8	1.9	1.7	1.6	1.5	1.4	1.3	1.3	1.3	1.5		
PV of PPG external debt (in Million of US dollars)			6315.1	6829.2	7349.7	7958.3	8565.1	9249.8	9984.9	13791.0	29523.3		
(PVt-PVt-1)/GDPt-1 (in percent)				1.9	1.8	2.0	1.8	1.9	1.9	1.5	1.6		
Non-interest current account deficit that stabilizes debt ratio	14.9	2.0	45.6	29.5	13.6	9.3	6.7	6.4	6.3	7.2	7.1		

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





Sources: Country authorities; and staff estimates and projections.

1/ Includes both public and private sector external debt.

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

3/ Includes exceptional financing (i.e., changes in arrears and debt relief); changes in gross foreign assets; and valuation adjustments. For projections also includes contribution from price and exchange rate changes.

4/ 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).

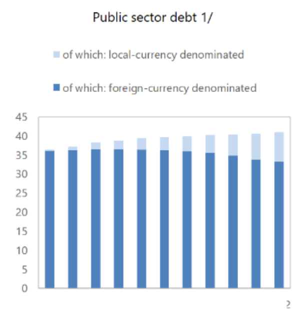
7/ Assumes that PV of private sector debt is equivalent to its face value.

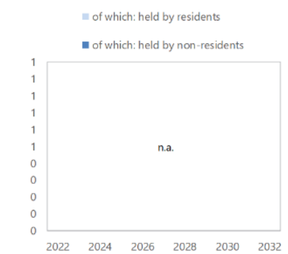
8/ Historical averages are generally derived over the past 10 years, subject to data availability, whereas projections averages are over the first year of projection and the next 10 years.

Table 2. Cambodia: Public Sector Debt Sustainability Framework, Baseline Scenario, 2019-2042
(In percent of GDP, unless otherwise indicated)

	Actual			Projections								Average 6/	
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2032	2042	Historical	Projections
Public sector debt 1/	28.2	34.4	35.9	36.3	37.2	38.2	38.9	39.3	39.7	40.9	40.4	31.2	39.3
of which: external debt	28.2	34.4	35.9	36.1	36.3	36.6	36.5	36.4	36.3	33.2	30.1	31.2	35.6
Change in public sector debt	-0.2	6.2	1.5	0.5	0.9	1.0	0.6	0.5	0.4	0.3	-0.5		
Identified debt-creating flows	-5.3	4.8	6.0	0.3	2.1	0.4	0.0	-0.4	-0.6	-0.5	-0.7	-0.4	0.0
Primary deficit	-3.3	3.0	6.7	3.8	4.7	3.1	2.7	2.4	2.3	2.3	2.1	1.4	2.9
Revenue and grants	26.8	23.9	21.6	22.1	22.0	22.9	23.4	23.5	23.5	23.6	23.8	21.4	23.2
of which: grants	2.0	1.9	1.6	0.7	0.8	0.9	0.7	0.6	0.6	0.2	0.0		
Primary (noninterest) expenditure	23.5	27.0	28.3	25.9	26.6	26.0	26.1	25.9	25.7	25.8	25.8	22.8	26.0
Automatic debt dynamics	-2.0	1.8	-0.7	-3.5	-2.6	-2.7	-2.8	-2.8	-2.8	-2.7	-2.8		
Contribution from interest rate/growth differential	-2.0	0.9	-2.0	-3.5	-2.6	-2.7	-2.8	-2.8	-2.8	-2.7	-2.8		
of which: contribution from average real interest rate	-0.1	0.0	-1.0	-1.8	-0.7	-0.5	-0.5	-0.4	-0.4	-0.3	0.0		
of which: contribution from real GDP growth	-1.9	0.9	-1.0	-1.7	-1.8	-2.2	-2.3	-2.4	-2.4	-2.5	-2.7		
Contribution from real exchange rate depreciation	0.0	0.9	1.3	...	...	...	...	...	...	...	...		
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	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		
Residual	5.1	1.4	-4.4	0.2	-1.2	0.6	0.7	0.9	1.0	0.8	0.2	1.0	0.4
Sustainability indicators													
PV of public debt-to-GDP ratio 2/	...	...	23.9	24.2	25.0	25.9	26.5	27.0	27.5	30.2	31.4		
PV of public debt-to-revenue and grants ratio	...	...	110.6	109.7	113.8	113.1	113.3	115.2	117.3	128.1	132.0		
PV of public debt-to-revenue ratio	...	...	119.3	113.3	118.2	117.7	117.0	118.3	120.2	129.3	132.2		
Debt service-to-revenue and grants ratio 3/	4.3	5.8	6.7	6.4	6.4	6.1	5.9	5.8	5.7	8.5	12.0		
Debt service-to-revenue ratio 3/	4.6	6.3	7.2	6.7	6.6	6.3	6.1	5.9	5.9	8.6	12.0		
Gross financing need 4/	-2.2	4.4	8.1	5.2	6.1	4.5	4.1	3.8	3.6	4.3	4.9		
in billions of U.S. dollars	-584.1	1143.4	2166.1	1499.6	1871.2	1484.6	1468.2	1469.5	1511.3	2657.0	6961.9		
Key macroeconomic and fiscal assumptions													
Real GDP growth (in percent)	7.1	-3.1	3.0	5.0	5.4	6.1	6.4	6.5	6.6	6.6	7.1	5.7	6.2
Average nominal interest rate on external debt (in percent)	1.3	1.1	1.0	0.8	0.8	0.9	0.9	1.0	1.0	1.2	1.6	1.1	1.0
Average real interest rate on domestic debt (in percent)	-1.9	1.8	-0.3	-2.8	2.0	2.5	2.4	2.3	2.4	2.1	2.1	-0.9	1.8
Real exchange rate depreciation (in percent, + indicates depreciation)	-0.1	3.0	4.0	...	...	...	...	...	...	...	...	0.2	...
Inflation rate (GDP deflator, in percent)	3.2	-0.7	1.3	3.7	2.9	2.4	2.6	2.7	2.6	2.8	2.9	2.0	2.8
Growth of real primary spending (deflated by GDP deflator, in percent)	10.7	11.3	8.0	-3.9	8.5	3.5	6.8	5.8	5.9	6.6	7.1	9.3	5.4
Primary deficit that stabilizes the debt-to-GDP ratio 5/	-3.1	-3.1	5.2	3.3	3.8	2.1	2.1	2.0	1.9	1.9	2.6	-0.3	2.4
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**





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 stabilizes 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.

Table 3. Cambodia: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2022–2032 (in percent)

	Projections 1/										
	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
PV of debt-to GDP ratio											
Baseline	24	24	24	24	24	24	24	24	23	23	22
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2022-2032 2/	24	23	25	29	32	35	37	39	**41**	**42**	**43**
B. Bound Tests											
B1. Real GDP growth	24	25	27	27	27	27	26	26	26	25	25
B2. Primary balance	24	26	30	29	29	29	29	29	28	27	27
B3. Exports	24	31	**42**	**41**	**41**	**40**	40	39	38	37	36
B4. Other flows 3/	24	26	27	27	27	27	27	26	26	25	25
B5. Depreciation	24	30	27	27	27	27	27	27	27	26	26
B6. Combination of B1-B5	24	30	31	31	31	31	30	30	30	29	28
C. Tailored Tests											
C1. Combined contingent liabilities	24	34	34	35	34	34	34	33	33	32	31
C2. Natural disaster	24	31	31	32	32	32	32	32	31	31	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	24	24	24	24	24	24	24	24	23	23	22
Threshold	40	40	40	40	40	40	40	40	40	40	40
PV of debt-to-exports ratio											
Baseline	29	27	27	26	26	25	25	25	24	24	23
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2022-2032 2/	29	27	28	31	34	37	39	41	43	44	45
B. Bound Tests											
B1. Real GDP growth	29	27	27	26	26	25	25	25	24	24	23
B2. Primary balance	29	29	33	32	31	31	31	30	29	29	28
B3. Exports	29	36	49	47	46	45	44	43	42	41	40
B4. Other flows 3/	29	29	30	29	29	29	28	28	27	26	26
B5. Depreciation	29	27	24	23	23	23	23	23	22	22	21
B6. Combination of B1-B5	29	35	32	34	34	33	33	32	31	31	30
C. Tailored Tests											
C1. Combined contingent liabilities	29	39	37	38	37	36	36	35	34	33	32
C2. Natural disaster	29	36	35	35	35	34	34	34	33	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	29	27	27	26	26	25	25	25	24	24	23
Threshold	180	180	180	180	180	180	180	180	180	180	180
Debt service-to-exports ratio											
Baseline	2	2	1	1	1	1	1	1	1	1	1
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2022-2032 2/	2	2	1	1	1	1	1	1	2	2	2
B. Bound Tests											
B1. Real GDP growth	2	2	1	1	1	1	1	1	1	1	1
B2. Primary balance	2	2	2	2	2	2	2	1	1	2	2
B3. Exports	2	2	2	2	2	2	2	2	2	2	2
B4. Other flows 3/	2	2	2	1	1	1	1	1	1	1	1
B5. Depreciation	2	2	1	1	1	1	1	1	1	1	1
B6. Combination of B1-B5	2	2	2	2	2	2	1	1	1	2	2
C. Tailored Tests											
C1. Combined contingent liabilities	2	2	2	2	2	2	2	2	2	2	2
C2. Natural disaster	2	2	2	2	2	2	2	1	2	2	2
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	2	2	1	1	1	1	1	1	1	1	1
Threshold	15	15	15	15	15	15	15	15	15	15	15
Debt service-to-revenue ratio											
Baseline	7	7	6	6	5	5	5	5	5	5	5
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2022-2032 2/	7	7	6	6	6	6	6	6	7	7	7
B. Bound Tests											
B1. Real GDP growth	7	7	7	6	6	6	6	6	6	6	6
B2. Primary balance	7	7	7	7	7	6	6	6	6	6	6
B3. Exports	7	7	7	8	7	7	7	7	7	7	7
B4. Other flows 3/	7	7	6	6	6	6	5	5	5	6	6
B5. Depreciation	7	8	8	7	7	6	6	6	6	7	7
B6. Combination of B1-B5	7	7	7	7	6	6	6	6	6	6	6
C. Tailored Tests											
C1. Combined contingent liabilities	7	7	8	7	7	7	6	6	6	7	7
C2. Natural disaster	7	7	7	7	7	6	6	6	6	6	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	7	7	6	6	5	5	5	5	5	5	5
Threshold	18	18	18	18	18	18	18	18	18	18	18

Sources: Country authorities; and staff estimates and projections.
1/ A bold value indicates a breach of the threshold.
2/ Variables include real GDP growth, GDP deflator (in U.S. dollar terms), non-interest current account in percent of GDP, and non-debt creating flows.
3/ Includes official and private transfers and FDI.

Table 4. Cambodia: Sensitivity Analysis for Key Indicators of Public Debt, 2022-2032

	Projections 1/										
	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
	PV of Debt-to-GDP Ratio										
Baseline	24	25	26	26	27	28	28	28	29	30	30
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2022-2032 2/	24	23	22	22	23	23	23	23	23	23	24
B. Bound Tests											
B1. Real GDP growth	24	27	32	34	36	39	41	43	45	47	49
B2. Primary balance	24	27	32	33	33	33	33	34	34	34	35
B3. Exports	24	30	39	39	39	39	39	39	39	39	40
B4. Other flows 3/	24	27	29	30	30	30	31	31	32	32	33
B5. Depreciation	24	30	29	27	26	24	23	22	21	20	19
B6. Combination of B1-B5	24	25	28	29	29	30	30	30	31	31	32
C. Tailored Tests											
C1. Combined contingent liabilities	24	38	38	38	38	38	38	38	38	39	39
C2. Natural disaster	24	34	34	35	35	36	36	37	37	38	38
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	24	25	26	26	27	28	28	28	29	30	30
TOTAL public debt benchmark	55	55	55	55	55	55	55	55	55	55	55
	PV of Debt-to-Revenue Ratio										
Baseline	110	114	113	113	115	117	119	121	123	125	128
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2022-2032 2/	110	103	98	96	96	97	96	97	97	99	101
B. Bound Tests											
B1. Real GDP growth	110	124	137	145	155	165	174	183	192	201	209
B2. Primary balance	110	124	141	139	140	141	141	143	144	145	147
B3. Exports	110	135	169	167	166	166	166	167	167	168	169
B4. Other flows 3/	110	121	127	127	128	130	131	133	134	136	138
B5. Depreciation	110	137	126	116	110	104	99	94	90	86	83
B6. Combination of B1-B5	110	116	123	123	124	126	127	129	130	132	134
C. Tailored Tests											
C1. Combined contingent liabilities	110	171	167	162	162	162	162	162	163	164	165
C2. Natural disaster	110	153	151	149	150	152	154	156	158	160	163
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	110	114	113	113	115	117	119	121	123	125	128
	Debt Service-to-Revenue Ratio										
Baseline	6	6	6	6	6	6	6	6	8	8	9
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2022-2032 2/	6	6	6	6	5	5	5	6	7	8	8
B. Bound Tests											
B1. Real GDP growth	6	7	7	8	9	9	9	10	12	13	13
B2. Primary balance	6	6	7	9	9	7	7	8	9	9	10
B3. Exports	6	6	6	7	7	7	7	7	8	9	9
B4. Other flows 3/	6	6	6	6	6	6	6	6	8	8	9
B5. Depreciation	6	7	8	7	6	7	6	6	8	8	8
B6. Combination of B1-B5	6	6	7	7	8	7	7	7	9	9	9
C. Tailored Tests											
C1. Combined contingent liabilities	6	6	8	17	8	9	7	8	9	10	10
C2. Natural disaster	6	6	7	14	7	8	7	8	9	10	10
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	6	6	6	6	6	6	6	6	8	8	9

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.