Debt Sustainability Framework for Participating Countries of the Belt and Road Initiative

Ministry of Finance of People's Republic of China

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I. Introduction

1. Financial Connectivity is an important underpinning for the development of the Belt and Road Initiative (BRI). Since 2017, finance ministries of 28 countries have endorsed the Guiding Principles on Financing the Development of the Belt and Road, calling upon the governments, financial institutions and companies from participating countries of the BRI (hereinafter referred to as BRI countries) to work together to build a long-term, stable, sustainable financing system that is well-placed to manage risks. Debt sustainability needs to be taken into account when mobilizing funds to finance the BRI cooperation for sustainable and inclusive growth.

2. The Addis Ababa Action Agenda identifies that borrowing is an important tool for financing investment critical to achieving sustainable development. Meanwhile, we also recognize the importance of striking a balance between meeting financing demands, sustainable development and debt sustainability. Therefore, based on the IMF/World Bank Debt Sustainability Framework for Low Income Countries (hereinafter referred to as LIC-DSF), as well as the national conditions and development stages of BRI countries, we formulate this debt sustainability framework with the aim to promote sustainable economic and social development of BRI countries while ensuring debt sustainability.

3. This debt sustainability framework (hereinafter referred to as BRI-DSF) is applicable to the debt sustainability analysis (DSA) of BRI low income countries (hereinafter referred to as LICs). LICs refer to countries eligible for concessional loans from both the Poverty Reduction and Growth Trust (PRGT) and the International Development Association (IDA), or eligible for IDA grants.

4. This framework is a non-mandatory policy tool. The financial institutions of China and other BRI countries are encouraged to use this framework to conduct debt sustainability analysis and manage debt risks according to the risk rating results, as an important reference for lending decisions. This framework would also serve as a supporting policy tool for the Multilateral Cooperation Center for Development Finance for usage on a voluntary basis.

II. Procedures

5. The procedures of DSA include following steps: (i) Debt coverage; (ii) Macroeconomic Projections; (iii) Realism tools; (iv) Country Classification and Debt Carrying Capacity; (v) Stress Tests; (vi) Risk Signals; (vii) The Use of Judgment; (viii) The Final Risk Ratings; (ix) The DSA Write Up.

A. Debt Coverage

6. The BRI-DSF defines the debt coverage as the future payments of interest and/or principal that are required from the public debtor to the creditor, including debt securities, loans and other accounts payable.

7. Public sector, in its broadest definition, comprises several different sub-sectors. These include the general government (comprising the central, the state, and the local governments, social security funds, and extra-budgetary funds); financial and non-financial public enterprises; central bank.

8. The exclusion of a financial or non-financial public enterprise from the BRI-DSF should only be considered if the enterprise poses limited fiscal risk, i.e., it is able to borrow without a guarantee from the government, does not carry out uncompensated quasi-fiscal activities, and has an established track record of positive operating balances. Quasi-fiscal activities related to state-owned enterprises (SOEs) include: (i) charging less than commercial prices or paying above commercial prices to suppliers; (ii) pricing for budget revenue purposes, where SOEs may be in a monopoly position and so may be able to charge prices above what a competitive market might establish to raise revenue for the government; and (iii) provision of noncommercial services (e.g., social services).

9. Any external debt contracted by central bank on behalf of the government would constitute public debt (for instance, borrowing from the IMF). In contrast, central bank issuance or foreign exchange swaps for the purposes of monetary policy or reserves management are excluded from external public debt.

10. The definition of the public sector in this framework applies only to debt sustainability analysis for relevant countries and not to other circumstances.

B. Macroeconomic Projections

11. The macroeconomic projection framework for a 20-year projection period should be specified. The projections of key macroeconomic variables should be based on the country's economic development plan and its medium and long-term fiscal plan, with comprehensive consideration of the economic development, economic cycle, capital accumulation, population structure, technological progress and other factors affecting the economy. The projection horizon can be broken up into medium-term (up to 5 years) and longer-term projections (beyond 5 years). The evolution of these variables is referred to as the "baseline scenario", which represents the most likely scenario given present information.

12. In addition to macroeconomic variables, the BRI-DSF template requires information on existing debt and planned new borrowing. External financing sources can be multilateral, official bilateral and commercial. Domestic financing sources include central bank advances, short-term (under 1 year), medium and long term (MLT) (1–3 years), MLT (4–7 years), and long term (beyond 7 years). The average terms of each debt instrument include interest rate, grace periods, and maturities of new public

borrowing. Financing assumptions should take into account shifts in borrowing terms and financing mix over time. The BRI-DSF applies discount rates estimated according to BRI countries' financing sources and development stage as appropriate, to calculate the present value of debt.

13. Table 1 summarizes the main macroeconomic and financing variables required for the BRI-DSF template.

Table 1. Macroeconomic Variables for the DSA

Variable	Currency	Historical	Projection
Balance of Payments			
Current account balance	U.S. dollars	√	√
Exports of goods and services	U.S. dollars	√	√
o/w fuel and non-fuel commodities	U.S. dollars	√	
Imports of goods and services	U.S. dollars	√	√
Current transfers, net total	U.S. dollars	√	√
Current transfers, official	U.S. dollars	√	√
Gross workers' remittances ("personal transfers" in BPM6[1])	U.S. dollars	√	√
Net foreign direct investment (excluding debt instruments)	U.S. dollars	√	√
Exceptional financing	U.S. dollars	√	√
Gross reserves	U.S. dollars	√	√
Public sector			
Public sector revenue (including grants)	National currency	√	√
Public sector grants	National currency	√	√
Privatization receipts	National currency	√	√
Public sector expenditure	National currency	√	√
Public sector assets (liquid and readily available)	National currency	√	√
Recognition of implicit or contingent liabilities	National currency	√	√
Other debt creating or reducing flows	National currency	√	√
Debt relief	National currency	√	√
Debt			
Stock of public and publicly guaranteed (PPG) external debt (medium and long term)	U.S. dollars	√	
Stock of PPG external debt (short term)	U.S. dollars	√	√
Stock of private external debt	U.S. dollars	√	√
Stock of public domestic debt	National currency	√	√
Interest due on PPG external existing debt	U.S. dollars	√	
Interest due on private external existing debt	U.S. dollars	√	√
Interest due on public domestic existing debt	National currency	√	√
Amortization due on PPG external debt	U.S. dollars	√	√
Amortization due on private external debt	U.S. dollars	√	√
Amortization due on public domestic existing debt	National currency	√	
Stock of outstanding PPG arrears	U.S. dollars	√	√
Other			

[1] Balance of Payments and International Investment Position Manual, 6th edition.

Variable	Currency	Historical	Projection
GDP, current prices	National currency	√	√
GDP, constant prices	National currency	√	√
U.S. GDP deflator	None	√	√
Exchange rate versus U.S. dollar, end of period	National currency	√	√
Exchange rate versus U.S. dollar, average	National currency	√	√
Total investment	National currency	√	√
o/w government investment	National currency	√	√
Financing			
New disbursements of PPG external debt	U.S. dollars		√
o/w multilateral	U.S. dollars		√
o/w official bilateral	U.S. dollars		√
o/w commercial	U.S. dollars		√
New disbursements of domestic debt measured in national currency	National currency		√
o/w central bank advances	National currency		√
o/w short-term	National currency		√
o/w medium and long term (1-3 years)	National currency		√
o/w medium and long term (4-7 years)	National currency		√
o/w long term (beyond 7 years)	National currency		√

C. Realism tools

14. To examine the realism of the baseline scenario, which is critical for a credible assessment of debt sustainability, the BRI-DSF includes three realism tools as follows:

15. **Drivers of debt dynamics.** The tool provides two signals that may point toward areas of the macro framework which may require deeper consideration: (i) significant differences between past debt creating flows and projected debt creating flows; and (ii) high unexpected changes in public debt over the past 5 years. When the tool sends such signals, possible explanations should be considered. If a reasonable explanation cannot be identified, then consideration should be given to revising the macroeconomic framework.

16. **Relationship between public investment and growth.** Productive investment, while increasing debt ratios in the short run, can generate higher economic growth, fiscal revenue and export, leading to lower debt ratios over time. Therefore, it is critical to reflect the impact of public investment on economic growth and debt changes. The pulling effect of public investment on economic growth can be marked by the output elasticity. When a new public investment project is implemented, if the economic growth calculated using the historical empirical output elasticity is inconsistent with the actual economic growth, possible explanations should be considered. Where a reasonable explanation is lacking, consideration should be given to adjusting the macroeconomic projections.

17. **Relationship between fiscal adjustment and growth.** If fiscal adjustment is in the pipeline for a LIC, the social and political feasibility should be assessed first, and if

feasible, the relationship of fiscal adjustment with growth should then be assessed. Lower-than-expected growth can derail fiscal consolidations, yet concern is also often expressed that the impact of fiscal expansion on output is underestimated. If the impact of the fiscal adjustment on economic development is inconsistent with expectation, possible explanations should be considered. Where adequate explanations are not evident, consideration should be given to revising baseline macroeconomic projections.

D. Country Classification and Debt Carrying Capacity

18. Countries with different policy and institutional strengths, macroeconomic performance, and buffers to absorb shocks, have different abilities to handle debt. To capture the different factors affecting a country's debt carrying capacity, the BRI-DSF uses the composite indicator (CI) with cutoffs, which is introduced in the IMF/World Bank LIC-DSF (2018), to determine countries' classification. The CI captures the impact of the different factors through a weighted average of the World Bank's Country Policy and Institutional Assessment (CPIA) score[2], the country's real GDP growth, remittances, international reserves, and world growth.[3] The CI is calculated based on the formula articulated below:

$$\mathrm{CI} = \beta_1 CPIA + \beta_2 g + \beta_3 \frac{Remittances}{GDP} + \beta_4 \frac{Reserves}{Imports} + \beta_5 \left(\frac{Reserves}{Imports}\right)^2 + \beta_6 g_w$$

$$\beta_1 = 0.385;\ \beta_2 = 2.719;\ \beta_3 = 2.022;\ \beta_4 = 4.052;\ \beta_5 = 3.990;\ \beta_6 = 13.520$$

where g and g_w are growth and world growth respectively, and all variables are in percent, except the CPIA score. The calculation of the CI is based on 10-year averages of the variables, across 5 years of historical data and 5 years of projection.

19. The CI determines the classification of countries into one of three categories: weak, medium, and strong, as shown in table 2. To reduce potential variations in risk assessments stemming from volatility in macro projections, a change in country classification would require at least two consecutive designations in the new category.

Table 2. CI Cutoffs for Country Classification

CI Score	Country Classification
$\mathrm{CI} < 2.69$	Weak
$2.69 \leq \mathrm{CI} \leq 3.05$	Medium
$\mathrm{CI} > 3.05$	Strong

E. Stress tests

20. The BRI-DSF includes stress tests to help gauge the sensitivity of projected debt burden indicators to changes in assumptions. There are five types of stress tests: standardized, contingent liability, tailored, fully customized and reverse stress tests.

[2] CPIA is an index compiled annually by the World Bank for all IDA-eligible countries, including blend countries. The index consists of 16 indicators grouped into four categories: (i) economic management; (ii) structural policies; (iii) policies for social inclusion and equity; and (iv) public sector management and institutions. Countries are rated on their current status in each of these performance criteria, with scores from 1 (lowest) to 6 (highest).

[3] The annual data of real GDP growth, remittances, GDP, international reserves, and world growth will be released in the Global Economic Outlook Report (April/October) regularly published by the IMF.

21. **Standardized Stress Tests.** There are six standardized stress tests (Table 3), applying to all countries. In standardized stress tests, a variable is subject to a shock, and the post-shock values of the stressed variables are set to the baseline projection minus one standard deviation. However, if the historical average is lower than the baseline projection, then the post-shock values are instead set to the historical average minus one standard deviation.

Table 3. Standardized Stress Tests

Shock design and duration	Shock interactions among variables
A. Real GDP growth Real GDP growth set to its historical average[4] minus one standard deviation, or the baseline projection minus one standard deviation, whichever is lower for the second and third years of the projection period	- Inflation to decrease with an elasticity to real growth of 0.6 - Primary balance deteriorates as the revenue to-GDP ratio remains the same as in the baseline, but the ratio of non-interest expenditures to GDP increases as the level of spending is kept the same as in the baseline
B. Primary balance Primary balance[5]-to-GDP ratio set to its historical average minus one standard deviation, or the baseline projection minus one standard deviation, whichever is lower in the second and third years of the projection period	- Domestic borrowing cost to increase by 25 basis points per 1 percent of GDP worsening of the primary balance for the case of LICs with domestic market financing - For market-access countries, external commercial borrowing cost to increase by 100 basis points per 1 percent of GDP worsening of the primary balance, or 400 basis points, whichever is lower
C. Exports Nominal export growth (in USD) set to its historical average minus one standard deviation, or the baseline projection minus one standard deviation, whichever is lower in the second and third years of the projection period	- Real GDP growth rate is lowered with an elasticity to exports of 0.8
D. Other flows Current transfers-to-GDP and FDI-to-GDP ratios set to their historical average minus one standard deviation, or baseline projection minus one standard deviation, whichever is lower in the second and third years of the projection period	
E. Depreciation One-time 30 percent nominal depreciation of the domestic currency in the second year of the projection period, or the size needed to close the estimated real exchange rate overvaluation gap, whichever is larger	- Real net exports as a percent of GDP increases with an elasticity to real depreciation of 0.15, starting in the year following the shock - Pass-through to inflation with an

[4] Throughout this table, historical averages refer to averages over the last 10 years.
[5] Primary balance is defined by the OECD as government net borrowing or net lending, excluding interest payments on consolidated government liabilities.

Shock design and duration	Shock interactions among variables
	elasticity of 0.3 in the year of the shock
Combination of A through E Apply all individual shocks (A through E) at half of the magnitude	Apply interactions in each individual shock scenarios

22. **Contingent Liability Stress Test.** A contingent liability stress test—which involves a one-off increase in the debt-to-GDP ratio in the second year of the projection—applies to all countries. The shock has two components: (i) a minimum starting value of 5 percent of GDP (representing the average cost to the government of a financial crisis in a LIC since 1980); and (ii) a tailored value, reflecting additional potential shocks for portions of the public sector that are not included in the definition of public debt used in the BRI-DSF, such as financial market, SOE debt and Public Private Partnerships (PPP). Table 4 provides a default setting, which is subject to further adjustment by BRI-DSF users based on country-specific circumstances.

Table 4. Contingent Liability Stress Tests

Contingent Liabilities	Default
Financial market	5% of GDP
SOE's debt[6]	2% of GDP
PPP	35% of PPP stock
Other elements of the general government not captured in Financial market	0% of GDP

23. **Other Tailored Stress Tests.** Other tailored stress tests apply to countries exposed to a set of specific risks, which may include new borrowings, natural disasters, volatile commodity prices, and market financing pressures (table 5).

- New borrowing shock applies to BRI countries that have new borrowing plans. It assesses the impact of a country's debt sustainability with the corresponding changes in the present value and assumptions of the new public debt.
- Natural disaster shock applies to small states vulnerable to natural disasters and BRI countries with high frequency of natural disasters and high economic losses.
- Commodity price shock applies to BRI countries that are largely dependent on commodity exports.
- Market financing shock applies to BRI countries with market access, i.e. those who: (i) have outstanding Eurobonds; or (ii) meet the market access criterion for PRGT graduation, but have not graduated due to serious short-term vulnerabilities.

[6] 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. If it is already included in the government debt 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%.

Table 5. Tailored Stress Tests

Trigger	Scenario design and interactions
New borrowing shock Applies to BRI countries that are planning to make new borrowings.	PPG external debt is increased by 1%, 5% and 10% of GDP, respectively, in the second year of the projection period. Interactions: The unpaid debt to GDP ratio is increased by 0.1%, 0.5% and 1%, respectively, in the second year of the projection period.
	PPG external debt is increased by USD 0.1, 0.5 and 1 billion, respectively, in the second year of the projection period. Interactions: The unpaid debt is increased by USD 0.01, 0.05 and 0.1 billion, respectively, in the second year of the projection period.
Natural disaster shock Applies to small states vulnerable to natural disasters (IMF 2016), and BRI countries that meet a frequency criterion (2 disasters every 3 years) and economic loss criteria (above 5 percent of GDP per year), based on the EM-DAT database during 1950–2015.	One-off shock of 10 percentage points of GDP to debt-GDP ratio in the second year of the projection period.[7] Interactions: Real GDP growth and exports are lowered by 1.5 and 3.5 percentage points, respectively, in the year of the shock.
Commodity price shock Applies to BRI countries where commodities constitute at least 50 percent of total exports (goods and services) over the previous three-year period.	Commodity exports are shocked by a commodity price gap[8] in the second year of projection, which closes over 6 years. The price gap for fuel and non-fuel exports is multiplied by their respective commodity exports. Interactions: Real GDP growth is reduced by 0.5 percentage points, and fiscal revenues-to-GDP are reduced by 0.75 percentage points in each of the three years starting from the second year of projection for each 10-percentage point contraction of commodity prices. This gap converges to the baseline in 6 years. GDP deflator is reduced by the impact of the

[7] Based on median change in the public debt to GDP ratio one year after the natural disaster from its pre-shock level, across all episodes with measured economic losses of at least 5 percent of GDP, using data from Emergency Events (EM-DAT) database

[8] The price gap is defined as the difference between the baseline commodity price in the second year of projection and the lower end of the 68 percent confidence interval (equivalent to a minus one SD) from the IMF's commodity price forecast distributions for fuel and non-fuel commodities, which may be found at http://www.imf.org/external/np/res/commod/index.aspx.

Trigger	Scenario design and interactions
	commodity price gap in the first year of the shock, converging to the baseline in 6 years.
Market financing shock Applies to BRI countries with market access, i.e. those who: (i) have outstanding Eurobonds; or (ii) meet the market access criterion for PRGT graduation but have not graduated due to serious short-term vulnerabilities	A 400 bps increase (sustained for 3 years from the second year of projection) in the cost of new external commercial borrowing and shortening of maturities of new commercial external borrowing (to 5-year maturity, or 2/3 of the assumed maturities, whichever is shorter, with grace periods adjusted proportionally), and one-off FX depreciation equivalent to 15 percent in the second year.

24. **Fully Customized Stress Tests.** Fully customized stress tests apply to specific risks not covered by the template due to the country's idiosyncrasy or lack of data. The scenarios include: (i) large delays in investment projects that may have adverse impacts on growth and fiscal revenues; (ii) idiosyncratic risks, such as civil war or an epidemic/major public health crisis; (iii) contagion-related macroeconomic risks; and (iv) policy slippage, which could result in very different debt paths.

25. **Reverse Stress Tests.** Reverse stress tests estimate a country's capacity to withstand external shocks. The procedures of the reverse stress test are as follows: (i) choose one or more risk variables, such as exchange rate, interest rate, economic growth rate and new borrowing, etc.; (ii) set the thresholds of selected debt burden indicators; (iii) calculate the value of the risk variables when the debt burden indicators reach the thresholds.

F. Risk Signals

26. The comparison between debt burden indicators and thresholds in the BRI-DSF leads to signals about the risk of debt distress. The thresholds for PPG external debt and benchmarks for total public debt are determined as follows (table 6):

Table 6. PPG External Debt Thresholds and Total Public Debt Benchmarks

	PPG External Debt Thresholds				Total Public Debt Benchmarks
CI	**PV of PPG external debt/ GDP（%）**	**PV of PPG external debt/ Exports（%）**	**PV of PPG external debt service/ Exports（%）**	**PV of PPG external debt service/ Revenue（%）**	**PV of total public debt / GDP（%）**
Weak	30	140	10	14	35
Medium	40	180	15	18	55
Strong	55	240	21	23	70

27. The risk signal for PPG external debt is determined as follows: (i) low risk of external debt distress if none of the PPG external debt burden indicators breach their respective thresholds under the baseline or the most extreme stress test[9]; (ii) moderate risk of external debt distress if none of the PPG external debt burden indicators breach

[9] The most extreme stress test is defined as the test that yields the highest level of debt on or before the tenth year of projection.

their thresholds under the baseline, but at least one indicator breaches its threshold under the stress tests; (iii) high risk of external debt distress if any of the PPG external debt burden indicators breaches its threshold under the baseline.

28. The risk signal for total public debt is determined as follows: (i) low overall risk of public debt distress if the PPG external debt has a low risk signal and the total public debt-to-GDP ratio remains below its benchmark under the baseline and the most extreme shock; (ii) moderate overall risk of public debt distress if the PPG external debt has a moderate risk signal or if the PPG external debt is low and if the public debt stock indicator breaches it the thresholds/benchmark under the stress tests; (iii) high overall risk of public debt distress if any of the four external debt burden indicators or the total public debt burden indicator breach their corresponding thresholds/benchmark under the baseline.

G. The Use of Judgment

29. In addition to the rating signaled by the model, the use of judgment may be needed to arrive at a final risk rating. Factors for judgments may include short-lived and marginal breaches, domestic debt, external private debt, availability of liquid financial assets, long-term considerations and loss given default, among others.

H. The Final Risk Ratings

30. BRI-DSF users are expected to combine the signals from the model on the risk of debt distress with judgment based on knowledge of the country analyzed to arrive at a final assessment on the risk of external debt distress and on the overall risk of debt distress. The external debt distress risk rating remains the primary BRI-DSF output, while the overall risk rating is considered supplementary information.

31. A final rating of the risk of external debt distress can be described as low, moderate[10], high or "in debt distress". A country should be rated as "in debt distress" when an external distress event has already occurred, i.e. when there are ongoing or impending external debt restructuring negotiations, or outstanding external arrears on debt.

32. A final rating of the overall risk of debt distress can be described as low, moderate, high or "in debt distress". A country should be rated as "in debt distress" when a distress event has already occurred, i.e. when there is external debt distress, and/or when there are ongoing or impending domestic debt restructuring negotiations, or outstanding arrears on domestic debt instruments.

33. In addition, a country may also be assessed to be "in debt distress" when the debt

[10] Against this background, the user should characterize debt vulnerabilities in a country facing a moderate risk of external debt distress as showing: (i) "limited space to absorb shocks" where at least one baseline debt burden indicator is close enough to its respective threshold that occurrence of the median observed shock would result in a downgrade to high risk; (ii) "substantial space to absorb shocks" where all baseline debt burden indicators are well below their respective thresholds, such that only shocks in the upper quartile of the observed distribution of shocks would downgrade the country to high risk of debt distress; (iii) all other countries, i.e., those assessed as facing moderate risk of debt distress but not falling into the categories discussed above would simply be characterized as having "some space to absorb shocks".

sustainability analysis indicates that there is a high probability of a future debt distress event. This situation can arise when a country faces large near-term breaches in debt service indicators, or significant or sustained breaches of debt thresholds that renders the debt position unsustainable. As for the judgment whether a "significant or sustained" breach warrants an "in distress rating", the user should consider: (i) how long they are (sustained would generally be understood to meet or exceed four to five- years); (ii) how large they are; (iii) the timing of the breaches (the first 5 years of the projection are more important); (iv) how quickly near-term breaches begin to be reversed (rising breaches in the near-term before a turn-around are cause for greater concern); and (v) whether they cover both debt and debt service indicators (extended breaches of solvency indicators matched by liquidity indicators contained beneath thresholds should be considered a mitigating factor).

34. For the "in debt distress" rating, following qualifications should be considered:

- As for debt restructuring negotiations, voluntary market-based debt re-profiling operations should be excluded.
- As for the existence of arrears, the circumstances that may not trigger a determination that a country is in debt distress include: (i) de minimus cases (where arrears are less than 1% GDP); (ii) cases where arrears arise because of technical problems with payments or due to payment barriers (e.g. related to sanctions), disputed claims, diplomatic disagreements, difficulties in establishing the appropriate counterparts for payment, or weak debt management (technical arrears); (iii) arrears to official bilateral creditors that have been deemed away because of the existence of debt relief agreement; or (iv) arrears to private creditors where debt restructuring with the majority of creditors has been completed, and where the government is judged to be engaged in "good faith" negotiations with the remaining holdouts.

35. In general, a country rated at "low risk" or "moderate risk" means that the debt is sustainable. However, it should be noted that an assessment for a country as "high risk" of debt distress, or even "in debt distress", does not automatically mean that debt is unsustainable in a forward-looking sense. In general, when a country is likely to meet its current and future repayment obligations, its PPG external debt and overall public debt are sustainable. In practice, sustainability would imply that the debt level and debt service profile are such that the policies needed for debt stabilization under both the baseline and realistic shock scenarios are politically feasible and socially acceptable, and consistent with preserving growth at a satisfactory level, while making adequate progress towards the authorities' development goals. Thus, other factors not captured in the model, like feasibility issues, debt structure and holders, and impact on development goals, also need to be accounted for.

I. The DSA Write Up

36. The DSA write up (refer to appendix for more details) contains: (i) public debt coverage; (ii) background on debt; (iii) background on macro forecasts; (iv) country

classification; (v) determination of scenario stress tests; (vi) external DSA; (vii) overall risk of public debt distress; (viii) application of judgment; (ix) final risk ratings; (x) authorities' views; (xi) tables and charts.

III. Application

A. Managing Debt Risks

37. The DSA Write up for applicable countries, in principle, may be compiled annually. With comprehensive assessment of the country's future development potential, debt carrying capacity, debt sustainability, the 2030 Agenda for Sustainable Development and other common development agenda, the DSA results can serve as important reference for the financial institutions of China and other BRI countries to conduct categorized management on debt risks and make rational lending decisions.

B. Providing Technical Assistance

38. We welcome the efforts of IMF, World Bank and other international institutions to improve debt sustainability of the LICs, and commend their continued technical assistance to BRI countries in need to strengthen fiscal policy frameworks, improve ability to manage debt risks, enhance capacity to withstand external shocks, optimize financing options, and ensure the soundness of public funding.

Appendix: THE DSA WRITE UP

The DSA write up is encouraged to follow the outline below.

Country X Debt Sustainability Analysis	
Risk of external debt distress:	low/medium/high/in debt distress
Overall risk of debt distress:	low/medium/high/in debt distress
Application of judgment:	yes/no; key judgments applied

The chapeau paragraph should specify the country's external risk rating, disclosing the risk rating signaled by the model and how judgment has been applied if relevant. The chapeau paragraph should also include an assessment of the overall risk of debt distress and explain the reason for any difference from the external risk rating. Commentary should be given on any necessary details in the risk rating. The vulnerability of the risk rating to policy slippages, or other factors, should be noted and relative policy suggestions should be provided.

Public Debt Coverage

- The public debt used for the DSA should by default be PPG external and public debt. The DSA should provide an explanation when full public debt coverage is not attainable and cover the requirements for the tailored stress test for contingent liabilities based on the debt coverage. The Discussion should also cover any known weaknesses or gaps in the data being used.
  - Table: the coverage of the public sector debt and design of contingent liability stress test.

Background on Debt

- Evolution of PPG external debt and total public debt in recent years, including compared with the previous DSA (developments related to debt relief, where relevant).
- Composition and structure of public external and domestic debt (creditors, and terms/concessionality).
- Evolution of private external debt in recent years, where relevant.

Background on Macro Forecasts

- Box to describe in detail the main assumptions in the macroeconomic framework underlying the DSA, including projections of real sector (real economic growth with main drivers of growth, and inflation), fiscal variables (medium- and long-term fiscal measures, primary balance, and borrowing costs), external sector (current account variables, external financing sources such as FDI, public external borrowing, private external borrowing, exceptional financing) and dynamics of

foreign reserves.

- Assumed financing mix between domestic and external financing. External financing should include the prospects of concessional financing / grants and non-concessional / market financing with projected grant elements in the medium- and long-term.
- Discussions of the output of the realism tools, explaining clearly why any flags should not be of concern.
  - Charts: Realism tool charts

Country Classification

- Description of the composite indicator, and applicable thresholds. Note any changes and why they have occurred.
- Classified a country through the use of debt carrying capacity: low, moderate, high.
  - Table: Composite indicator and threshold tables

Determination of Scenario Stress Tests

- Five types of stress test scenarios should be considered: standardized, contingent liability, tailored, customized and reverse stress test scenarios. Explanation of how scenario stress tests have been set up (including clear justification for any changes in default settings), and the results of stress tests should be displayed.

Risk of External Debt

- Signal from the model:
  - Projected evolution of PPG external debt burden indicators compared to thresholds in the baseline scenario. Discussion of breaches, if any.
  - Projected evolution of PPG external debt burden indicators under stress tests including tailored stress tests, compared to thresholds. Discussion of breaches, if any.
  - Results of customized scenarios, where relevant.

Overall Risk of Public Debt

- Signal from the model:
  - Projected evolution of total public debt under the baseline, including with respect to the benchmark on public debt to GDP.
  - Projected evolution of total public debt under stress tests, including with respect to the benchmark on public debt to GDP.
  - Results of customized scenarios, where relevant.

Application of Judgment

- Short-lived and marginal breaches
- Domestic debt
- External private debt
- Availability of liquid financial assets
- Long-term considerations
- Loss rate of debt default

Final Risk Ratings

- Summary of assigned external and overall risk ratings (taking into account judgment).
- Discussions on key risks to debt sustainability and recommendations.

Authorities' Views

The DSA assumptions and results should be discussed with the authorities. The authorities' views, including any disagreement with staff's main findings, should be reflected in the concluding section of DSA write-ups.

Tables and Charts

Tables:

- Debt Sustainability Framework, Baseline Scenario (external and public)
- Sensitivity Analysis for Key Indicators of Debt (external and public)
- Risk signals summary table

Charts:

- Debt accumulation and debt ratio charts (external and public)