PROPOSED SOVEREIGN RATING METHODOLOGY

Issue Date: 22 May 2018

Request for Comments: CI Ratings is requesting feedback from subscribers, other stakeholders, and market participants on this proposed Sovereign Rating Methodology.

Comments should be sent to criteriafeedback@ciratings.com by 22 June 2018.

In accordance with EU regulation, all comments received will be published on our public website at the end of the consultation period, unless the respondent requests that their identity and comments be treated as confidential.

After the deadline, we will review the comments and subsequently finalise and publish the new methodology.

1. ABOUT THIS PROPOSED METHODOLOGY

Effective Date

1. We intend to finalize this proposed methodology after considering comments received during the stakeholder consultation period, which will run for one month from the issue date given above. If adopted, the proposed Sovereign Rating Methodology is expected to come into effect not less than two weeks after the above issue date. The actual effective date and details of any transitional arrangements will be provided in the final published version of this methodology.

Scope

2. This proposed methodology applies to local and foreign currency credit ratings assigned by Capital Intelligence Ratings (hereinafter CI Ratings or CI) to sovereign governments (i.e. central or national governments) using our international credit rating scales. It does not apply to local and regional governments, government-related entities (GREs), or state-owned enterprises (SOEs).

Rationale for Change and Effect on Existing Ratings

3. This methodology replaces CIôs current sovereign rating methodology. It provides a clearer and more detailed presentation of our analytical framework and rating criteria, including greater articulation of the rationale for each key rating factor and more granular assessment criteria. This updated methodology also includes the introduction of a scorecard framework as a tool for assessing the relative strength of rated sovereigns in a consistent manner and for enhancing ratings comparability. This proposed methodology contains mostly minor revisions to the version disseminated for comments in August 2016.

4. This updated methodology is more transparent compared to its predecessor, but as it largely captures the same broad set of factors, CI expects few, if any, outstanding sovereign ratings to be impacted by its introduction.

About Sovereign Ratings

5. CIôs sovereign credit ratings indicate the ability and willingness of sovereign governments to repay existing and expected future debt obligations to private-sector creditors on time and in full.

6. A sovereignôs ability to repay is often ï although not always ï an economic issue, while willingness to repay, or to pursue policies consistent with debt sustainability, tends to be political. The ratings we assign therefore take into account the governmentôs capacity to service its debts under present and expected political and economic conditions, as well as its capacity to continue doing so through typical macroeconomic fluctuations and in the event of plausible shocks.

7. CIôs sovereign ratings indicate the likelihood of default based on an ordinal ranking of credit risk. Consequently, the rated governmentôs credit profile and financial robustness is considered relative to that of other sovereigns as part of the ratings determination process.

8. Sovereign credit ratings are not country risk ratings. Whilst they take into account certain aspects of the business and investment climate, sovereign ratings may not fully reflect the risk of doing business in a country. Sovereign credit risk is generally highly correlated with, but is not necessarily equivalent to, sovereign interference risk, that is, the risk of the government at a time of stress introducing restrictive measures, such as transfer and convertibility controls, which impair the ability of financial institutions and corporates to service their debts in a timely manner.

Structure of this Methodology Report

9. The remainder of this methodology paper is organised as follows:

- Section 2 contains an overview of CIÊs analytical approach for determining sovereign credit ratings, which includes the use of a scoring system as a methodological tool to help identify in broad terms the credit strengths and weaknesses of sovereign governments.
- In Section 3 we explain the rationale for each of the key rating factors in our sovereign scorecard and provide a detailed description of our assessment criteria for each of those factors.
- Section 4 contains a summary of the principal rating factors that are generally considered outside of the scorecard framework.
- In section 5 we outline our approach to setting local-currency and foreign-currency sovereign ratings.
- The main assumptions and limitations of the methodology are set out in section 6.
- Annex 1 contains a list of the main quantitative indicators used in CIÊs sovereign analysis.
- Annex 2 contains the rating scale used for sovereign ratings.
- Annex 3 contains the guidelines we use for mapping long-term and short-term ratings.

2. SUMMARY OF OUR ANALYTICAL APPROACH

Overview of Analytical Dimensions and Scorecard Framework

10. CI assigns sovereign credit ratings following a detailed analysis of a range of political, economic and financial factors which we believe have a significant bearing on the ability and willingness of sovereign governments to adopt and implement sustainable fiscal policies and to take other measures that reduce the risk of default.

11. To provide structure and facilitate comparability and consistency, each of the principal drivers of credit quality is placed into one of five analytical dimensions. We use a scorecard approach as an organising framework for evaluating these key rating factors and for gauging a country's relative strength in each of the analytical dimensions. This provides a convenient and relatively easy way to synthesize the information contained within a wide range of economic, financial and political indicators. It also provides a basis for monitoring a country over time and for making cross-country comparisons at any point in time.

12. The analytical dimensions and key rating factors used in the scorecard are shown below.

	ANALYTICAL DIMENSIONS				
KEY RATING FACTORS	**Political & Institutional Risk**	**Economic Strength**	**Fiscal Strength**	**Monetary & Financial Stability**	**External Strength**
	Political and policy risk (50%)	Economic growth performance (40%)	Budget performance (30%)	Monetary policy flexibility (25%)	Current account performance and financing (35%)
	Institutional strength and administrative capacity (50%)	GDP per capita (15%)	Budget structure (20%)	Inflation performance (20%)	External debt capacity (40%)
		Economic diversification (25%)	Liquidity risk (25%)	Capital market development (15%)	International liquidity (25%)
		Competitiveness (20%)	Government debt burden (25%)	Macro-financial imbalances (20%)	
				Banking sector strength (20%)	

The initial weighted contribution of key rating factors to the overall score for each analytical dimension is shown in parentheses.

13. Key rating factors are assessed with reference to a number of sub-factors and criteria, which are selected based on their relevance to the major areas of economic inquiry, academic research, and CI's experience of what matters for sovereign creditworthiness. Some variables are quantifiable; others are purely qualitative and inevitably require judgement. Wherever possible we use quantitative metrics as an objective starting point for evaluating each key rating factor and then adjust the initial score, where desirable, in accordance with prescribed guidelines. We do this because economic indicators require context to be meaningful. The context may be measurement deficiencies that mean the reported metric (e.g. GDP) is over- or under-stated; or economic, financial, institutional or other qualitative factors that mean the degree of vulnerability or risk indicated by the quantitative metric is misleading. Importantly, the discretion that may be applied to the score for a quantifiable variable is constrained by adjustment criteria and is not arbitrary or unlimited.

14. For quantitative variables, scoring thresholds are set at levels deemed by CI to trigger increased risk, but also take into account long-term distributions derived from the metrics of more than 60 countries (rated and unrated). For qualitative variables, the principal characteristics of each rating factor by scoring category are tabulated for ease of reference. These "key characteristics" tables are offered for guidance. They do not constitute a checklist and are not exhaustive. Some, but not necessarily all, of the characteristics of a particular scoring category may apply to the rated sovereign and there may be cases where the sovereign is best described by attributes from a

combination of scoring categories. It is ultimately for the rating committee to determine which scoring category fits best.

How We Determine the Final Rating

15. Our methodological approach is relatively straightforward and summarised in Box 1. We first use the scorecard as a tool for making an initial or preliminary assessment of the relative strengths and weaknesses of rated sovereigns in a manner consistent with uniformity of treatment. Using this preliminary ranking as a first step, we then take into account all other relevant information in order to determine the final ratings and outlook.

16. In the first stage of the process, we award an overall score for each of the five analytical dimensions based on the weighted-average score of the key rating factors, with weights (shown in parenthesis in the table above) distributed fairly evenly, except in cases where a slightly lower weight for two or more variables within the same analytical dimension is warranted by the degree of correlation or overlap between those variables. The weights shown are a starting point. The relevance of key rating factors will generally vary according to the structure, level of development and particularities of the country whose sovereign is being assessed. Consequently, in the final analysis the degree of emphasis placed on some key rating factors may differ significantly from the initial weights shown.

17. The score for each analytical dimension maps to a long-term credit rating category, as shown below.

Analytical Dimension Score		Indicative Rating Category	Relative Credit Risk Descriptor
7	⇒	AAA	Extremely Low
6	⇒	AA	Very Low
5	⇒	A	Low
4	⇒	BBB	Low-to-Moderate
3	⇒	BB	Moderate-to-High
2	⇒	B	High
1	⇒	C	Very High

18. The final rating assigned is determined by CIs rating committee, taking into account the sovereigns performance in each of the analytical dimensions, as well as other relevant rating considerations that are not reflected in the scorecard framework. The principal additional factors are shown below and explained in more detail in section 4.

RATING CONSIDERATIONS BEYOND THE SCORECARD		
Default History	Distressed Exchanges and Missed Payments	Event Risk
Creditor Sentiment and Risk Appetite	Government Contingent Liabilities	Official External Support
Reform Efficacy	Long-Term Risks for Exporters of Non-Renewable Resources	Exceptionally Large Financial Buffer
Information Risk		

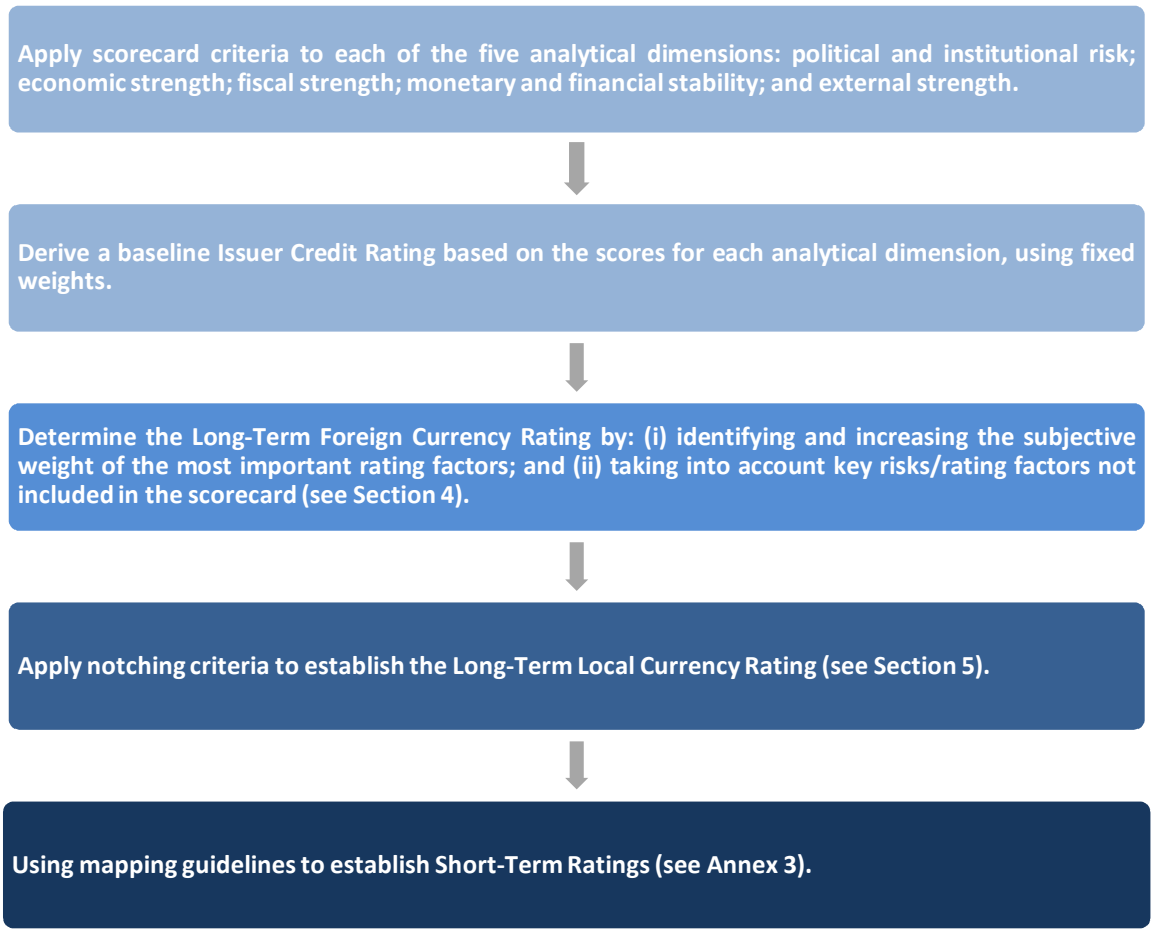
19. There is no set method or formula for combining the various political, economic, and financial factors in order to derive the final credit rating. In our opinion the heterogeneity of sovereigns

calls for a flexible approach that takes into account country-specific circumstances. Rating drivers may not be the same for each country and the relative importance or weight of an analytical dimension or key rating factor may change according to circumstances. By contrast, the automatic generation of ratings from scores would result in an overly mechanical approach to ratings; and basing rating outcomes on the aggregated score for key factors could result in material changes in credit quality being concealed due to offsetting positive and negative signals from different economic and political variables.

20. Whilst we do not use preset weightings to determine the credit ratings we assign, we will always indicate the principal drivers of the credit rating in our rating reports. Where we change a credit rating or rating outlook, we will identify in our rating reports: (a) the rationale behind the revision; (b) the relative importance or weight (high, medium, low) of each analytical dimension in the decision to change the rating or outlook; and (c) the changes we have made to our underlying quantitative and qualitative assumptions for the rated sovereign.

21. There may be instances where the scorecard framework is not relevant and ratings are driven by consideration of a narrow sub-set of factors, selected on the basis of country-specific circumstances. This is most likely to be the case when the sovereign is either in default or when there is a heightened risk of the government encountering debt repayment problems in the short term (in which case the rating would likely be in the CC range).

BOX 1: SUMMARY SOVEREIGN RATING ANALYTICAL PROCESS



3. ANALYTICAL DIMENSIONS AND CORE CRITERIA

22. In this section we explain the rationale for each of the five analytical dimensions of CIís sovereign scorecard and outline the criteria used to assess the underlying key rating factors. The analytical dimensions are:

    1. Political and Institutional Risk
    2. Economic Strength
    3. Fiscal Strength
    4. Monetary and Financial Stability
    5. External Strength

ANALYTICAL DIMENSION

3.1 POLITICAL AND INSTITUTIONAL RISK

23. This analytical dimension captures the potential effect or influence of political and institutional factors on the willingness and ability of the rated government to pursue sustainable economic and financial policies and to undertake, where necessary, reforms and other measures to safeguard its capacity to repay maturing financial obligations.

24. Domestic and external political risk factors, as well as governance standards, can have an important bearing on sovereign creditworthiness and may in some settings emerge as the dominant rating driver. Stable political environments and policymaking institutions support government effectiveness and lower the risk of dramatic swings in the direction of policy. Political and social cohesion reduces the likelihood of damaging internal power struggles and civil unrest, and also facilitates long-term planning and economic growth.

25. Political volatility and political crises tend to have negative repercussions for economic and fiscal outcomes, including by increasing uncertainty and deterring investment, disrupting market activities, and weakening the governmentís ability to generate revenue, borrow funds and plan ahead. Adverse political settings also tend to give rise to rigidities in the structure of public expenditure by motivating the government to spend disproportionate amounts on populist programmes in an effort to bolster support and ï particularly in authoritarian and highly unstable environments ï on internal security and defence in order to ensure regime survival. Governments of politically vulnerable countries also tend to protect their position through patronage networks, which in turn tend to impede the efficient allocation of resources, reduce policy flexibility, and foster corruption.

26. We assess Political and Institutional Risk with reference to two broad-based key rating factors:

    (i) Political and Policy Risk

    (ii) Institutional Strength and Administrative Capacity

KEY RATING FACTOR 1

Political and Policy Risk

27. Political and policy risk refers primarily to policy decisions and political events that could materially affect sovereign creditworthiness. It also takes into account the durability of the social and political fabric of a country and the existence of any underlying vulnerabilities that could potentially engender political instability and undermine the workings of government.

28. In assessing the level of political and policy risk we consider the overall orientation, predictability and efficacy of government policy, focusing on those measures and initiatives that are most likely to affect economic and financial conditions, or which are politically contentious or sensitive. We assess whether the current policy direction is broadly sustainable or whether it is likely to be significantly altered or reversed in the short to medium term, and consider the possible implications of current and likely changes in key policies on political stability and the public finances. We also take into account the sensitivity of financial markets and funding conditions to developments and events in the political arena.

29. We review the authoritiesô track record of managing past political and economic crises and in identifying and rectifying policy mistakes. We evaluate the ability and willingness of the government to implement reforms to improve economic and social outcomes and mitigate or reduce any fiscal and external vulnerabilities. In so doing we consider the internal cohesion of the government and the strength of its power base, the degree of reform consensus across the political spectrum, and the governmentôs ability to mobilise public support for its initiatives. We are mindful that structural reforms in particular often meet with resistance from vested interests and may entail high short-term adjustment costs ï for example job losses ï which can give rise to significant popular opposition, leading to the watering down or reversal of planned reforms.

30. Our assessment of political risk also takes into account the general volatility of the political environment, including the tendency for governmental instability (particularly where changes in the composition of the executive result in large shifts in policy direction) and the propensity for civil disobedience and social unrest. Risks to political stability are often highest in countries with a recent history of violent conflict and in societies characterised by factionalism, where politics is polarised between competing groups with self-perceived irreconcilable differences (often based on ethnic, religious and other identity cleavages) and, in particular, where systematic discrimination is strong. Depending on the system of government, political polarisation may also increase the frequency of legislative gridlock and policy paralysis, thereby jeopardising the formulation and implementation of coherent public policies, reforms and long-term strategic initiatives.

31. We recognise that a country may be outwardly stable ï in the sense that the incumbent regime has been in place for many years ï but at the same time at high risk of experiencing instability due to underlying vulnerabilities. For example, the ruling elite may lack legitimacy, political opposition and civil society may be suppressed, or deep social fault lines or cleavages may exist which, in effect, prevent compromise and collaboration from being firmly embedded in the political culture.

Assessment Criteria

32. We classify a country into one of five political risk categories, firstly by taking into account long-term tendencies and key vulnerabilities in the domestic political environment (Step 1) and then by factoring in to the assessment external vulnerabilities and risks (Step 2).

Step 1

33. We provide an initial classification of each country drawing on the summary characteristics shown in the table below.

34. The determination of the relative position of each country is largely subjective. However, we may use survey-based indicators of political risk as a guidepost, in particular: (i) the political stability and absence of violence/terrorism index ï one of the World Bankôs six Worldwide Governance Indicators (WGI); (ii) the voice and accountability indicator ï another of the WGIs; and (iii) the Fragile States Index, produced by The Fund for Peace.[1]

[1] Political stability and absence of violence/terrorism is an index that reflects, ñperceptions of the likelihood that the government will be destabilized or overthrown by unconstitutional or violent means, including politically-motivated violence and terrorismò Voice and accountability captures, ñperceptions of the extent to which a countryôs citizens are able to participate in selecting their government, as well as freedom of expression, freedom of association, and a free mediaò

Political and Policy Risk, Key Characteristics				
Very Low	**Low**	**Moderate**	**High**	**Very High**
Highly stable political environment and mature and resilient political system with a very long history of changing the executive and legislature through constitutional means and in an orderly fashion. Policy predictability is high and policy making processes transparent and efficient. Governments tend to follow generally sustainable economic and fiscal policies. Strong track record of managing the economy during times of stress. Political events rarely have a significant impact on financial market conditions.	Stable political environment and resilient political system, but possibly less mature compared to the category above. Policy predictability is generally high and changes in government do not tend to result in radical shifts in policy direction. There may be relatively high rates of government turnover, occasional protracted disputes between the executive and legislature on some key issues, and occasional bouts of popular protest but the overall impact on the functioning of the state is low. Governments pursue relatively sound policies but may not be proactive in addressing longer term economic and social issues. Good track record of managing the economy during times of stress. Political events may very occasionally have a significant impact on financial market conditions.	Stable environment underpinned by a reasonable degree of legitimacy and popular acceptance. Political system may be evolving, creating some uncertainty or characterised by divisions on policies relevant to creditworthiness. Public participation may be limited, patronage may be high, and there may be some restrictions on civil liberties. For non-democracies succession issues may raise concerns about long-term leadership and stability. Politics may be fragmented and there may be some tensions or strains linked to the inadequate accommodation of the main political cleavages (religious, ethnic, linguistic, social class etc) or due to relatively high levels of public dissatisfaction with socio-economic conditions. Policy making processes may be slow, lacking transparency or driven by short-term considerations. Track record of managing the economy through good times and bad may be mixed. Financial market liquidity and capital flows may be fairly sensitive to political events.	Political system may have significant weaknesses and vulnerabilities and may be prone to bouts of stress. Characteristics may include: serious disruptions to legislative activity and the workings of government due to poor relations between the main political actors; or the frequent removal of members of the executive or legislature via non-constitutional means; or periodic episodes of serious civil unrest or political violence. The political environment may be highly fragmented and there may be deep societal fault lines that have yet to be adequately accommodated in the political settlement and these may be a source of tension. Policymaking structures may be opaque. Financial market liquidity and capital flows may be very sensitive to events in the political arena.	The political situation is very unstable. The country is likely to be on the brink of instability or to have recently emerged from instability while remaining fragile. The political environment is likely characterised by an elevated risk of one or more of the following: civil war, revolution, rebellion, coup d'état, or widespread and violent civil unrest.

Step 2: Adjustment for external risk factors

35. We may adjust our initial classification by one or more categories where: (a) external or geopolitical risk is relatively high; or (b) there are one or more identifiable external factors that could potentially result in a material improvement or weakening of political risk over the medium term. Possible changes in external factors include, but are not limited to: shifts in relations with other states that alter the balance of risks to the security of the country or its ability to conduct international trade and transactions (e.g. through the imposition or removal of sanctions or embargoes); and spillovers from changes in political and security conditions in neighbouring countries.

KEY RATING FACTOR 2

Institutional Strength and Administrative Capacity

36. Institutional quality refers to the effectiveness and equity of the rules and conventions that govern political and economic interaction within a country and the ability of state organisations that operate within these rules and conventions (for example the executive, legislature, judiciary, bureaucracy and monetary authorities) to perform their mandated functions competently, achieve policy objectives, and respond effectively to changing circumstances.

37. The evidence suggests that the quality of institutions matters for economic performance and fiscal outcomes, as well as for the level of political stability. Sound institutions and high standards of governance are associated with transparency and predictability in policymaking and in the application of laws, as well as greater oversight of the use of public resources.

38. Weak institutional settings ï which are typically characterised by poorly specified mandates, limited transparency and accountability, and inadequate human and technical resources ï are often associated with ineffective policies and regulations, inefficient resource management, political favouritism and corruption, and a lack of transparency and predictability in policymaking. A lack of institutional capacity also hampers the ability to govern and cope with new challenges, and may therefore make a country more vulnerable to unexpected events or shocks.

Assessment Criteria

39. Our assessment takes into account several dimensions of institutional strength, including:
    - The predictability of the legal system, the independence of the judiciary, and the enforcement of property rights.
    - The strength of institutions for holding the executive accountable for its actions, including for the use of public resources and funds (e.g. the national legislature, internal and external audit functions and non-governmental bodies). We also consider the strength and impartiality of the media and whether the government is sufficiently open to enable adequate public scrutiny of its activities.
    - The extent of corruption in the public sector.
    - The effectiveness of state institutions in terms of their ability to perform mandated functions and meet operational targets.

40. Our opinions on institutional quality are largely based on analytical judgment, but may draw on international surveys, particularly: (i) the rule of law and government effectiveness indices from the World Bank WGIs database; and (ii) Transparency Internationalôs Corruption Perceptions Index.[2]

41. Key characteristics of institutional strength and administrative capacity are shown below.

[2] The rule of law index reflects ñperceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violenceò. The government effectiveness index reflects ñperceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the governmentôs commitment to such policiesò.

Institutional Strength & Administrative Capacity, Key Characteristics				
Very Strong	**Strong**	**Moderate**	**Low**	**Very Low**
Legal system is predictable, laws and regulations are transparent and applied fairly, and protection of property rights is very strong. The judiciary is impartial and independent of the other branches of government. Institutions and arrangements for holding the executive branch of government accountable for its decisions and actions are strong and effective. Organisational effectiveness is high and supported by strong human, financial and technical resources. Consultation on new laws and regulations with affected parties is the norm. Employment and promotion in the public sector, including the civil service, is based primarily on competence and merit. Ethical standards are high and corruption is very low.	Legal system is fairly predictable; the judiciary is impartial and independent; protection of property rights is strong. Access to justice may be costly. Institutional checks on the executive are reasonably effective. There may be some weaknesses in terms of the scope, depth or frequency of public audit and inspection regimes. Public transparency may be low in some areas of economic and financial policy. Consultation on new laws and regulations with affected parties occurs sometimes but not always. Public sector employment and promotion is based mainly on competence and merit; patronage may be involved to a small extent. Corruption is fairly low. Anti-corruption mechanisms and enforcement regimes are generally effective. Organisational effectiveness is fairly high but there may be some moderate weaknesses in terms of strategic planning or in policy coordination.	The legal system may be somewhat deficient in practice. The protection of property rights may not always be certain. The court system may be somewhat slow and inefficient. Institutional checks on the executive may not be entirely effective due to insufficient mandates and resources or limited transparency of government operations. There may be limited consultation on new laws and regulations with affected parties. Public sector employment and promotion may depend to some extent on non-meritocratic factors (e.g. seniority, personal connections, political affiliations and patronage). Mechanisms and procedures to combat corruption are comprehensive but there may be some weaknesses in terms of enforcement. Corruption exists but is not systemic. Organisational effectiveness may be hampered by duplication of functions and resource constraints.	The protection of property rights may be somewhat uncertain, judicial independence is low, the transparency of laws, regulations and judicial decisions inadequate. Institutions and arrangements for holding the executive to account have been established but with limited scope and powers and without the independence in practice to pose an effective check. Procedures for reviewing and updating regulations are neither systematic nor efficient. Administrative systems and procedures in the public sector are outdated and transparency and accountability in decision-making is weak. Patronage and nepotism may have a significant influence on the distribution of jobs and positions. Corruption is a systemic problem in public administration. Anti-corruption laws are not applied consistently or thoroughly in practice.	Recognition of property rights is weak and protection is highly uncertain. Laws and regulations are not transparent and are sometimes changed arbitrarily, including through unpublished executive decrees. The judiciary may be heavily politicised and corrupt. Laws, and they way they are applied, may be heavily biased towards certain vested interests. Power may be concentrated among the ruling elite with few, if any, effective checks and balances on the use of executive power. There may be little or no public participation in governance arrangements and serious restrictions on media independence. Organisational structures may be highly fragmented and organisational effectiveness severely constrained by duplication of functions, weak coordination mechanisms and very limited technical capabilities. Corruption is likely pervasive in the public sector and anti-corruption mechanisms and agencies weak or non-existent.

ANALYTICAL DIMENSION

3.2 ECONOMIC STRENGTH

42. Economic strength refers to the capacity of an economy to generate robust output growth, increase per capita income and be resilient to adverse economic shocks, or at least able to recover quickly after they occur.

43. High economic strength is characterised by comparatively high and rising per capita incomes, diversified production and export bases, and strong foundations of competitiveness. Countries with high economic strength tend to be more resilient to unanticipated economic shocks and better able to attain and maintain a sound budgetary position and a sustainable level of government debt.

44. Low economic strength ï which tends to be characterised by volatile growth, low productivity and limited supply-side flexibility ï increases the risks to the public finances emanating from, or propagated through, the real economy and makes fiscal and public debt management more challenging.

45. Our assessment of economic strength takes into account the following key rating factors:

    (i) Economic Growth Performance

    (ii) GDP Per Capita

    (iii) Economic Diversification

    (iv) Competitiveness

KEY RATING FACTOR 1

Economic Growth Performance

46. Real GDP growth is a key measure of economic performance and an important indicator of an economyôs ability to absorb the growth of its labour force and increase living standards. Strong, sustained growth makes it easier for a government to increase its tax power and strengthen its budgetary position. Fast growth also enables a country to reduce the burden of public debt, or else sustain higher levels of debt. Conversely ï and particularly in emerging market and developing economies ï low growth is often associated with socio-economic challenges, such as unemployment and poverty, and tends to give rise to structural fiscal weaknesses.

47. Prolonged slowdowns in economic growth may also be problematic from a credit perspective by reducing government revenue and increasing public expenditure through the operation of automatic stabilisers and discretionary actions to support economic activity. Hence, lower growth may contribute to an increase in the budget deficit and the ratio of public debt to GDP; but to what extent this erodes sovereign creditworthiness will depend upon factors such as the state of the public finances prior to the downturn (with a large deficit and debt stock limiting the space for further deterioration without significantly reducing repayment capacity) and the depth and duration of the downturn.

Assessment Criteria

Step 1

48. To evaluate economic growth performance we first classify a country into one of seven categories based on annual average real GDP growth over a five-year horizon ï a period that would generally be long enough to cover most, if not all, of the duration of a typical economic cycle.

Real GDP Growth, %							
Descriptor	Very Strong	Strong	Good	Moderate	Moderate-to-Low	Low	Very Low
Indicator Range	>5.0	[4.0; 5.0]	[3.0; 4.0]	[2.0; 3.0]	[1.0; 2.0]	[0.0; 1.0]	< 0.0
Score	7	6	5	4	3	2	1

Step 2: Adjustment factors

49. We next consider the durability of real output growth and its effectiveness in improving socio-economic outcomes. We may raise the score derived from Step 1 by up to two points where one or more of the following apply:

- The average rate of real GDP growth is low in absolute terms or relative to population growth, but recent or ongoing structural reforms or a transformative economic event (such as the commercialisation of a natural resource endowment) indicate a high likelihood of significantly stronger economic growth over the medium term.
- The average rate of real GDP growth is moderate or weaker in absolute terms but the economy is an advanced industrialised economy, real GDP per capita is increasing and growth is relatively balanced.

50. We may lower the score derived from Step 1 by up to two points where one or more of the following apply:

- The rate of real GDP growth is above the economyõs potential or trend rate and is unlikely to be sustained over the next two-to-three years, but the expected slowdown is likely to be orderly, reflecting cyclical forces and the tightening of macroeconomic and financial policies (a ñsoft landingò scenario; typically a one point adjustment).
- Overheating risks are at elevated levels ï as evidenced by factors such as high domestic inflation, accelerating asset prices (including financial assets, real estate and housing), rapid wage growth and a widening external trade deficit ï and the medium term is likely to be characterised by a marked economic slowdown and a drawn-out recovery (a ñhard landingò scenario; typically a two point adjustment).
- The average rate of real GDP growth is below the rate of growth of the countryõs population, so real GDP per capita in local currency terms is declining.
- The unemployment rate is relatively high (above 10%) and is either rising or unresponsive to real output growth.
- Growth in the past one or two years has been well below the longer-term average and the pace of growth over the medium term is expected to be significantly below the potential rate due to adverse structural changes or other factors that have contributed to a marked deterioration in the business climate.

KEY RATING FACTOR 2

GDP Per Capita

51. Nominal GDP per capita is an indicator of economic affluence and a useful proxy for a countryõs ability to absorb shocks and for the populationõs willingness to tolerate fiscal measures aimed at making more resources available for government or external debt service. In addition, the level of public debt that a country can sustain tends to be positively correlated with the level of GDP per capita, in part because the economic and institutional context for borrowing tends to improve as a country moves up the income scale.

Assessment Criteria

Step 1

52. We score GDP per capita in accordance with the thresholds below. Country classifications are based on the five-year average of GDP per capita, with GDP measured at market prices and converted into US dollars at current exchange rates.

GDP Per Capita, USD '000

Descriptor	Very High	High	Good	Moderate	Moderate-to-Low	Low	Very Low
Indicator Range	>45	[30; 45]	[18; 30]	[10; 18]	[6; 10]	[3; 6]	<3
Score	7	6	5	4	3	2	1

Step 2: Adjustment factors

53. The score from Step 1 may be adjusted upwards by one point if:
    - GDP per capita is considered to be significantly understated due to measurement or other issues, such as undervaluation of the exchange rate.
54. Conversely, the score may be lowered by one point if either of the following applies:
    - GDP per capita is considered to be significantly overstated due to measurement or other issues, such as overvaluation of the exchange rate (for example in countries with multiple exchange rates and where non-market official rates are used) or high domestic inflation.
    - Income inequality is relatively high (proxied by a large Gini coefficient), or where other indicators of socio-economic development ï in particular UN human development indices for health and education ï suggest that relative living standards are significantly lower than implied by GDP per capita.

KEY RATING FACTOR 3

Economic Diversification

55. Countries with diversified production and export sectors are often more resilient to adverse external shocks and tend to experience more broad-based and sustainable GDP growth. By contrast, concentration in production and exports tends to increase a countryôs exposure to adverse external shocks, including fluctuations in the terms of trade, and may result in more volatile economic growth.

Assessment Criteria

Step 1

56. For comparative purposes we focus on export diversification rather than output diversification and as a starting point use the export concentration index produced by the United Nations Conference on Trade and Development (UNCTAD) to gauge how diversified a countryôs exports are in terms of the products it sells.
57. Initial scores are assigned to a country based on the value of the concentration index as prescribed below. An index value that is close to 1 indicates high export concentration, while very low values suggest the country exports a larger number of products.

Export Concentration Index

Descriptor	Very Low	Low	Moderate-to-Low	Moderate	Moderate-to-High	High	Very High
Indicator Range	0-0.15	0.15-0.30	0.30-0.45	0.45-0.60	0.60-0.75	0.75-0.90	0.90-1.0
Score	7	6	5	4	3	2	1

Step 2: Adjustment factors

58. The concentration index has a number of limitations. Most notably it does not capture the quality and relative importance of a countryôs export mix in world trade. In addition, due to its focus on goods exports, the index may provide a misleading indicator of concentration risk in those countries that export international services, such as tourism, shipping and banking. Moreover, the index does not take into account the geographical concentration of trade and, therefore, the risks posed by reliance on a small number of trading partners.

59. We may therefore raise the initial score by up to two points if export diversification is considered to be much greater than indicated by the concentration index and, in particular, if any of the following apply:

- Exports of services account for a significant share of total export earnings.
- The export structure is of high quality, characterised, for example, by a large share of high value-added products compared to peers.
- The country has substantial market power in its key export industries, such that it can influence international prices (ñprice makerò).

60. We may lower the initial score by up to two points if export concentration risk is deemed to be significantly higher than implied by the concentration index due to either of the following:

- Comparatively high geographical concentration of exports, with earnings heavily reliant on economic conditions in a few specific countries.
- A high share of primary commodity or agricultural exports ï for which pricing power is weak ï in total exports.

61. In cases where data from UNCTAD is not available or not updated in a sufficiently timely manner, we may use other indices of trade concentration (e.g. the Hirschman Herfindahl market concentration index produced by the World Bank) as well as analytical judgement in order to gauge the degree of diversification.

KEY RATING FACTOR 4

Competitiveness

62. Competitiveness is a key determinant of productivity and a major driver of an economyôs long-term potential growth rate. Competitiveness takes into account the value of the goods and services a country produces (which is derived in turn from factors such as their quality and uniqueness), as well as the efficiency with which they are produced. A competitive economy is more likely to be able to grow faster over time, as well as adapt to changes in external demand and withstand shocks.

Assessment Criteria

Step 1

63. We generally use the Global Competitiveness Index (GCI) produced by the World Economic Forum (WEF) as the starting point for our assessment of a countryôs relative competitiveness. The WEF defines competitiveness as: ñthe set of institutions, policies, and factors that determine the level of productivity of a country,ò and derives the GCI from a large number of indicators and opinion surveys. The Index is based on a number of sub-components or ópillarsô of competitiveness including: institutions, infrastructure, education and training, labour market efficiency, financial market development, technological readiness, business sophistication, and innovation.

64. Where data is available we first score countries based on their GCI ranking, as indicated below. For example, countries that rank 121st and above receive 1 point.

Global Competiveness Index

Descriptor	Very High	High	Satisfactory	Adequate	Moderate	Low	Very Low
Indicator Range	[1; 20]	[21; 40]	[41; 60]	[61; 80]	[81; 100]	[101; 120]	[>120]
Score	7	6	5	4	3	2	1

Step 2: Adjustment factors

65. We may adjust the initial score by up to two points in either direction when, in our opinion, a countryôs competitiveness is relatively stronger or weaker than indicated by the GCI. This may be because of shortcomings in the dataset used to determine the CGI (for example key data may be outdated), or because our opinion on a number of underlying determinants of the index differ significantly from those surveyed by the WEF.

66. Scores for countries not included in the GCI will be based on analytical judgment and may draw on other survey-based measures, such as the World Bankôs Ease of Doing Business Rankings and the Corruption Perceptions Index produced by Transparency International, as well as indictors of price and cost competitiveness produced by central banks, national statistical agencies or international financial institutions.

ANALYTICAL DIMENSION

3.3 FISCAL STRENGTH

67. Fiscal Strength refers to the overall soundness of the public finances and, in particular, to the ability of the government to repay or rollover maturing debt obligations. To assess fiscal strength we consider not only whether the current fiscal position is sustainable ï that is, whether the government can safely finance its expenditures taking into account current and planned policies ï but also whether in the event of adverse developments, such as macroeconomic shocks or the realisation of contingent liabilities, the government would be able to manoeuvre in an appropriate and timely way in order to continue servicing its debts and keep borrowing at manageable levels.

68. We base our overall assessment of fiscal strength on four key rating factors:

    (i) Budget Performance

    (ii) Budget Structure

    (iii) Liquidity Risk

    (iv) Government Debt Burden

69. The focus of fiscal strength is on self-sustaining debt repayment capacity, namely the capacity to meet financial obligations by mobilising sufficient fiscal resources (including in foreign currency) or accessing debt markets in a sustained manner, without being reliant on external support from other governments or supra-national organisations.

KEY RATING FACTOR 1

Budget Performance

70. Budget performance, evaluated in terms of the ability of the government to keep the gap between public revenues and expenditures within safe financing limits, is important not only for fiscal sustainability but also for broader macroeconomic stability.

71. Large, persistent budget deficits generally reflect unsustainable fiscal policies and result in the accumulation of government debt and the weakening of the government balance sheet. Growing budget deficits tend to push up funding costs and may increase the governmentôs vulnerability to a crisis of confidence in financial markets. Persistent budget deficits may also reduce national savings, potentially weakening the external current account position and long-run economic growth.

72. Overall budget deficits may also constrain fiscal policy flexibility. In particular, for a given net debt position, the higher the overall budget deficit, the lower the governmentôs capacity to use fiscal policy to support economic activity or to accommodate contingent liabilities.

Assessment Criteria

73. A variety of indicators may be used to assess budget performance, but the two main summary measures are the overall budget balance and the primary budget balance.

- The **overall budget balance** indicates the governmentôs net financing requirement and provides a measure of the governmentôs influence on aggregate demand in economies where budget revenues are derived largely from domestic sources (e.g. it can be a misleading indicator of the fiscal stance in hydrocarbon economies).
- The **primary budget balance** ï i.e. the overall balance excluding interest payments ï is a key determinant of government debt dynamics. The higher the level of government debt, the larger the primary budget surplus needed to stabilise (or reduce) the ratio of government debt to GDP, all other things being equal. In addition, because interest expenditure is largely predetermined by the size of past overall budget deficits, changes in the primary balance over time may be indicative of government efforts to improve the structure of the budget. For this reason the primary balance is usually the operational target for governments seeking to reduce their debt burdens.

74. We use the primary budget balance as our principal measure of budget performance, while the overall budget balance is captured in Key Rating Factor 3: Liquidity Risk via its inclusion in the calculation of the gross government financing requirement.

75. Fiscal analysis is conducted, to the extent possible, at the level of the general government, which is made up of the central government, local authorities, and social security funds. We may, however, rely on central government accounts if consolidated general government accounts are not prepared or made available in a timely manner, supplemented if necessary by a qualitative assessment of broader fiscal performance. Similarly, we will take into account any off-budget quasi-fiscal activities undertaken by the central bank, public financial institutions, or other state-controlled enterprises where these are likely significant.

Step1

76. Budget performance is initially assessed based on the five-year average (three actual, two estimated/forecast) of the primary budget balance.

Primary Budget Balance, % of GDP

Descriptor	Very High	High	Good	Moderate	Moderate-to-Low	Low	Very Low
Indicator Range	>4.0	[4.0; 2.0]	[2.0; 0.0]	[0.0; -2.0]	[-2.0; -3.0]	[-3.0; -4.0]	< -4.0
Score	7	6	5	4	3	2	1

Step 2: Adjustment factors

77. The initial score for budget performance based on the measured primary balance may be raised by up to two points if any of the following apply:
    - Budget performance based on the reported primary balance is consistently understated due to the recurring positive balances of extra-budgetary funds (such as savings funds, stabilisation funds and social security funds), which regularly receive fiscal revenues outside of the government budget.
    - Based on current policies, or expected changes in policy, the primary budget balance is expected to improve significantly over the intermediate term. Expected policy changes refer to measures that have been approved by the government and are awaiting enactment or implementation. Possible examples include planned reforms to the design, coverage or administration of taxes, and structural reforms that reduce public expenditure. The latter could include: privatisation; measures to improve the efficiency and cost-effectiveness of public administration and public services; improvements to the targeting of social welfare spending; and subsidy reform.
78. The score for budget performance may be lowered by up to two points if any of the following apply:
    - The primary fiscal position is significantly weaker than indicated by the reported primary budget balance due to factors such as the limited institutional coverage of government accounts, extensive off-budget fiscal activities, or government payment arrears.
    - The observed improvement in the primary budget balance is unlikely to be durable as it is largely attributable to short-lived factors, such as the introduction of one-off or temporary fiscal measures (e.g. temporary surtaxes and tax amnesties); strong cyclical economic effects; or windfalls arising from a positive, but likely temporary, change in the underlying source of revenue (e.g. a jump in oil prices, in the case of hydrocarbon producers). When assessing fiscal performance or consolidation we may also consider measures such as the structural and cyclical budget balances (where available) and the non-hydrocarbon budget balance (where relevant).
    - Based on current policies or expected changes in policy the primary budget balance is expected to deteriorate significantly over the intermediate term. Expected policy changes could include planned tax reforms that would reduce revenue, or planned changes in

entitlement programmes (such as state pensions, social benefits and healthcare) that would involve a significant increase in public spending.

KEY RATING FACTOR 2

Budget Structure

79. The structural composition of the budget has a bearing on the amount of debt that a government can sustain and on its ability to adapt budgetary policy in order to meet its financial obligations, especially during times of economic stress.

80. On the income side, low rates of revenue mobilisation and reliance on proceeds from potentially volatile sources make it more challenging for a government to avoid possibly large fiscal deficits and also increase the risk of the government resorting to risky forms of financing ï such as monetary financing ï when funding gaps emerge.

81. The degree of diversification of government income and the breadth of the tax base also matter as reliance on revenue from one or two sources increases the vulnerability of the budget to shocks and limits the capacity to raise revenue by raising tax rates. For oil exporters, fiscal break-even oil prices (the price required to balance the budget given current levels of spending) that are close to, or exceed, the actual oil price in international markets would generally be regarded as a source of fiscal vulnerability, especially if the level of public spending is entrenched.

82. On the expenditure side, a high share of inflexible forms of spending in total expenditure limits the scope for using fiscal policy to counter economic shocks and may over time exert upward pressure on total spending. In addition, the quality of public spending tends to weaken when expenditure rigidities are high, as efforts to restrain the growth in overall spending typically focus on flexible ï but often more productive ï goods and services, such as public infrastructure, education and healthcare.

83. Expenditure rigidity is evaluated primarily by the share of non-discretionary spending in total spending. We define non-discretionary spending in broad terms as expenditure the government is legally obliged or strongly committed to undertake and is unlikely to be able to reduce significantly in the intermediate term owing to legal or political constraints. This includes wages and salaries, interest payments, public pensions, other social benefits, and some types of subsidies.

84. Expenditure flexibility may be deemed lower than indicated by the degree of non-discretionary spending if there are significant amounts of public expenditure that are beyond the direct control of the central government.

Assessment Criteria

85. The criteria for assessing the budget structure are shown below.

Budget Structure, Key Characteristics				
Very Strong	**Strong**	**Adequate**	**Weak**	**Very Weak**
Revenue administration and collection is very efficient and tax compliance is very high. Revenue sources are well diversified and the tax base for major taxes is broad. The government is able to generate substantial revenue by adjusting tax rates, which are low to moderate by international comparison. Expenditure flexibility is very high. (As a guideline, non-discretionary spending is likely to account for less than 50% of total expenditure and the rigidity of other expenditures is likely low.)	Revenue administration and collection is efficient and tax compliance is high. Revenue sources are well diversified and the tax base for major taxes is reasonably broad, although in comparison to the category above tax rates may be relatively high or there may be greater reliance on distortionary taxes or on income from non-tax sources (grants, royalties, central bank profits, privatisation proceeds). Expenditure flexibility is high (guideline: non-discretionary spending is 50%-60% of the total).	Revenue administration and collection is reasonably strong but there may be some constraints posed by the complexity of the tax system or insufficient human and technical resources, including information systems. The tax system may still be developing and in comparison to higher categories tax bases may be narrower, necessitating comparatively high rates of taxation, and there may be significant reliance on non-tax revenues. Alternatively, the budget may be largely dependent on revenue from one or two potentially-volatile sources (for example hydrocarbons), but there are effective institutional mechanisms or rules for setting aside a proportion of annual revenues from such sources for fiscal stabilisation or similar purposes. Expenditure flexibility is moderate (guideline: non-discretionary spending is 60%-70% of the total).	Revenue administration and collection is inefficient by international comparison. Revenue mobilisation is weak (guideline: total budget revenue is below 25% of GDP and there is little or no evidence to suggest mobilization is significantly stronger). The tax system may be overly complex or porous due to the prevalence of exemptions. There may be high reliance on trade taxes, other distortionary taxes, and non-tax revenues. The income tax base may be narrow and consumption based taxes (e.g. VAT) limited in scope. Reliance on grants and other forms of budgetary support from external donors may be high (10%-25% of total revenue) or the budget may be largely dependent on revenue from one or two potentially-volatile sources. Expenditure flexibility is low (guideline: non-discretionary spending accounts for 70%-80% the total).	Revenue mobilisation is very weak (guideline: total budget revenue is below 20% of GDP and there are insufficient offsetting or mitigating factors to suggest mobilization is significantly stronger). Resources for revenue administration may be inadequate, the income tax system poorly designed, collection rates low, and tax evasion high. Dependence on non-tax sources of revenue may be very high. The government's ability to raise revenue in the short term may be severely constrained by political, institutional, technical or other factors. Reliance on grants and other forms of budgetary support from external donors may be very high (more than 25% of total revenue). Expenditure flexibility is very low (guideline: non-discretionary spending accounts for more than 80% of total expenditure).

KEY RATING FACTOR 3

Liquidity Risk

86. Liquidity risk takes into account the underlying vulnerabilities in the public debt structure and budget position that make government financing more sensitive to changes in creditor sentiment and which could potentially affect the governmentôs ability to access debt markets and other financing venues on an ongoing basis in order to meet maturing debt obligations.

87. For scoring purposes we focus on identifying fiscal vulnerabilities that could result in funding difficulties should investor sentiment or market conditions worsen and not on the current risk appetite of creditors or the market environment itself, which are considered outside of the scorecard framework.

88. Our assessment of sovereign liquidity risk is based on the following three sub-factors:

    (i) Gross Government Financing Requirement

    (ii) Government Financial Assets and Non-Debt Funding

    (iii) Debt Profile and Creditor Base

SUB-FACTOR 3.1

Gross Government Financing Requirement

89. The annual gross financing requirement is an approximate measure of how much money the government will need to borrow or raise in a given year and hence is a good indicator of potential liquidity problems.

90. The gross financing requirement is determined by the size of the budget deficit ï which typically necessitates the issuance of new debt ï and the amount of maturing debt, and is defined more formally as the overall budget balance on a cash basis *plus* principal payments on medium- and long-term debt *plus* the stock of short-term debt at the end of the previous period.

Assessment Criteria

91. Scoring guidelines for gross funding needs are given below and refer to the average of the previous, current and following year.

Gross Government Financing Requirement, % of GDP

Descriptor	Negligible	Very Low	Low	Moderate	Moderate-to-High	High	Very High
Indicator Range	<-1.0	[-1; 5]	[5; 10]	[10; 15]	[15; 20]	[20; 25]	>25
Score	7	6	5	4	3	2	1

SUB-FACTOR 3.2

Government Financial Assets and Non-Debt Funding

92. This sub-factor considers the likely ability of the government to mitigate short-term financing risks in a stressed environment by drawing on liquid financial assets or realising other assets (including through privatisation). For scoring purposes we do not take into account the ability of the government to ôprint moneyô to bridge a financing gap. Nor do we consider the possibility of external financial assistance from the official sector as the scorecard aims to capture the key facets of standalone creditworthiness.

Assessment Criteria

93. Government financial assets include deposits with the banking system and domestic and foreign securities held by extra-budgetary funds and sovereign wealth funds. The key issue in determining the degree to which liquidity risk is mitigated is whether and to what extent the government would be willing and able to liquidate financial assets in a stress scenario. We are generally conservative in our treatment of domestic assets, as governments tend to be reluctant (or unable) to dispose of equity stakes in local entities, particularly flagship companies, or to make large-scale deposit withdrawals from local banks during times of stress, due to the potential impact on financial market conditions and bank liquidity. Similarly, expected proceeds from privatisation are only taken into account if terms and conditions have been agreed with investors, or are very likely to be agreed in the near term.

94. For most countries, our assessment of government financial assets has a large subjective component. This reflects the lack of internationally comparable data on government financial assets and limited disclosure about the value, composition and liquidity of such assets. The score for this sub-factor is therefore based on analytical judgement taking into account potential liquid and realisable assets relative to gross funding needs for the current and following fiscal year.

Government Financial Assets and Non-Debt Funding, Key Characteristics				
Very High	**High**	**Adequate**	**Moderate-to-Low**	**Low**
Liquid government financial assets and other probable non-debt funding exceed the annual gross financing requirement.	Liquid government financial assets and other probable non-debt funding cover 75%-100% of the annual gross financing requirement.	Liquid government financial assets and other probable non-debt funding cover 50%-75% of the annual gross financing requirement.	Liquid government financial assets and other probable non-debt funding cover 20%-50% of the annual gross financing requirement.	Liquid government financial assets and other probable non-debt funding cover less than 20% of the annual gross financing requirement.

SUB-FACTOR 3.3

Debt Profile and Creditor Base

95. Sovereign liquidity risk is also affected by the structural composition of government debt, including in terms of currency, maturity at issuance, and ownership. A poorly structured debt stock is typically harder to manage and is a prime source of financial vulnerability as it can contribute to potentially large and unanticipated changes in debt servicing requirements. Some examples are provided below.

- **Currency composition** ï A high share of foreign currency debt in total debt may create a significant mismatch between government cashflow and debt service (provided fiscal receipts are predominantly local currency) and make debt service payments sensitive to exchange rate movements.
- **Maturity structure** ï A high share of short-term debt at original maturity (which might reflect an inability to issue long-term debt) may expose the government to significant rollover risk during the course of the year and lead to higher-than-planned debt service costs if interest rates increase sharply.[3]
- **Ownership structure** ï The nature of the creditor base may also affect liquidity risk. For example, a narrow investor base for marketable securities can give rise to high refinancing risk. Similarly, reliance on non-residents to purchase marketable government debt (foreign or

[3] In this context it should be noted that the standard measure of the gross financing requirement, referred to in sub-factor 3.1 implicitly assumes that short-term debt by original maturing outstanding at the end of the year is refinanced in the next year by new debt that falls due in a future year.

local currency) may pose a risk to funding stability, particularly where those investors lack a long-term commitment to the country. On the other hand, a captive domestic investor base (created, for example, by investment regulations for public and private institutional investors, such as public pension or social security funds, or through reserve and liquid asset requirements on banks) can help to reduce market and refinancing risks in the short term, although possibly at the longer term cost of the development of the financial system.

Assessment Criteria

96. We classify the debt profile and creditor base as favourable, neutral or unfavourable taking into account the criteria below.

Debt Profile and Creditor Base, Key Characteristics		
Favourable	**Neutral**	**Unfavourable**
▪ The share of local currency debt in total government debt is more than 80%. ▪ The share of short-term debt by original maturity in total government debt is below 20%. ▪ More than 65% of government debt is held by residents. A deviation from any one the above may be permitted if there is a large domestic investor base (relative to government funding needs) that has proven to be liquid and stable over time (a significant part may be "captive").	▪ The share of local currency debt in total government debt is between 60% and 80%. ▪ The share of short-term debt by original maturity in total government debt is between 20% and 30%. ▪ Between 40% and 65% of government debt is held by residents. A deviation from any one of the above may be permitted if there is a supportive creditor base that has proven to be relatively liquid and stable over time. It may include captive domestic investors or official creditors with a long-term commitment to the country. We may be flexible in our application of the first criterion in cases where the government receives a significant part of annual budget revenue in foreign currency.	▪ The share of foreign currency debt in total government debt is more than 40%. ▪ The share of short-term debt by original maturity in total government debt is greater than 30%. ▪ More than 60% of government debt is held by non-residents (unless non-resident holdings have proven to be stable over time, debt is held by entities with a close connection to the country, and is mainly in local currency).

KEY RATING FACTOR 4

Government Debt Burden

97. The level of government debt is a key determinant of fiscal solvency and an important indicator of the degree of fiscal space available to the government to run budget deficits and to use the public finances to absorb economic and financial sector shocks. High levels of debt tend to be associated with high borrowing requirements, which in turn expose the government to refinancing risk. Heavy indebtedness also tends to exacerbate a country's vulnerability to a deterioration in economic fundamentals, and primary budget surpluses of increasing magnitude may be needed in order to prevent the debt becoming unsustainable (surpluses that may be economically or politically difficult to generate).

98. While government indebtedness is obviously an essential factor in the determination of sovereign creditworthiness, empirical studies are far from conclusive regarding the level of debt that may be considered "safe" or sustainable. Some governments have encountered repayment difficulties at debt levels that might ordinarily be regarded as low or moderate, while others have been able to

sustain debt at comparatively high levels. Consequently, there may be little correspondence between a sovereignôs credit rating and the level of public debt.

99. Differences in debt thresholds between sovereigns reflect country-specific factors including, but certainly not limited to, the following: the strength of institutions; the level of economic development and long-term growth prospects; the sophistication and depth of local capital markets; investor perceptions of market access; the countryôs vulnerability to shocks; and the default history of the government.

100. The above notwithstanding, we do not attempt to establish country-specific debt thresholds. Instead, for reasons of simplicity and transparency, we evaluate each sovereign against the same debt thresholds and take account of the other factors that influence debt sustainability elsewhere in the methodology.

Assessment Criteria

101. We base our assessment of the debt burden and solvency risk on the following three indicators:

- The ratio of gross government debt to GDP ï which provides a direct measure of the debt burden relative to the size of the economy;
- The ratio of gross government debt to budget revenue ï which indicates the capacity to mobilise fiscal revenue to repay debt; and
- The ratio of gross interest payments to budget revenue ï which indicates the burden of government debt on the budget.

Gross Government Debt, % of GDP

Indicator Range	[0; 20]	[20; 30]	[30; 40]	[40; 60]	[60; 80]	[80; 100]	>100
Score	7	6	5	4	3	2	1

Gross Government Debt, % of Budget Revenue

Indicator Range	[0; 50]	[50; 100]	[100; 150]	[150; 200]	[200; 250]	[250; 350]	>350
Score	7	6	5	4	3	2	1

Interest Payments, % of Budget Revenue

Indicator Range	[0; 3]	[3; 5]	[5; 7]	[7; 9]	[9; 15]	[15; 20]	>20
Score	7	6	5	4	3	2	1

ANALYTICAL DIMENSION

3.4 MONETARY AND FINANCIAL STABILITY

102. Monetary stability generally means low inflation and confidence in the domestic currency. Financial stability refers to the ability of a country's financial system to mobilise savings, allocate resources and facilitate economic growth, as well as to continue performing key functions during times of stress. This analytical dimension therefore captures the degree to which monetary and financial stability support the economic, fiscal and external strength of a country or, conversely, the extent to which price instability and deficiencies or imbalances in the financial system impede or pose a risk to economic growth and sovereign creditworthiness.

103. We base our overall assessment of monetary and financial stability on the following key rating factors:

(i) Monetary Policy Flexibility

(ii) Inflation Performance

(iii) Capital Market Development

(iv) Macro-Financial Imbalances

(v) Banking Sector Strength

KEY RATING FACTOR 1

Monetary Policy Flexibility

104. Monetary policy flexibility takes into account the ability of the authorities to use policy instruments to influence domestic demand, manage inflation and ensure the sustainability of the country's exchange rate regime. Monetary policy flexibility also captures the capacity of the authorities to adjust the policy stance to counteract economic shocks and to provide temporary liquidity support to the financial system in times of severe disruption.

105. Monetary policy flexibility is typically highest when a country issues its own currency, is capable of operating an independent domestic monetary policy unconstrained by factors such as exchange rate objectives, high levels of dollarization or fiscal dominance, and where the monetary authorities are able to influence the behaviour of financial institutions and activity in the real economy through changes in market-based policy instruments.

106. As monetary policy can be undermined by fiscal laxity and macro-financial vulnerabilities, countries assessed favourably under this key rating factor would be expected to pursue prudent macroeconomic policies and demonstrate good coordination between the institutions responsible for monetary, fiscal and macro-prudential policies.

107. Certain expansionary or unsustainable policy stances tend to be particularly problematic and countries pursuing them would be marked down accordingly. For example, we would generally regard monetary financing of the government budget deficit as a negative rating factor, particularly if resorted to frequently. Similarly, we would tend to view unfavourably the adoption of very loose monetary policies, especially in countries with rigid exchange rate regimes, as this could result in pressure on international reserves and the exchange rate.

Assessment Criteria

Step 1

108. We assign an initial score for monetary policy flexibility based on the criteria shown below.

Monetary Policy Flexibility, Key Characteristics				
Very High	**High**	**Moderate**	**Low**	**Very Low**
Monetary autonomy and policy flexibility is very high. The monetary authorities operate under a well-established and credible monetary policy framework. The exchange rate is independently floating; the currency is a reserve currency or a major internationally traded currency. The monetary authorities possess a range of market-based and other policy instruments to meet operational targets and objectives. They largely control short-term interest rates and have a significant influence on broader domestic financial conditions and domestic demand. Liquidity management is sophisticated and effective, with the monetary authorities able to conduct timely operations in well-developed and liquid money markets. Lender-of-last-resort capacity is very strong. Coordination between monetary policy and macro-prudential policy is strong.	Monetary autonomy and policy flexibility is high. Monetary authorities in this category have similar characteristics to those in the óvery highô category but are slightly weaker or have less flexibility in one or two areas. For example, the exchange rate may be floating or lightly managed with no predetermined path and the domestic currency may not be a significant currency in international markets; instruments for managing domestic liquidity may be market-based but less sophisticated, possibly reflecting the lower stage of financial sector development.	There is some scope for discretionary monetary policy but the degree of flexibility is constrained by one or more of the following: the operation of a fixed or targeted exchange rate regime; limited liquidity management capabilities (including in the context of large capital flows that are difficult to sterilise); reliance on non-market based policy instruments (for example reserve requirements, standing facilities, and credit ceilings); and a weak transmission mechanism (which may reflect the stage of financial sector development or shallow money markets). The monetary regime may be in transition to a more market-based framework where the role of the monetary authorities, and their influence on interest rates, is increasing. Alternatively, a degree of policy discretion could arise from binding restrictions on capital flows in the context of a fixed exchange rate regime.	The exchange rate regime may be very rigid (for example, a currency board), policy instruments may be largely administrative; policy effectiveness may be low and the underlying monetary transmission mechanism uncertain, possibly reflecting a low stage of financial sector development. Scope for lender-of-last-resort and emergency liquidity operations may be greatly constrained by the exchange rate regime, dollarization or a high level of foreign-currency liabilities in the banking system. Monetary policy flexibility may be severely constrained by high public debt and deficit monetisation.	The country does not have an independent national currency and has adopted the currency of another jurisdiction (formal dollarization). The national authorities have little or no scope to undertake discretionary monetary policy or provide liquidity support to financial institutions in the event of a systemic crisis.

Step 2: Adjustment for policy stance

109. We may revise the initial score down by up to two points where, in our opinion, the monetary stance of the authorities is inappropriate ï given economic conditions ï and is likely to contribute to a weakening in sovereign creditworthiness (e.g. the stance may be excessively loose/tight at a time of mounting inflationary/deflationary pressures).

Other rating considerations:

Monetary flexibility in monetary unions

110. Countries that join currency unions generally cede control of monetary and exchange rate policy to a central supra-national authority; the degree of monetary flexibility retained at the national level is low. Nevertheless, we may score individual states in the range from ómighô to óvery lowô depending on the following:

- The credibility of the monetary union and financial strength of its central bank.
- The strength of the countryôs commitment to membership of the monetary union.
- The appropriateness of the policy stance of the central bank given economic conditions in the member country.
- The effectiveness of central institutional arrangements for providing liquidity support to solvent but temporarily illiquid banks in member countries, even in the event of home government financial distress.

KEY RATING FACTOR 2

Inflation Performance

111. Low inflation is an important indicator of monetary policy efficacy and confidence in the local currency. Price stability contributes to long-run economic growth and employment by reducing real interest rates and facilitating business planning and investment.

112. Sustained high inflation is typically indicative of underlying weaknesses in macroeconomic management and policy credibility. High inflation generates uncertainty ï especially since the price level tends to become more volatile as inflation increases ï and therefore has adverse implications for investor confidence, business sentiment, bank lending, and real output growth. High inflation may also reduce international competitiveness by driving up the real exchange rate. Inflation erodes purchasing power (dampening domestic demand) and, in some settings, the distributional impact of fast and unevenly rising prices may have significant social and political costs.

113. Rampant inflation is a key driver of dollarization, which in turn tends to reduce the effectiveness of domestic monetary policy ï including the ability of the central bank to provide liquidity support to the banking system ï and in severe cases may fuel capital flight and the loss of international reserves.

114. High and variable inflation also increases the riskiness of holding long-term local-currency debt and can therefore weaken the debt structure of issuers, including the government, as investor preference shifts to foreign currency or short duration assets.

115. Deflation can also be costly ï especially if associated with declining aggregate demand ï due to its potentially debilitating impact on profits, output and employment. Deflation discourages consumption and is a burden for debtors as it increases the real value of financial obligations contracted in nominal terms, making them harder to service. In addition, deflation is often accompanied by declines in asset prices and collateral values, which weaken balance sheets.

116. Very low inflation can also be a cause for concern. This is because it reduces the buffer against deflation, thereby leaving the monetary authorities with little room to combat the risk of falling prices.

Assessment Criteria

Step 1

117. We gauge inflation performance based on actual and expected changes in the consumer price index over a five-year period (three past years, the current year and the next year). The scoring intervals for inflation are set out below.

Consumer Price Inflation, five-year annual average (%)

Indicator Range	[1.0; 2.5]	[2.5; 3.5]	[3.5;4.5] [0.0;1.0]	[4.5; 6.0] [-1.0; 0.0]	[6.0; 7.0]	[7.0; 9.0] [<-1.0]	>9.0
Score	7	6	5	4	3	2	1

Step 2: Adjustment factors

118. The score for inflation performance may be raised by up to two points if any of the following apply:
    - The official consumer price index overstates inflation significantly due to methodological deficiencies.
    - Inflation is either close to zero or negative and the forces behind deflation are largely temporary or benign (e.g. they may be associated with a positive supply side shock).
119. The score for inflation performance may be lowered by up to two points if any of the following apply:
    - The official consumer price index understates inflation significantly due to methodological deficiencies, government manipulation or other factors ï and as evidenced by alternative measures of inflation (where available).
    - Very low inflation reflects a weak economy with deficient domestic demand.

KEY RATING FACTOR 3

Capital Market Development

120. Capital markets are important for economic growth and development, as well as for financial stability and the conduct of monetary policy. Financial systems with under-developed capital markets tend to be over-reliant on banks, less capable of intermediating over long horizons, and are more likely to be dependent on external financing. In contrast, deep and liquid capital markets, particularly debt markets, enable financial risks to be dispersed more widely and provide the private sector and government with access to long-term local-currency financing. Deep and liquid capital markets may also help increase resilience to domestic banking crises by providing alternative sources of finance and investable local assets and contribute to capital flow volatility by bolstering absorptive capacity through higher domestic savings. The small size of many economies may, however, present a significant structural barrier for developing deep and liquid domestic markets.

Assessment Criteria

121. The criteria for assessing capital market development are given below:

Capital Market Development, Key Characteristics			
Highly Developed	**Developed**	**Developing**	**Underdeveloped**
Money and capital markets are highly developed, diversified, deep and liquid. The availability of investable securities across the maturity spectrum is relatively high and the domestic investor base and number of issuers is large and varied. Market regulation is sound and supervision is strong, supported by high-class IT infrastructure and surveillance capabilities, as well as strong corporate governance and disclosure standards. The government can issue local-currency denominated marketable instruments with very long tenors (20 years or more). There is a sizeable and active private fixed-income market.	Money and capital markets are reasonably developed. Market infrastructure is aligned with international standards. Capital markets are relatively large in relation to the size of the economy. Market liquidity is generally adequate but may be limited in some segments of the maturity spectrum. The number of issuers and diversity of financial instruments may be somewhat limited, possibly reflecting the size of the economy. The government securities market is well developed and reasonably liquid; the government can issue local-currency denominated marketable instruments with long tenors (10 years or more).	Money and capital markets are developing. The investor and issuer base may be expanding, the availability and diversity of financial instruments increasing, and good progress may be being made with regard to market infrastructure. Nevertheless, market liquidity may be relatively low; the interest rate and liquidity risk management tools of financial institutions may be constrained as a result. The government is likely to be able to issue local-currency denominated marketable instruments with medium-term tenors (5-10 years) and possibly accounts for the overwhelming majority of securities outstanding. The ability of the private sector to issue long-term in the local currency may be somewhat limited. The small size and narrowness of the domestic economy may pose a major challenge to further capital market development.	Money and capital markets are underdeveloped. The supply of investible instruments may be very low and the investor base small or narrow, possibly dominated by local banks. Secondary markets may lack adequate liquidity. The private fixed-income market may be very small. Market infrastructure may be developing; regulation and supervision may be somewhat below international standards. Government issuance of local-currency denominated marketable instruments may be relatively low or largely confined to short- to intermediate-term instruments (less than 5 years).

KEY RATING FACTOR 4

Macro-Financial Imbalances

122. This key rating factor considers the degree to which macro-financial imbalances are present in an economy and the extent to which they pose a risk to government financial strength.[4] Macro-financial imbalances are defined as significant and sustained deviations in macro-financial variables (such as aggregate credit growth, private sector indebtedness, and asset prices) from their respective historical trends or in relation to the norms in countries at a similar level of economic development. Such imbalances pose a material risk to the economy because they are often unsustainable and may ultimately result in a sharp slowdown in economic activity and, *in extremis*, severe financial sector stress or a currency crisis. In fact most systemic financial crises followed lengthy periods of rapid growth in credit and property prices during which sectoral balance sheets (banks, households and corporates) became over-stretched and vulnerable to relatively moderate ï and not just large ï shocks.

123. Not all macro-financial imbalances result in financial instability. Indeed, particularly in emerging economies, fast-paced credit growth may reflect the deepening of the financial system (possibly stimulated by reforms that help mobilise savings and increase access to credit) and financial-sector expectations of future growth in real productivity. Consequently, it is not always easy to identify the more pernicious types of credit boom or asset-price bubble when they are occurring and it is even more challenging to estimate the timing of a future crisis.

124. Nevertheless, it is necessary to assess the possible severity of macro-financial imbalances given the potentially large impact on sovereign creditworthiness in an adverse scenario. Negative effects may include some of the following: a pronounced deterioration in the budget position due to weaker domestic demand and the deployment of counter-cyclical fiscal measures that may be hard to scale back fully at a later date; an increase in contingent liabilities in the event of government assistance to financial institutions and corporates; and the drawdown of international reserves should the crisis trigger undesirable exchange rate and balance of payments pressures.

Assessment Criteria

125. We gauge the severity of macro-financial imbalances by comparing key variables with historical norms and by examining the underlying drivers and associated indicators of vulnerability. We pay particular attention to credit growth, which is closely associated with banking sector crises, taking into account, *inter alia*, the growth of the economy, the level of financial development, and the riskiness of funding sources. For comparability purposes we focus on bank claims on the non-financial private sector, but may rely on broader measures of the growth of private indebtedness where these are available and point to a materially different risk profile. In assessing the extent of financial imbalances, we may draw on the studies of national authorities and international financial institutions.

126. The circumstances in which we would likely consider macro-financial imbalances to be low, moderate, high or very high are given below.

[4] We focus here on the degree of macro-financial imbalances; the ability of the authorities to respond to a financial crisis and the capacity of the financial system to absorb losses are not captured in this rating factor.

Macro-Financial Imbalances, Key Characteristics			
Low	**Moderate**	**High**	**Very High**
Credit expansion is consistent with sustainable economic growth and financial deepening and poses little or no risk to macro and financial stability. The ratio of private sector credit to GDP is unlikely to be very high (general guideline: below 150% for a mature economy; and below 100% for an emerging market) or rising significantly from year to year (guideline: the annual change in the ratio is likely to be no more than five percentage points). External financing of private sector credit is likely relatively low (guideline equivalent to less than 15% of total banking system assets). Broader measures of private sector debt do not indicate any significant vulnerability. There are no indications of a real estate price bubble, and asset price inflation poses no serious challenge for monetary and financial regulatory authorities. Exchange rate volatility and interest rate volatility are fairly low and well-managed across the banking system. Deposit dollarization and the share of bank loans denominated in foreign currency pose little or no systemic risk.	Credit growth may be relatively fast and above historical norms. Short-term risks to macro and financial stability from the continuation of, or a modest increase in, the current rate of credit growth are low but medium-term risks may be somewhat higher, possibly on account of a relatively high or steadily increasing of private credit to GDP ratio. The level of private sector credit is not high (guideline: below 160% of GDP for a mature economy; and below 110% for an emerging market). External financing of private sector credit is moderate. Broader measures of private sector debt do not indicate any significant vulnerability. There may be some early signs that credit growth is pushing domestic demand above potential output, but overheating pressures are not high and may be contained with appropriate policies. Real estate prices may be rising above historical norms but the risk of an asset price bubble in the medium-term currently appears to be moderate. Exchange rate volatility and interest rate volatility are adequately managed across the banking system. Deposit dollarization and the share of domestic bank loans denominated in foreign currency pose a low-to-moderate systemic risk. There may be some indirect risks to the financial system from the external debt of non-bank sectors.	Credit growth is fast and the ratio of private credit to GDP is rising quickly (general guideline: by more than five percentage points per annum in recent years). The rate of credit growth is unsustainable and imbalances associated with excessive credit growth are likely to be clearly visible (e.g. significant asset price inflation, strong growth in bank foreign liabilities and a widening external trade deficit). There is either significant asset price inflation, which is a growing cause for concern, or else asset prices do not appear to be overvalued and the price level reflects market correction following a recent boom. Exchange rate volatility and interest rate volatility are high to moderate and associated balance sheet risks are reasonably high. Increasing deposit dollarization and a rising share of bank loans denominated in foreign currency are possible sources of moderate-to-high systemic risk. We may also include here countries where the banking system is on the path to recovery following the end of a credit boom or other macro or systemic event that hit the sector reasonably hard.	Credit growth is very fast and outpacing nominal GDP growth by a large margin. Overheating pressures are likely very high and the depth of financial imbalances poses a significant risk to macro and financial stability in the intermediate term. Banking sector reliance on unstable funding sources to sustain credit growth may be high. There is either very high asset price inflation, which is a cause of major concern, or else asset prices are falling in response to deteriorating market conditions. Exchange rate volatility and interest rate volatility are high, as are related balance sheet risks. Changes in the rate of deposit dollarization and in the share of bank loans denominated in foreign currency may pose a potentially high level of systemic risk. We may also include here countries where the banking system is currently experiencing financial stress following the end of a credit boom or other macro or systemic event.

KEY RATING FACTOR 5

Banking Sector Strength

127. We focus on the strength of the banking sector for three main reasons. Firstly, banks support economic growth by mobilising and channelling savings into investment. Secondly, as the primary financial intermediaries in a country banks typically play a key role in absorbing economic shocks. Finally, banks are among the entities most likely to require government financial assistance in the event of a crisis.

Assessment Criteria

128. We assess banking sector strength drawing on the criteria we use to assess individual institutions. We consider the banking sectorôs current financial health by analysing the main aggregated micro-prudential indicators of financial soundness, specifically ratios measuring asset quality, profitability, liquidity, and capital adequacy published by national authorities or international financial institutions, or else estimated by CI in cases where timely data from official sources is not available.

129. We pay particular attention to funding, based on our observation that resilient banking systems tend to be characterised by funding structures that are diversified, stable and involve less leverage. Vulnerabilities tend to increase the higher the loan-to-deposit funding gap, the greater the reliance on wholesale funding (short term and foreign currency in particular), the lower the share of stable funding in total funding, and the more leveraged and less capitalised the system.

130. In addition, we consider potential vulnerabilities arising from system-wide asset concentrations, including where these reflect the small size or perhaps narrowness of the local economy, as well as those associated with weaknesses in lending and underwriting standards.

131. We appreciate that aggregate data may mask significant differences between banks ï differences that may be of systemic importance ï and that movements in key ratios may be cyclical or transient and therefore not necessarily indicative of a fundamental change in the overall risk profile and financial soundness of the banking system. Consequently, similar to the way we assess the financial strength of individual banks, we combine quantitative indicators with qualitative information to gain a more comprehensive understanding of the systemôs financial strength.

132. Key characteristics of banking sector strength are shown below.

Banking Sector Strength, Key Characteristics				
Very Strong	**Strong**	**Moderate**	**Low**	**Very Low**
The capacity of major banks to absorb significant losses in a stressed economic environment is very high, supported by high levels of high-quality, loss-absorbing capital instruments. System funding is predominantly from stable sources. Liquidity metrics indicate very high short-term resilience to stress. Funding and liquidity benefit from deep and liquid domestic capital markets. Asset structure is well diversified and asset quality is generally strong through the cycle, supported by strong underwriting standards. Profitability is very sound and built on sustainable sources of income.	Loss absorption capacity is high, supported by reasonably high levels of high-quality capital. System funding is mainly from stable sources, and liquidity metrics are reasonably strong. Funding markets are developed but moderately deep and diversified. Asset quality is satisfactory through the cycle, supported by generally prudent underwriting standards There may be some moderate concentrations in funding or lending, possibly reflecting the small size and limited diversification of the economy. Profitability is sound and built on sustainable sources of income.	Regulatory capital ratios may be comfortably above regulatory minima in aggregate, but may not fully reflect the sectors risk profile and or may benefit from higher levels of capital instruments with weaker loss absorbing features. System funding is reasonably stable but there may be some vulnerability reflecting the degree of exposure to potentially volatile funding sources (e.g. cross-border or wholesale funding). Liquidity metrics are satisfactory but reliance on the central bank would likely be significant in the event of a period of moderate stress. Asset quality may be currently satisfactory but possibly untested by economic disturbances. The level of NPLs may be elevated and reserve coverage only moderate. Profitability is adequate but may be somewhat volatile.	Regulatory capital ratios may be at or slightly above regulatory minima, but may not fully reflect the banking sectors risk profile and may benefit from capital instruments with weaker loss absorbing features. System funding may display significant vulnerabilities, possibly with relatively low customer deposit funding and high reliance on wholesale, foreign currency, or external borrowing. Domestic capital markets may be too small and shallow to adequately fund bank liabilities. Liquidity metrics suggest limited resilience to short-term stress. Asset quality may be very sensitive to the cycle. Risks associated with excessive asset concentrations may be reasonably high. Profitability may be significantly affected by adverse changes in the business conditions or asset quality.	Capital and other financial buffers suggest the capacity of the system to absorb shocks on a standalone basis is relatively low. The funding structure may be weak. Reliance on riskier forms of funding may be high or deposit confidence relatively low, possibly reflecting a history of banking crises or the lack of credible deposit insurance. Liquidity metrics may be weak; reliance on central bank liquidity may be relatively high. Asset quality may be very weak or deteriorating rapidly and reserve coverage inadequate There may be excessive concentrations in key areas and significant deficiencies in risk management. Profitability may be relatively weak and highly vulnerable to adverse changes in business conditions or asset quality.

ANALYTICAL DIMENSION

3.5 EXTERNAL STRENGTH

133. External strength refers to a countryôs capacity to generate the foreign exchange needed to meet its current and future external debt service obligations in full, and to continue being able to do so in the event of adverse external shocks.

134. In essence a country must generate sufficient external liquidity on an ongoing basis to cover debt service payments to non-residents and to enable the purchase of essential foreign goods and services. In the main it can do this by exporting goods and services, attracting hard currency inflows by issuing debt or selling domestic assets to non-residents, or by running down its stock of accumulated foreign assets.

135. Our approach to evaluating external strength and sustainability therefore involves a combination of flow and stock analysis. We assess the consistency of the external current account balance with underlying fundamentals and whether it can be financed comfortably. We also explore the implications of the size and composition of financing flows for the evolution of the countryôs net foreign liability position in general and net external debt position in particular.

136. Moreover, we examine the countryôs international liquidity position, focusing on the adequacy of official reserves. Official reserves are an essential element of a sovereignôs ability to cushion balance of payments shocks, support the exchange rate, protect the domestic banking sector, and ensure the timely fulfilment of external obligations. In addition, strong reserve metrics are often important for investor and depositor confidence, particularly in emerging markets.

137. Our assessment of external strength is divided into three segments:

(i) Current Account Performance and Financing

(ii) External Debt Capacity

(iii) International Liquidity

KEY RATING FACTOR 1

Current Account Performance and Financing

138. The current account balance reflects the difference between domestic savings and investment and provides a general indication of how much net capital is being exported or imported from abroad. More precisely, current account surpluses mean that a country is accumulating net foreign assets, while deficits have the opposite effect. Importantly, cumulative current account flows, net of equity financing, determine a countryôs net external debt position.

139. Recurring current account surpluses tend to be regarded as favourable from a credit perspective as external solvency requires that countries generate sufficient foreign exchange from trade and returns on external assets to meet present and future payments on foreign debts. There are exceptions to this, however, including current account surpluses that reflect anaemic domestic demand (especially low investment in productive capacity) and surpluses that reflect transitory factors.

140. Deficits in the current account tend to be more worrisome since they imply the build up of net foreign liabilities and possibly declining international competitiveness. Whether and to what degree external deficits are treated as a negative rating factor depends upon a number of factors. These include the magnitude and expected persistence of the imbalance, the causes of the shortfall in savings relative to investment, and the composition of current account financing ï in particular the extent to which the country is reliant upon debt-creating or speculative capital flows.

141. External deficits arising from investment in fixed assets rather than from either rapid private consumption growth or fiscal deficits are generally more sustainable. This is particularly so if the investment is flowing into internationally tradeable sectors, as opposed to sectors that typically add little to a countryôs productive capacity (e.g. some types of real estate development). There are numerous cases of countries financing their current account deficits with essentially short-term or flighty forms of capital, which have in turn fuelled asset price and credit booms, driven up external debt, and left their economies vulnerable to shifts in investor confidence and ñsudden stopsò in capital flows.

Assessment Criteria

Step 1

142. To assess the strength or conversely the degree of vulnerability arising from the current account balance we first classify a country into one of seven categories based on external performance over a five-year period.

Current Account Balance, % of GDP							
Indicator Range	>5.0	[5.0; 2.0]	[2.0; 0.0]	[0.0; -2.0]	[-2.0; -4.0]	[-4.0; -6.0]	< -6.0
Score	7	6	5	4	3	2	1

Step 2: Adjustment factors

143. We may raise the score derived from step 1 by up to two points if one or more of the following apply:

- The current account balance would be significantly stronger but for the impact of one-off country-specific factors. One example might be a large-scale industrial project that would enhance the countryôs production and export capacity in the medium term, but involves a significant increase in the import bill in the short to intermediate term.
- The current account balance largely reflects catching up or convergence processes, consistent with a productive and growing economy, subject to the following provisos: the current account deficit is expected to remain below 8% of GDP; net FDI coverage of the current account deficit is at least 50%; domestic credit growth is neither excessive nor rapid; and the exchange rate is not significantly overvalued.

144. We may lower the score derived from step 1 by up to two points if one or more of the following apply:

- The relative strength of the current account balance reflects distortionary domestic policies or significantly undervalued exchange rates.
- The relative strength of the current account balance reflects one-off or transitory factors.
- Current account dynamics are being driven by potentially volatile price effects or, alternatively, the countryôs export base is relatively narrow and sensitive to adverse movements in the terms of trade.
- The country is reliant upon short term or potentially volatile sources of current account financing. As a guideline net FDI and non-debt creating flows (excluding short-term portfolio equity investment) account for less than one-third of current account financing.
- Deteriorating terms of trade or overvalued real exchange rates point to a significant weakening of the current account position over the medium term.
- Gross external financing needs in the short to intermediate term are expected to be much higher than indicated by the current account position due to the volume of external debt falling due.

145. Any concerns about the countryôs ability to secure adequate external financing without significantly weakening its foreign reserve buffer could result in a larger adjustment to the initial score.

KEY RATING FACTOR 2

External Debt Capacity

146. External solvency is evaluated by considering the evolution of a countryôs gross external debt and net external debt stocks against measures of repayment capacity. Gross external debt is generally defined as the stock of liabilities that require the payment of principal and interest to non-residents of a country, regardless of the currency of denomination.Net external debt is defined narrowly by CI as gross external debt *less* the external assets of the public sector (including official reserves) *less* the external assets of the banking sector (other than the central bank). Non-bank private sector external assets are excluded because data on the size and composition of private sector assets is not always available and it is not easy to determine whether those private entities that have external debts are the same as those that have external assets.

147. High and rising external debt ratios indicate a greater burden of servicing the debt and are generally a cause for concern. However, the reason for the growth in external borrowing also has to be assessed. For example, borrowing for productive investment may result in debt ratios that are high in the short run but are likely to decline steadily in the medium term as new capacity comes on stream.

148. We examine both public sector external debt and private sector external debt. Indeed, private external debt may be as important as public external debt in the determination of sovereign ratings. This is because private sector external difficulties are likely to undermine foreign investorsô confidence in the economy, resulting in a reduction in capital inflows or, worse, net capital outflows. This in turn could have adverse implications for official reserves and, in the event of a large depreciation of the exchange rate, the repayment ability of other parts of the economy with foreign currency liabilities, including the government. In addition, corporate and bank failures could potentially trigger financially expensive government intervention, especially if the institutions in trouble are important to the national economy.

Assessment Criteria

Step 1

149. Our assessment of a countryôs capacity to carry external debt takes into the account the dynamics of the following two ratios:

- Gross external debt to current account receipts (CAR) ï which relates a countryôs total external debt to foreign exchange earnings and other current receipts from non-residents; and
- Net external debt (narrowly defined) to GDP ï which takes into account the external assets of the public and banking sectors and compares net external debt to the ability of the country as a whole to generate income.

150. Our initial score for external debt capacity is derived from the simple five-year average score for each indicator based on the following thresholds:

Gross External Debt, % of CAR

Indicator Range	<50	[50; 99]	[100; 149]	[150; 199]	[200; 249]	[250; 300]	>300
Score	7	6	5	4	3	2	1

Net External Debt, % of GDP

Indicator Range	<-50	[-50; -25]	[-24; 0.0]	[1.0; 49]	[50; 99]	[100; 150]	>150
Score	7	6	5	4	3	2	1

Step 2: Adjustment factors

151. We may raise the score for external debt capacity by up to two points if any of the following apply:
    - A substantial proportion of the gross external debt stock is payable in domestic currency. As a guideline, the score may be raised by one point if the share is between 50% and 70% and by up to two points if the share is greater than 70%. Domestic currency includes local currency issued by national authorities and, for member states of a currency union, the common currency of that bloc.
    - Computed external debt ratios have been pushed up temporarily by borrowing for large-scale, export-oriented projects that are expected to increase CARs and GDP in the medium term (this is most likely to apply to relatively small economies where such scale effects can be highly misleading from an inter-temporal perspective).
    - Data on public sector external financial assets is limited or not available on an annual basis but it is known that the authorities control substantial assets (for example through a sovereign wealth fund) and that net external debt is likely significantly lower than reported.
    - The country is an international or offshore financial centre where bank foreign liabilities are large relative to the size of the domestic economy but are not intermediated locally to any great extent. In such cases we may score external capacity based exclusively on the ratio of net external debt to GDP, which provides a more accurate gauge of external debt capacity by taking into accounting the external asset holdings of the sector that accounts for the bulk of gross external debt, namely the banking sector, and taking into account the stability of foreign liabilities and the investor base, as well as the quality of external assets.
    - A significant component of the external debt stock is in the form of deposits held with banks by nationals, who are treated as non-resident for statistical purposes but who have been a relatively stable source of funding over time and during periods of economic stress.
    - The net international investment position (IIP) suggests that solvency risk is significantly lower than implied by the net external debt due public and private sector holdings of foreign equities.
152. We may lower the score for external debt capacity by up to two points if any of the following apply:
    - The external debt stock is likely significantly understated due to serious data deficiencies.
    - More than one-third of the external debt stock is short term (by original maturity) and the maturity structure is indicative of high rollover-risk.
    - Pre-announced borrowing plans or the path of the current account point to significantly higher gross external debt over the intermediate term.
    - The country has limited access to long-term international capital markets.

KEY RATING FACTOR 3

International Liquidity

153. International liquidity refers to a countryôs ability to access foreign currency resources and finance a balance of payments deficit in the event of a severe external shock. The first and strongest line of defence against such shocks is usually formed by a countryôs official reserves, which can be used quickly and without conditions. Countries with strong reserve buffers are not only better able to withstand external shocks, all other things being equal, but may be less susceptible to market-induced shocks owing to the positive impact of precautionary reserve holdings on investor and depositor confidence.
154. Own reserves are not necessarily the only source of international liquidity available to the official sector in a crisis. Central banks may be able to access foreign liquidity in a number of other ways, for example by drawing down other (non-reserve) state-owned foreign assets, by engaging in foreign currency swap arrangements with other central banks, by borrowing reserves from other countries, by participating in multilateral reserve pooling arrangements, or by accessing

credit lines offered by supra-national institutions. However, with the possible exception of the liquid portion of government foreign assets, these other potential foreign currency resources are not typically as readily available or controllable as own reserves, or a guaranteed source of liquidity in stress scenario.

Assessment Criteria

Step 1

155. The starting point for our assessment of international liquidity is the computation of three ratios, each of which captures different aspects of vulnerability. The principal metrics are:

- The **ratio of official reserves to short-term external debt on a remaining maturity basis** ï which provides a simple static stress test in which it is assumed that the current account balance is zero and the country has no access to international capital markets for a year. This ratio captures the extent of any maturity mismatch on the national balance sheet and, therefore, the degree of rollover risk.
- The **ratio of official reserves to broad money** ï which provides a measure of the adequacy of reserves in the event that a countryôs residents lose confidence in the domestic currency and increase their demand for foreign assets. Hence, while the previous ratio captured vulnerability to one of the principal external drains on reserves, the focus of this ratio is on potential internal drains arising from domestic capital flight. In most countries broad money will be represented by the monetary aggregate M2. Alternative measures, such as M3, may be used in those countries where M2 does not include foreign currency deposits of residents.
- The **international liquidity ratio** ï defined as the sum of official reserves and banksôliquid foreign assets divided by estimated gross external financing needs, which in effect gauges the degree to which expected uses of foreign exchange are covered by banking system foreign resources. The gross external financing requirement is the sum of the current account balance (with its sign reversed, so a surplus reduces the numerator) plus amortisation on medium- and long-term external debt plus short-term external debt with an original maturity of up to one year. Of course, the non-bank private sector may also have external assets that could conceivably be liquidated; but it is difficult in practice to determine whether the external debtors are the same as those holding claims on non-residents.

156. Our initial score for international liquidity is derived from the simple three-year average score for each indicator based on the following thresholds:

Official Reserves, % of Short-Term External Debt (by Remaining Maturity)

Indicator Range	>300	[250; 300]	[200; 250]	[150; 200]	[100; 150]	[50; 100]	<50
Score	7	6	5	4	3	2	1

Official Reserves, % Broad Money (‘M2’)

Indicator Range	>30	[25; 30]	[20; 25]	[15; 20]	[10; 15]	[5; 10]	<5
Score	7	6	5	4	3	2	1

International Liquidity Ratio

Indicator Range	>400 [<0]	[350; 400]	[300; 350]	[250; 300]	[150; 250]	[100; 150]	<100
Score	7	6	5	4	3	2	1

Step 2: Adjustment factors

157. These indicators have a number of limitations, not least because they do not take into account other potential sources of foreign liquidity or factors that might reduce the need to accumulate large precautionary reserve holdings, such as the ability to issue long-term debt in local currency to foreigners. We may therefore increase the score for international liquidity by up to two points if any of the following apply and help to support shock-absorption capacity:

- The exchange rate regime is flexible, financial markets are relatively deep, and the home currency is widely traded in international markets.
- Foreign liabilities, especially external debt, are largely denominated in local currency (unless we have concerns about the potential call on reserves in the event of a shift in investor sentiment).
- There are effective capital and exchange controls which reduce the risk of internal drains on foreign reserves.
- Reserve adequacy based on the average of the above metrics is understated as non-resident deposits comprise a significant proportion of short-term external debt and such deposits have been relatively stable during past economic disturbances and are adequately covered by banksô holdings of external assets (after taking into account cover for resident foreign currency deposits and non-deposit foreign liabilities of the banking sector).
- The authorities possess substantial liquid non-reserve foreign currency assets (for example through sovereign wealth funds) that could potentially be used to augment official foreign liquidity in a stress scenario;
- The country participates in a regional reserve pooling arrangement, or is likely to benefit from swap lines with major central banks (particularly issuers of reserve currencies) in the event of a liquidity shock.

158. We may lower the score for reserve adequacy by up to two points if any of the following apply:

- Non-resident portfolio investment in locally-issued debt instruments (where this has not been recorded as part of external debt) or in local equities is relatively high and ï based on past evidence ï potentially volatile.
- The stock of government foreign currency debt held by residents is large, the capital account is open, and the public finances are relatively weak.
- Reported reserves are overstated due to the inclusion of assets that may not be readily available in a crisis and do not meet the standard international definition of official reserves. These may include foreign assets that are illiquid, non-marketable, encumbered or in some other way inaccessible, as well as central bank holdings of home-government foreign currency debt.
- There are significant potential drains on reserves that are not captured by the above key metrics.

Other rating considerations:

Reserve currency issuers

159. The above metrics may be less relevant for those advanced economies with highly-developed, globally-integrated financial markets and freely floating exchange rates and, in particular, countries that issue a reserve currency. Indeed, we would generally assign a score of 6 or 7 to issuers of reserve currencies with flexible exchange rates unless there is a plausible risk to their ability to obtain foreign currencies with the reserve currency in order to meet foreign currency financing needs.

Members of monetary unions

160. The above metrics may also be less relevant or misleading when applied to individual member states of monetary unions, particularly where the external imbalances and external debt of the

member state are largely denominated in the common currency of the union and owed to the residents of other member states, and where national central banks cede control of foreign reserves to the unionôs central bank.

161. The risk of a currency crisis in a credible monetary union is usually low. However, depending on the institutional design of the union and degree of monetary, fiscal and banking integration, individual member states may still experience balance of payments difficulties, including õsudden stopsö in capital flows and runs on government debt and local banks. Such problems may be addressed (or the likelihood of them occurring diminished) through appropriate cross-country risk sharing arrangements and liquidity support from the unionôs central bank.

162. Hence, in our assessment of international liquidity for member states of monetary unions we will consider: (i) the overall reserve adequacy position of the union, taking into account the criteria in Steps 1 and 2 above and whether or not the unionôs currency has reserve currency status; and (ii) the likelihood of the individual member state receiving adequate official financing or liquidity assistance (foreign currency and local currency) from central institutions to cover external payments imbalances or in the event of external shocks. We would generally assume the likelihood to be very high unless there are concerns about the solvency of the institutions requiring access to official financing or there are pressing political issues that make the likelihood of such assistance uncertain.

4. RATING FACTORS BEYOND THE SCORECARD

163. The following is a list of potential rating factors that are either not included in CI Ratingsô sovereign scorecard or are only partially captured in the sense that a change in these factors could have a much greater impact on credit quality than implied by the scorecard. Where they are material, the factors below may result in an adjustment to the final rating of one or more notches. The list below is not exhaustive and there may be other country-specific factors or circumstances that amplify or mitigate sovereign credit risk. It is for rating committees to apply analytical judgement in identifying and determining the rating impact of such factors or circumstances. All key rating drivers, including any not referred to in this methodology, will be disclosed in CIôs credit rating reports and credit rating announcements.

Default History

164. We treat a sovereignôs default history as a negative adjustment factor, with the impact on ratings a function of the recentness of the last default and the frequency of default over the past 10 years. In determining the magnitude of the adjustment ï which would normally be between one and three notches, all other things being equal ï we would also take into account the severity of past defaults (in terms of creditor losses), with a debt reprofiling that results in moderate losses in net present value (NPV) terms qualifying for a smaller notch adjustment than a restructuring that involves a large ôhaircutôin principal.

165. Debt arrears to official creditors ï whilst not an event of default by CIôs definitions ï would normally be regarded negatively as well. Whether or not we take a rating action would depend on our assessment of the likelihood of such events of financial non-performance (or their underlying determinants) increasing the risk of the sovereign defaulting on debt obligations to private creditors.

Distressed Exchanges and Missed Payments

166. We will normally override the scorecard and assign ratings in the ôCôrange when the likelihood of the sovereign defaulting in the short term is very high. This includes cases where the sovereign announces its intention to restructure, reschedule or exchange a debt instrument that results in an adverse change to the terms of the original debt agreement and where the renegotiation or exchange is considered by CI to be distressed or coercive. The sovereignôs ratings will be lowered to a level indicating that a default has taken place once a debt-service payment has been missed or a distressed exchange completed.

Event Risk

167. The scorecard captures underlying economic and political vulnerabilities, but it does not fully reflect the likelihood of large adverse shocks materialising and may not adequately capture the change in sovereign creditworthiness that would likely follow from the occurrence of a high-impact low-probability event. Examples of such events include political uprisings, war, natural disasters, as well as pronounced and unexpected changes in financial market liquidity, capital flows, and commodity prices.

168. The ratings impact of such events will depend on a number of factors, including the severity of the underlying vulnerability, the size and duration of the shock, and the effectiveness of the authoritiesô response to the crisis (itself a function of several factors, including policy flexibility and the size of fiscal and foreign reserve buffers).

169. CIôs ratings are not conditioned on a sovereignôs ability to survive high-impact low-probability shocks (to do so would be overly cautious and likely result in the bunching of most ratings at relatively low grades). Consequently, the occurrence of such extreme events may trigger a multi-notch adjustment in ratings. Once the shock has dissipated, ratings may be partially or fully returned to their pre-event levels, depending on the extent to which sovereign credit fundamentals have been durably weakened as a consequence of the adverse event.

Creditor Sentiment and Risk Appetite

170. Market sentiment and expectations clearly matter for creditworthiness and in some settings adverse shifts in sentiment may give rise to a self-fulfilling debt crisis without there necessarily being any change in the underlying economic fundamentals of the particular country. While the vulnerability of the public and external finances to shifts in creditor sentiment is captured in the scorecard, the likelihood of such shifts occurring is not. The scoring of market sentiment and expectations from a ratings perspective is far from straightforward, in part due to the volatility of markets and their tendency to overshoot, but also because changes in market prices may be driven by factors other than credit risk.

171. Consequently, we monitor market-based indicators of the cost and availability of funding and assess conditions in local and international financial markets in which the sovereign may be active outside of the scorecard framework, and adjust ratings where changes in such indicators point to a material increase in financing risk.

Government Contingent Liabilities

172. The fiscal impact of contingent liabilities can be very high and in extreme cases can result in public debt dynamics shifting from a sustainable to an unsustainable path in a very short period of time.

173. Explicit government contingent liabilities, which are generally defined by law or contract, include credit guarantees (for example on the borrowings of state enterprises or local government), project guarantees (typically offered in connection with public-private partnerships and infrastructural or industrial projects) and state insurance schemes.

174. Implicit government contingent liabilities are liabilities that the government is not legally obligated to honour but is presumed likely to absorb for political or systemic reasons. Such potential liabilities could include the non-guaranteed debt of state enterprises, the fiscal costs of bank rescues and natural disasters, and the losses of local or regional governments or strategically important corporations.

175. The risk to the public finances from contingent liabilities is hard to measure accurately as it is uncertain whether the event giving rise to the potential liability will occur and ï particularly in the case of implicit liabilities ï whether the government will ultimately intervene and, if so, the fiscal cost involved.

176. Due to the uncertainty of estimating contingent liabilities we consider this important rating factor outside of the scorecard framework. To gauge the potential magnitude of such fiscal risks we may rely on estimates of contingent liabilities produced by national authorities or international financial institutions, but only if we consider such estimates to be credible. Where official estimates are not available, we will consider, inter alia:

- The expected value of government loan and other formal guarantees (excluding any bank deposit guarantees) by adjusting the amount outstanding to take into account our subjective assessment of the likelihood of the guarantee being called in the intermediate term.
- The potential fiscal cost of government intervention in the event of a systemic banking, taking into account the likelihood of a systemic crisis in the medium term (proxied by the standalone financial strength of the domestic banking system), the potential magnitude of gross problematic assets in a crisis scenario, and the likelihood of the government bailing out the banking system in the event of a crisis.
- The likelihood that the government will have to absorb implicit contingent liabilities from other sectors or institutions in the intermediate term. These could relate, for example, to the non-guaranteed borrowings of strategically important state-owned firms and other government controlled entities, or to the liabilities of sub-national layers of government.

Official External Support

177. The scorecard focuses to a large extent on a sovereignôs standalone, or self-sustaining, debt-repayment capacity and does not fully address issues that arise when a government is reliant on, or is expected to receive, financial assistance from friendly states, international financial institutions, or via regional financial arrangements to enable it to meet maturing debt obligations.

178. In such cases, we would consider the following outside of the scorecard framework:

- The underlying reasons for external financial assistance.
- The level and expected duration of assistance.
- The nature and extent of any conditionality attached to official support (e.g. whether loan disbursements are linked to the attainment of reform or performance targets) and the governmentôs ability and willingness to adhere to those conditions (e.g. implement reforms and meet targets).
- The strength of the external supporterôs commitment to providing assistance (a function of both financial capacity and political priorities).
- The likelihood of the sovereign experiencing severe financial difficulties in the event that support is withdrawn or significantly reduced.

179. External support, particularly for countries with severe fiscal or external imbalances, may help to mitigate default risk in the short to intermediate term and provide governments with breathing space to address economic and financial weaknesses. However, unless in the form of grants, official support usually adds to the countryôs external debt stock and may have little impact on long-term debt sustainability.

180. We would generally regard the availability of external financial assistance as a factor that helps to support the ratings of a sovereign that would otherwise be fiscally vulnerable or highly susceptible to external shocks. As the standalone credit profile of a sovereign in need of external assistance is generally weak and because the provision of external support, or a countryôs eligibility for support, may be subject to significant risks, we may restrict the ratings of sovereigns reliant on external support to sub-investment grades. Concerns about the durability of support arrangements aside, the trajectory of the sovereignôs ratings over the medium term would depend primarily on the success of the authoritiesô efforts to strengthen standalone credit fundamentals through appropriate reforms and corrective measures.

Reform Efficacy

181. The scorecard horizon is generally too short to fully capture the likely effect of recently adopted or planned reforms ï economic, social or political ï on sovereign creditworthiness. Consequently, we may make a positive adjustment to our assessment of sovereign credit quality (all other things equal) where in our opinion the government is pursuing reformist policies that are likely to make a positive contribution to sovereign creditworthiness over the medium term, subject to the proviso that the governmentôs policy agenda is broadly credible and implementation and policy reversal risks are low.

182. Conversely, we may make a negative adjustment to our sovereign credit assessment if we perceive the government to be pursuing policies that are likely to contribute to a deterioration in sovereign creditworthiness over the medium term, or if it is failing to address emerging threats to creditworthiness and the likelihood of reformist policies or sound and prudent (corrective) policies being implemented in the short to medium term is low.

Long-Term Risks for Exporters of Non-Renewable Resources

183. CIôs sovereign scorecard takes into account vulnerabilities arising from concentrations in exports and budget revenues, which are typical features of oil and gas producing countries. However, the scorecard does not fully incorporate longer-term risks to fiscal and external sustainability associated with the exhaustion of hydrocarbon reserves for those countries heavily reliant on hydrocarbon exports for fiscal revenue and foreign exchange earnings.

184. We may therefore make a negative ratings adjustment for overreliance on hydrocarbons (outside of the scorecard) after considering the following:

- The current production horizon (ratio of proven reserves to annual output).
- The magnitude of any non-hydrocarbon budget or external current account imbalances (with deficits indicating the size of adjustment that will be needed when resources are depleted).
- The net asset position of any state-owned savings funds established to mitigate future declines in hydrocarbon wealth.

185. We concede that such assessments are fraught with difficulty, not least because the long-term is uncertain and production horizons can shift considerably depending on exploration efforts, recovery technology, and economic and operating conditions. Consequently, we will generally make no additional rating adjustment where the current production horizon exceeds 30 years, or where the non-hydrocarbon fiscal deficit is less than 3% of non-hydrocarbon GDP.

186. In most other cases we will adjust the indicative or baseline rating by one or two notches depending on the magnitude of the non-hydrocarbon fiscal deficit and the number of years until oil and gas reserves would be depleted. A larger adjustment may, however, be warranted in extreme cases where reserves are close to being depleted or production capacity is declining rapidly and insufficient reforms have been implemented to offset the likely impact on fiscal and external accounts.

Exceptionally Large Financial Buffer

187. We may make an exceptional positive adjustment of up to three notches (i.e. one rating category) for sovereigns with liquid financial assets that exceed gross government debt by more than 100% of GDP, provided we believe the government would be willing and able to drawdown such assets in the event of fiscal stress.

Information Risk

188. The quality and transparency of data on the public finances and external finances tends to vary across countries and hence is often an important rating consideration. Indeed, it is widely accepted that informational deficiencies were a major factor behind the failure of many economists to accurately assess the extent of underlying imbalances in many Asian economies prior to the 1997 crisis. Moreover, the misreporting of fiscal data, once uncovered, contributed to the sharp lowering of Greeceôs sovereign ratings in 2010.

189. CI generally sources economic, fiscal and external accounts data from national authorities. The quality and timeliness of the data are a function of each governmentôs statistical and administrative capacities, reporting requirements, and willingness to disclose accurate and comprehensive information, particularly on the public finances. Any concerns we have about the accuracy and coverage of data will be mentioned in the credit rating report and may be reflected in the ratings assigned.

5. LOCAL AND FOREIGN CURRENCY RATINGS

190. CI may assign local currency and foreign currency ratings to a sovereign to indicate relative credit risk in the respective currency. For reasons outlined below, the sovereign local currency rating may exceed the foreign currency rating (usually by one or two notches). However, in many cases the two ratings will be the same. It is also possible for the foreign currency rating to be higher than the local currency rating, although such cases are likely to be rare.

191. There is a common misconception that the repayment capacity of a sovereign state that issues its own currency will necessarily be stronger in local currency than foreign currency. This is usually attributed to the governmentôs unrivalled ability to procure local currency through its ability to tax, repress the domestic financial system (e.g. by requiring financial institutions to purchase government paper at below market rates) and, ultimately, to print money.

192. However, local currency sovereign debt is not órisk freeô Governments can and do default on local currency obligations and whilst history indicates that default risk is generally lower in local currency, the evidence of the past 20 years suggests that the difference between the default rates of the two debt categories has narrowed.

193. This change has been driven by a number of factors. In particular, governments appear to have become less tolerant of the potentially significant economic and political costs associated with persistent debt monetisation. Indeed, debt monetisation provides at best a short-term fix and is not a sustainable financing option. Moreover, in many countries the printing of money to repay debt has become a more challenging option for the government due to the transfer of monetary policy operations to independent central banks with price stability mandates.

194. In addition, rising foreign participation in expanding domestic bond markets has weakened the incentive of governments to prioritise local currency repayment for national political and welfare reasons. The motivation for governments to differentiate between local and foreign currency obligations has also been eroded by the internationalisation of economies and financial systems, which has increased the economic and reputational cost of foreign currency defaults and the likelihood that repayment difficulties in one currency will be transmitted, at least to some extent, to the other currency.

195. In short, as the relationship between the currency of denomination of government debt and the likelihood of default is not easy to pin down *a priori*, a conservative approach to assigning local and foreign currency ratings is warranted.

Notching Guidelines

196. We would generally set the local currency rating one or two notches above the foreign currency rating where all of the following apply:

- Monetary policy flexibility is in the range of moderate to very high.
- The countryôs fiscal strength is at least as high as its external strength
- The risk of debt-servicing difficulties in foreign currency spilling over and significantly impacting local currency debt-servicing capacity is low or moderate. This could be for a number of reasons including, but not limited to, the following: sovereign local-currency debt may be low; the domestic creditor base may be supportive or ócaptiveô with little foreign participation (in which case the local currency debt stock may not need to be low); monetary policy flexibility may be high and local debt markets resilient to shifts in foreign investor sentiment; or there may be effective capital controls in place.

197. Regardless of the above factors, we would tend to equalise the local and foreign currency ratings if any of the following apply:

- The country is a member of a monetary union with a single currency.
- The country has (i) a fixed exchange rate; (ii) the dominant source of budgetary revenue is largely exogenous to the government (e.g. receipts from oil exports); and (iii) the tax system is not well developed (e.g. the tax base is narrow and administration and collection capacity are relatively weak).
- The country has extremely high inflation, or hyperinflation, making it difficult to issue in the local unit.

- The sovereign has a recent track record of defaulting on local currency debt.
- Political and institutional risk is considered to be very high.

198. We may deviate from our general approach and be more flexible in our notching in crisis scenarios where we have greater clarity about the government's intentions vis-à-vis debt obligations in different currencies, or when the government has selectively defaulted on obligations denominated in one currency type (e.g. foreign currency) but not the other.

6. ASSUMPTIONS AND LIMITATIONS

Criteria-Specific Assumptions and Limitations

199. The following assumptions and limitations refer specifically to this methodology.

200. Based on empirical evidence or analytical experience, we believe that the analytical dimensions and rating factors referred to in this methodology matter for sovereign creditworthiness and that individually or in combination with each other they are associated with the likelihood of default.

201. CIôs sovereign ratings and rating outlooks are forward-looking measures. As such they are conditioned on specific scenarios and underpinned by a number of assumptions. These include qualitative and quantitative assumptions about the path of key variables, as well as expectations of how the government and wider economy would cope with plausible adverse shocks.

202. Quantitative assumptions refer to estimates and projections of key economic and financial indicators. Qualitative assumptions are those assumptions of a descriptive or categorical nature that are not directly tied to a quantifiable rating factor. They include assumptions about political risk, economic management, and policy implementation. They may also include assumptions about important exogenous factors, such as global growth, conditions in international capital markets, and commodity price trends. They may also include assumptions about the duration and intensity of economic and political shocks.

203. Ratings may be sensitive to the assumptions used. As the future is uncertain, key rating factors may evolve or change in a different way to that contained in our baseline scenario, potentially warranting an adjustment in the rating or rating outlook. Ratings may be raised or lowered by more than one notch in response to unanticipated changes in key rating factors and underlying quantitative and qualitative assumptions, depending on the magnitude of such changes and CIôs expectations of the duration of the change and impact on creditworthiness.

204. CI Ratings discloses the main qualitative and quantitative assumptions that underpin the baseline path for key rating factors and credit metrics for a country in our sovereign credit rating reports.

205. We use a scorecard as a tool for assessing the strengths and weaknesses of sovereigns in a consistent manner, including relative to peers. The scorecard is not a predictive model of default risk nor does it capture all factors that may affect default risk or the level of the rating assigned or the rating outlook. The weighting of variables is based on analytical judgment. Scoring thresholds are based on both analytical judgement and long-term distributions. Some quantitative metrics are time varying (e.g. GDP per capita measured at current market prices and exchange rates) and hence must be re-calculated periodically in order to remain relevant as a ranking tool. The scorecard implicitly assumes a monotonic but not necessarily linear relationship between quantitative metrics and default risk. In the ôreal worldô some indicators may not be monotonically related to the likelihood of default. In addition, scoring thresholds are general rather than country-specific; however, the relationship between quantitative metrics and sovereign risk may not be same for all countries.

206. It is important to note that the scorecard is essentially a ranking tool and has not been designed to generate ratings. CIôs ratings are based on fundamental credit analysis whereby rating committees composed of experienced analysts determine credit ratings based on a holistic assessment of quantitative and qualitative drivers of long-term credit risk. Rating drivers may include country-specific factors as well as variables that are not captured by the scorecard.

207. To assign and maintain credit ratings CI Ratings must have information that is (a) reliable and (b) sufficient in coverage to form a credible opinion, consistent with CI methodology, of the risk of the rated entity failing to meet its financial commitments on a timely basis. In the sovereign ratings context, this does not mean that CI has access to all relevant information (particularly as governments may conceal or choose not to disseminate certain types of information) or that the data published by national authorities is of the same quality. Indeed, there are no internationally accepted or adhered to standards for the content and presentation of some of the data used in sovereign analysis. This is particularly the case for public finance data, where there may be significant differences between countries regarding the scope, coverage, transparency and accounting basis for fiscal accounts and government financial assets and liabilities, including debt stocks. Whilst every effort is made to ensure comparability of key indicators, or at least to take appropriate account of significant variations, it is difficult to fully assess the extent and

seriousness of information inadequacies. Consequently, differences in data quality and disclosure may mean there is a greater risk to our baseline scenario in some countries compared to others.

General Attributes and Limitations of Credit Ratings

208. The following general attributes and limitations of the credit ratings produced by CI ratings also apply to sovereign ratings:

- CIôs credit ratings are statements of opinion and not statements of fact. They are an independent opinion of the creditworthiness of an entity or obligor either in general (an issuer rating) or with regard to a specific financial obligation (an issue rating).
- CIôs credit ratings are intended to provide a relative ranking of credit risk among rated entities and obligations based on fundamental credit analysis and expressed in rating symbols from óAAAôto ódô Reflecting the limited number of gradations, entities or obligations with the same rating may not be of exactly the same credit quality, but they will share substantially similar credit risk characteristics.
- CIôs credit ratings are assigned by, and all subsequent rating actions (including upgrades, downgrades and changes in outlook) determined by, rating committees and never by an individual analyst.
- CIôs credit ratings indicate the likelihood of default, but they do not indicate a specific probability of default over any given time period.
- CI may initiate credit ratings on issuers without the request of the issuer provided there is adequate public information available to form a credible opinion of the issuerôs creditworthiness.
- CI does not audit or verify the accuracy of information obtained from issuers as part of the rating process and may, in some cases, rely on unaudited financial data.
- A credit rating may, at any time, be raised, lowered, placed under review, suspended or withdrawn in accordance with CIôs policies and procedures.
- CI may assign private óshadowôsovereign ratings ï internal assessments of sovereign risk that are not intended for publication and are used as an input into other rating assessments. Shadow sovereign ratings may constrain or cap the ratings of other rated issuers within a country. Shadow sovereign ratings may be based on a lower level of information or less detailed analysis compared to public sovereign ratings and, although monitored, may be reviewed less frequently than every six months. They do not represent a full rating opinion.

209. CIôs credit ratings may be used as an analytical input into, but are not a substitute for, investorsô own risk management. Investors in particular should be aware that:

- CIôs credit ratings focus on one aspect of investment risk ï credit (or repayment) risk ï and do not explicitly capture loss severity or recovery prospects.
- CIôs ratings are not recommendations to purchase, sell, or hold stocks or shares in an institution or particular security.
- CIôs ratings do not assess or indicate the likelihood of changes in the market price of rated instruments due to market-related factors such as changes in interest rates or liquidity.
- CIôs ratings do not provide an opinion of the liquidity in the market of an issuerôs securities.

ANNEX 1: KEY QUANTITATIVE INDICATORS

The principal quantitative indicators used in our sovereign credit analysis are listed below. The list is not exhaustive and not all indicators will be relevant to every sovereign or country. Moreover, we may use additional metrics, where appropriate, to address or further investigate country-specific factors, albeit within the context of the key rating factors referred to in this methodology.

The data we use is sourced primarily from national authorities. These include national statistical agencies (typically for national accounts and inflation data), central banks (for external accounts and financial indicators) and finance ministries (for fiscal data, including government debt). We may also rely on data published by international organizations such as the International Monetary Fund (IMF), World Bank, Organization for Economic Cooperation and Development (OECD), Bank for International Settlements (BIS), Asian Development Bank (ADB), and the European Commission.

KEY RATING FACTOR	INDICATOR
Economic Growth Performance	Real GDP at Market Prices, % Change
	Real GDP Per Capita (Local Currency), % Change
	Unemployment Rate, %
	Real Non-Hydrocarbon GDP, % Change
GDP Per Capita	GDP Per Capita, Current USD
	Income Inequality (Gini Coefficient)
	UN Human Development Index Ranking
Economic Diversification	Export Concentration Index (UNCTAD)
	Ratio of Service Exports to Total Exports
	Primary Commodity Exports, % Total Exports
Competitiveness	Global Competitiveness Index (WEF)
	Ease of Doing Business Ranking (World Bank)
	Real Effective Exchange Rate, % Change
	Nominal Unit Labour Costs,% Change
Budget Performance	Overall Budget Balance, % GDP
	Primary Budget Balance, % GDP
	Non-Hydrocarbon Budget Balance, % GDP
	Cyclical Budget Balance, % GDP
	Structural Budget Balance, % GDP
Budget Structure	Total Revenue, % GDP
	Total Expenditure, % GDP
	Share of Tax Revenue in Total Revenue
	Share of External Grants in Total Revenue
	Tax Revenue, % GDP

KEY RATING FACTOR	INDICATOR
Budget Structure (con't)	Capital Expenditure, % GDP
	Share of Non-Discretionary Expenditure in Total Expenditure
	Share of Hydrocarbon Revenue in Total Revenue
	Fiscal Break-Even Oil Price Relative to Current/ Expected Market Prices
Liquidity Risk	Gross Government Financing Requirement (GGFR), % GDP
	Government Financial Assets and Non-Debt Funding, % GGFR
	Share of Local Currency Debt in Gross Government Debt
	Share of Foreign Currency Debt in Gross Government Debt
	Share of Short-Term Debt (Original Maturity) in Gross Government Debt
	Proportion of Gross Government Debt Held by Non-Residents
Government Debt Burden	Gross Government Debt, % GDP
	Gross Government Debt, % Total Revenue
	Gross Interest Payments, % Total Revenue
	Net Government Debt, % GDP
	Total Public Debt, % GDP
Contingent Liabilities	Government Debt Guarantees, % GDP
	Non-Guaranteed Debt of State-Owned Entities, % GDP
Inflation Performance	Consumer Price Inflation (%)
	Core Inflation (%)
	Producer Price Inflation (%)
Capital Market Development	Domestic Debt Securities Outstanding, % GDP
	Domestic Private Debt Securities Outstanding, % GDP
Macro-Financial Imbalances	Credit to the Private Sector, % Change
	Credit to the Private Sector, % GDP
	Private Sector Debt, % GDP
	Household Debt, % GDP
	Corporate Leverage (Debt-Equity) Ratio
	Share of Foreign Liabilities in Total Banking Sector Liabilities
	Share of Foreign Currency Deposits in Total Bank Deposits
	House Price Inflation, %
	Change in Equity Indices
Current Account Performance	Current Account Balance, % GDP
	Trade Balance, % GDP
	Net FDI, % Current Account Balance
	Real Effective Exchange Rate, % Change

KEY RATING FACTOR	INDICATOR
External Debt Capacity	Gross External Debt, % CAR
	Gross External Debt, % GDP
	Net External Debt, % CAR
	Net External Debt, % GDP
	Gross Public External Debt, % GDP
	Net Public External Debt, % GDP
	Net Banking Sector External Debt, % GDP
	Proportion of Gross External Debt Payable in Local Currency
	Net International Investment Position, % GDP
	Share of Short-Term External Debt (Original Maturity) in Gross External Debt
	External Debt Service, % CAR
International Liquidity	Official Reserves, % Short-Term External Debt (Remaining Maturity Basis)
	Official Reserves, % Broad Money
	International Liquidity Ratio (see text for definition)

ANNEX 2: SOVEREIGN RATING DEFINITIONS AND RATING SCALE

Sovereign credit ratings are issued using CI Ratingsô international issuer credit rating scales and indicate the ability and willingness of sovereign governments to repay existing and future debt obligations ï payable in either local currency or foreign currency ï to private-sector creditors on time and in full.

CI may assign either a public rating or an internal óshadowô rating to sovereigns. Shadow sovereign ratings are not intended for publication and are used to ensure that sovereign risk factors are adequately reflected in the ratings of non-sovereign issuers.

The following rating scale applies to both foreign currency and local currency sovereign ratings. Short-term ratings assess the time period up to one year.

Long-Term Sovereign Credit Ratings

Investment Grade	
AAA	The highest credit quality. Exceptional capacity for timely fulfilment of financial obligations and most unlikely to be affected by any foreseeable adversity. Extremely strong financial condition and very positive non-financial factors.
AA	Very high credit quality. Very strong capacity for timely fulfilment of financial obligations. Unlikely to have repayment problems over the long term and unquestioned over the short and medium terms. Adverse changes in business, economic and financial conditions are unlikely to affect the institution significantly.
A	High credit quality. Strong capacity for timely fulfilment of financial obligations. Possesses many favourable credit characteristics but may be slightly vulnerable to adverse changes in business, economic and financial conditions.
BBB	Good credit quality. Satisfactory capacity for timely fulfilment of financial obligations. Acceptable credit characteristics but some vulnerability to adverse changes in business, economic and financial conditions. Medium grade credit characteristics and the lowest investment grade category.
Speculative Grade	
BB	Speculative credit quality. Capacity for timely fulfilment of financial obligations is vulnerable to adverse changes in internal or external circumstances. Financial and/or non-financial factors do not provide significant safeguard and the possibility of investment risk may develop.
B	Significant credit risk. Capacity for timely fulfilment of financial obligations is very vulnerable to adverse changes in internal or external circumstances. Financial and/or non-financial factors provide weak protection; high probability for investment risk exists.
C	Substantial credit risk is apparent and the likelihood of default is high. Considerable uncertainty as to the timely repayment of financial obligations. Credit is of poor standing with financial and/or non-financial factors providing little protection.
RS	Regulatory supervision (this rating is assigned to financial institutions only). The obligor is under the regulatory supervision of the authorities due to its weak financial condition. The likelihood of default is extremely high without continued external support.
SD	Selective default. The obligor has failed to service one or more financial obligations but CI believes that the default will be restricted in scope and that the obligor will continue honouring other financial commitments in a timely manner.
D	The obligor has defaulted on all, or nearly all, of its financial obligations.

Short-Term Sovereign Credit Ratings

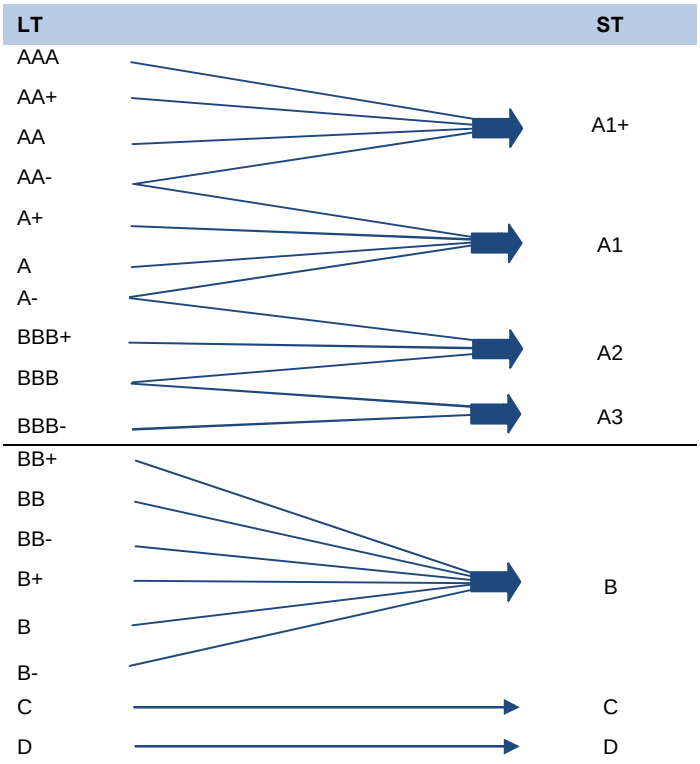
Investment Grade	
A1	Superior credit quality. Highest capacity for timely repayment of short-term financial obligations that is extremely unlikely to be affected by unexpected adversities. Institutions with a particularly strong credit profile have a ñ+òaffixed to the rating.
A2	Very strong capacity for timely repayment but may be affected slightly by unexpected adversities.
A3	Strong capacity for timely repayment that may be affected by unexpected adversities.
Speculative Grade	
B	Adequate capacity for timely repayment that could be seriously affected by unexpected adversities.
C	Inadequate capacity for timely repayment if unexpected adversities are encountered in the short term.
RS	Regulatory supervision (this rating is assigned to financial institutions only). The obligor is under the regulatory supervision of the authorities due to its weak financial condition. The likelihood of default is extremely high without continued external support.
SD	Selective default. The obligor has failed to service one or more financial obligations but CI believes that the default will be restricted in scope and that the obligor will continue honouring other financial commitments in a timely manner.
D	The obligor has defaulted on all, or nearly all, of its financial obligations.

CI Ratings appends "+" and "-" signs to long-term foreign and local currency ratings in the categories from "AA" to "C" to indicate that the strength of a particular sovereign is, respectively, slightly greater or less than that of similarly rated peers.

Outlook: expectations of improvement, no change or deterioration in a sovereign rating over the 12-24 months following its publication are denoted Positive, Stable or Negative.

ANNEX 3: CORRESPONDENCE BETWEEN LONG-TERM AND SHORT-TERM RATINGS

Short-term sovereign ratings are mapped from long-term sovereign ratings using the guidelines below. Deviations may be permitted where sovereign- or country-specific circumstances render the guidelines inappropriate.



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