MOODY'S INVESTORS SERVICE

RATING METHODOLOGY

Sovereign Ratings Methodology

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Analyst Contacts:

FRANKFURT +49.69.70730.700

Dietmar Hornung +49.69.70730.790
Associate Managing Director
dietmar.hornung@moodys.com

LONDON +44.20.7772.5454

Matt Robinson +44.20.7772.5635
Associate Managing Director
matt.robinson@moodys.com

Yves Lemay +44.20.7772.5512
Managing Director – Sovereign Risk
yves.lemay@moodys.com

Alastair Wilson +44.20.7772.1372
Managing Director - Global Sovereign Risk
alastair.wilson@moodys.com

SINGAPORE +65.6398.8308

Gene Fang +65.6398.8311
Associate Managing Director
gene.fang@moodys.com

Marie Diron +65.6398.8310
Managing Director – Sovereign Risk
marie.diron@moodys.com

NEW YORK +1.212.553.1653

Mauro Leos +1.212.553.1947
Associate Managing Director
mauro.leos@moodys.com

This rating methodology replaces the *Sovereign Bond Ratings* methodology published in November 2018. While this methodology reflects the same core approach to assessing sovereign credit risk as the November 2018 methodology, we replaced some quantitative metrics with qualitative sub-factors that are informed by quantitative information. We also eliminated some overlapping indicators and increased the transparency of our adjustment factors. We adjusted the calibration of some scoring ranges and sub-factor weights to better reflect our analytical thinking. In addition, we have increased the granularity of the scale for metrics and sub-factors within the scorecard and changed the scoring nomenclature. We also made some editorial changes to enhance readability.

Introduction

In this rating methodology, we explain our general approach to assessing credit risk for sovereigns globally, including the qualitative and quantitative factors that are likely to affect rating outcomes in this sector. We discuss the scorecard used for this sector. The scorecard[1] is a relatively simple reference tool that can be used in most cases to approximate credit profiles in this sector and to explain, in summary form, many of the factors that are generally most important in assigning ratings to sovereigns. The scorecard factors may be evaluated using historical or forward-looking data or both.

We also discuss other rating considerations, which are factors that are assessed outside the scorecard, usually because the factor's credit importance varies widely among the issuers in the sector, or because the factor may be important only under certain circumstances or for a subset of issuers. In addition, some of the methodological considerations described in one or more cross-sector rating methodologies may be relevant to ratings in this sector.[2]

As a result, the scorecard-indicated outcome is not expected to match the actual rating for each issuer.

Our presentation of this rating methodology proceeds with: (i) the scope of this methodology; (ii) a sector overview; (iii) a description of our overall approach to rating sovereigns; (iv) the scorecard framework; (v) a discussion of the scorecard factors;

1 In our methodologies and research, the terms "scorecard" and "grid" are used interchangeably.

2 A link to an index of our sector and cross-sector methodologies can be found in the "Moody's Related Publications" section.

(vi) other rating considerations not fully reflected in the scorecard; (vii) the assignment of issuer-level and instrument-level ratings; (viii) methodology assumptions; and (ix) limitations. In Appendix A, we describe how we use the scorecard to arrive at a scorecard-indicated outcome. Appendix B shows the full view of the scorecard factors, sub-factors and thresholds.

Scope of This Methodology

This methodology applies to sovereign governments globally.[3] A sovereign is the highest tier of government in a country, and we also refer to a sovereign as the central government.

We also rate central banks under this methodology.

Sector Overview

Sovereign debt is used to fund government operations. Most countries issue a combination of bonds, bills and notes, and their debt structures are based on capital market depth, market conditions and government preferences. In the vast majority of the world's debt capital markets, national governments are the largest borrowers, and their credit standing provides a benchmark for other issuers of debt.

Sovereigns have executive authority, including to incur debt. A number of characteristics distinguish sovereigns from other debtors. These characteristics include (i) a sovereign's ability to curb expenditures or increase tax revenues to service debt outstanding; (ii) absence of a higher authority to compel debt resolution; and (iii) the high probability of survival even after an event of default — that is, countries rarely disappear.

[3] We may also assign local and foreign currency country ceilings for bonds and other obligations in order to facilitate the assignment of ratings to issuers domiciled in the country or structured finance transactions whose cash flows are primarily generated from domestic assets or residents. For more information on ceilings, please see the cross-sector methodology that describes our approach for assigning local and foreign currency country ceilings for bonds and other obligations. A link to an index of our cross-sector methodologies and a link to *Rating Symbols and Definitions* can be found in the "Moody's Related Publications" section.

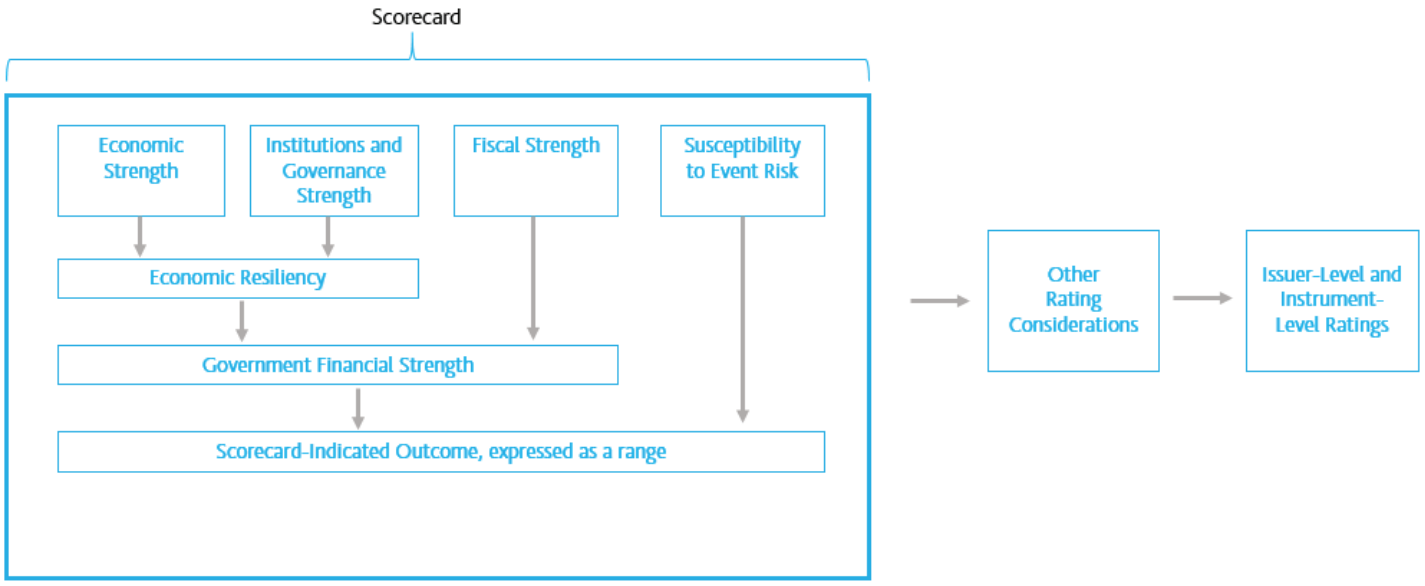
Overall Approach to Rating Sovereigns

The scorecard in this rating methodology comprises four factors: Economic Strength, Institutions and Governance Strength, Fiscal Strength and Susceptibility to Event Risk. Some of the factors comprise sub-factors, metrics and sub-sub-factors.

The scorecard is oriented to the issuer rating. Scorecard-indicated outcomes are expressed as three-notch ranges on our alphanumeric rating scale. The assigned rating is expressed on our 21-point rating scale and is often but not always within the three-notch range.

EXHIBIT 1

Overall Approach to Rating Sovereigns



Source: Moody's Investors Service

Scorecard Framework

The scorecard in this rating methodology is composed of four factors. The four factors comprise a number of sub-factors.

EXHIBIT 2

Sovereign Bond Ratings Sector Scorecard Overview

Factor	Sub-factor	Sub-factor Weighting	Metric/Sub-sub-factor	Metric / Sub-sub-Factor Weighting
Factor: Economic Strength	Growth Dynamics	35%	Average Real GDP Growth $_{t-4\ to\ t+5}$	25%
			Volatility in Real GDP Growth $_{t-9\ to\ t}$	10%
	Scale of the Economy	30%	Nominal GDP (US$ bn) $_{t}$	30%
	National Income	35%	GDP per Capita (PPP, Int. USD) $_{t}$	35%
	Adjustment to Factor Score	0 - 9 notches	Other	
Factor: Institutions and Governance Strength	Quality of Institutions	40%	Quality of Legislative and Executive Institutions	20%
			Strength of Civil Society and the Judiciary	20%
	Policy Effectiveness	60%	Fiscal Policy Effectiveness	30%
			Monetary and Macroeconomic Policy Effectiveness	30%
	Adjustment to Factor Score	0 - 3 notches	Government Default History and Track Record of Arrears	
		0 - 3 notches	Other	
Factor: Fiscal Strength	Debt Burden	50%[1]	General Government Debt / GDP $_{t}$	25%
			General Government Debt / Revenue $_{t}$	25%
	Debt Affordability	50%[1]	General Government Interest Payments / Revenue $_{t}$	25%
			General Government Interest Payments / GDP $_{t}$	25%
	Adjustments to Factor Score	0 - 6 notches	Debt Trend $_{t-4\ to\ t+1}$	
			General Government Foreign Currency Debt / General Government Debt $_{t}$	
			Other Non-Financial Public Sector Debt / GDP $_{t}$	
			Public Sector Financial Assets and Sovereign Wealth Funds / General Government Debt $_{t}$	
		0 - 3 notches	Other	
Factor: Susceptibility to Event Risk	Political Risk	Minimum Function[2]	Domestic Political and Geopolitical Risk	
	Government Liquidity Risk	Minimum Function[2]	Ease of Access to Funding	
			0 - 2 scoring categories	Adjustment to Sub-factor Score High Refinancing Risk
	Banking Sector Risk	Minimum Function[2]	Risk of Banking Sector Credit Event (BSCE)	
			Total Domestic Bank Assets / GDP $_{t}$	
			0 - 2 scoring categories	Adjustment to Sub-factor Score
	External Vulnerability Risk	Minimum Function[2]	External Vulnerability Risk	
			0 - 2 scoring categories	Adjustment to Sub-factor Score
	Adjustment to Factor Score	0-2 scores		

[1] For more details about how these weights may vary, please refer to our discussion on the Treatment of Reserve Currency Countries and HIPC/IDA Countries within the Fiscal Strength section of the methodology.

[2] The aggregation of Political Risk, Government Liquidity Risk, Banking Sector Risk and External Vulnerability Risk follows a minimum function, i.e. as soon as one area of risk warrants an assessment of elevated risk, the country's overall Susceptibility to Event Risk is scored at that specific, elevated level.

Source: Moody's Investors Service

We may adjust certain factor or sub-factor scores to incorporate considerations that may not be fully reflected in the scorecard metrics, or that have a different impact for a particular issuer than indicated by the scorecard weights. Adjusted scores incorporate additional analytical judgment, reflecting that the scorecard may not always capture the nuances of a sovereign's credit profile. In the Discussion of the Scorecard Factors, we explain the typical drivers of adjustments. We consider these drivers and, in a few cases, other drivers that meaningfully affect the sovereign in their totality to arrive at an adjusted factor or sub-factor score. Some adjustment drivers are inter-related, but we avoid double-counting by taking an overall view of the factor or sub-factor score.

Discussion of the Scorecard Factors

In this section, we explain our general approach for scoring each scorecard factor or sub-factor, and we describe why the sub-factors we use are meaningful credit indicators.

Factor: Economic Strength

Why It Matters

The intrinsic strength of the economy provides critical indications of a sovereign's resilience to shocks. A sovereign's ability to generate sufficient revenue to service debt over the medium term relies on sustained economic growth and prosperity, i.e. wealth.

Economic weakness, either sudden and severe or milder but long-lasting has been a decisive factor in past sovereign defaults. An erosion of external competitiveness, caused either by a major terms-of-trade shock or by a gradual erosion that leads to a loss of export revenue, is also an indicator of default risk. Large, diversified and flexible economies are much more resilient to such economic shocks than smaller, concentrated and inflexible economies.

Past sovereign defaults have typically occurred in the context of severe and sustained economic stress, underscoring the importance of a sovereign's economic strength in reducing the likelihood of default in the event of adverse shocks or severe or prolonged economic downturns.

The factor comprises three sub-factors:

Growth Dynamics

Low or volatile levels of economic growth can, if sustained over a number of years, amplify debt serviceability challenges and can render a heavy debt burden unsustainable. A low level of growth over a long period typically indicates challenges in addressing structural internal or external constraints to growth. In turn, prolonged low growth may reduce the latitude for economic and fiscal reforms, which often involve short-term economic costs for longer-term economic and fiscal gains. Meanwhile, sovereigns experiencing robust, sustained growth are typically better able to implement credit-positive reforms, maintain strong budgetary performance and manage relatively large debt burdens or reverse increases in debt ratios caused by domestic or external shocks. In addition, high growth volatility undermines wealth creation and competitiveness, reducing the economy's ability to withstand shocks and the government's capacity to pursue stable, predictable policies.

Scale of the Economy

Scale is an important indicator of an economy's diversity and complexity, which greatly influences its ability to withstand shocks and hence the sovereign's capacity to generate stable revenue streams to

service its debt. For example, a very small country with a competitive but concentrated exposure to a few sectors can be subject to abrupt economic shifts, undermining the sovereign's ability to raise revenue from within the economy and hence its creditworthiness. A larger and more diverse economy is typically more resilient to shocks, implying a broader capacity on the part of the government to generate stable revenue to support outstanding debt.

National Income

Income, captured by an economy's output in relation to the size of the population, is a further proxy for the revenue-generating potential of a sovereign. We use income in purchasing power parity (PPP) terms as a measure of per capita income because it provides greater comparability of the level of buying power associated with that per capita income across different countries and currencies. High income is generally closely correlated with a low risk of default. Higher income generally signals a higher capacity to absorb economic or fiscal shocks. Income can also be a proxy for other characteristics that inform a sovereign's economic strength, including the underlying degree of competitiveness within an economy such as the availability and quality of labour and capital.

How We Assess It for the Scorecard – Growth Dynamics Sub-factor

AVERAGE REAL GROSS DOMESTIC PRODUCT GROWTH:

We calculate or estimate the average of real gross domestic product (GDP) growth levels based on a 10-year average, including the average of the five most recently reported annual periods and our estimate of growth for the following five years.

VOLATILITY OF REAL GDP GROWTH:

We calculate or estimate the volatility of real GDP growth based on the standard deviation of real GDP growth levels for the 10 most recently reported years.

How We Assess It for the Scorecard – Scale of the Economy Sub-factor

NOMINAL GDP:

We use the most recently reported annual nominal GDP, denominated in billions of US dollars at market exchange rates.

How We Assess It for the Scorecard – National Income Sub-factor

GROSS DOMESTIC PRODUCT PER CAPITA:

We use the most recently estimated year-end GDP per capita in purchasing power parity (PPP) terms, in international dollars. For countries where we do not have estimates of relative price levels, we use GDP per capita, unadjusted for price level, as a proxy.

FACTOR

Economic Strength

Sub-factor	Metric	Metric Weight	aaa	aa1	aa2	aa3	a1	a2	a3	baa1	baa2	baa3	ba1	ba2	ba3	b1	b2	b3	caa1	caa2	caa3	ca
Growth Dynamics	Average Real GDP Growth (%) $_{t-4 \text{ to } t+5}$ *1	25%	≥ 5.7	5.3 - 5.7	4.9 - 5.3	4.4 - 4.9	4 - 4.4	3.7 - 4	3.3 - 3.7	3 - 3.3	2.6 - 3	2.3 - 2.6	2 - 2.3	1.8 - 2	1.6 - 1.8	1.3 - 1.6	1.1 - 1.3	0.9 - 1.1	0.7 - 0.9	0.5 - 0.7	0.3 - 0.5	< 0.3
	Volatility in Real GDP Growth (%) $_{t-9 \text{ to } t}$ *2	10%	≤ 1.4	1.4 - 1.46	1.46 - 1.53	1.53 - 1.62	1.62 - 1.72	1.72 - 1.83	1.83 - 1.96	1.96 - 2.10	2.10 - 2.26	2.26 - 2.42	2.42 - 2.61	2.61 - 2.80	2.80 - 3.01	3.01 - 3.23	3.23 - 3.47	3.47 - 3.71	3.71 - 3.98	3.98 - 4.25	4.25 - 4.54	> 4.54
Scale of the Economy	Nominal GDP (US$ bn) $_{t}$ *3	30%	≥ 1,000	750 - 1,000	600 - 750	450 - 600	330 - 450	250 - 330	190 - 250	140 - 190	100 - 140	80 - 100	60 - 80	45 - 60	35 - 45	26 - 35	20 - 26	15 - 20	10 - 15	8 - 10	6 - 8	< 6
National Income	GDP per capita (PPP, international USD) $_{t}$ *4	35%	≥ 48,000	42,000 - 48,000	37,000 - 42,000	32,000 - 37,000	27,500 - 32,000	24,500 - 27,500	21,000 - 24,500	19,000 - 21,000	16,000 - 19,000	14,000 - 16,000	12,000 - 14,000	10,750 - 12,000	9,500 - 10,750	8,000 - 9,500	7,000 - 8,000	6,200 - 7,000	5,500 - 6,200	4,700 - 5,500	4,100 - 4,700	< 4,100

*1 For the linear scoring scale, the aaa endpoint value is 15%. A value of 15% or better equates to a numeric score of 0.5. The ca endpoint value is zero. A value of zero or worse equates to a numeric score of 20.5.

*2 For the linear scoring scale, the aaa endpoint value is zero. A value of zero equates to a numeric score of 0.5. The ca endpoint value is 40. A value of 40 or worse equates to a numeric score of 20.5.

*3 For the linear scoring scale, the aaa endpoint value is $25,000 billion. A value of $25,000 billion or better equates to a numeric score of 0.5. The ca endpoint value is $1 billion. A value of $1 billion or worse equates to a numeric score of 20.5.

*4 For the linear scoring scale, the aaa endpoint value is $100,000. A value of $100,000 or better equates to a numeric score of 0.5. The ca endpoint value is $1,000. A value of $1,000 or worse equates to a numeric score of 20.5.

Source: Moody's Investors Service

Adjustments to the Economic Strength Factor Score

We may adjust the Economic Strength factor score where we conclude that the core scorecard metrics do not adequately reflect relative strengths or weaknesses. Adjustments to the Economic Strength factor score most often reflect our judgment regarding the economy's (i) flexibility; (ii) diversity; (iii) productivity; and (iv) labour supply challenges, which we consider to be key factors influencing the level and volatility of medium-term growth. They may also reflect other considerations relevant in our assessment of the Economic Strength factor score. Adjustments can be upwards or downwards and are limited to nine notches in aggregate. While there may be several considerations, there is one overall adjustment.

Adjustments are generally more likely for either extremely large or small, extremely wealthy or poor countries. For example, we may adjust the Economic Strength factor score upwards where we consider an economy to be unusually flexible or diverse for its scale, and where economic size therefore understates the economy's resilience. This is generally only the case in smaller economies, because the flexibility and diversity of large economies is typically sufficiently reflected in the core metrics. As a counter example, we may adjust the Economic Strength score downwards for a fast-growing economy that is concentrated in a commodity-based sector, since our standard quantitative metrics could overstate the economy's resilience to a shock emanating from a single source – in this case the commodity market in question.

In assessing whether adjustments related to flexibility, diversity, productivity, labour supply challenges or other economic considerations are needed, we use a set of globally relevant indicators, examples of which are provided below; however, indicators that are relevant and globally available may vary over time. Peer comparisons also inform our assessment. For example, we may differentiate between two sovereigns whose core metrics signal similar economic strength but where other indicators and analytical judgment indicate material differences in economic fundamentals.

FLEXIBILITY:

Countries that have flexible economies are generally more adaptable to shocks, which in turn supports sustainable growth and ultimately boosts long-term economic prosperity.

For example, the degree of flexibility in labour and product markets helps inform our assessment of the economy's ability to adjust to changes in market conditions. Labour markets that facilitate a broad equilibrium between demand and supply are better able to withstand downturns by redeploying labour towards the most efficient sectors. Legislation or regulatory changes which aim to increase the flexibility of employment terms, including working time, wage and hiring or firing practices, may weigh positively in our assessment.

The extent of collective or decentralised wage negotiations can also affect the ability to adapt cost structures to changes in market conditions. A labour market that is more fungible, through the development of interchangeable skills, is also typically regarded as more flexible. Flexibility in a country's production structure and resource allocation, reflected in conditions that support a competitive product market, helps ensure that goods and services are traded efficiently and also drives an economy's capacity to adapt to changes. Well-developed and deep financial markets can support the reallocation of resources between sectors, and thereby support an economy's flexibility.

In assessing flexibility, we typically consider indicators such as the World Economic Forum (WEF)'s Global Competitiveness Index (GCI), including components that measure labour and goods market efficiency, and the WEF Financial Market Development Index.

DIVERSITY:

We may adjust the Economic Strength factor score upwards where we consider an economy to be unusually diverse for its scale, and where economic size therefore understates the economy's resilience. Furthermore, countries with stronger integration into the supply chains or markets of high-income countries or with more complex and therefore higher value-added trade structures, all else being equal, may be less susceptible to changes in the demand or price of their products or services.

Conversely, high economic dependence on a single product or service as a percentage of GDP may result in a downward adjustment. For example, a country that shows particularly large concentration of exports of a few products, which could be indicated by the United Nations Conference on Trade and Development (UNCTAD) Products Exports Diversification Index, is vulnerable to a shock hitting demand for these products. This can be the case for countries whose growth or revenue is highly dependent on the production and export of a commodity (or a group of highly correlated commodities). Exposure to an unexpected but plausibly foreseeable shock to demand for that commodity may imply a lack of resilience. The risk associated with a large concentration in commodities diminishes when a country produces a diverse set of commodities whose price movements and international demand trends exhibit weak correlation with one another.

We generally consider a sovereign to be highly dependent on commodities when they account for more than half of all exports, and exports account for more than a quarter of GDP. We typically do not apply a downward adjustment on the basis of high concentration when the Economic Strength factor score before adjustments is already very low, because we generally expect concentration to be captured by the core indicators.

In assessing diversity, we typically consider broad measures of export structure diversification, such as the UNCTAD Products Exports Diversification Index, and indicators of the value-added nature or price sensitivity of the country's exports, such as the World Development Indicator (WDI) for goods exports to high-income countries and the Economic Complexity Index produced by the Observatory of Economic Complexity.

For services, we typically assess the contribution to GDP of major service categories produced in an economy as well as their relationships with other sectors of the economy. For example, a country whose economy is heavily dependent on a service sector (e.g. tourism or financial services) would typically score lower under this factor. Conversely, countries that produce diverse types of services typically show greater resilience to adverse shocks and would score higher.

We may adjust upwards our assessment of Economic Strength in the rare cases where a country benefits from exceptionally large, untapped natural resources, or this consideration may offset the downward adjustment that would otherwise result from unusual concentration. Large natural resources that can be accessed readily and cheaply may allow the sovereign to adjust output to mitigate a price shock, also helping to sustain economic growth over the long term.

Given inevitable uncertainty about the extent to which as-yet-unrealised reserves will support growth in the more distant future and about the sovereign's ability to monetise them when needed, we typically limit any offset to the adjustment otherwise prompted by unusual concentration to a maximum of two notches. However, where proven oil or gas reserves are projected to last more than 50 years or, on a sustainable, forward-looking basis, proven reserves of other commodities are in approximately the top 15th percentile amongst global producers and cost of production is in or very

near the lowest decile amongst global producers, we may fully offset the downward adjustment otherwise suggested by excessive economic concentration in commodities.

PRODUCTIVITY:

An economy's productivity, which reflects how efficiently the inputs into production, such as labour and capital, are used to produce a given level of output, is a key source of competitiveness and helps drive wealth creation. Countries that have low or declining productivity levels generate less wealth and typically face a greater risk of diminishing long-term growth prospects. Where we consider the underlying productivity potential is understated or overstated by the scorecard metrics, we may apply an upward or downward adjustment to the Economic Strength factor score.

Sustained productivity growth has many drivers, including innovation, adequate infrastructure, and a mix of favourable economic and social policies. The capacity to adopt new technologies supports productivity by increasing the country's level of output for a given labour force. Poor infrastructure can hinder the effective functioning of the economy by impeding the transport of goods and services, the free flow of information through communication networks and the reliability of electricity and energy supplies. Economic or social policies, such as investment in workforce skills and education, can sustain or improve a country's productivity.

In assessing productivity, we typically consider the WEF Infrastructure, Innovation and Higher Education and Training Indexes as well as estimates of longer-term changes in productivity based on the average growth of real GDP per capita over 10 years.

LABOUR SUPPLY CHALLENGES:

In many countries, changing demographics and labour supply developments can weigh on the size and composition of a country's workforce. For example, slowing or negative growth in working-age populations raises labour input challenges and weighs on long-term growth. Similarly, an ageing workforce may affect labour productivity if not supported by technological solutions or skills development. Conversely, positive trends in migration and in female labour participation can, over time, support the growth of the workforce and its adaptability.

These considerations, while longer term in nature, are typically an important part of our assessment of a sovereign's ability to expand its economy sustainably and to foster economic prosperity.

Where such labour market challenges are expected to become acute, we may reflect this in a downward adjustment to the Economic Strength factor score to recognize that these longer-term considerations may not be adequately captured in the scorecard metrics.

In assessing labour supply challenges, we may consider estimates of a country's working age population growth over the next decade compared to the previous 10 years, as well as indicators that measure or estimate the degree of ageing within a population.

OTHER:

In unusual cases, we may also adjust the Economic Strength factor score upwards or downwards based on other considerations. Examples of other considerations may include:

» We may consider adjusting the factor score downwards where excessive credit growth suggests that apparently strong core scorecard metrics will not be sustained. To assess the extent to which credit growth has been excessive and cannot be sustained, we typically consider the absolute levels of credit growth, whether credit growth has deviated materially from estimates of its long-term trend or the extent to which it exceeds nominal GDP growth for a sustained period. We also typically assess the severity of a potential credit boom-bust cycle based on the size of the domestic credit stock relative to GDP. Although the level of debt that a country can sustain is tied to its wealth level, generally, the larger the size of domestic credit as a proportion of GDP, the greater the potential severity of a credit boom-bust cycle. We also may consider whether there is evidence of excessive asset price growth, which might lead to an unsustainable build-up of credit. Furthermore, we may look beyond aggregate credit growth and consider the sectors that have borrowed heavily to inform our assessment of the extent to which credit growth is excessive. We typically consider whether macroprudential frameworks are in place that may curb excessive credit growth or mitigate the impact.

» In addition, we may adjust the factor score where an economy is undergoing a structural break, positive or negative, that backward-looking indicators fail to capture. For example, a commodity-based economy may undergo deep structural change, resulting from a depletion of natural resources. As a counter example, policies aimed at supporting economic diversification may point to more balanced and sustained growth in the future. Since some degree of structural change is typically a continuous feature of most economies, we usually adjust the factor score on a forward-looking basis only where we view the changes as deep-rooted.

» As another example, where there are extremes of national income or poverty, we may consider that core metrics understate or overstate a sovereign's economic strength relative to its peers and indicate a materially lower or higher buffer to absorb internal and external shocks. For example, small jurisdictions that act as offshore centres may report income per capita levels above that which would in reality be available to absorb shocks. In such circumstances we may adjust the Economic Strength factor score upwards or downwards relative to the score indicated by the core metrics and other adjustments in the scorecard.

» A final example relates to sovereigns particularly exposed to climate change. Economic losses and volatility in incomes as a result of frequent and severe natural disasters are largely taken into account in forward-looking scorecard metrics where we have visibility, but they may also be assessed qualitatively.

Factor: Institutions and Governance Strength

Why It Matters

The strength of institutions and governance are important determinants of a sovereign's creditworthiness because they influence the predictability and stability of the legal and regulatory environment, which is of importance to investors. Institutions and governance provide a strong indication of a government's willingness to repay its debt. They influence the sovereign's capacity and willingness to formulate and implement economic, fiscal and monetary policies that support growth, socio-economic stability and fiscal sustainability, which in turn protect the interests of creditors over the long term.

We define a country's institutional and governance framework broadly, to include all the actors, i.e., broadly speaking, state and non-state actors, that participate in the formation and enforcement of rules and norms and in the policymaking process. Checks and balances that allow policy and other public actions to be scrutinised and to be informed by feedback are also part of a country's institutional and governance framework.

There has been a clear linkage between institutional weaknesses and sovereign defaults, arising in part from erosion in governments' willingness to pay, but also because institutional weaknesses amplify other credit weaknesses, such as structural growth challenges or an accumulation of large amounts of debt which influence the sovereign's capacity to pay.

The factor comprises two sub-factors:

Quality of Institutions

Core aspects of the quality of a sovereign's institutions are (i) the quality of its legislative and executive institutions; and (ii) the strength of civil society and the judiciary.

Transparent, predictable and robust legislative and executive institutions are important drivers of the strength of a sovereign's credit profile. Where legislative and enforcement institutions are weak, and the development and enforcement of laws, rules and societal norms are unpredictable, opaque and unreliable, the position of investors in sovereign debt is correspondingly more uncertain and credit risk higher. In such environments, administrative and legislative capacity tends to be weaker, with negative long-run implications for growth, debt and investor confidence.

The strength of the judiciary and, more broadly, civil society is also important because these institutions can act as a check on a country's lawmakers or executive. They enforce the rule of law, control corruption and reinforce norms in a way that typically protects the interests of creditors and supports effective policymaking.

When the general enforcement environment is weak, governance mechanisms are typically less effective and adherence to the rule of law and to norms of society is more uncertain, thus undermining the overall strength of the business environment, including the repayment culture that prevails in a given country.

Policy Effectiveness

The willingness and capacity of a country's institutions to design and implement policies which foster economic and fiscal strength are important aspects of a sovereign's credit profile.

Sovereigns that exhibit a lack of policy stability or a weak capacity to legislate policies typically exhibit greater economic inertia and find it more difficult to adapt to changes or shocks, a consideration relevant to political economies at all stages of development. For example, emerging economies that have not sufficiently built up the quality of their legislative and executive institutions may face difficulty in designing and implementing multi-year economic and social plans and, more generally, in unlocking the country's growth potential.

Similarly in developed economies, reform inertia, which may result from a lack of consensus, instability around the design of socio-economic policies, or from the complexity and rigidity of the legislative process, may diminish the adaptability of these economies to eroding competitiveness and to other structural challenges.

Our assessment of policy effectiveness focuses on two core aspects, namely (i) fiscal policy effectiveness; and (ii) monetary and macroeconomic policy effectiveness.

Effective fiscal policies support debt sustainability over the medium term and create fiscal capacity during periods of economic expansion that allows a country to weather inevitable cyclical downturns, the crystallisation of contingent liabilities or other foreseeable fiscal challenges without permanently impairing the government's credit quality. The capacity to sustain credit-positive fiscal policy over time can also support investor confidence, which improves debt affordability. Investors typically place a great deal of importance on public debt sustainability, because signals that a government does not have the sufficient fiscal firepower to pursue its socio-economic role or to protect the economy from shocks may erode business confidence and investment.

Preventing and correcting macroeconomic imbalances through robust monetary and macroeconomic policies is key to supporting sustainable economic growth over the longer term. Macroeconomic imbalances can build up even within the most developed economies and may erode competitiveness and impair social cohesion over time. Such imbalances can take many forms, depending on the stage of development of an economy and the fundamental characteristics of a country's economic model. These include elevated inflation, volatile currency and investment inflows, high current account deficits, unsustainable external indebtedness and asset price bubbles.

How We Assess It for the Scorecard — Quality of Institutions Sub-factor

QUALITY OF LEGISLATIVE AND EXECUTIVE INSTITUTIONS:

We assess this sub-factor qualitatively based on the quality of public actions we observe, both at the legislative and executive levels. However, we anchor our qualitative assessment using a range of quantitative indicators. The Worldwide Governance Indicators (WGIs) for regulatory quality and government effectiveness are typically the primary considerations in our assessment. Beyond those inputs, our assessment incorporates our forward-looking views of certain other considerations, including the efficiency of the government and public administration, institutional capacity constraints (typically more prevalent in very small countries), the reporting of data, the capacity to translate policy into law and whether independent bodies have a voice in policymaking.

Our view of the effectiveness of government action is also driven by the quality of the public administration, because its role is key in the formulation and implementation of government policy. Understaffing or a poorly skilled public sector workforce typically constrains government effectiveness. Similarly, infrequent and limited data reporting and major revisions may indicate a weaker institutional setting.

Due to their more limited human and financial resources, very small countries are typically constrained in their capacity to plan and execute policy at the legislative and executive levels. As a result, we typically do not assign the highest score under this sub-factor to very small sovereigns.

FACTOR

Institutions and Governance Strength

Sub-factor	Sub-sub-factor	Sub-sub-factor Weight	aaa	aa	a	baa	ba	b	caa	ca
Quality of Institutions	Quality of Legislative and Executive Institutions	20%	Sovereigns in this category would generally have WGI scores for regulatory quality and government effectiveness above 1.5. Policy is legislated and implemented with the support of a highly professional, well-staffed and highly capable public administration with exceptionally deep bench strength. These institutions have demonstrated the flexibility to deal with changing circumstances and can absorb shocks while maintaining financial and economic stability. Law-making occurs under a well-developed constitutional framework that is transparent and predictable. Data sets are timely, stable, comprehensive and are provided for all levels of government (central, regional, local, and social security). Politically independent governmental bodies, such as fiscal councils, have a strong voice in the policymaking process.	Sovereigns in this category would generally have WGI scores for regulatory quality and government effectiveness between 1.5 and 1.0. Policy is legislated and implemented with the support of a generally professional and capable public administration, though in some cases it may face skill shortages in some areas or capacity constraints due to the country's size. These institutions can absorb shocks while maintaining financial and economic stability, but may be slow or tentative when dealing with changing circumstances. Law-making occurs under a well-developed constitutional framework that is transparent and predictable. Data reporting is comprehensive overall, but it may not be timely or may be subject to large revisions. Politically independent governmental bodies, such as fiscal councils, have a strong voice in the policymaking process.	Sovereigns in this category would generally have WGI scores for regulatory quality and government effectiveness between 1.0 and 0.5. Policy is legislated and implemented with the support of a generally professional and capable public administration, though in some cases it may face skill shortages in some areas or capacity constraints due to the country's size. These institutions can absorb shocks while maintaining financial and economic stability, but may be slow or tentative when dealing with changing circumstances. Law-making occurs under a constitutional framework that is generally transparent and predictable. Data reporting is comprehensive overall, but it may not be timely or may be subject to large revisions. Politically independent governmental bodies, such as fiscal councils, are an input into the policymaking process.	Sovereigns in this category would generally have WGI scores for regulatory quality and government effectiveness between 0.5 and 0.0. The public administration has a core of highly capable and qualified professionals, but bench strength is not particularly deep. As a result, at times it may struggle to support policy creation and implementation. These institutions generally struggle to respond to shocks while maintaining financial and economic stability, and are slow or tentative when dealing with changing circumstances. Law-making occurs under a constitutional framework that is generally transparent and predictable. Data reporting is systematic but not comprehensive and may be subject to significant lags and revisions. There may also be recurrent questions about data reliability. Fiscal data is not reported for lower levels of government (regional, local, and social security). Politically independent governmental bodies, such as fiscal councils, are an input into the policymaking process.	Sovereigns in this category would generally have WGI scores for regulatory quality and government effectiveness between -0.5 and 0.0. The public administration has a core of highly capable and qualified professionals, but bench strength is not particularly deep. As a result, at times it may struggle to support policy creation and implementation. These institutions generally struggle to respond to shocks while maintaining financial and economic stability, and are slow or tentative when dealing with changing circumstances. Law-making occurs under a constitutional framework that may be somewhat opaque and unpredictable. Data reporting is systematic but not comprehensive and may be subject to significant lags and revisions. There may also be recurrent questions about data reliability. Fiscal data is not reported for lower levels of government (regional, local, and social security). Politically independent bodies do not have a meaningful voice in the policymaking process.	Sovereigns in this category would generally have WGI scores for regulatory quality and government effectiveness between -1.0 and -0.5. The public administration often struggles to support policy creation and implementation. It accumulates government arrears. These institutions have difficulty dealing with changing circumstances and have little or no ability to absorb shocks without creating social, fiscal, and/or economic instability. Law-making occurs under a constitutional framework that may be somewhat opaque and unpredictable. Data reporting of key fiscal and economic indicators is typically annual, can be erratic, or data collection and provision are adversely affected by political influence over the collection and reporting process. Politically independent bodies do not have a meaningful voice in the policymaking process.	Sovereigns in this category would generally have WGI scores for regulatory quality and government effectiveness between -1.5 and -1.0. The public administration often struggles to support policy creation and implementation. It accumulates government arrears. These institutions have difficulty dealing with changing circumstances and have little or no ability to absorb shocks without creating social, fiscal, and/or economic instability. Law-making occurs under a legal framework that is opaque and unpredictable. Data reporting of key fiscal and economic indicators is typically annual, can be erratic, or data collection and provision are adversely affected by political influence over the collection and reporting process. There are no politically independent actors participating in the policymaking process.	Sovereigns in this category would generally have WGI scores for regulatory quality and government effectiveness below -1.5. The public administration lacks technical skills in some key areas and is often not executing its functions. It exhibits weak willingness to pay creditors, and accumulates significant government arrears. These institutions have difficulty coping with even day-to-day management of the country and the population's fundamental economic and security needs. Law-making occurs under a legal framework that is opaque and unpredictable. Key data sets are missing and unreliable. There are no politically independent actors participating in the policymaking process.

Source: Moody's Investors Service

How We Assess It for the Scorecard — Quality of Institutions Sub-factor

STRENGTH OF CIVIL SOCIETY AND THE JUDICIARY:

We focus on institutional outcomes, not on the form of government, namely the ability and willingness of sovereigns to observe and enforce laws and norms in a way that supports the government's overall creditworthiness and the interests of bondholders.

We assess this sub-factor qualitatively, principally based on the strength of the sovereign's rule of law, including the judiciary system and role of civil society institutions. Again, however, we typically anchor our qualitative assessment using quantitative measures, namely the Worldwide Governance Indicators for voice and accountability, rule of law, and control of corruption. Beyond those metrics, our assessment incorporates our forward-looking views of certain considerations, including the enforcement of laws, the balance and separation of power between the judiciary and the government, the prevalence of corruption, the effectiveness of judicial and legal processes and the civil society's capacity to act as a check on the exercise of government power.

Our overall assessment of this sub-factor also considers our view of the consistency and predictability of law enforcement, including with respect to the government itself and public officials. We generally view effective public enforcement as a pre-condition to enforcement of private mechanisms such as contract rights, which require public laws to function predictably. A track record of delayed, partial or absent enforcement of laws typically signals limited predictability of enforcement in the public and private sectors and may weigh negatively on our assessment of this sub-factor score.

The existence of judicial institutions that have meaningful influence on and independence from the government is also an important determinant of the strength of an enforcement environment. Where judicial institutions are subject to a large degree of interference from the government or have, by law or due to capacity constraints, little control over the government's compliance with the law, it is likely that legal obligations or contractual arrangements between other private and public stakeholders will not be easily enforceable.

Corruption negatively affects our view of the quality of sovereign institutions and governance. The presence of corruption may reflect the absence of enforceability of the law or incentives to abide by it. It may also influence other credit features, such as the government's ability to collect revenues effectively or, more broadly, growth levels in the economy. We typically assign lower scores to this sub-factor in cases where corruption is widespread or undermines policy formation, the business environment or social cohesion.

Our view of the quality of the judiciary is also influenced by an assessment of its impartiality and effectiveness in enforcing the law and resolving disputes. For example, we consider whether the judicial power operates with laws that facilitate the enforcement of contracts and benefit from sufficient human and financial resources to be effective. A track record of bias in judicial decisions, for example in favour of a specific socioeconomic, ethnic or religious group or a particular sector (e.g., large government-owned corporations) typically does not reflect strong enforcement foundations and practice.

Civil society can play an important role in shaping the enforcement of laws and norms and can act as a check on the exercise of government power. Capacity to voice concerns about the rule of law and exert influence on government policy to promote good governance are viewed positively in our assessment of the sub-factor score.

FACTOR

Institutions and Governance Strength

Sub-factor	Sub-sub-factor	Sub-sub-factor Weight	aaa	aa	a	baa	ba	b	caa	ca
Quality of Institutions	Strength of Civil Society and the Judiciary	20%	WGI scores for voice and accountability, rule of law and control of corruption typically above 1.5. The enforcement of laws is highly predictable and consistent, including with respect to the government itself. An effective balance of power and separation of powers is consistently and dependably maintained between branches of government, and judicial independence is maintained and respected. There are few instances of corruption that act to the detriment of the sovereign's credit profile. Judicial processes are impartial, contracts are enforced, and legal cases are resolved in a timely manner. Institutions in civil society consistently act as an effective check on the exercise of government power.	Generally have WGI scores for voice and accountability, rule of law and control of corruption typically between 1.5 and 1.0. The enforcement of laws is highly predictable and consistent, including with respect to the government itself. An effective balance of power and separation of powers is consistently and dependably maintained between branches of government, and judicial independence is maintained and respected. There are few instances of corruption that act to the detriment of the sovereign's credit profile. Judicial processes are impartial, contracts are enforced, and legal cases are resolved in a timely manner. Institutions in civil society consistently act as an effective check on the exercise of government power.	Generally have WGI scores for voice and accountability, rule of law and control of corruption typically between 1.0 and 0.5. The enforcement of laws is usually predictable and consistent, including with respect to the government itself. An effective balance of power and separation of powers is generally maintained between branches of government. However, judicial independence is not always maintained. Corruption can be a problem that acts to the detriment of the sovereign's credit profile. Judicial processes are impartial and contracts are enforced, but it often takes a long time for a case to be resolved in the courts. Civil society institutions often act as an effective check on the exercise of government power.	WGI scores for voice and accountability, rule of law and control of corruption typically between 0.5 and 0.0. The enforcement of laws is usually predictable and consistent, including with respect to the government itself. An effective balance of power and separation of powers is generally maintained between branches of government. However, judicial independence is not always maintained. Corruption can be a problem that acts to the detriment of the sovereign's credit profile. Judicial processes are impartial and contracts are enforced, but it often takes a long time for a case to be resolved in the courts. Civil society institutions often act as an effective check on the exercise of government power.	WGI scores for voice and accountability, rule of law and control of corruption typically between 0.0 and -0.5. The enforcement of laws is sometimes unpredictable and inconsistent. Checks on the exercise of government power are not consistently applied. The judiciary is subject to political influence in ways that affect the business climate or other aspects of the sovereign's credit profile. Corruption is a significant structural challenge that undermines policy formation, economic stability and/or social cohesion. There is evidence of judicial bias, and contract enforcement can be challenging. Civil society institutions exist, but have difficulty acting as an effective check on the exercise of government power.	WGI scores for voice and accountability, rule of law and control of corruption typically between -0.5 and -1.0. The enforcement of laws is sometimes unpredictable and inconsistent. Checks on the exercise of government power are not consistently applied. The judiciary is subject to political influence in ways that affect the business climate or other aspects of the sovereign's credit profile. Corruption is a significant structural challenge that undermines policy formation, economic stability and/or social cohesion. There is evidence of judicial bias, and contract enforcement can be challenging. Civil society institutions exist, but have difficulty acting as an effective check on the exercise of government power.	WGI scores for voice and accountability, rule of law and control of corruption typically between -1.0 and -1.5. The enforcement of laws is usually unpredictable and inconsistent. There are few formal checks on the exercise of government power or the judiciary is not independent. Corruption is endemic and affects a wide range of policy choices. The courts system is ineffective. Civil society institutions either do not exist or have little discernable impact on the exercise of government power.	WGI scores for voice and accountability, rule of law and control of corruption typically below -1.5. The enforcement of laws is usually unpredictable and inconsistent. There are few formal checks on the exercise of government power or the judiciary is not independent. Corruption is endemic and affects a wide range of policy choices. The courts system is ineffective. Civil society institutions either do not exist or have little discernable impact on the exercise of government power.

Source: Moody's Investors Service

How We Assess It for the Scorecard — Policy Effectiveness Sub-factor

FISCAL POLICY EFFECTIVENESS:

We assess this sub-factor qualitatively based on the trajectory of public debt through cycles, fiscal balances and fiscal performance against budgetary plans, medium-term planning, transparency in reporting of government accounts as well as debt management. Our assessment of the sub-factor considers fiscal policy effectiveness over a sustained period of time.

In assessing the trajectory of public debt throughout cycles, we consider the historical and anticipated government debt[4] levels as a percentage of GDP through several economic cycles. Stronger fiscal effectiveness is typically associated with stable or decreasing debt levels over time. While it is expected that, in times of downturn or crisis, debt levels may increase typically because of reduced revenue levels and budget expansion to support recovery, the ability of a government to contain increases and rebuild shock absorption capacity thereafter through reduction in debt loads is a key indication of its fiscal effectiveness. Conversely, sovereigns that exhibit large debt burdens or consistent increases in debt levels over several economic cycles typically score lower for this sub-factor.

The trajectory of budget balances is also an important indicator in our assessment of fiscal policy effectiveness. Governments that post structural[5] budgets, balanced or in surplus, typically have stronger budget planning capacities with built-in flexibility. Flexibility in the design of the budget is key to mitigating economic gyrations and one-off events. Sovereigns with weaker fiscal effectiveness typically have more rigid budgets that make it more difficult to adjust to changed economic circumstances by raising additional revenue or cutting expenses. Similarly, challenges in tax collection are typically indicative of developing administrative capacities, or as can be the case for tax evasion, a lack of effective tax enforcement from the fiscal institutions. These characteristics are typically commensurate with a low score for this sub-factor.

The existence of fiscal targets or expenditure ceilings and consistent compliance with those targets or ceilings over a number of political cycles generally signals stronger fiscal policymaking and implementation. Fiscal targets or expenditure ceilings are useful budgetary tools to foster fiscal discipline and expenditure efficiency. A track record of adherence to the targets or limits is typically viewed positively in our assessment, to the extent that they are designed to maintain a good fiscal performance or to improve the fiscal trajectory. The absence of stated fiscal rules does not necessarily signal weaker policy effectiveness. Our main analytical focus is on the track record of fiscal prudence and our expectations regarding budgetary performance and debt management over the medium term.

While flexibility to adjust revenue and expenses to mitigate unplanned circumstances is an important driver of our assessment, medium-term fiscal policy planning is also key. Robust multi-year planning is typically accompanied with better fiscal performance over the long term. In particular, frequent changes in the policy mix as a reaction to unforeseen or unplanned events, such as large and sudden discrete spending items (e.g. capital expenditures), may support the fiscal trajectory in the short run but undermine the effectiveness of the longer-term fiscal policy objectives. The existence of non-partisan bodies that form part of the budget-making process through a consultative or review role is typically viewed positively in our assessment of the quality of budgetary planning practices.

Transparency and quality of government accounts, for all levels of government, are important determinants of effective budget planning. The availability of comprehensive, accurate and recent data on government accounts supports budgetary authorities and related stakeholders (including external

[4] For more details on the perimeter of government debt, please see the "Factor: Fiscal Strength" section.

[5] The structural budget is an estimate of the nominal budget balance adjusted by the cyclical component, excluding one-off and temporary policy measures.

non-partisan bodies) in the design of robust fiscal policies. Sovereigns with higher quality of disclosures typically report monthly budget accounts (on a cash basis) and annual or quarterly accrual budget accounts as well as government balance sheets, including contingent liabilities and other off-balance-sheet items. The perimeter of accounts is also typically clearly defined. While accounting standards can be complex and evolve over time, leading to ex-post revisions of fiscal performance and debt levels, a track record of frequent and large revisions in past budget accounts would typically weigh negatively on our assessment of a sovereign's fiscal effectiveness.

Our view of fiscal effectiveness also relies on the quality of government debt management. Typically, sovereigns with a higher score for this sub-factor have a specific unit or department that is in charge of the management of the government's debt. Well-structured debt management policies typically aim at ensuring reliable access to financing, for example through frequent issuances across maturities and by diversification of funding sources, while limiting the service cost and refinancing risk. Mitigation strategies are typically well-articulated. Stronger debt management practices also typically include regular public reporting of key financial information, planning and policies. Indications of weaker debt management practices typically include the absence, or the understaffing, of dedicated professionals; poor or nonexistent formal debt management plan and policies, for example characterized by the absence of a multi-year strategy (which considers, for example, investor type, maturities and currencies); or practices that are informed by insufficient data, for example on future financing needs.

We may also consider any material benefit a country may derive from its participation in an external assistance programme, such as from the International Monetary Fund (IMF) or the European Stability Mechanism (ESM), or cooperation with other institutions such as the EU or the World Bank, where we see lasting positive credit impact. The measures policymakers may implement under the auspices of these institutions can have a positive impact on all dimensions captured in our Institutions and Governance Strength factor, but the largest impact would typically be within the fiscal policy effectiveness and monetary and macroeconomic policy effectiveness areas. When assessing the institutional benefits governments may derive from these programmes, we also consider the capacity of governments to sustain the benefits after participation in the programme has ended.

FACTOR

Institutions and Governance Strength

Sub-factor	Sub-sub-factor	Sub-sub-factor Weight	aaa	aa	a	baa	ba	b	caa	ca
Policy Effectiveness	Fiscal Policy Effectiveness	30%	Over several cycles, debt/GDP may have increased during recessions, but then decreased during periods of normal or high growth. The budget is generally in a structural balance or surplus, as measured by international organisations, and we expect that to continue. Fiscal targets or expenditure ceilings are observed or outperformed. The medium-term policy planning process is highly robust. Revenues and expenditures are very stable, and a period of significant economic weakness does not prompt material and lasting deviations from the plan. There is a high degree of transparency in the government accounts, including guarantees and other contingent liabilities. Debt is well-structured and issuance is predictable, with extremely robust risk-mitigation strategies in place.	Over several cycles, debt/GDP may have increased during recessions, but then decreased during periods of normal or high growth. The budget is generally in a structural balance or a small structural deficit, as measured by international organisations; or budget balances are generally consistent with a stable debt burden. The structure of government revenues and expenditures is relatively flexible, and tax evasion is not a major problem for fiscal policy formation. Fiscal targets or expenditure ceilings are observed or outperformed. Medium-term policy planning process results in government spending in the outer years remaining largely stable except in periods of significant economic shock. There is a high degree of transparency in the government accounts, including guarantees and other contingent liabilities. Debt is well-structured and issuance is predictable, with extremely robust risk-mitigation strategies in place.	Over several cycles, debt/GDP will have generally increased during recessions, but then decreases slowly during periods of normal or high growth. The budget is generally in a structural balance or a small structural deficit, as measured by international organisations; or budget balances are generally consistent with a stable debt burden. The structure of government revenues and expenditures is relatively flexible, and tax evasion is not a major problem for fiscal policy formation. Fiscal targets or expenditure ceilings are sometimes missed. Medium-term policy planning process results in government spending in the outer years remaining largely stable except in periods of significant economic shock. There is a high degree of transparency in the government accounts, but information on guarantees and other contingent liabilities may not be available or fully transparent. Debt is well-structured but issuance is opportunistic, with robust risk-mitigation strategies in place.	Over several cycles, debt/GDP will have generally increased during recessions, but then decreases slowly during periods of normal or high growth. The budget is generally in structural deficit, as measured by international organisations; or budget balances are generally consistent with a gradual rise in the debt burden. The structure of government revenues and expenditures is relatively rigid. Tax evasion is a constraint on fiscal policy formation. Fiscal targets or expenditure ceilings are sometimes missed. Fiscal policymaking is reactive rather than the product of a structured, well-planned process. The medium-term policy planning process may result in government spending throughout the budgeting horizon (including mid-year) changing meaningfully and frequently. Governments regularly adjust budget balances through sudden, unplanned cuts in capital spending. There is a high degree of transparency in the government accounts, but information on guarantees and other contingent liabilities may not be available or fully transparent. Debt is well-structured but issuance is opportunistic, with robust risk-mitigation strategies in place.	Over several cycles, debt/GDP will have generally increased materially during recessions, without meaningful decreases during periods of normal or high growth. The budget is generally in structural deficit, as measured by international organisations; or budget balances are generally consistent with a gradual rise in the debt burden. The structure of government revenues and expenditures is relatively rigid. Tax evasion is a constraint on fiscal policy formation. Fiscal targets or expenditure ceilings are often missed. Fiscal policymaking is reactive rather than the product of a structured, well-planned process. The medium-term policy planning process may result in government spending throughout the budgeting horizon (including mid-year) changing meaningfully and frequently. Governments regularly adjust budget balances through sudden, unplanned cuts in capital spending. There are material gaps in the transparency of government accounts, and information on guarantees and other contingent liabilities is generally not available. Debt structure carries significant unhedged risk. There is not a structured issuance plan in place, relying more heavily on opportunistic market access.	Over several cycles, debt/GDP will have generally increased materially during recessions, without meaningful decreases during periods of normal or high growth. Budget deficits are the norm and tend to be large enough so that they add to the debt burden. The structure of government expenditures is highly rigid, and the government is reliant on a narrow range of revenue sources. The incidence of tax evasion is high and is a material constraint on fiscal policy formation. Fiscal targets or expenditure ceilings are often missed. Fiscal policymaking is entirely reactive, and the government's ability to manage its finances is highly limited. There is no medium-term policy planning process, and government spending throughout the budgeting horizon (including mid-year) is subject to meaningful changes. Governments typically adjust budget balances through sudden, unplanned cuts in capital spending. There are material gaps in the transparency of government accounts, and information on guarantees and other contingent liabilities is generally not available. Debt structure carries significant unhedged risk. There is not a structured issuance plan in place, relying more heavily on opportunistic market access.	Over several cycles, debt/GDP will have increased on an unsustainable basis. Budget deficits are the norm and tend to be large enough so that they add to the debt burden. The structure of government expenditures is highly rigid, and the government is reliant on a narrow range of revenue sources. The incidence of tax evasion is high and is a material constraint on fiscal policy formation. Fiscal targets or expenditure ceilings do not exist. Fiscal policymaking is entirely reactive. There is no medium-term policy planning process, and government spending throughout the budgeting horizon (including mid-year) is subject to meaningful changes. Governments typically adjust budget balances through sudden, unplanned cuts in capital spending. Government accounts are opaque. Debt management is insufficiently effective to avoid very significant foreign exchange or interest rate risk and intermittent liquidity crises.	Over several cycles, debt/GDP will have increased on an unsustainable basis. The government faces very significant structural constraints in formulating fiscal policy, including a very high incidence of tax evasion. Fiscal targets or expenditure ceilings do not exist. Fiscal policymaking is entirely reactive, and the government's ability to manage its finances is highly limited. Government spending decisions are ad hoc. Government accounts are opaque. Debt management is insufficiently effective to avoid very significant foreign exchange or interest rate risk and intermittent liquidity crises.

Source: Moody's Investors Service

How We Assess It for the Scorecard — Policy Effectiveness Sub-factor

MONETARY AND MACROECONOMIC POLICY EFFECTIVENESS:

We assess this sub-factor qualitatively based on the effectiveness of monetary and macroeconomic policies. Considerations include the level of inflation relative to any targets set for or by policymakers and the implied effectiveness of monetary policy, the capacity of the authority to identify and address macroeconomic imbalances, the role and effectiveness of the central bank, the strength of macroprudential tools and banking system regulation. Our assessment of the sub-factor considers monetary and macroeconomic policy effectiveness over a sustained period of time. The effectiveness of public policy response to shocks, including adverse economic, social or financial changes, is another important consideration of our assessment. Sovereigns whose institutions swiftly mitigate the impact of shocks by identifying appropriate responses and implementing them without threatening macroeconomic stability typically score higher for this sub-factor. Delays in responding to changing circumstances can weigh negatively on our assessment, in particular if these institutions' response or inaction jeopardizes macroeconomic stability.

Sustainable economic growth and prosperity are best achieved with price stability. Inflation is also a determinant of an economy's competitiveness. Inflationary episodes are often a precursor to economic and political instability given that inflation effectively acts as a tax, particularly on the less well-off members of a society. High inflation also typically erodes confidence in the function of a domestic currency as a store of value and can contribute to capital flight and to currency and balance-of-payments crises. The ability of the monetary authorities to contain inflation provides meaningful insight into the broader capacity of the country's institutions to articulate and achieve creditor-friendly policies. We typically assign lower scores for this sub-factor to sovereigns whose economies exhibit high inflation levels, reflecting our view that the policy objectives or tools of the monetary authorities are insufficient to ensure macroeconomic stability.

While the inflation level relative to any targets offers a good proxy for the effectiveness of monetary and macroeconomic policies, we also consider more holistically the capacity and willingness to address macroeconomic imbalances and structural challenges. Sovereigns whose institutions pro-actively prevent the build-up of macroeconomic imbalances or address them swiftly through structural reforms typically receive higher scores for this sub-factor. Where sovereigns address imbalances as a result of external incentives — for example, because it is a pre-requisite to re-gain investor confidence or to secure financing from a supranational, or because the sovereign would otherwise be subject to any form of penalty — scores for this sub-factor are typically lower. Sovereigns whose policies do not address macroeconomic imbalances or are ineffective in doing so typically have scores in the lowest categories.

The role of identifying and addressing macroeconomic and structural imbalances can belong to different authorities in a given country depending on the institutional framework. Our assessment of the capacity to prevent and address those imbalances is holistic, in that we typically consider the tools relevant authorities have at hand to perform a comprehensive and effective diagnostic assessment and implement effectual corrective actions.

The central bank generally plays an essential role in ensuring monetary and macroeconomic stability. The role and mandate of a central bank can be different across jurisdictions. In our assessment, we consider the central bank's objectives, whether they are clearly delineated and whether the central bank has sufficient capacity and independence from government to fulfil its role. A lack of clearly established goals or a central bank's track record of falling short of meeting its objectives, for example

illustrated by high or volatile inflation, a deflationary environment,[6] large currency fluctuations, or build-up of unsustainable private indebtedness, typically weigh negatively on the sub-factor score. The central bank's de jure and de facto insulation from government interference is typically also an important input to our assessment of this sub-factor. We may also consider the availability and credibility of the tools the central bank can use to address any future economic or financial shock.

We may also assess how imbalances that may exist in the financial system are addressed. Because of its intermediary role in the economy, its increasingly interlinked nature, and, typically, its large size relative to the economy, the financial system can be a key source of macroeconomic risk. Financial or banking crises have often translated into economic downturns, with rising unemployment, costly bailouts for governments and social discontent. The existence of effective macroprudential tools[7] that are reviewed on a regular basis and informed by relevant data is viewed positively in our assessment. The very strongest macroprudential tools are expected to increase the resilience of the financial sector, contain the build-up of systemic vulnerabilities by managing procyclicality in the financial system, and control structural vulnerabilities that can arise due to interlinkages in the financial system and the broader economy.

Similarly, effectively balancing the need for the banking sector to support economic growth against the need to avoid excessive risk-taking is one of the key objectives of banking regulation. Weaker regulations fail to achieve these goals as a result of skills shortages, lack of effective tools or difficulty to keep pace with the complexity of the banking system. Sovereigns that have experienced a systemic banking crisis in the recent past would typically score lower for this sub-factor as a reflection of their past inability to contain systemic risks. In these cases, we typically also consider any regulatory or restructuring reforms the sovereign may have undertaken in its banking sector to respond to weaknesses highlighted by the crisis, where we think those reforms will have a lasting effect in reducing credit risk.

6 A deflationary environment also reflects adversely on a central bank's capabilities. Deflationary developments typically coincide with subdued or negative real growth and an increase in the debt-to-GDP ratio.

7 Macroprudential tools are used to regulate and mitigate risk to the financial or banking system as a whole rather than to its individual components and are thereby designed to reduce the risk and the macroeconomic costs of financial instability. Examples of such tools include leverage limits for lending to households, or minimum capitalisation levels. Macroprudential tools are by nature preventative rather than resolution or crisis tools.

FACTOR

Institutions and Governance Strength

Sub-factor	Sub-sub-factor	Sub-sub-factor Weight	aaa	aa	a	baa	ba	b	caa	ca
Policy Effectiveness	Monetary and Macroeconomic Policy Effectiveness	30%	Extremely effective policies, with inflation typically 1-3%. The authorities avoid the build-up of macroeconomic imbalances and are highly proactive in pursuing competitiveness-enhancing structural reforms. The central bank has a clear goal, the tools to implement the goal, and is credible in delivering against that goal. The central bank is independent. The authorities effectively use macroprudential tools to mitigate systemic capital, liquidity and credit risk without creating unintended distortions or imbalances in the financial system. The banking system is regulated in a way that effectively balances the need for the sector to support economic growth against the need to avoid excessive risk-taking. Regulatory competence is in line with the complexity of the financial system. There have been no systemic banking crisis in the past decade.	Extremely effective policies, with inflation typically 1-3%. The authorities are generally proactive and forward-thinking in addressing macroeconomic imbalances, including pursuing structural reforms where needed. The central bank has a clear goal, the tools to implement the goal, and is credible in delivering against that goal. The central bank is independent. The authorities effectively use macroprudential tools to mitigate systemic capital, liquidity and credit risk without creating unintended distortions or imbalances in the financial system. The banking system is regulated in a way that effectively balances the need for the sector to support economic growth against the need to avoid excessive risk-taking. Regulatory competence is in line with the complexity of the financial system. There have been no systemic banking crisis in the past decade.	Highly effective policies, with inflation typically 0.5-1% or 3-3.5%. The authorities are generally proactive and forward-thinking in addressing macroeconomic imbalances, including pursuing structural reforms where needed. The central bank has a clear goal, the tools to implement the goal, and is largely credible in delivering against that goal, but structural features such as the depth and breadth of the financial sector or the economy's reliance on imported goods impair policy effectiveness. The authorities use macroprudential tools to mitigate systemic capital, liquidity and credit risk, but sometimes fail to avoid the build-up of imbalances in the financial system. The banking system is regulated in a way that effectively balances the need for the sector to support economic growth against the need to avoid excessive risk-taking. However, the regulator may suffer from skills shortages, lack of effective tools or may struggle to keep pace with the complexity of the financial system. There may have been a systemic banking crisis in the past decade.	Effective policies, with inflation typically 0-0.5% or 3.5-4%. The authorities address macroeconomic imbalances and structural challenges in a reactive manner that is driven by short-term concerns. The central bank has a clear goal, the tools to implement the goal, and is largely credible in delivering against that goal, but structural features such as the depth and breadth of the financial sector or the economy's reliance on imported goods impair policy effectiveness. The authorities use macroprudential tools to mitigate systemic capital, liquidity and credit risk, but sometimes fail to avoid the build-up of imbalances in the financial system. The banking system is regulated in a way that effectively balances the need for the sector to support economic growth against the need to avoid excessive risk-taking. However, the regulator may suffer from skills shortages, lack of effective tools or may struggle to keep pace with the complexity of the financial system. There may have been a systemic banking crisis in the past decade.	Moderately effective policies, with inflation typically below 0% or between 3.5-4%. The authorities address macroeconomic imbalances and structural challenges in a reactive manner that is driven by short-term concerns. The central bank may not have a clear policy goal, and it lacks either the tools to implement monetary policy or is inconsistent in delivering the desired monetary policy outcomes. The government tends to interfere with the conduct of monetary policy. The authorities use macroprudential tools to mitigate systemic capital, liquidity and credit risk but struggle to avoid the build-up of imbalances in the financial system. The banking system is regulated in a way that either fails to support economic growth or allows excessive risk-taking to build up in the system. There may have been a systemic banking crisis in the past decade, and there is a moderate probability of a future crisis developing.	Weak policies, with inflation typically 3.5-4%. The authorities only address macroeconomic imbalances and structural challenges under duress, either from market forces or international bodies. The central bank may not have a clear policy goal, and it lacks either the tools to implement monetary policy or is inconsistent in delivering the desired monetary policy outcomes. The government tends to interfere with the conduct of monetary policy. The authorities use macroprudential tools to mitigate systemic capital, liquidity and credit risk but struggle to avoid the build-up of imbalances in the financial system. The banking system is regulated in a way that either fails to support economic growth or allows excessive risk-taking to build up in the system. There may have been a systemic banking crisis in the past decade, and there is a moderate probability of a future crisis developing.	Very weak policies, with inflation typically 4-10%. The authorities only address macroeconomic imbalances and structural challenges under duress, either from market forces or international bodies. Central bank policymaking is ineffective, and the transmission of monetary policy to the economy is very weak. The authorities do not use macroprudential tools to mitigate systemic capital, liquidity and credit risk. Banking system regulation is weak, and these shortcomings keep the probability of a crisis developing in the sector at relatively high levels.	Extremely weak policies, with inflation typically greater than 10% The authorities do not address macroeconomic imbalances or are ineffective in doing so. Central bank policymaking is ineffective, and the transmission of monetary policy to the economy is very weak. The authorities do not use macroprudential tools to mitigate systemic capital, liquidity and credit risk. Banking system regulation is weak and these shortcomings keep the probability of a crisis developing in the sector at relatively high levels.

Source: Moody's Investors Service

Adjustment to the Institutions and Governance Strength Factor Score

GOVERNMENT DEFAULT HISTORY AND TRACK RECORD OF ARREARS:

We may adjust the Institutions and Governance Strength factor score downwards in cases where there is a track record of government default or significant arrears. Our assessment typically focuses on defaults on debt owed to the private sector. The adjustment can only be downward and is limited to three notches.

The magnitude of the negative adjustment typically depends on our expectations for the risk of re-default, how recent the default was and the size of the loss for investors. The larger the losses, the larger the negative adjustment to this factor score. Moreover, we typically apply a more negative adjustment for a government that has defaulted several times in the past 20 years, regardless of the recovery rate observed. If there have been no new defaults in the past 10 - 15 years, we may reduce the negative adjustment if it is clear that the underlying economic, financial or political problems that gave rise to the default event have been resolved in a sustainable way. If there have been no new defaults in 20 years, we generally do not make a downward adjustment due to default.

Similarly, we may also make a negative adjustment to the factor score if the government has a frequent history of accumulating significant arrears to creditors, including suppliers or government employees. Frequent and large arrears can point to weak fiscal management, a poor culture of repayment and ultimately a fragile rule of law and contract enforcement.

OTHER:

In unusual cases, we may adjust the Institutions and Governance Strength factor score based on our view that the combination of fixed sub-sub-factors weights, combined with the government's default history and track record of arrears adjustment, do not fully reflect our overall view of a sovereign's institutions and governance. The adjustment can be upward or downward and is limited to three notches.

Determining the Economic Resiliency Outcome

We combine the final scores of the factors Economic Strength and Institutions and Governance Strength to get the Economic Resiliency score using equal weights.

Factor: Fiscal Strength

Why It Matters

A sovereign's fiscal strength is a direct indicator of the sustainability of the sovereign's debt burden. Persistent fiscal imbalances often result in elevated leverage and deteriorating debt affordability, ultimately making the sovereign more vulnerable to financial shocks and the risk of not being able to meet its obligations.

This factor comprises two quantitative sub-factors, each of which comprises two metrics.

Debt Burden

This sub-factor provides indications of a sovereign's debt level relative to GDP, i.e. relative to the size of the economy, as well as relative to overall government revenue, i.e. the sovereign's repayment capacity based on its actual revenue base. An elevated debt level relative to GDP constrains the sovereign's capacity to provide fiscal support to the economy, particularly in times of economic or financial stress, dampening the growth prospects for an economy.

High debt burdens often result from the buildup of persistent financial imbalances. Apart from reflecting such legacy fiscal weaknesses, high debt levels may also be the result of the assumption of contingent liabilities (e.g., from the recapitalisation of financial institutions or state-owned enterprises), or stock-flow adjustments, driven, for example, by a depreciation of the local currency in combination with a stock of foreign-currency-denominated debt.

Debt Affordability

This sub-factor provides indications of a sovereign's capacity to service its debt. The ratio of general government interest payment to revenue indicates the extent to which a government's debt service burden is within its revenue-generation capacity. Drivers of debt affordability are the debt burden itself, (the larger the stock of debt relative to GDP, the lower the debt affordability); the interest rate paid, which reflects the willingness of creditors to finance government deficits with smaller or larger risk premia; and revenues generated by the sovereign through its budget (the lower the value of revenues, the less are available for interest payments).

A high ratio of general government interest payments to revenue means that a large share of revenue needs to be diverted to interest payments, crowding out other types of spending. The lower the sovereign's debt affordability, the higher the social costs of servicing debt. Unsustainably high social costs of servicing debt may over time undermine a sovereign's ability, and eventually its willingness, to service debt.

The ratio of general government interest payments to GDP expands our analysis of the immediate capacity of fiscal revenue to meet government debt service requirements to the broader capacity of national income and output to meet government debt service requirements.

How We Assess It for the Scorecard

The Debt Burden and Debt Affordability sub-factors are assessed using debt and fiscal metrics at the general government level. The typical perimeter for our definition of general government debt includes the debt of the central government and the regional and local governments, and, when separate from the central government, the social security system.[8] We generally draw the perimeter at that level to reflect both the high mutual reliance between central and lower government levels that we typically observe and the overlap in sources and uses of revenues.

In cases where there are insufficient reported data to calculate or estimate the general government debt perimeter, we typically calculate or estimate the metrics for this factor on a perimeter as close to it as data availability allows and assess any credit impact related to the fiscal position outside of the factor core metrics (see the "Adjustments to the Fiscal Strength Factor Score" section). We may also calculate or estimate the metrics for this factor at the central government level where there is no or very limited spillover risk for the central government (consolidated with the social security system, if any) stemming from lower tiers of governments. For example, in a few cases of federal systems with a very clear and credible division of fiscal responsibilities, we may focus our assessment only on the central/federal government finances.

[8] Our calculation or estimation includes government debt owned by a central bank but typically excludes the central bank's liabilities.

How We Assess It for the Scorecard — Debt Burden Sub-factor

GENERAL GOVERNMENT DEBT / GDP:

The numerator is general government gross debt, and the denominator is GDP in nominal terms.

GENERAL GOVERNMENT DEBT / REVENUE:

The numerator is general government gross debt, and the denominator is general government revenue.

How We Assess It for the Scorecard — Debt Affordability Sub-factor

GENERAL GOVERNMENT INTEREST PAYMENTS / REVENUE:

The numerator is general government interest payments, and the denominator is general government revenue.

GENERAL GOVERNMENT INTEREST PAYMENTS / GDP:

The numerator is general government interest payments, and the denominator is GDP in nominal terms.

FACTOR
Fiscal Strength

Sub-factor	Metric	Metric Weight	aaa	aa1	aa2	aa3	a1	a2	a3	baa1	baa2	baa3	ba1	ba2	ba3	b1	b2	b3	caa1	caa2	caa3	ca
Debt Burden	General Government Debt / GDP (%) $_t$ [*1]	25%	≤ 5	5-20	20-30	30-35	35 - 40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-90	90-100	100 - 120	120 - 130	130 - 140	140 - 150	> 150
	General Government Debt / Revenue (%) $_t$ [*2]	25%	≤ 10	10-80	80-120	120 -140	140 - 160	160 - 180	180 - 200	200 - 220	220 - 230	230 - 240	240 - 260	260 - 280	280-320	320 - 360	360 - 400	400 - 450	450 - 500	500 - 550	550 - 600	> 600
Debt Affordability	General Government Interest Payments / Revenue (%) $_t$ [*3]	25%	≤ 1.5	1.5-3.5	3.5-6	6-7	7-8	8- 9	9 - 10	10 - 11	11 - 11.5	11.5 - 12	12-13	13-14	14 -16	16-18	18 -20	20 - 22.5	22.5 - 25	25 - 27.5	27.5 - 30	> 30
	General Government Interest Payments / GDP (%) $_t$ [*4]	25%	≤ 0.25	0.25 - 1.0	1.0-1.5	1.5-1.75	1.75-2.0	2.0 - 2.25	2.25 - 2.5	2.5-2.75	2.75-3.0	3.0 - 3.15	3.15 - 3.25	3.25 - 3.5	3.5-4.0	4.0-4.5	4.5-5.0	5.0-6.0	6.0-6.5	6.5-7.0	7.0-7.5	> 7.5

*1 For the linear scoring scale, the aaa endpoint value is 0%. A value of 0% equates to a numeric score of 0.5. The ca endpoint value is 700%. A value of 700% or worse equates to a numeric score of 20.5.

*2 For the linear scoring scale, the aaa endpoint value is 0%. A value of 0% equates to a numeric score of 0.5. The ca endpoint value is 700%. A value of 700% or worse equates to a numeric score of 20.5.

*3 For the linear scoring scale, the aaa endpoint value is 0%. A value of 0% equates to a numeric score of 0.5. The ca endpoint value is 35%. A value of 35% or worse equates to a numeric score of 20.5.

*4 For the linear scoring scale, the aaa endpoint value is 0%. A value of 0% equates to a numeric score of 0.5. The ca endpoint value is 35%. A value of 35% or worse equates to a numeric score of 20.5.

Source: Moody's Investors Service

Treatment of Reserve Currency Countries and HIPC/IDA Countries

For reserve currency countries and countries that are eligible for funding from the World Bank or the IMF as part of the Heavily Indebted Poor Countries (HIPC), International Development Association (IDA) or similar programmes, the scorecard weights for the debt burden and debt affordability ratios are different from the weights shown in the scorecard above, reflecting the varying importance of these considerations in assessing the fiscal strength of these countries.

For reserve currency countries, the weights of Debt Burden and Debt Affordability are 10% and 90%, respectively, while for countries in HIPC, IDA or similar programmes, the weights are 100% and 0%, respectively.[9]

A reserve currency is a currency that accounts for a large share of central banks' foreign exchange reserves or a currency for which central banks' ownership of that government's debt in their reserves represents a large share of that government's total debt. We typically consider that reserve currency countries benefit from an exceptional capacity to attract investors and as such, our assessment largely focuses on debt affordability rather than debt burden. We consider that Australia, Canada, Japan, Switzerland, the UK and the US are currently reserve currency countries. Whilst the euro is considered a reserve currency, only the two largest member states, Germany and France, are considered to benefit from reserve-currency status.

For countries in HIPC, IDA or similar programmes, the debt affordability ratios typically do not sufficiently represent the fiscal strength of these countries. Apparently strong debt affordability stems from the largely concessional terms of their debt but does not denote high fiscal flexibility; were these countries to shift towards greater issuance of marketable debt, the cost of debt would typically be higher and debt affordability commensurately lower. For these countries, debt burden metrics are generally a more relevant indication of debt sustainability than debt affordability metrics. In some cases, however, we may apply the standard scorecard weights to a country in HIPC, IDA or similar programmes where we view its debt composition materially evolving towards market-rate debt.

Adjustments to the Fiscal Strength Factor Score

We may adjust the Fiscal Strength factor score based on the government's debt trend, its exposure to a sudden exchange rate depreciation or crystallisation of contingent liabilities, and the presence of sovereign wealth funds (SWFs). In aggregate, the adjustments can be upward or downward by up to six notches.

FISCAL STRENGTH FACTOR SCORE ADJUSTMENT — DEBT TREND:

We may adjust the Fiscal Strength factor score based on our view of the government's debt trend. The adjustment can be upwards or downwards and is limited to three notches.

Our adjustment is based on our debt trend projections, i.e. the percentage point change in the debt-to-GDP ratio between the latest annual period ended four years prior and our estimate for the next year. Please see Exhibit 3.

A rising trend above 10 percentage points typically results in a negative adjustment to the factor score. Conversely, a declining trend may result in a positive adjustment, but only if we conclude that the decline is both material and sustainable. The adjustment is asymmetric in part because experience suggests that a trend of rising debt is more likely to be sustained. Governments promote economic stimulus in ways that increase debt much more often, and more effectively, than they impose austerity

[9] Metrics within the Debt Burden and Debt Affordability are equally weighted.

measures, and increasing debt-servicing requirements themselves add to budgetary pressures that may increase debt levels. Debt-reduction programmes are typically relatively short-lived, and declining debt trends are more likely to plateau or reverse than increasing debt trends.

Our assessment may consider a range of forward-looking scenario analyses with respect to nominal growth, fiscal trajectories, interest rate developments and other risk factors that could cause meaningful variations in future debt metrics. In cases where we also take contingent liabilities and financial assets into account in debt trend, we do not include them in the adjustments described below (i.e., we do not double count).

EXHIBIT 3

Increase in General Government Debt to GDP Adjustment

Indicated Notching Adjustment	-1	-2	-3
Increase in General Government Debt/GDP (percentage points) t-4 to t+1	≥10 - 20	20 - 30	≥ 30

Source: Moody's Investors Service

FISCAL STRENGTH FACTOR SCORE ADJUSTMENT — GENERAL GOVERNMENT FOREIGN CURRENCY DEBT / GENERAL GOVERNMENT DEBT:

We may adjust the Fiscal Strength factor score based on the government's exposure to debt denominated in foreign currencies. The adjustment can only be downward and is limited to six notches.

Sovereign issuance of foreign-currency-denominated debt could lead to a sudden rise in interest costs and increase in debt stock in the case of a currency depreciation, thereby increasing the sovereign's overall debt burden and decreasing its debt affordability.

Our assessment of the adjustment for foreign currency government debt is qualitative but is informed by quantitative data, such as the proportion of government debt denominated in foreign currency. We typically limit this negative adjustment to the Fiscal Strength factor score to three notches if the ratio of general government debt to GDP is less than 25% of GDP, given the limited vulnerability to adverse currency movements at such low debt levels. The magnitude of the adjustment is typically informed by the potential for added debt-servicing costs and debt stock in the case of a currency depreciation. We may also consider the extent to which associated foreign exchange risk is meaningfully mitigated, for example, through financial hedges.

Where an economy is identified as entirely dollarized, we typically do not consider the ostensibly negative credit impact of debt issuances denominated in the adopted currency, considering that the foreign currency is the de facto local currency. However, we may still apply some adjustment if the value of the local currency is fixed through fixed exchange regimes or pegs, since sovereigns operating under these regimes are susceptible to similar types of pressures should external imbalances destabilise the pegs. Where currency pegs have been maintained over many decades and where we have no reasonable expectation that these pegs could be destabilized over the foreseeable future, we typically would apply limited or no downward notching.

EXHIBIT 4

General Government Foreign Currency Debt to General Government Debt Adjustment

Indicative Notching Adjustment	-1	-2	-3	-4	-5	-6
General Government Foreign Currency Debt/General Government Debt (%)	≥20 - 25	25 - 30	30 - 40	40 - 50	50 - 60	≥ 60

Source: Moody's Investors Service

FISCAL STRENGTH FACTOR SCORE ADJUSTMENT — OTHER NON-FINANCIAL PUBLIC SECTOR DEBT:

We may adjust the Fiscal Strength factor score based on the presence of sizeable debt from the non-financial public sector and our view of the related risk of the direct or indirect assumption of this debt by the government. The adjustment can only be downward and is limited to three notches.

Weak public sector companies can drain fiscal resources from the government and can eventually lead to a direct or indirect assumption of debt that was previously a contingent claim. The assumption of debt can take different forms, such as recapitalisation, subsidies or a transfer of the debt obligation.

Our assessment of the adjustment to the factor score is primarily qualitative but is typically informed by quantitative data, in particular by the debt level of non-financial public entities. The magnitude of the adjustment is based on both the size of the non-financial public sector debt and the likelihood that there will be a partial assumption of this debt by the government. Considerations that may indicate a material likelihood of the assumption of this debt by the government over time typically include weak stand-alone financial profiles with low or negative profitability levels and a history of financial support.

The likelihood of the government's assumption of public sector debt also hinges on the government's willingness to provide financial support. Entities that carry an economic or social mandate that is viewed as strategically important for the country are typically more likely to receive some form of support in times of stress.

Since there can be myriad public companies in a country, we generally restrict the perimeter of our individual assessment of the likelihood of crystallisation of contingent liabilities to non-financial corporates that are material relative to domestic GDP or to the government debt burden, i.e. typically when they represent more than a few percentage points. We also exclude from the perimeter of our assessment entities whose financial obligations are already consolidated within the general government debt perimeter used for core metrics in the Fiscal Strength factor. Guarantees that are not already directly included in the general government debt perimeter are typically considered in our assessment of this adjustment.

Our assessment is based on reliable and comprehensive data on public companies, including audited financial statements. Where there is insufficient data on public companies or the size of public companies appears individually very small but may collectively represent a sizeable risk for the sovereign's fiscal strength, we may apply a downward adjustment, although it would typically be limited to one notch.

EXHIBIT 5

Other Non-financial Public Sector Debt Adjustment

Indicative Notching Adjustment	-1	-2	-3
Other Non-Financial Public Sector Debt/GDP (%)	≥20 - 40	40 - 55	≥ 55

Source: Moody's Investors Service

FISCAL STRENGTH FACTOR SCORE ADJUSTMENT — PUBLIC SECTOR FINANCIAL ASSETS AND SOVEREIGN WEALTH FUNDS:

We may adjust the Fiscal Strength factor score based on the presence of sizeable public sector financial assets, and sovereign wealth funds. The deployment of public sector financial assets or sovereign wealth fund assets can support government finances where those assets are liquid and can reasonably be assumed to have stable value. The adjustment can only be upward and is limited to four notches.

Our assessment of the adjustment to the factor score is primarily qualitative but is typically informed by quantitative data, in particular the level of public sector financial assets and those held by sovereign wealth funds. We typically do not consider other public assets as a mitigant to the debt burden, because of the risk that they are or will become illiquid or lose value during an economic crisis.[10] Similarly, we typically do not place meaningful weight on assets owned by social security or public pension systems, because using these assets to reduce government debt generally has the effect of replacing one liability with another.

While some countries have substantial cash reserves, which are not included in the sovereign wealth fund data, they typically do not trigger an adjustment. On an exceptional basis, we may treat cash or liquid funds as, in effect, sovereign wealth funds, in cases where they represent a stable and meaningful reserve. Examples might include domestic cash funds, bond reserve funds or sinking funds; domestic liquid fiscal reserve funds whose holdings of government bonds are not already netted out as part of the calculation of consolidated government gross debt; and foreign exchange funds that are not already captured in reported foreign exchange reserves or in the sovereign wealth fund adjustment. We generally would only do so where the cash reserve fund was unusually large compared to other sovereigns (i.e. over 10% of debt); had been in existence for at least five years; was subject to a clear government policy of managing the cash or liquidity fund to maintain the unusually large balances going forward; and was not already captured in the calculation of consolidated government gross debt, or as a sovereign wealth fund adjustment.

We typically assign less uplift for sovereign wealth funds with limited transparency and for sovereign wealth funds that primarily invest domestically in assets that could prove illiquid in times of stress. If the level of transparency is extremely poor, e.g., where the total size of sovereign wealth fund assets is unavailable or there is meaningful uncertainty around the size, we haircut the size estimate, typically by 50%. We also typically deduct the sovereign wealth fund's domestic assets from its total assets. Domestic assets do not provide the same kind of fiscal buffer as foreign assets, since domestically held assets are also more likely to lose value or become illiquid in times of sovereign stress. Finally, where the sovereign wealth fund issues debt, we subtract borrowings from assets.

Our assessment of the sovereign wealth fund is forward-looking, and the extent of any adjustment is case-specific, taking into consideration other information relevant to how the sovereign wealth fund or other liquid reserves mitigate the sovereign's debt burden. For instance, the expectation of a rapid debt build-up that would significantly dilute the relative size of sovereign wealth fund may lead us to reduce or remove any positive adjustment.

The amount of uplift provided by public sector net financial assets and sovereign wealth funds assets, rises according to their size in relation to debt. Net assets exceeding 10% of government debt outstanding typically result in an uplift to the Fiscal Strength score of one notch. Net assets exceeding 50% of government debt outstanding typically lead to an uplift of two notches. Net assets of more

[10] In some cases, we recognize the potential for sales of real estate assets to support fiscal strength where planned sales are at an advanced stage, with investors identified.

than 100% of debt outstanding may lead to three notches of uplift, and four notches may be applied to exceptionally high levels of net assets, typically in excess of 500% of debt.

EXHIBIT 6

Net Public Sector Financial Assets and Sovereign Wealth Fund Assets to General Government Debt Adjustment

Indicative Notching Adjustment	+1	+2	+3	+4
Net Public Sector Financial Assets and SWF assets/General Government Debt (%)	≥10 - 50	50 - 100	100 - 500	≥ 500

Source: Moody's Investors Service

FISCAL STRENGTH FACTOR SCORE ADJUSTMENT — OTHER:

In unusual cases, we may adjust the Fiscal Strength factor score based on our view that sub-factors and other adjustments do not fully reflect our overall view of a sovereign's fiscal strength. For example, we may apply a positive adjustment to the score where, in our view, the government benefits from exceptional fiscal flexibility but has rarely used it to lower the debt burden. The adjustment can be upward or downward and is limited to three notches.

Determining the Government Financial Strength Outcome

We combine the final score of the factor Fiscal Strength with the Economic Resiliency Outcome using dynamic weights according to the below table to get to the Government Financial Strength outcome. The weight of Fiscal Strength is highest for sovereigns with Economic Resiliency scores between baa2 and ba2, reflecting our view that the creditworthiness of countries with a high score for Economic Resiliency is less susceptible to changes in their debt metrics whereas the creditworthiness of countries with mid scores for Economic Resiliency is more sensitive to changes in their Fiscal Strength. In contrast, the creditworthiness of countries with low Economic Resiliency scores tends to be weak irrespective of debt metrics.

EXHIBIT 7

Government Financial Strength

Economic Resiliency \ Fiscal Strength	aaa	aa1	aa2	aa3	a1	a2	a3	baa1	baa2	baa3	ba1	ba2	ba3	b1	b2	b3	caa1	caa2	caa3	ca
aaa	aaa	aaa	aaa	aaa	aaa	aa1	aa1	aa1	aa1	aa1	aa1	aa1	aa2	aa2	aa2	aa2	aa2	aa2	aa3	aa3
aa1	aa1	aa1	aa1	aa1	aa1	aa1	aa1	aa2	aa2	aa2	aa2	aa2	aa2	aa2	aa3	aa3	aa3	aa3	aa3	aa3
aa2	aa1	aa1	aa2	aa2	aa2	aa2	aa2	aa2	aa2	aa3	aa3	aa3	aa3	aa3	aa3	aa3	a1	a1	a1	a1
aa3	aa2	aa2	aa2	aa2	aa3	aa3	aa3	aa3	aa3	aa3	aa3	a1	a1	a1	a1	a1	a1	a1	a2	a2
a1	aa2	aa2	aa3	aa3	aa3	aa3	a1	a1	a1	a1	a2	a2	a2	a2	a3	a3	a3	a3	baa1	baa1
a2	aa3	aa3	aa3	a1	a1	a1	a1	a2	a2	a2	a2	a3	a3	a3	a3	baa1	baa1	baa1	baa1	baa2
a3	aa3	a1	a1	a1	a1	a2	a2	a2	a2	a3	a3	a3	a3	baa1	baa1	baa1	baa1	baa2	baa2	baa2
baa1	a1	a1	a2	a2	a2	a2	a3	a3	a3	a3	baa1	baa1	baa1	baa1	baa2	baa2	baa2	baa2	baa3	baa3
baa2	a1	a1	a2	a2	a2	a3	a3	a3	baa1	baa1	baa1	baa2	baa2	baa2	baa3	baa3	baa3	ba1	ba1	ba1
baa3	a1	a2	a2	a2	a3	a3	a3	baa1	baa1	baa1	baa2	baa2	baa3	baa3	baa3	ba1	ba1	ba1	ba2	ba2
ba1	a2	a2	a3	a3	a3	baa1	baa1	baa1	baa2	baa2	baa2	baa3	baa3	baa3	ba1	ba1	ba1	ba2	ba2	ba2
ba2	a2	a3	a3	a3	baa1	baa1	baa1	baa2	baa2	baa2	baa3	baa3	ba1	ba1	ba1	ba2	ba2	ba2	ba3	ba3
ba3	baa1	baa1	baa2	baa2	baa2	baa2	baa3	baa3	baa3	baa3	ba1	ba1	ba1	ba1	ba2	ba2	ba2	ba2	ba3	ba3
b1	baa2	baa2	baa2	baa2	baa3	baa3	baa3	baa3	ba1	ba1	ba1	ba1	ba2	ba2	ba2	ba2	ba3	ba3	ba3	ba3
b2	baa2	baa2	baa3	baa3	baa3	baa3	ba1	ba1	ba1	ba1	ba2	ba2	ba2	ba2	ba3	ba3	ba3	ba3	b1	b1
b3	baa3	baa3	baa3	ba1	ba1	ba1	ba1	ba2	ba2	ba2	ba2	ba3	ba3	ba3	ba3	b1	b1	b1	b1	b2
caa1	ba2	ba2	ba2	ba2	ba3	ba3	ba3	ba3	ba3	ba3	b1	b1	b1	b1	b1	b1	b1	b2	b2	b2
caa2	ba3	ba3	ba3	ba3	ba3	ba3	b1	b1	b1	b1	b1	b1	b2	b2	b2	b2	b2	b2	b2	b3
caa3	ba3	b1	b1	b1	b1	b1	b1	b1	b2	b2	b2	b2	b2	b2	b3	b3	b3	b3	b3	b3
ca	b1	b1	b1	b2	b2	b2	b2	b2	b2	b2	b3	b3	b3	b3	b3	b3	caa1	caa1	caa1	caa1

Source: Moody's Investors Service

Factor: Susceptibility to Event Risk

After arriving at the Government Financial Strength Outcome, we consider a sovereign's susceptibility to event risk. This factor may only lower the Government Financial Strength outcome. Exhibit 8 shows the midpoint[11] of the overall scorecard-indicated range outcome resulting from the combination of the Government Financial Strength outcome and the Susceptibility to Event Risk factor score.

EXHIBIT 8

Combining Government Financial Strength and Susceptibility to Event Risk*

Susceptibility to Event Risk \ Government Financial Strength	aaa	aa1	aa2	aa3	a1	a2	a3	baa1	baa2	baa3	ba1	ba2	ba3	b1	b2	b3	caa1
aaa	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	Ba3	B1	B2	B3	Caa1
aa	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	Ba3	B1	B2	B3	Caa1
a	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa2	Baa3	Ba1	Ba2	Ba3	B2	B3	Caa1	Caa2	Caa3
baa	Aaa	Aa1	Aa2	Aa3	A2	A3	Baa1	Baa2	Ba1	Ba2	Ba3	B1	B3	Caa1	Caa2	Caa3	Ca
ba	Aa1	Aa2	Aa3	A1	A2	Baa1	Baa2	Baa3	Ba2	Ba3	B1	B2	B3	Caa1	Caa2	Caa3	Ca
b	Aa2	Aa3	A1	A2	A3	Baa2	Ba1	Ba2	Ba3	B1	B2	B3	Caa1	Caa2	Caa3	Caa3	Ca
caa	Aa3	A1	A2	A3	Baa1	Baa3	Ba1	Ba2	B1	B2	B3	Caa1	Caa2	Caa3	Caa3	Caa3	Ca
ca	A1	A2	A3	Baa1	Baa2	Ba1	Ba2	Ba3	B1	B2	B3	Caa1	Caa2	Caa3	Caa3	Caa3	Ca

Source: Moody's Investors Service

Why It Matters

Susceptibility to sudden, extreme events that could severely impact the country's economy or its institutions, or strain public finances is an important indicator of a sovereign's creditworthiness. Event risks are varied and typically include domestic political and geopolitical risks, government liquidity risk, banking sector risk and external vulnerability risk.

This factor comprises four sub-factors.

Political Risk

Political risks, stemming from domestic politics or from geopolitics, may increase a sovereign's probability of default. A challenging domestic political environment characterized by political instability, elevated or rising social discontent, or religious, ethnic or social divisions, can challenge stability and predictability of policymaking. In more extreme cases, it can lead to civil wars and economic dislocation.

Geopolitical risks can also threaten economic, institutional and fiscal stability. For example, a sovereign's credit standing may be influenced by unresolved political or military issues with a neighbouring country, especially one with a bellicose foreign policy. An escalation of tensions between countries or the potential for a loss of sovereignty due to interference from another state could weigh on the creditworthiness of a sovereign.

Government Liquidity Risk

A government's liquidity risk is an important indicator of its ability to meet all its payment obligations, especially those related to debt service.

[11] The overall scorecard-indicated outcome is expressed as a three-notch range on our alphanumeric scale except for scores of Caa3 and Ca for which the range is Caa2-C.

A core aspect of government liquidity risk is ease of access to funding. Most sovereigns operate with negative cash flows and run annual fiscal deficits. They typically have large amounts of maturing debt to repay or refinance each year. And they usually have a limited amount of highly liquid, high-quality assets relative to their refinancing needs. Their capacity to obtain fresh funding on a consistent and reliable basis is thus core to our assessment of government liquidity.

Even for sovereigns with a track record of securing financing when needed, access to funding can be very sensitive to internal or external developments. Our assessment of government liquidity risk is based on a forward-looking view and, to the extent we have visibility, considers events which could impede access. We may use scenario analysis to inform our assessment of this sub-factor.

We consider likely sources of funding. Sovereigns typically borrow from varying types of creditors. Government borrowings most often entail the issuance of debt instruments on domestic credit and capital markets, but also on international markets. Some governments can also tap loan markets or borrow directly from commercial banks.

Official sector lending, including from bilateral lenders (countries) and supranational institutions, is another common source of financing for emerging economies and frontier markets, generally at interest rates below the level offered by the other types of borrowing. Exceptionally, when governments have accumulated a very large reserve of financial assets such as sovereign wealth funds, they will also be able to rely on asset drawdowns.

Banking Sector Risk

Because of the essential role of banks in the economy, systemic banking crises are often accompanied by a material build-up of public debt through revenue losses due to deep recessions, bank bail-outs or economically costly debt restructurings. Systemic banking crises often cause or exacerbate economic dislocation by impeding or sometimes halting the supply of credit and hampering policy effectiveness. An accompanying economic crisis would in turn weigh on the government's revenue generation.

External Vulnerability Risk

External vulnerability risk is an important indicator of a sovereign's capacity to access or repay financing denominated in a foreign currency.

Economies rely on capital inflows to meet import payments and repay external debt. When risk appetite weakens, investors tend to rebalance their portfolios away from the economies most reliant on such capital inflows, in particular those with low reserve buffers. In turn, smaller capital inflows erode official foreign exchange reserves, which can further discourage inflows, depreciating the currency and challenging capacity to meet foreign currency payments.

How We Assess It for the Scorecard

The aggregation of the four sub-factors of event risk uses a minimum function (in other words the factor score is the worst score of the four sub-factors), because the materialisation of even one of these risks can lead to a severe deterioration of a sovereign's credit profile. The use of a minimum function also reflects that these risks are typically correlated, with the manifestation of one of these risks likely to accelerate the occurrence of other risks.

However, where weak scores are observed across more than one sub-factor, and where the risks driving those scores are considered to be largely uncorrelated, we may assign a factor score that is worse than indicated by the minimum of sub-factor scores to take into account the overall higher level of risk.

How We Assess It for the Scorecard — Political Risk Sub-factor

DOMESTIC POLITICAL AND GEOPOLITICAL RISK:

We assess this sub-factor qualitatively based on our view of domestic political and geopolitical risks, typically using quantitative indicators to inform our analysis. Our assessment is forward-looking.

Our assessment of domestic political risk considers the existence of socio-economic characteristics that could lead to discontent or divisions in a society, such as high levels of income inequality, ethnic or religious strife, or an absence of consensus around policy direction.

We generally consider people's ability to voice their preferences freely and to have an impact on policymaking, which typically support lower risk of tensions that could lead to disruptive political episodes and can have a credit positive impact on policy outcomes. To inform our assessment regarding freedom of expression, we typically use the WGI Voice and Accountability indicator.

High or rising income inequality typically poses risks of social unrest and hence political disruption, in particular when most of an economy's resources are captured by a specific group. We typically use the Gini index as a proxy for a society's income inequality. Higher Gini coefficients[12] indicate greater disparities in income and thus higher political risk. However, we recognize that some countries may have relatively high income inequality as captured by the Gini coefficient but also demonstrate overall high standards of living, thereby reducing the risk that parts of the society will challenge a country's socio-economic model. Conversely, moderate Gini coefficients may conceal unequal social opportunities that other indicators and expressed social demands reveal. Tensions within the society can also stem from ethnic, religious or social divisions. Where we consider deep-rooted or rising divisions likely to threaten political stability, we typically assign a lower score to the sub-factor.

Political stability is another important determinant of political risk. Sovereigns that achieve a high degree of policy continuity, possibly despite frequent government transitions, typically receive higher scores for this sub-factor. Conversely, countries where executive transitions are disorderly or typically translate into low policy predictability, owing to their frequency, negative impact on the continuity of public administration work or the lack of effective succession plans and mechanisms, typically receive lower scores for this sub-factor. We typically use the WGI political stability indicator to inform our assessment.

The above challenges can be magnified where there is an absence of consensus on policy outcomes that we view as credit positive. Heightened political or social divisions that result in limited consensus around policy direction may undermine the enactment of credit-positive policies.

In our assessment of the sub-factor, we also consider the existence of geopolitical tensions that have already materialised or can escalate into events or policies that may weigh negatively on a sovereign's creditworthiness. These can include latent conflicts and armed conflicts on the one hand, but also include instances of non-violent state-to-state conflict including trade tensions, trade wars, cyber-attacks and diplomatic sanctions. In arriving at an overall assessment, we typically develop a qualitative view of the probability of heightened tensions and the impact of their materialisation on the economy, institutions and public finances.

We typically score to our view of the greater of the domestic political and geopolitical risks (i.e., the score that is worse). However, in some cases, the two risks reinforce each other, leading to a score that is weaker than otherwise assessed for the individual risks.

[12] The Gini coefficient is a statistical measure of distribution of a value (here, income) within a population. Gini coefficients range between 0 and 100, a value of 0 reflecting a perfectly even income distribution and a value of 100 reflecting the theoretical maximum income inequality.

FACTOR

Susceptibility to Event Risk

Sub-factor	Sub-sub-factor	aaa	aa	a	baa	ba	b	caa	ca
Political Risk	Domestic Political and Geopolitical Risk	WGI for voice and accountability is typically above 1.5. Gini index is typically between 0 and 30. WGI for Political Stability is typically above 1.5. Unemployment is typically low, and distribution of wealth and incomes is relatively uniform with little or no adverse impact on policy outcomes. There are no significant sources of social conflict that pose a material risk to political or economic outcomes. General consensus on credit-positive policy outcomes that endures through changes in government. Political transitions are routinely smooth, with negligible implications for the sovereign's credit profile. Generally harmonious geopolitical relationships and little interference from external actors. The country is not engaged in any armed or latent conflict that affects economic activity, fiscal outcomes or policymaking.	WGI for voice and accountability is typically between 1.5 and 1.0. Gini index is typically between 0 and 30. WGI for Political Stability is typically between 1.5 and 1.0. Unemployment is typically low, and distribution of wealth and incomes is relatively uniform with little or no adverse impact on policy outcomes. There are no significant sources of social conflict that pose a material risk to political or economic outcomes. General consensus on credit-positive policy outcomes that endures through changes in government. Political transitions are routinely smooth, with negligible implications for the sovereign's credit profile. Generally harmonious geopolitical relationships and little interference from external actors. The country is not engaged in any armed or latent conflict that affects economic activity, fiscal outcomes or policymaking.	WGI for voice and accountability is typically between 1.0 and 0.5. Gini index is typically between 30 and 40. WGI for Political Stability is typically between 1.0 and 0.5. Although the distribution of employment, wealth and incomes is relatively uniform across the economy, differences across regions, socioeconomic or other groups or changes over time may have an adverse impact on policy outcomes. There are some areas of religious, ethnic or social conflict that could materially influence political or economic outcomes. Changes in government may pose challenges to the continuity of credit-positive policy outcomes, or the ability to address credit weaknesses. Political transitions are generally orderly and rarely significantly impact the administrative functions of the bureaucracy. Sometimes tense geopolitical relationships that could have some limited impact on the sovereign's credit profile. Interference from external actors does not have a material credit impact. Although the country is not engaged in armed conflict, it may be exposed to the impact of armed conflict elsewhere or to a latent conflict, with a limited impact on economic activity, fiscal outcomes or policymaking.	WGI for voice and accountability is typically between 0.5 and 0.0. Gini index is typically between 30 and 40. WGI for Political Stability is typically between 0.5 and 0.0. Although the distribution of employment, wealth and incomes is relatively uniform across the economy, differences across regions, socioeconomic or other groups or changes over time may have an adverse impact on policy outcomes. There are some areas of religious, ethnic or social conflict that could materially influence political or economic outcomes. Changes in government may pose challenges to the continuity of credit-positive policy outcomes, or the ability to address credit weaknesses. Political transitions are generally orderly and rarely significantly impact the administrative functions of the bureaucracy. Sometimes tense geopolitical relationships that could have some limited impact on the sovereign's credit profile. Interference from external actors does not have a material credit impact. Although the country is not engaged in armed conflict, it may be exposed to the impact of armed conflict elsewhere or to a latent conflict, with a limited impact on economic activity, fiscal outcomes or policymaking.	WGI for voice and accountability is typically between 0.0 and -0.5. Gini index is typically between 40 and 50. WGI for Political Stability is typically between 0.0 and -0.5. The distribution of employment, wealth and incomes is relatively unequal, and there may be deep religious, ethnic or social divisions in society. These tensions introduce a low but not insignificant probability of social tensions that could include violence and that could have a severe impact on policy outcomes. Changes in government routinely reduce policy predictability and raise the probability of credit-negative policies that could impact economic or fiscal outcomes. There may be significant succession or key-person risks, where government instability negatively impacts the administrative functions of the bureaucracy. The escalation of geopolitical tensions, possibly leading up to an armed conflict, has the potential to negatively impact economic activity, fiscal outcomes and funding conditions.	WGI for voice and accountability is typically between -0.5 and -1.0. Gini index is typically between 40 and 50. WGI for Political Stability is typically between -0.5 and -1.0. The distribution of employment, wealth and incomes is relatively unequal, and there may be deep religious, ethnic or social divisions in society. These tensions introduce a low but not insignificant probability of social tensions that could include violence and that could have a severe impact on policy outcomes. Changes in government routinely reduce policy predictability and raise the probability of credit-negative policies that could impact economic or fiscal outcomes. There may be significant succession or key-person risks, where government instability negatively impacts the administrative functions of the bureaucracy. The escalation of geopolitical tensions, possibly leading up to an armed conflict, has the potential to negatively impact economic activity, fiscal outcomes and funding conditions.	WGI for voice and accountability is typically between -1.0 and -1.5. Gini index is typically above 50. WGI for Political Stability is typically below -1.0 and -1.5. There is mass unemployment, large disparities of wealth and income, communal tensions in some cases involving internal armed conflict, which severely disrupt or impair economic activity, policymaking and the orderly operation of government institutions. There is an absence of a functioning government and/or the bureaucracy's administrative functions are severely impaired. There is no clear and credible means of transferring power, and there is significant risk that any succession will be disorderly and will damage the sovereign's credit profile. Contentious geopolitical relationships, including actual engagement in armed conflict, severely impairs or disrupts economic activity, the ability to obtain financing and/or the orderly operation of institutions.	WGI for voice and accountability is typically below -1.5. Gini index is typically above 50. WGI for Political Stability is typically below -1.5. There is mass unemployment, large disparities of wealth and income, communal tensions in some cases involving internal armed conflict, which severely disrupt or impair economic activity, policymaking and the orderly operation of government institutions. There is an absence of a functioning government and/or the bureaucracy's administrative functions are severely impaired. There is no clear and credible means of transferring power, and there is significant risk that any succession will be disorderly and will damage the sovereign's credit profile. Contentious geopolitical relationships, including actual engagement in armed conflict, severely impairs or disrupts economic activity, the ability to obtain financing, and/or the orderly operation of institutions.

Source: Moody's Investors Service

How We Assess It for the Scorecard — Government Liquidity Risk Sub-factor

EASE OF ACCESS TO FUNDING:

We assess this sub-factor qualitatively based on the government's ease of access to three main categories of borrowing: (i) local currency borrowing from domestic creditors; (ii) local currency borrowing from external creditors; and (iii) foreign currency borrowing. Considerations include the government's track record of having access to these types of funding, their cost and maturity relative to peers, the diversity of each sovereign's investor base for different types of debt instruments, the reliance on borrowing from official lenders and the existence of material foreign currency reserves.

Our assessment is forward-looking. Hence, in assessing a government's future capacity to access funding, we complement the assessment of a government's track record with an assessment of the robustness of a government's financing strategy, i.e. the priorities it has set in terms of price, maturity and currency, among other things, and not only based on its funding constraints. Whereas a government's funding mix may be skewed towards one specific source, this would not necessarily be indicative of the potential for access to other funding sources.

» **Local currency borrowing from domestic creditors.** The presence of deep domestic capital markets which the government can rely on to borrow in local currency is a credit strength. A large, broad and diverse base of domestic investors fosters a deep local market providing the sovereign with consistent ability to issue various types of debt instruments across a wide range of maturities.

  Conversely, where domestic capital markets are narrow, the government would often largely rely on banks, which carries a heightened risk that the capacity of the prime source of demand for government debt becomes saturated. A government's capacity to rely on banks for funding depends on a variety of considerations, including the size of the banking system, the dynamic of deposit inflows or the share of assets already invested in government securities. A high share typically denotes a track record of capacity, although it could also point to saturation risks. Regulations that incentivize government debt holdings by banks may indicate good access to bank financing. Conversely, regulatory frameworks that deter banks from holding government debt typically weigh negatively on our assessment of ease of access to funding.

» **Local currency borrowing from external creditors.** Access to foreign investors in local currency government debt broadens the government's borrowing base, which is positive in our assessment of the government's ease of access to funding. The larger, broader and more diversified the base, the lower the liquidity risk for the government. A track record of stable and reliable access to foreign investors for local currency debt issuance is an important credit differentiator, because foreign investors who typically have a wider array of investment choices generally represent a more volatile source of funding than domestic investors, which we view as more captive. As a result, there is a greater risk of a sudden stop of foreign investment in local currency debt or a net disinvestment (i.e. capital outflows) over time.

  Indications that suggest a strong and reliable capacity to attract foreign investors include a reserve status of the currency in which a government issues debt. Governments with a local currency benefitting from a reserve status, often reflected in a high share of government debt in local currency held by central banks of other countries as reserve assets, typically receive higher scores for this sub-factor. For governments with no track record, we typically assess their potential ability to borrow from that source but would not expect the sovereign to score in the top scoring categories for this sub-factor.

» **Foreign currency borrowing.** A government's capacity to borrow in foreign currency, typically from external creditors, further broadens the government's scope of funding sources and weighs positively in our assessment. Foreign currency borrowing primarily comes in the forms of international bond issuances and loans from the official sector. The larger, broader and deeper the available sources of foreign currency borrowing, the lower the liquidity risk for the government. Governments with a track record of stable and reliable foreign currency issuance in international markets typically receive higher scores for this sub-factor.

The absence of any track record of stable access to international markets in foreign currency typically implies higher liquidity risk. Only if the government benefits from the best access to external borrowing in its own currency (i.e. is compatible with a aaa score for that consideration) would we consider that the government could benefit from the strongest access to foreign currency borrowing (i.e. would be compatible with a aaa score for this consideration). In such a case, it is likely that the government's financing strategy focuses on issuing only in local currency to avoid foreign exchange risk or the related hedging cost.[13]

Indications that access to foreign currency borrowing may be limited typically include a strong reliance on official sector lending. Some governments rely on a broad range of official lenders, in which case the sovereign would typically score ba or lower for this sub-factor. The reliance on a broad range of official lenders is often associated with constrained access to other sources of funding. Official sector lending also may be less flexible because it is often earmarked for specific uses, such as infrastructure projects or social programmes. A reliance on IMF financing programmes, which are often a funding source of last resort, is generally a sign of significant fundamental credit weakness and heightened default risk.

» **Large reserve assets held by the government,[14] including sovereign wealth funds.** Some sovereign governments may have set aside very large reserve assets, typically managed through sovereign wealth funds. Where these reserves are material relative to the stock of debt, and we see limited risk that these reserves will deplete over a relatively short time frame, we may score this sub-factor up to one scoring category higher than otherwise suggested by its access to other funding sources.

Adjustment to the Government Liquidity Risk Sub-factor Score

HIGH REFINANCING RISK:

We may adjust the sub-factor score based on our forward-looking view of a government's funding needs and refinancing risks. The adjustment can only be downward and is limited to two broad alpha scoring categories.

In our assessment, we typically consider the size of a government's funding needs relative to GDP over the next two years in conjunction with its ease of access to funding. The stronger the access, the higher the tolerance for large government funding needs. In assessing refinancing risk, we typically consider the size of future principal debt payments in the context of the government's ease of access to funding. Large principal debt payments coming due in foreign currency typically expose governments to greater risk, including a more skittish investor base, resultant pressure on exchange rates if foreign currency maturities are refinanced through local currency debt issuance, and the potential for depleting foreign currency reserves.

[13] With a few exceptions, including some commodity exporter governments, the bulk of government revenues are in local currency.

[14] We only include reserves that are readily available to support the government's budget and exclude the central bank's foreign exchange reserves from our assessment of government liquidity risk.

FACTOR

Susceptibility to Event Risk

Sub-factor	Sub-sub-factor	aaa	aa	a	baa	ba	b	caa	ca
Government Liquidity Risk	Ease of Access to Funding	The government has a strong track record of reliable access to extremely deep domestic capital markets with a broad and diverse base of investors, including a wide range of types of institutional investors. The government has unquestioned access to an extremely broad range of non-resident investors in local-currency debt, generally reflecting the reserve currency status of its currency. The government has a strong track record of reliable access to foreign currency financing from a broad and diverse range of investors.	The government has a strong track record of reliable access to extremely deep domestic capital markets with a broad and diverse base of investors, including a wide range of types of institutional investors. The government has a strong track record of reliable access to a broad range of non-resident investors in local-currency debt. Non-resident participation in domestic capital and credit markets is extremely stable. The government has a strong track record of reliable access to foreign currency financing from a broad and diverse range of investors.	Experience suggests that the government has generally reliable access to deep domestic capital markets with a reasonably broad and diverse base of investors, including a range of institutional investors. The government has a strong track record of reliable access to a broad range of non-resident investors in local-currency debt. Non-resident participation in domestic capital and credit markets is extremely stable. The government has generally reliable access to foreign currency financing from a reasonably broad and diverse range of investors.	Experience suggests that the government has generally reliable access to deep domestic capital markets with a reasonably broad and diverse base of investors, including a range of institutional investors. Experience suggests that the government has generally reliable access to non-resident investors in local-currency debt. Non-resident participation in the domestic capital and credit markets can be volatile but is expected to remain quite stable over time. The government has generally reliable access to foreign currency financing from a reasonably broad and diverse range of investors.	The government has intermittent access to domestic capital markets which are relatively narrow and underdeveloped. Experience suggests that the government has generally reliable access to non-resident investors in local-currency debt. Non-resident participation in the domestic capital and credit markets can be volatile but is expected to remain quite stable over time. The government has intermittent access to foreign currency financing through a relatively narrow range of investors and a variety of official lenders.	The government has intermittent access to domestic capital markets which are relatively narrow and underdeveloped. The government has intermittent access to non-resident investors in local-currency debt. Non-resident participation in the domestic capital and credit markets is limited and can be volatile. The government has intermittent access to foreign currency financing through a relatively narrow range of investors and a variety of official lenders.	The government has very limited access to domestic capital markets which are narrow and underdeveloped. The government has intermittent access to non-resident investors in local-currency debt. Non-resident participation in the domestic capital and credit markets is limited and can be volatile. The government has no or virtually no access to market-based foreign currency financing, and relatively limited access to official lenders.	The government has very limited access to domestic capital markets which are narrow and underdeveloped. The government has no or very limited access to non-resident investors in local-currency debt. Non-resident participation in the domestic capital and credit markets is shallow, volatile and unreliable. The government has no or virtually no access to market-based foreign currency financing and relatively limited access to official lenders.

Source: Moody's Investors Service

How We Assess It for the Scorecard — Banking Sector Risk Sub-factor

We assess this sub-factor qualitatively based on our view of the risk of a systemic crisis and the impact it may have on a country's economic strength and public finances, including through the crystallisation of contingent liabilities in the banking system on the government's balance sheet.

There are two main considerations that underpin our assessment of banking sector risk for the sovereign: the stand-alone credit profile of the domestic banking system, i.e. absent any support from the government, which informs our assessment of the risk of a Banking Sector Credit Event (BSCE); and the size of the domestic system, measured or estimated by total domestic bank assets relative to GDP. The weaker and larger the banking system, the greater the potential for contingent liabilities to crystallise on the government's balance sheet and for a banking crisis to spill over to the functioning of the economy.

For the purposes of our assessment of both the size and strength of the banking system, we define domestic banks as banks that have a strong footprint in the domestic market, as lenders or investors as well as deposit takers. Although we would typically include bank subsidiaries of foreign financial institutions as domestic banks, we are much less likely to include the branches of foreign banks unless they have established significant lending or deposit activities in the domestic market.

As a result, our assessment of the size and strength of the domestic banking system may be markedly different from that of the total banking system for countries which house large offshore financial centres. Similarly, we would include the offshore operations of domestic banks within the perimeter of our assessment where we have a reasonable expectation, based on past actions, legislation or pronouncements, that these offshore operations would be considered part of the domestic bank's core business in a resolution, giving rise to contingent liability risks for the sovereign.

RISK OF BANKING SECTOR CREDIT EVENT (BSCE):

We use the average of Baseline Credit Assessments (BCAs), weighted by bank assets, for rated domestic banks (as described above). BCAs are our opinions of issuers' stand-alone intrinsic strength, absent any extraordinary support from an affiliate or a government.[15]

Our assessment considers the underlying credit strength of the domestic system, which may not be fully reflected by the asset weighted-average BCA for countries in which our ratings cover only part of the overall banking sector. We may consider the risk of a banking sector credit event to be higher than the weighted average BCA if the average for the system as a whole obscures credit concerns in a discrete but material part of the system. For example, where the weighted average BCA is uplifted by the BCAs of a small number of strong banks, and understates the risk posed to the sovereign by a larger number of small banks with weaker credit quality, scoring for this sub-factor typically would reflect the higher risk.

Conversely, a banking system that is predominantly foreign-owned and whose parent banks have the capacity and a high propensity to support the branches or subsidiaries in other jurisdictions, would typically lower the need for sovereign support or its costs. In these cases, we may consider banking sector credit risk to be lower than what is implied by the weighted average BCA of the domestic system, because such support lowers contingent liabilities to the government and can lessen the impact of a banking sector credit event for the host country. Our assessment may consider the share of domestic assets under foreign ownership as well as the potential for parent support to reduce a

[15] Affiliate includes a parent, cooperative groups and significant investors (typically with a greater than 20% voting interest). Government includes local, regional and national governments. For more information about Baseline Credit Assessments, please see our methodology that discusses banks and *Rating Symbols and Definitions*; a link to this publication and our index of sector and cross-sector methodologies can be found in the "Moody's Related Publications" section.

domestic bank's credit risk, which may include reference to the subsidiaries' adjusted BCA (incorporating affiliate support).

Where we have no or very small rating coverage in a system, we estimate the risk of a banking sector credit event based on available data for the aggregate banking system and analytical judgment, including the existing or expected sovereign rating. In these instances, we typically use the corresponding reference point provided in the below table. The BSCE score cannot be higher than the sovereign rating and would generally be lower,[16] which recognizes the relationship between the sovereign rating and the risk of a banking sector credit event.

In assessing the risk of a banking sector credit event in countries where we have no or very small coverage, we consider other information about the banking system, including our understanding of the system's funding profile, capitalisation, liquidity, industry structure, profitability and asset performance as well as comparisons with other banking systems which have similar characteristics.

EXHIBIT 9
Risk of Banking Sector Credit Event

Sovereign Rating Category	Indicative Score for Risk of Banking Sector Credit Event
Aaa	a3
Aa	baa2
A	baa3
Baa	ba1
Ba	ba3
B	b2

Source: Moody's Investors Service

TOTAL DOMESTIC BANK ASSETS / GDP:

We measure or estimate the size of the banking system using the ratio of total assets of the domestic banking sector (as described above) relative to GDP. All else being equal, the larger the relative size of the domestic banking system, the larger the contingent liability risks and the risks of negative spillovers to the economy. In instances where our assessment of the risk of a banking sector credit event is based on a subset of the domestic system, we adjust the size perimeter accordingly.

Combining the BSCE and the Total Domestic Bank Assets / GDP metric to Arrive at the Banking Sector Risk Score

Using the matrix shown in Exhibit 10 below, we combine the BSCE score and the total domestic bank assets to GDP ratio to estimate the overall banking sector risk for the sovereign.

[16] In the unlikely event that the BSCE score were higher than a proposed rating for the sovereign, we would use that proposed rating as the BSCE score, repeating as necessary until the condition were met.

EXHIBIT 10

Banking Sector Risk for the Sovereign

	Risk of Banking Sector Credit Event						
Total Domestic Bank Assets / GDP	aaa-a3	baa1	baa2	baa3	ba1-ba2	ba3-b3	caa-c
≥ 400%	a	a	baa	ba	b	b	ca
230 - 400%	a	a	baa	baa	ba	b	ca
180 - 230%	a	a	a	baa	ba	ba	b
80 - 180%	a	a	a	a	baa	ba	ba
< 80%	aaa	aa	aa	a	a	baa	ba

Source: Moody's Investors Service

Adjustments to Banking Sector Risk Sub-factor Score

We may adjust the Banking Sector Risk sub-factor score based on considerations that are not fully captured by BSCE and the ratio of total assets of the domestic banking sector relative to GDP. The adjustments can be upwards or downwards and are limited to two scoring categories.

Examples of other considerations may include:

- Where the domestic banking system, irrespective of its overall size, is highly concentrated in a few banks, we consider whether there is a higher risk that distress in a single institution would give rise to a systemic crisis. We may conclude that the risks to the sovereign from a highly concentrated banking system warrant a lower Banking Sector Risk score than indicated by the initial score.

- We typically do not consider the existence of an Operational Resolution Regime (ORR) a mitigating factor in assessing banking sector risk for the sovereign. This is because an ORR, which entails specific legislation enabling the orderly resolution of a failed bank, may be effective in eliminating risks for the sovereign in case of an individual bank failing, but is less likely to prove effective in mitigating or eliminating the contingent liability risks for the sovereign in the event of a systemic banking crisis, which is the focus from a sovereign perspective. In rare instances where we consider an ORR to be effective in the event of a systemic crisis, we may consider that the contingent liability risks from the banking sector are lower than suggested by the initial score. Such effectiveness would likely entail clear, recent and objective evidence that the sovereign is willing to not provide financial support to multiple entities within the banking system.

- We may consider adjusting the sub-factor score downwards in the event of a significant and sustained shift in sentiment that poses acute financing pressures for the banking sector, including through a sharp rise in funding costs, and increases the potential risk of a systemic banking crisis.

- We may consider, in rare instances, adjusting the Banking Sector Risk sub-factor score downwards to reflect risks to the sovereign from the wider financial sector both in terms of contingent liabilities and possible disruption to the wider economy. For example, we may adjust our assessment downwards to reflect the risks to the sovereign from non-bank systemically important financial institutions. A downward adjustment could also reflect the risks posed by the possible need for the sovereign to step in to support policy banks, to honour a contractual obligation or for another reason.

» In cases where we consider the risk of a banking crisis to be magnified and imminent, the Banking Sector Risk sub-factor score may also incorporate scenario analysis of sovereign contingent liabilities arising from the banking sector that could crystallise onto the sovereign's balance sheet. For this scenario analysis, we consider the aggregate potential capital needs of all rated banks and extrapolate proportionally to the entire banking system as needed for countries with sizeable unrated banks.

How We Assess It for the Scorecard — External Vulnerability Risk Sub-factor

While we incorporate multiple quantitative elements into our analysis of external vulnerability, our assessment of this sub-factor is primarily qualitative, based on the descriptions in the table below, incorporating multiple dimensions into a single assessment. The country's current account position and its financing structure, the level and sustainability of its external liabilities, the presence of foreign exchange reserves and the overall capacity to access hard currency are the main considerations. For a particular issuer, the interplay among these risks and mitigants is often very specific, and we consider them holistically to arrive at an overall assessment.

Current Account Balance and How It Is Financed

We consider the current account position and the financing structure of any current account deficit. Considerations include the size and track record of current account surpluses or deficits relative to GDP, the composition of external financing and the level of diversification of the economy's export base.

» **Current account balance.** Our forward-looking expectation for the current account balance (CAB), based on the track record and our assessment of change drivers, often serves as the primary anchor assessing external vulnerability. The CAB records all cross-border transactions between residents and non-residents, including exports and imports of goods and services, unilateral transfers (such as official grants and worker remittances), and flows of dividend and interest payments on foreign assets and liabilities. The CAB is positive if receipts from abroad exceed payments, and it is negative if the reverse is the case. Hence, the CAB (when in deficit) gives an approximate indication of the external position — how much net import of capital from the rest of the world a country requires to close the gap between domestic savings and investments. During times of weaker risk appetite, large current-account deficits can increase a country's vulnerability to sudden stops in foreign financing, with disruptive consequences for the overall economy.

  We consider a structurally strong external position, demonstrated by a current account that is consistently balanced or in surplus, a credit strength. Conversely, large and persistent current-account deficits indicate a credit-negative structural imbalance — for example, structural features of the economy that constrain saving or competitiveness — and would typically lead us to consider assigning a low score for this sub-factor.

» **Financing of the external position.** How a current account deficit is financed is very meaningful to assessing the risk to the sovereign posed by a current account deficit. Financing of a current account deficit through portfolio or similar flows, which are typically short-term and can be volatile, exposes the economy to shifts in international investor sentiment. Foreign Direct Investment (FDI) is generally a more stable source of external finance and less prone to sudden stops, and reliance on FDI to finance a current account deficit may indicate that the country has a combination of growth, stability and returns that are attractive to investors. Where current-account deficits are fully and consistently financed by FDI inflows, sub-factor scores are typically relatively high.

» **Export base structure.** The diversification of the export base can be a distinguishing element in our assessment. A sovereign with an economy where a high share (typically about half) of total goods and services exports is driven by a single commodity, or by multiple commodities whose prices are largely correlated, has higher vulnerability to terms of trade shocks and significant fluctuations in the current-account balance and would typically receive a lower score for this sub-factor. Conversely, a high degree of export diversification can provide shock absorption, and would typically drive some uplift to our assessment of this sub-factor.

External Debt Sustainability

We consider the economy's stock of external liabilities and its ability to support a given level of external debt. Metrics informing this aspect of our assessment may include the ratio of gross external debt to current account receipts, the net international investment position (NIIP), and the composition of overall foreign liabilities.

In our assessment, we consider both the ratio of gross external debt to current account receipts as well as the NIIP[17] relative to GDP. Both are indicators of the sustainability of the country's current account balance and the potential for balance-of-payments stresses to emerge. We typically assign a lower score to sovereigns with a high level of external liabilities, particularly if a large share is composed of short-term debt obligations that result in very high external refinancing needs.

However, we also consider the level of economic resilience — the intrinsic strength of the economy and institutions — as a key mitigant. Economies with very high levels of economic resilience are typically able to support a higher external debt load, even during times of economic or financial shock. This may reflect a general attractiveness to investors, strong institutions and policy frameworks, deep and liquid financial markets, and sustained economic potential. As a result, these countries typically receive the highest score for this sub-factor. Conversely, countries with moderate or low economic resilience are typically more susceptible to external shocks and the risks associated with a higher level of external debt, and typically receive lower scores for this sub-factor.

Foreign Exchange Reserves and Other Resources

We consider the economy's ability to repay external debt and its ease of access to hard currency. Countries hold foreign-exchange reserves in part as a buffer against current and capital account shortfalls. In general, countries with high external debt obligations relative to foreign reserves are particularly at risk of an external crisis.

In our external vulnerability assessment, we primarily consider reserve adequacy through the external vulnerability indicator (EVI)[18] ratio, which measures or estimates a sovereign's relative capacity to use immediately available international reserves to make debt payments, even if there is a complete refusal of creditors to roll over debt that is due within a given year. A high ratio, particularly one exceeding 100%, can be a signal of vulnerability, resulting either from excessive short-term debt, large upcoming repayments on long-term debt, or insufficient reserves. A country with a high EVI, or where strains on the ability of the government or private sector to service external debt are otherwise evident, would typically receive a low score in our assessment. Membership of a currency union in which the convertibility of the union's currency is guaranteed by a strong external guarantor can limit external

[17] The difference between the market value of a country's foreign assets and that of its liabilities.

[18] The ratio is defined as the stock of official foreign reserves at the end of year t-1 as the denominator, and the residual maturity short-term debt (including original maturity short-term debt and principal payments on long-term debt) falling due in year t in the numerator. Also included in the numerator are deposits in domestic banks by non-residents with a maturity greater than one year (those below one year are already included as part of short-term debt). This is included because, in a general run on the currency, depositors may attempt to withdraw longer-term deposits even if they have to pay a penalty to do so. The EVI thus measures the capacity to withstand a (temporary) loss of investor confidence resulting from heightened risk perception or a general liquidity squeeze.

vulnerability. In such cases, the EVI would typically be calculated at the level of the monetary union — if all member countries' foreign exchange reserves are pooled — instead of the country-level. We also consider other mitigants to external debt repayment risk such as currency composition or presence of large intra-group debt. A large share of external debt in local currency typically weighs positively in our scoring of the sub-factor, and we typically consider that intra-group debt carries less repayment risk because it can be more easily rolled over. Our assessment of external vulnerability typically focuses on the economy as a whole. However where external debt composition varies significantly across sectors, we may also focus on external risk for sectors that are important to the economy. For countries where comprehensive or timely data on external debt are not available, we may also consider import coverage, i.e. the number of months of imports that can be covered with immediately available foreign-exchange reserves.

Not all countries need to hold reserves to the same extent. For advanced economies, we may consider the country's ability to draw on resources beyond reserve buffers to repay external debt, including reliable access to foreign exchange markets. The availability and adequacy of other means of access to hard foreign currency, and the country's role in the global financial system, may also be an important consideration in our assessment. A track record of deep and resilient access to funding markets, including the foreign-exchange swap market, is credit positive and can lead to higher scores for this sub-factor. Countries with a local currency benefitting from a reserve status typically receive the highest score.

FACTOR

Susceptibility to Event Risk

Sub-factor	Sub-sub-factor	aaa	aa	a	baa	ba	b	caa	ca
External Vulnerability Risk	External Vulnerability Risk	The country benefits from a structural external surplus, as demonstrated by consistent current account surpluses resulting from a well-diversified export base. The country has a low level of net external liabilities. Alternatively, very high economic resilience and general attractiveness to investors enable it to support a high external debt load, even during times of economic and financial shock. The country has unfettered access to international capital markets, through a reserve currency.	The country benefits from a structural external surplus, as demonstrated by consistent current account surpluses resulting from a well-diversified export base. The country has a low level of net external liabilities. Alternatively, very high economic resilience and general attractiveness to investors enable it to support a high external debt load, even during times of economic and financial shock. The country is expected to have no difficulty in using immediately available foreign currency reserves to service external debt. Alternatively, the country has deep and stable access to foreign exchange markets or a strong external guarantor, limiting the need for large foreign currency buffers.	Current account deficits are expected to be small (typically less than 5% of GDP over three years) and remain fully and consistently financed by FDI inflows. The country has high or moderate economic resilience or a moderate level of economy-wide external liabilities (above 100% of current account receipts). The country is expected to have no difficulty in using immediately available foreign currency reserves to service external debt. Alternatively, the country has deep and stable access to foreign exchange markets or a credible eternal guarantor, limiting the need for large foreign currency buffers.	Current account deficits are expected to be small (typically less than 5% of GDP over three years) and remain fully and consistently financed by FDI inflows. The country has high or moderate economic resilience or a moderate level of economy-wide external liabilities (typically above 100% of current account receipts). The country displays relatively limited vulnerability in its capacity to service external debt. Foreign exchange reserves are expected to remain sufficient to prevent external liquidity pressures (typically EVI of around 100%).	Current account deficits are expected to be large and persistent (typically more than 5% of GDP over three years). Financing is partly dependent on portfolio and debt capital inflows that expose the economy to shifts in market sentiment. The country is a net debtor. It has a low economic resilience and high level of economy-wide external liabilities (typically above 200% of current account receipts) which makes it vulnerable to external shocks. The country displays relatively limited vulnerability in its capacity to service external debt. Foreign exchange reserves are expected to remain sufficient to prevent external liquidity pressures (typically EVI of around 100%).	Current account deficits are expected to be large and persistent (typically more than 5% of GDP over three years). Financing is partly dependent on portfolio and debt capital inflows that expose the economy to shifts in market sentiment. The country is a net debtor. It has a low economic resilience and high level of economy-wide external liabilities (typically above 200% of current account receipts) which makes it vulnerable to external shocks. The country displays increasing vulnerability in its capacity to service external debt. Foreign exchange reserves have fallen to low levels and external liquidity is increasingly constrained (typically EVI of around 200%).	Current account deficits are expected to be very large and persistent, indicative of a structural imbalance. Financing is highly dependent on portfolio and debt capital inflows that expose the economy to shifts in market sentiment. The export base is narrow or concentrated on commodities. The country is a net debtor. It shows very weak economic resilience and a very high level of economy-wide external liabilities (typically above 400% of current account receipts), or a large share composed of short-term debt resulting in very high external refinancing needs. The country displays increasing vulnerability in its capacity to service external debt. Foreign exchange reserves have fallen to low levels and external liquidity is increasingly constrained (typically EVI of around 200%).	Current account deficits are expected to be very large and persistent, indicative of a structural imbalance. Financing is highly dependent on portfolio and debt capital inflows that expose the economy to shifts in market sentiment. The export base is narrow or concentrated on commodities. The country is a net debtor. It shows very weak economic resilience and a very high level of economy-wide external liabilities (typically above 400% of current account receipts), or a large share composed of short-term debt resulting in very high external refinancing needs. The country displays significant vulnerability in its capacity to service external debt. Foreign exchange reserves have fallen to very low levels and external liquidity is materially constrained (typically EVI above 200%).

Source: Moody's Investors Service

Adjustment to the External Vulnerability Risk Sub-factor Score

OTHER:

We may adjust the sub-factor score based on considerations that are not fully captured by the considerations listed above. The adjustment can be upward or downward and is limited to two scoring categories.

How Environmental, Social and Governance (ESG) Risks May Impact Sovereign Factor Scores

ESG risks for sovereigns are integrated into our credit analysis and incorporated into the scorecard factors in various ways, rather than being a discrete set of credit drivers.

Environmental risks primarily relate to the economic and fiscal impact of shocks specific to each sovereign's environment. Some of these risks pertain to overall living conditions, such as access to clean water and pollution. Shocks could include predictable and unforeseen natural disasters or other phenomena that threaten the availability of natural resources. These risks are primarily captured in our scoring of the Economic Strength and Fiscal Strength factors.

For instance, weather-related shocks such as climate-change-induced natural disasters can affect fiscal accounts in the short term, and result in lower growth in the long term, in particular in small island nations susceptible to sea rises and storms. Frequent natural disasters lead to heightened volatility in growth, which is a sign of low shock absorption capacity and low economic strength. Long-term climate trends such as rising sea levels that place coastal areas at risk or increasing pollution can also have a negative impact on growth potential and lead to structurally higher government expenditures. Changes in energy and food availability can further exacerbate growing social demands. In general, economies concentrated in weather-reliant sectors, such as agriculture or tourism, are particularly exposed to environmental risks.

Environmental considerations also include other natural or human-caused disasters, such as earthquakes or large industrial accidents. The institutional and financial capacity of a sovereign to deal with such shocks is a key credit support in such circumstances.

Sovereigns, in particular those reliant on hydrocarbons as a source of income, are also exposed to carbon transition risk. Efforts at a global level to reduce emissions of greenhouse gases negatively affect growth in demand for hydrocarbon products, thus affecting the fiscal strength of sovereigns where a large share of government revenue is related to the sale of hydrocarbon products. External positions may also be weakened, potentially raising external vulnerability risks and macroeconomic instability. For energy importers, the costs associated with moving away from use of hydrocarbon fuels within the economy may be significant, impacting fiscal strength.

Social considerations encompass risks to sovereigns' credit profiles that derive from society's characteristics and structure. Many of these considerations are directly captured in our scoring of the Institutions and Governance Strength factor. However, the effect of social characteristics and social changes will also, over time, be reflected in a country's economic indicators and fiscal metrics, as well as its susceptibility to domestic and geopolitical risks.

Social considerations include, among others, the fiscal, economic and political implications of conditions such as poverty, inequality or violence and crime; the quality of education and the extent to which it supports an economy's competitiveness and flexibility; the availability of adequate housing to support working populations; and the mainly policy-related credit implications of tensions within society resulting from lack of political freedom and representation. Demographic changes, including ageing, are incorporated in our forward view of metrics for Economic Strength and Fiscal Strength. An ageing population contributes a smaller share of population in the labour force, which weighs on long-term economic growth. It also results in increased pension and health spending, which, if uncompensated by higher revenue or lower expenditure for other items, erodes fiscal strength. And as households tend to save less in retirement, aggregate savings tend to slow with a potential negative impact on debt affordability and on the balance of payments. Measures taken to address ageing, including reducing pension benefits and extending working lives, or encouraging immigration, can have political side effects that distract and undermine the credibility — and hence the effectiveness — of policymakers.

Increased wealth and income inequality can lead to demands for new types of policies, governments and political parties, with implications, positive or negative, for policy effectiveness and potential growth. Where politicians are perceived to be unresponsive to emerging social demands, lack of representation can result in sudden and, at times violent, demands for greater freedom, in turn increasing political turmoil and reducing economic growth. Meanwhile, chronically high levels of violence may reduce investment and act as a drag to economic growth. When it necessitates sharp and sustained increases in government spending on security, violence can also affect a sovereign's fiscal strength.

In general, pent-up social demands may take years, sometimes decades, to crystallise as credit concerns. Poverty and lack of political representation can escalate into unrest leading to regime change, increasing political risk and affecting economic growth. The measures taken by some of the governments, in part to address some of the social demands, including very large increases in the public sector's wage bill, can contribute to a weakening in these sovereigns' fiscal strength.

Governance issues are integral to our assessment of Institutions and Governance Strength.

In unusual cases, ESG considerations, such as very weak governance or climate trends that expose an economy to the negative economic, fiscal and political impact of climate change, may not be fully captured in the scorecard, but they are incorporated into our analysis. Please see the “Other Rating Considerations” section.

Other Rating Considerations

Ratings may include additional factors that are not in the scorecard, usually because the factor's credit importance varies widely among the issuers in the sector or because the factor may be important only under certain circumstances or for a subset of issuers. Such factors include our assessments of environmental and social considerations. Regulatory, litigation, liquidity, technology and reputational risk can also affect ratings.

Following are some examples of additional considerations that may be reflected in our ratings and that may cause ratings to be different from scorecard-indicated outcomes.

Partial Guarantees

The credit quality of sovereign debt may benefit from partial guarantees extended by another entity, often by another sovereign or multilateral development bank. This entity may partially guarantee debt instruments issued by the sovereign in order to lower the interest rate or otherwise improve the terms and conditions. The guarantee is partial if it covers a portion of the debt issuance rather than the full amount. We consider that such guarantees materially reduce credit risk only in cases where the guarantor has a higher rating than the sovereign.

Where a higher-rated entity provides a direct partial guarantee[19] for a sovereign's bond issuance, the difference in the expected loss on the enhanced instrument relative to the expected loss on an unsupported instrument informs our assessment of the extent, if any, to which the rating of the enhanced instrument may be notched up from the sovereign's unenhanced debt rating. For the purposes of considering partial guarantees for sovereigns, and on the basis of broad historical average loss experience at various horizons, a one-notch downward movement on the alphanumeric rating scale can be thought of as generally implying an average 60% increase in expected losses for investment-grade ratings (Aaa – Baa3) and generally implying an average 40% increase in expected losses for non-investment-grade ratings (Ba1 and lower). The impact of the partial guarantee on expected loss depends on the coverage it provides of future debt payments (the percentage of principal or interest or both) and the rating of the entity providing the partial guarantee.[20] Where the coverage is high and the credit profile of the guarantor is substantially stronger than the unenhanced credit profile of the sovereign, the uplift could be material because it would reflect the reduced expected loss on the relevant instrument.

Environmental, Social and Governance Considerations

To the extent not captured in the scorecard, ESG considerations that are material to our rating analysis are considered outside the scorecard. For additional information about our approach to assessing ESG issues, please see our methodology that describes our general principles for assessing these risks.[21]

Event Risk

We also recognize the possibility that an unexpected event could cause a sudden and sharp decline in an issuer's fundamental creditworthiness, which may cause actual ratings to be lower than the scorecard-indicated outcome. Event risks — which are varied and can range from natural and human-caused disasters to significant cyber-crime events — can overwhelm an issuer.

[19] Where a higher-rated entity provides a full guarantee for another entity's bond issuance, the security is typically rated using our cross-sector methodology that discusses credit substitution. A link to an index of our sector and cross-sector methodologies can be found in the "Moody's Related Publications" section.

[20] The impact of the partial guarantee is typically informed by the 10 year Moody's Idealized Cumulative Loss Rates associated with the rating level of the guarantor, for the guaranteed portion, and the unenhanced rating or equivalent of the supranational institution for the unguaranteed portion.

[21] An index of our sector and cross-sector methodologies can be found in the "Moody's Related Publications" section.

Special Considerations for Central Banks

Because a central bank's credit profile is typically inextricably intertwined with that of the government and therefore influenced by the same credit fundamentals, issuer-level and instrument-level ratings assigned to a central bank typically correspond to those of the central government. In assigning a central bank rating, we consider the central bank's institutional setup, as well as relationship between the sovereign and the central bank and their overall alignment.

In evaluating a regional central bank, our analysis considers the credit strength of each sovereign that is a member. Our analysis of a regional central bank is also informed by its institutional setup, which includes the ownership percentage of the central bank's shareholders or members. We often focus on the central bank's strongest shareholders and their ability to support, typically indicated by their rating or credit profile; however, the relative importance, or weighting, of each shareholder's credit profile depends upon the individual circumstances of the regional central bank. For example, we typically consider the central bank's economic importance in the region, the financial resources available to it and any specific institutional arrangements with supporting members and non-members.

A regional central bank's rating is typically constrained by the relevant currency ceiling of the strongest shareholder.

Assigning Issuer-Level and Instrument-Level Ratings and Distinguishing Between Local and Foreign Currency Ratings

After considering the scorecard-indicated outcome, other rating considerations and relevant cross-sector methodologies, we may assign a senior unsecured debt rating, an issuer rating that usually corresponds to the senior unsecured debt rating, or both. In cases where a sovereign issues debt instruments other than senior unsecured debt, individual debt instrument ratings may be notched upward or downward from the senior unsecured rating to reflect our assessment of any differences in expected loss arising from an instrument's seniority and any collateral.[22]

We may also assign issuer-level and instrument-level ratings to the central bank.

We also use this methodology to rate asset-based sukuk instruments where we conclude, based on the terms and conditions of the financing documents, that a sukuk instrument represents an obligation equivalent to a senior unsecured obligation of the sponsoring sovereign.

We may also assign short-term ratings based on our methodology for assigning short-term ratings.[23]

Our rating approach typically does not differentiate between obligations in local currency and foreign currency. In rare cases, we may differentiate ratings of those obligations where there is (i) limited capital mobility; and (ii) the government faces constraints in terms of external liquidity, or, in exceptional cases, shows a material and observable distinction between its ability and willingness to repay creditors in local currency versus foreign currency (which could lead to lower ratings for foreign currency obligations), or vice versa (i.e., in very exceptional cases the foreign currency obligations could be rated higher than the rating of local currency obligations). The magnitude of any notching in favour

[22] Collateral is considered only where it would meaningfully lower creditors' loss upon default. Given sovereigns' broad powers, such collateral would typically need to be held offshore.

[23] A link to an index of our sector and cross-sector rating methodologies can be found in the "Moody's Related Publications" section.

of local currency obligations depends on the severity of the external liquidity constraint. Any difference of more than two notches would be very rare.

Even if these two necessary conditions are met, we would differentiate ratings only where we consider that these conditions will persist. If in our view these conditions could evolve over the foreseeable future we may not differentiate ratings, for instance if the government were likely to open up the capital account of the balance of payments, or if the country's external position were likely to improve considerably.

Assumptions

Key rating assumptions that apply in this sector include our view that legal priority of claim affects average recovery on different classes of debt sufficiently to generally warrant differences in ratings for different debt classes of the same issuer, and the assumption that access to liquidity is a strong driver of credit risk.

Our forward-looking opinions are based on assumptions that may prove, in hindsight, to have been incorrect. Reasons for this could include unanticipated changes in any of the following: the macroeconomic environment, general financial market conditions, sector competition, disruptive technology or regulatory and legal actions.

Limitations

In the preceding sections, we have discussed the scorecard factors, many of the other rating considerations that may be important in assigning ratings, and certain key assumptions. In this section, we discuss limitations that pertain to the scorecard and to the overall rating methodology.

Limitations of the Scorecard

There are various reasons why scorecard-indicated outcomes may not map closely to actual ratings.

The scorecard in this rating methodology is a relatively simple tool focused on indicators for relative credit strength. Credit loss and recovery considerations, which are typically more important as an issuer gets closer to default, may not be fully captured in the scorecard. The scorecard is also limited by its upper and lower bounds, causing scorecard-indicated outcomes to be less likely to align with ratings for issuers at the upper and lower ends of the rating scale.

The weights for each sub-factor and factor in the scorecard represent an approximation of their importance for rating decisions across the sector, but the actual importance of a particular factor may vary substantially based on an individual issuer's circumstances.

Factors that are outside the scorecard, including those discussed above in the "Other Rating Considerations" section, may be important for ratings, and their relative importance may also vary from issuer to issuer. In addition, certain broad methodological considerations described in one or more cross-sector rating methodologies may be relevant to ratings in this sector.[24] Examples of such considerations include the following: the relative ranking of different classes of debt and hybrid securities, and the assignment of short-term ratings.

[24] A link to an index of our sector and cross-sector methodologies can be found in the "Moody's Related Publications" section.

We may use the scorecard over various historical or forward-looking time periods. Furthermore, in our ratings we often incorporate directional views of risks and mitigants in a qualitative way.

General Limitations of the Methodology

This methodology document does not include an exhaustive description of all factors that we may consider in assigning ratings in this sector. Institutions in the sector may face new risks or new combinations of risks, and they may develop new strategies to mitigate risk. We seek to incorporate all material credit considerations in ratings and to take the most forward-looking perspective that visibility into these risks and mitigants permits.

Ratings reflect our expectations for an issuer's future performance; however, as the forward horizon lengthens, uncertainty increases and the utility of precise estimates, as scorecard inputs or in other rating considerations, typically diminishes. In any case, predicting the future is subject to substantial uncertainty.

Appendix A: Using the Scorecard to Arrive at a Scorecard-Indicated Outcome Range

1. Measurement or Estimation of the Factors in the Scorecard

In the "Discussion of the Scorecard Factors" section, we explain our analytical approach for scoring each scorecard sub-factor, sub-sub-factor or metric,[25] and we describe why they are meaningful as credit indicators. We explain how we generally calculate or estimate each metrics for use in the scorecard and the weighting for each individual sub-factor, sub-sub-factor indicator or metric.

The information used in assessing the sub-factors is generally drawn from a number of international sources, including the International Monetary Fund, the Organisation for Economic Cooperation and Development, the European Commission, the World Bank, and the Bank for International Settlements. Some indicators, however, particularly in the area of government and external debt, may be estimated by Moody's analysts using data provided by national statistical sources. We may also incorporate non-public information.

Our ratings are forward-looking and reflect our expectations for future financial performance. However, historical results are helpful in understanding patterns and trends of a sovereign issuer's performance as well as for peer comparisons. Financial ratios, unless otherwise indicated, are typically calculated based on an historical period (an annual period unless otherwise specified in the Discussion of the Scorecard Factors). However, the factors in the scorecard can be assessed using various time periods. For example, rating committees may find it analytically useful to examine both historical and expected future performance for periods of several years or more. We also incorporate our views on the future trend of key financial ratios. These trends can lead to adjustments to the sub-factors; upwards if we expect a sovereign issuer's financial indicators to materially improve from their historic trend in the coming years or downward if the reverse holds true. We also explain other adjustments we may make in assigning scores.

2. Assigning Sub-factor and Factor Scores and Mapping to a Numeric Score

Qualitative sub-factors are scored based on the description in the scorecard and are mapped to a broad Moody's rating category (aaa, aa, a, baa, ba, b, caa or ca) and to a numeric score based on the scale below.

EXHIBIT 11

Assigning Sub-factor and Factor Scores

aaa	Aa	a	baa	ba	b	caa	ca
1	3	6	9	12	15	18	20

Source: Moody's Investors Service

Quantitative factors are scored on a linear continuum. For each metric, the scorecard shows the range by alphanumeric category. We use the scale below and linear interpolation to convert the metric, based on its placement within the scorecard range, to a numeric score, which may be a fraction. As a purely theoretical example, if there were a ratio of revenue to short-term debt for which the baa1 range was 5x to 5.5x, then the numeric score for an issuer with revenue/short-term debt of 5.4x, relatively strong within this range, would score closer to 7.5, and an issuer with revenue/short-term debt of 5.1x, relatively weak within this range, would score closer to 8.5. In the text or table footnotes,

[25] When a factor comprises sub-factors, we score at the sub-factor level, or, in cases where the sub-factor comprises sub-factor indicators, at the sub-factor indicator level.

we define the endpoints of the line (i.e., the value of the metric that constitutes the lowest possible numeric score, and the value that constitutes the highest possible numeric score).

EXHIBIT 12

Scoring Scale

Alphanumeric score	Numeric Score
aaa	x ≤ 1.5
aa1	1.5 < x ≤ 2.5
aa2	2.5 < x ≤ 3.5
aa3	3.5 < x ≤ 4.5
a1	4.5 < x ≤ 5.5
a2	5.5 < x ≤ 6.5
a3	6.5 < x ≤ 7.5
baa1	7.5 < x ≤ 8.5
baa2	8.5 < x ≤ 9.5
baa3	9.5 < x ≤ 10.5
ba1	10.5 < x ≤ 11.5
ba2	11.5 < x ≤ 12.5
ba3	12.5 < x ≤ 13.5
b1	13.5 < x ≤ 14.5
b2	14.5 < x ≤ 15.5
b3	15.5 < x ≤ 16.5
caa1	16.5 < x ≤ 17.5
caa2	17.5 < x ≤ 18.5
caa3	18.5 < x ≤ 19.5
ca	19.5 < x ≤ 20.5
c	>20.5

Source: Moody's Investors Service

Each numeric score for quantitative metrics and qualitative sub-factors or sub-sub-factors within the first three factors of the scorecard (Economic Strength, Institutions and Governance Strength, Fiscal Strength) is multiplied by the weight for that sub-factor (or sub-sub-factor), and the products are summed and rounded to the nearest integer to arrive at the initial numeric factor score, which can be mapped to an alphanumeric score using the table in Exhibit 12. The initial factor score may be adjusted upward or downward by a defined number of scoring categories, based on the "other" adjustments to factor score described in the "Discussion of the Scorecard Factors" section, to arrive at a final factor score.[26] For these first three factors, an adjustment of one in the scorecard corresponds to an adjustment by one alphanumeric scoring category (e.g., from baa2 to baa3 or from a2 to a1).

For the last factor, Susceptibility to Event Risk, the initial sub-factor scores may be adjusted. For these sub-factors, an adjustment of one corresponds to an adjustment by one alpha scoring category (e.g., from aa to a or from ba to baa). The combination of adjusted sub-factor scores in the Susceptibility to

[26] In Fiscal Strength, for the Debt Trend, General Government Foreign Currency Debt / General Government Debt, Other Non-Financial Public Sector Debt, and Public Sector Financial Assets or Sovereign Wealth Funds adjustments, the indicated adjustments are based on quantitative indicators as described in the "Discussion of the Scorecard Factors" section and are included in the initial score. Qualitative judgment applied to these adjustments as well as any "other" adjustment applied to the initial Fiscal Strength factor score gets us to the final Fiscal Strength factor score. .

Event Risk factor is based on a minimum function, i.e., the factor score corresponds to the lowest alpha score (highest risk) of the four sub-factors within the factor.

3. Combining Factors and Determining the Overall Scorecard-Indicated Outcome

We combine, using equal weights, the Economic Strength and Institutions and Governance Strength factors to arrive at the Economic Resiliency score, which is rounded to the nearest integer, and the resulting numeric score can be mapped to an alphanumeric based on the scoring scale in Exhibit 12. We then combine the numeric Economic Resiliency with the numeric Fiscal Strength factor score using variable weights (see Exhibit 7) to arrive at a numeric Government Financial Strength value, which can be mapped to an alphanumeric based on the scoring scale in Exhibit 12.

The final step combines the Susceptibility to Event Risk factor with Government Financial Strength as detailed in Exhibit 8 to arrive at an alphanumeric that is the midpoint of the scorecard-indicated outcome, which is expressed as a three-notch range on our alphanumeric scale.[27]

[27] See Exhibit 7 for more details.

Appendix B: Scorecard Factors, Sub-Factors and Thresholds

FACTOR
Economic Strength

Sub-factor	Metric	Metric Weight	aaa	aa1	aa2	aa3	a1	a2	a3	baa1	baa2	baa3	ba1	ba2	ba3	b1	b2	b3	caa1	caa2	caa3	ca
Growth Dynamics	Average Real GDP Growth (%) t-4 to t+5 *1	25%	≥ 5.7	5.3 - 5.7	4.9 - 5.3	4.4 - 4.9	4 - 4.4	3.7 - 4	3.3 - 3.7	3 - 3.3	2.6 - 3	2.3 - 2.6	2 - 2.3	1.8 - 2	1.6 - 1.8	1.3 - 1.6	1.1 - 1.3	0.9 - 1.1	0.7 - 0.9	0.5 - 0.7	0.3 - 0.5	< 0.3
	Volatility in Real GDP Growth (%) t-9 to t *2	10%	≤ 1.4	1.4 - 1.46	1.46 - 1.53	1.53 - 1.62	1.62 - 1.72	1.72 - 1.83	1.83 - 1.96	1.96 - 2.10	2.10 - 2.26	2.26 - 2.42	2.42 - 2.61	2.61 - 2.80	2.80 - 3.01	3.01 - 3.23	3.23 - 3.47	3.47 - 3.71	3.71 - 3.98	3.98 - 4.25	4.25 - 4.54	> 4.54
Scale of the Economy	Nominal GDP (US$ bn) t *3	30%	≥ 1,000	750 - 1,000	600 - 750	450 - 600	330 - 450	250 - 330	190 - 250	140 - 190	100 - 140	80 - 100	60 - 80	45 - 60	35 - 45	26 - 35	20 - 26	15 - 20	10 - 15	8 - 10	6 - 8	< 6
National Income	GDP per capita (PPP, international USD) t *4	35%	≥ 48,000	42,000 - 48,000	37,000 - 42,000	32,000 - 37,000	27,500 - 32,000	24,500 - 27,500	21,000 - 24,500	19,000 - 21,000	16,000 - 19,000	14,000 - 16,000	12,000 - 14,000	10,750 - 12,000	9,500 - 10,750	8,000 - 9,500	7,000 - 8,000	6,200 - 7,000	5,500 - 6,200	4,700 - 5,500	4,100 - 4,700	< 4,100
Other		(Adjustment to Factor Score)																				

*1 For the linear scoring scale, the aaa endpoint value is 15%. A value of 15% or better equates to a numeric score of 0.5. The ca endpoint value is zero. A value of zero or worse equates to a numeric score of 20.5.

*2 For the linear scoring scale, the aaa endpoint value is zero. A value of zero equates to a numeric score of 0.5. The ca endpoint value is 40. A value of 40 or worse equates to a numeric score of 20.5.

*3 For the linear scoring scale, the aaa endpoint value is $25,000 billion. A value of $25,000 billion or better equates to a numeric score of 0.5. The ca endpoint value is $1 billion. A value of $1 billion or worse equates to a numeric score of 20.5.

*4 For the linear scoring scale, the aaa endpoint value is $100,000. A value of $100,000 or better equates to a numeric score of 0.5. The ca endpoint value is $1,000. A value of $1,000 or worse equates to a numeric score of 20.5.

FACTOR

Institutions and Governance Strength

Sub-factor	Sub-sub-factor	Sub-sub-factor Weight	aaa	aa	a	baa	ba	b	caa	ca
Quality of Institutions	Quality of Legislative and Executive Institutions	20%	Sovereigns in this category would generally have WGI scores for regulatory quality and government effectiveness above 1.5. Policy is legislated and implemented with the support of a highly professional, well-staffed and highly capable public administration with exceptionally deep bench strength. These institutions have demonstrated the flexibility to deal with changing circumstances and can absorb shocks while maintaining financial and economic stability. Law-making occurs under a well-developed constitutional framework that is transparent and predictable. Data sets are timely, stable, comprehensive and are provided for all levels of government (central, regional, local, and social security). Politically independent governmental bodies, such as fiscal councils, have a strong voice in the policymaking process.	Sovereigns in this category would generally have WGI scores for regulatory quality and government effectiveness between 1.5 and 1.0. Policy is legislated and implemented with the support of a generally professional and capable public administration, though in some cases it may face skill shortages in some areas or capacity constraints due to the country's size. These institutions can absorb shocks while maintaining financial and economic stability, but may be slow or tentative when dealing with changing circumstances. Law-making occurs under a well-developed constitutional framework that is transparent and predictable. Data reporting is comprehensive overall, but it may not be timely or may be subject to large revisions. Politically independent governmental bodies, such as fiscal councils, have a strong voice in the policymaking process.	Sovereigns in this category would generally have WGI scores for regulatory quality and government effectiveness between 1.0 and 0.5. Policy is legislated and implemented with the support of a generally professional and capable public administration, though in some cases it may face skill shortages in some areas or capacity constraints due to the country's size. These institutions can absorb shocks while maintaining financial and economic stability, but may be slow or tentative when dealing with changing circumstances. Law-making occurs under a constitutional framework that is generally transparent and predictable. Data reporting is comprehensive overall, but it may not be timely or may be subject to large revisions. Politically independent governmental bodies, such as fiscal councils, are an input into the policymaking process.	Sovereigns in this category would generally have WGI scores for regulatory quality and government effectiveness between 0.5 and 0.0. The public administration has a core of highly capable and qualified professionals, but bench strength is not particularly deep. As a result, at times it may struggle to support policy creation and implementation. These institutions generally struggle to respond to shocks while maintaining financial and economic stability, and are slow or tentative when dealing with changing circumstances. Law-making occurs under a constitutional framework that is generally transparent and predictable. Data reporting is systematic but not comprehensive and may be subject to significant lags and revisions. There may also be recurrent questions about data reliability. Fiscal data is not reported for lower levels of government (regional, local, and social security). Politically independent governmental bodies, such as fiscal councils, are an input into the policymaking process.	Sovereigns in this category would generally have WGI scores for regulatory quality and government effectiveness between -0.5 and 0.0. The public administration has a core of highly capable and qualified professionals, but bench strength is not particularly deep. As a result, at times it may struggle to support policy creation and implementation. These institutions generally struggle to respond to shocks while maintaining financial and economic stability, and are slow or tentative when dealing with changing circumstances. Law-making occurs under a constitutional framework that may be somewhat opaque and unpredictable. Data reporting is systematic but not comprehensive and may be subject to significant lags and revisions. There may also be recurrent questions about data reliability. Fiscal data is not reported for lower levels of government (regional, local, and social security). Politically independent bodies do not have a meaningful voice in the policymaking process.	Sovereigns in this category would generally have WGI scores for regulatory quality and government effectiveness between -1.0 and -0.5. The public administration often struggles to support policy creation and implementation. It accumulates government arrears. These institutions have difficulty dealing with changing circumstances and have little or no ability to absorb shocks without creating social, fiscal, and/or economic instability. Law-making occurs under a constitutional framework that may be somewhat opaque and unpredictable. Data reporting of key fiscal and economic indicators is typically annual, can be erratic, or data collection and provision are adversely affected by political influence over the collection and reporting process. Politically independent bodies do not have a meaningful voice in the policymaking process.	Sovereigns in this category would generally have WGI scores for regulatory quality and government effectiveness between -1.5 and -1.0. The public administration often struggles to support policy creation and implementation. It accumulates government arrears. These institutions have difficulty dealing with changing circumstances and have little or no ability to absorb shocks without creating social, fiscal, and/or economic instability. Law-making occurs under a legal framework that is opaque and unpredictable. Data reporting of key fiscal and economic indicators is typically annual, can be erratic, or data collection and provision are adversely affected by political influence over the collection and reporting process. There are no politically independent actors participating in the policymaking process.	Sovereigns in this category would generally have WGI scores for regulatory quality and government effectiveness below -1.5. The public administration lacks technical skills in some key areas and is often not executing its functions. It exhibits weak willingness to pay creditors, and accumulates significant government arrears. These institutions have difficulty coping with even day-to-day management of the country and the population's fundamental economic and security needs. Law-making occurs under a legal framework that is opaque and unpredictable. Key data sets are missing and unreliable. There are no politically independent actors participating in the policymaking process.

FACTOR

Institutions and Governance Strength

Sub-factor	Sub-sub-factor	Sub-sub-factor Weight	aaa	aa	a	baa	ba	b	caa	ca
Quality of Institutions	Strength of Civil Society and the Judiciary	20%	WGI scores for voice and accountability, rule of law and control of corruption typically above 1.5. The enforcement of laws is highly predictable and consistent, including with respect to the government itself. An effective balance of power and separation of powers is consistently and dependably maintained between branches of government, and judicial independence is maintained and respected. There are few instances of corruption that act to the detriment of the sovereign's credit profile. Judicial processes are impartial, contracts are enforced, and legal cases are resolved in a timely manner. Institutions in civil society consistently act as an effective check on the exercise of government power.	Generally have WGI scores for voice and accountability, rule of law and control of corruption typically between 1.5 and 1.0. The enforcement of laws is highly predictable and consistent, including with respect to the government itself. An effective balance of power and separation of powers is consistently and dependably maintained between branches of government, and judicial independence is maintained and respected. There are few instances of corruption that act to the detriment of the sovereign's credit profile. Judicial processes are impartial, contracts are enforced, and legal cases are resolved in a timely manner. Institutions in civil society consistently act as an effective check on the exercise of government power.	Generally have WGI scores for voice and accountability, rule of law and control of corruption typically between 1.0 and 0.5. The enforcement of laws is usually predictable and consistent, including with respect to the government itself. An effective balance of power and separation of powers is generally maintained between branches of government. However, judicial independence is not always maintained. Corruption can be a problem that acts to the detriment of the sovereign's credit profile. Judicial processes are impartial and contracts are enforced, but it often takes a long time for a case to be resolved in the courts. Civil society institutions often act as an effective check on the exercise of government power.	WGI scores for voice and accountability, rule of law and control of corruption typically between 0.5 and 0.0. The enforcement of laws is usually predictable and consistent, including with respect to the government itself. An effective balance of power and separation of powers is generally maintained between branches of government. However, judicial independence is not always maintained. Corruption can be a problem that acts to the detriment of the sovereign's credit profile. Judicial processes are impartial and contracts are enforced, but it often takes a long time for a case to be resolved in the courts. Civil society institutions often act as an effective check on the exercise of government power.	WGI scores for voice and accountability, rule of law and control of corruption typically between 0.0 and -0.5. The enforcement of laws is sometimes unpredictable and inconsistent. Checks on the exercise of government power are not consistently applied. The judiciary is subject to political influence in ways that affect the business climate or other aspects of the sovereign's credit profile. Corruption is a significant structural challenge that undermines policy formation, economic stability and/or social cohesion. There is evidence of judicial bias, and contract enforcement can be challenging. Civil society institutions exist, but have difficulty acting as an effective check on the exercise of government power.	WGI scores for voice and accountability, rule of law and control of corruption typically between -0.5 and -1.0. The enforcement of laws is sometimes unpredictable and inconsistent. Checks on the exercise of government power are not consistently applied. The judiciary is subject to political influence in ways that affect the business climate or other aspects of the sovereign's credit profile. Corruption is a significant structural challenge that undermines policy formation, economic stability and/or social cohesion. There is evidence of judicial bias, and contract enforcement can be challenging. Civil society institutions exist, but have difficulty acting as an effective check on the exercise of government power.	WGI scores for voice and accountability, rule of law and control of corruption typically between -1.0 and -1.5. The enforcement of laws is usually unpredictable and inconsistent. There are few formal checks on the exercise of government power or the judiciary is not independent. Corruption is endemic and affects a wide range of policy choices. The courts system is ineffective. Civil society institutions either do not exist or have little discernable impact on the exercise of government power.	WGI scores for voice and accountability, rule of law and control of corruption typically below -1.5. The enforcement of laws is usually unpredictable and inconsistent. There are few formal checks on the exercise of government power or the judiciary is not independent. Corruption is endemic and affects a wide range of policy choices. The courts system is ineffective. Civil society institutions either do not exist or have little discernable impact on the exercise of government power.

FACTOR

Institutions and Governance Strength

Sub-factor	Sub-sub-factor	Sub-sub-factor Weight	aaa	aa	a	baa	ba	b	caa	ca
Policy Effectiveness	Fiscal Policy Effectiveness	30%	Over several cycles, debt/GDP may have increased during recessions, but then decreased during periods of normal or high growth. The budget is generally in a structural balance or surplus, as measured by international organisations, and we expect that to continue. Fiscal targets or expenditure ceilings are observed or outperformed. The medium-term policy planning process is highly robust. Revenues and expenditures are very stable, and a period of significant economic weakness does not prompt material and lasting deviations from the plan. There is a high degree of transparency in the government accounts, including guarantees and other contingent liabilities. Debt is well-structured and issuance is predictable, with extremely robust risk-mitigation strategies in place.	Over several cycles, debt/GDP may have increased during recessions, but then decreased during periods of normal or high growth. The budget is generally in a structural balance or a small structural deficit, as measured by international organisations; or budget balances are generally consistent with a stable debt burden. The structure of government revenues and expenditures is relatively flexible, and tax evasion is not a major problem for fiscal policy formation. Fiscal targets or expenditure ceilings are observed or outperformed. Medium-term policy planning process results in government spending in the outer years remaining largely stable except in periods of significant economic shock. There is a high degree of transparency in the government accounts, including guarantees and other contingent liabilities. Debt is well-structured and issuance is predictable, with extremely robust risk-mitigation strategies in place.	Over several cycles, debt/GDP will have generally increased during recessions, but then decreases slowly during periods of normal or high growth. The budget is generally in a structural balance or a small structural deficit, as measured by international organisations; or budget balances are generally consistent with a stable debt burden. The structure of government revenues and expenditures is relatively flexible, and tax evasion is not a major problem for fiscal policy formation. Fiscal targets or expenditure ceilings are sometimes missed. Medium-term policy planning process results in government spending in the outer years remaining largely stable except in periods of significant economic shock. There is a high degree of transparency in the government accounts, but information on guarantees and other contingent liabilities may not be available or fully transparent. Debt is well-structured but issuance is opportunistic, with robust risk-mitigation strategies in place.	Over several cycles, debt/GDP will have generally increased during recessions, but then decreases slowly during periods of normal or high growth. The budget is generally in structural deficit, as measured by international organisations; or budget balances are generally consistent with a gradual rise in the debt burden. The structure of government revenues and expenditures is relatively rigid. Tax evasion is a constraint on fiscal policy formation. Fiscal targets or expenditure ceilings are sometimes missed. Fiscal policymaking is reactive rather than the product of a structured, well-planned process. The medium-term policy planning process may result in government spending throughout the budgeting horizon (including mid-year) changing meaningfully and frequently. Governments regularly adjust budget balances through sudden, unplanned cuts in capital spending. There is a high degree of transparency in the government accounts, but information on guarantees and other contingent liabilities may not be available or fully transparent. Debt is well-structured but issuance is opportunistic, with robust risk-mitigation strategies in place.	Over several cycles, debt/GDP will have generally increased materially during recessions, without meaningful decreases during periods of normal or high growth. The budget is generally in structural deficit, as measured by international organisations; or budget balances are generally consistent with a gradual rise in the debt burden. The structure of government revenues and expenditures is relatively rigid. Tax evasion is a constraint on fiscal policy formation. Fiscal targets or expenditure ceilings are often missed. Fiscal policymaking is reactive rather than the product of a structured, well-planned process. The medium-term policy planning process may result in government spending throughout the budgeting horizon (including mid-year) changing meaningfully and frequently. Governments regularly adjust budget balances through sudden, unplanned cuts in capital spending. There are material gaps in the transparency of government accounts, and information on guarantees and other contingent liabilities is generally not available. Debt structure carries significant unhedged risk. There is not a structured issuance plan in place, relying more heavily on opportunistic market access.	Over several cycles, debt/GDP will have generally increased materially during recessions, without meaningful decreases during periods of normal or high growth. Budget deficits are the norm and tend to be large enough so that they add to the debt burden. The structure of government expenditures is highly rigid, and the government is reliant on a narrow range of revenue sources. The incidence of tax evasion is high and is a material constraint on fiscal policy formation. Fiscal targets or expenditure ceilings are often missed. Fiscal policymaking is entirely reactive. There is no medium-term policy planning process, and government spending throughout the budgeting horizon (including mid-year) is subject to meaningful changes. Governments typically adjust budget balances through sudden, unplanned cuts in capital spending. There are material gaps in the transparency of government accounts, and information on guarantees and other contingent liabilities is generally not available. Debt structure carries significant unhedged risk. There is not a structured issuance plan in place, relying more heavily on opportunistic market access.	Over several cycles, debt/GDP will have increased on an unsustainable basis. Budget deficits are the norm and tend to be large enough so that they add to the debt burden. The structure of government expenditures is highly rigid, and the government is reliant on a narrow range of revenue sources. The incidence of tax evasion is high and is a material constraint on fiscal policy formation. Fiscal targets or expenditure ceilings do not exist. Fiscal policymaking is entirely reactive. There is no medium-term policy planning process, and government spending throughout the budgeting horizon (including mid-year) is subject to meaningful changes. Governments typically adjust budget balances through sudden, unplanned cuts in capital spending. Government accounts are opaque. Debt management is insufficiently effective to avoid very significant foreign exchange or interest rate risk and intermittent liquidity crises.	Over several cycles, debt/GDP will have increased on an unsustainable basis. The government faces very significant structural constraints in formulating fiscal policy, including a very high incidence of tax evasion. Fiscal targets or expenditure ceilings do not exist. Fiscal policymaking is entirely reactive, and the government's ability to manage its finances is highly limited. Government spending decisions are ad hoc. Government accounts are opaque. Debt management is insufficiently effective to avoid very significant foreign exchange or interest rate risk and intermittent liquidity crises.

FACTOR

Institutions and Governance Strength

Sub-factor	Sub-sub-factor	Sub-sub-factor Weight	aaa	aa	a	baa	ba	b	caa	ca
Policy Effectiveness	Monetary and Macroeconomic Policy Effectiveness	30%	Extremely effective policies, with inflation typically 1-3%. The authorities avoid the build-up of macroeconomic imbalances and are highly proactive in pursuing competitiveness-enhancing structural reforms. The central bank has a clear goal, the tools to implement the goal, and is credible in delivering against that goal. The central bank is independent. The authorities effectively use macroprudential tools to mitigate systemic capital, liquidity and credit risk without creating unintended distortions or imbalances in the financial system. The banking system is regulated in a way that effectively balances the need for the sector to support economic growth against the need to avoid excessive risk-taking. Regulatory competence is in line with the complexity of the financial system. There have been no systemic banking crisis in the past decade.	Extremely effective policies, with inflation typically 1-3%. The authorities are generally proactive and forward-thinking in addressing macroeconomic imbalances, including pursuing structural reforms where needed. The central bank has a clear goal, the tools to implement the goal, and is credible in delivering against that goal. The central bank is independent. The authorities effectively use macroprudential tools to mitigate systemic capital, liquidity and credit risk without creating unintended distortions or imbalances in the financial system. The banking system is regulated in a way that effectively balances the need for the sector to support economic growth against the need to avoid excessive risk-taking. Regulatory competence is in line with the complexity of the financial system. There have been no systemic banking crisis in the past decade.	Highly effective policies, with inflation typically 0.5-1% or 3-3.5%. The authorities are generally proactive and forward-thinking in addressing macroeconomic imbalances, including pursuing structural reforms where needed. The central bank has a clear goal, the tools to implement the goal, and is largely credible in delivering against that goal, but structural features such as the depth and breadth of the financial sector or the economy's reliance on imported goods impair policy effectiveness. The authorities use macroprudential tools to mitigate systemic capital, liquidity and credit risk, but sometimes fail to avoid the build-up of imbalances in the financial system. The banking system is regulated in a way that effectively balances the need for the sector to support economic growth against the need to avoid excessive risk-taking. However, the regulator may suffer from skills shortages, lack of effective tools or may struggle to keep pace with the complexity of the financial system. There may have been a systemic banking crisis in the past decade.	Effective policies, with inflation typically 0-0.5% or 3.5-4%. The authorities address macroeconomic imbalances and structural challenges in a reactive manner that is driven by short-term concerns. The central bank has a clear goal, the tools to implement the goal, and is largely credible in delivering against that goal, but structural features such as the depth and breadth of the financial sector or the economy's reliance on imported goods impair policy effectiveness. The authorities use macroprudential tools to mitigate systemic capital, liquidity and credit risk, but sometimes fail to avoid the build-up of imbalances in the financial system. The banking system is regulated in a way that effectively balances the need for the sector to support economic growth against the need to avoid excessive risk-taking. However, the regulator may suffer from skills shortages, lack of effective tools or may struggle to keep pace with the complexity of the financial system. There may have been a systemic banking crisis in the past decade.	Moderately effective policies, with inflation typically below 0% or between 3.5-4%. The authorities address macroeconomic imbalances and structural challenges in a reactive manner that is driven by short-term concerns. The central bank may not have a clear policy goal, and it lacks either the tools to implement monetary policy or is inconsistent in delivering the desired monetary policy outcomes. The government tends to interfere with the conduct of monetary policy. The authorities use macroprudential tools to mitigate systemic capital, liquidity and credit risk but struggle to avoid the build-up of imbalances in the financial system. The banking system is regulated in a way that either fails to support economic growth or allows excessive risk-taking to build up in the system. There may have been a systemic banking crisis in the past decade, and there is a moderate probability of a future crisis developing.	Weak policies, with inflation typically 3.5-4%. The authorities only address macroeconomic imbalances and structural challenges under duress, either from market forces or international bodies. The central bank may not have a clear policy goal, and it lacks either the tools to implement monetary policy or is inconsistent in delivering the desired monetary policy outcomes. The government tends to interfere with the conduct of monetary policy. The authorities use macroprudential tools to mitigate systemic capital, liquidity and credit risk but struggle to avoid the build-up of imbalances in the financial system. The banking system is regulated in a way that either fails to support economic growth or allows excessive risk-taking to build up in the system. There may have been a systemic banking crisis in the past decade, and there is a moderate probability of a future crisis developing.	Very weak policies, with inflation typically 4-10%. The authorities only address macroeconomic imbalances and structural challenges under duress, either from market forces or international bodies. Central bank policymaking is ineffective, and the transmission of monetary policy to the economy is very weak. The authorities do not use macroprudential tools to mitigate systemic capital, liquidity and credit risk. Banking system regulation is weak, and these shortcomings keep the probability of a crisis developing in the sector at relatively high levels.	Extremely weak policies, with inflation typically greater than 10% The authorities do not address macroeconomic imbalances or are ineffective in doing so. Central bank policymaking is ineffective, and the transmission of monetary policy to the economy is very weak. The authorities do not use macroprudential tools to mitigate systemic capital, liquidity and credit risk. Banking system regulation is weak and these shortcomings keep the probability of a crisis developing in the sector at relatively high levels.
Government Default History and Track Record of Arrears			(Adjustment to Factor Score)							
Other			(Adjustment to Factor Score)							

FACTOR

Fiscal Strength

Sub-factor	Metric	Metric Weight	aaa	aa1	aa2	aa3	a1	a2	a3	baa1	baa2	baa3	ba1	ba2	ba3	b1	b2	b3	caa1	caa2	caa3	ca
Debt Burden	General Government Debt / GDP (%) $_t$ [*1]	25%[*5]	≤ 5	5-20	20-30	30-35	35 - 40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-90	90-100	100 - 120	120 - 130	130 - 140	140 - 150	> 150
	General Government Debt / Revenue (%) $_t$ [*2]	25%[*5]	≤ 10	10-80	80-120	120 -140	140 - 160	160 - 180	180 - 200	200 - 220	220 - 230	230 - 240	240 - 260	260 - 280	280-320	320 - 360	360 - 400	400 - 450	450 - 500	500 - 550	550 - 600	> 600
Debt Affordability	General Government Interest Payments / Revenue (%) $_t$ [*3]	25%[*5]	≤ 1.5	1.5-3.5	3.5-6	6-7	7-8	8- 9	9 - 10	10 - 11	11 - 11.5	11.5 - 12	12-13	13-14	14 -16	16-18	18 -20	20 - 22.5	22.5 - 25	25 - 27.5	27.5 - 30	> 30
	General Government Interest Payments / GDP (%) $_t$ [*4]	25%[*5]	≤ 0.25	0.25 - 1.0	1.0-1.5	1.5-1.75	1.75-2.0	2.0 - 2.25	2.25 - 2.5	2.5-2.75	2.75-3.0	3.0 - 3.15	3.15 - 3.25	3.25 - 3.5	3.5-4.0	4.0-4.5	4.5-5.0	5.0-6.0	6.0-6.5	6.5-7.0	7.0-7.5	> 7.5
Debt Trend $_{t-4 \text{ to } t+1}$				(Adjustment to Factor Score)																		
General Government Foreign Currency Debt / General Government Debt $_t$				(Adjustment to Factor Score)																		
Other Non-Financial Public Sector Debt / GDP $_t$				(Adjustment to Factor Score)																		
Public Sector Financial Assets and Sovereign Wealth Funds / General Government Debt $_t$				(Adjustment to Factor Score)																		
Other				(Adjustment to Factor Score)																		

*1 For the linear scoring scale, the aaa endpoint value is 0%. A value of 0% equates to a numeric score of 0.5. The ca endpoint value is 700%. A value of 700% or worse equates to a numeric score of 20.5.

*2 For the linear scoring scale, the aaa endpoint value is 0%. A value of 0% equates to a numeric score of 0.5. The ca endpoint value is 700%. A value of 700% or worse equates to a numeric score of 20.5.

*3 For the linear scoring scale, the aaa endpoint value is 0%. A value of 0% equates to a numeric score of 0.5. The ca endpoint value is 35%. A value of 35% or worse equates to a numeric score of 20.5.

*4 For the linear scoring scale, the aaa endpoint value is 0%. A value of 0% equates to a numeric score of 0.5. The ca endpoint value is 35%. A value of 35% or worse equates to a numeric score of 20.5.

*5 For more details about how these weights may vary, please refer to our discussion on the Treatment of Reserve Currency Countries and HIPC/IDA Countries within the Fiscal Strength section of the methodology.

FACTOR

Susceptibility to Event Risk

Sub-factor	Sub-sub-factor	aaa	aa	a	baa	ba	b	caa	ca
Political Risk	Domestic Political and Geopolitical Risk	WGI for voice and accountability is typically above 1.5. Gini index is typically between 0 and 30. WGI for Political Stability is typically above 1.5. Unemployment is typically low, and distribution of wealth and incomes is relatively uniform with little or no adverse impact on policy outcomes. There are no significant sources of social conflict that pose a material risk to political or economic outcomes. General consensus on credit-positive policy outcomes that endures through changes in government. Political transitions are routinely smooth, with negligible implications for the sovereign's credit profile. Generally harmonious geopolitical relationships and little interference from external actors. The country is not engaged in any armed or latent conflict that affects economic activity, fiscal outcomes or policymaking.	WGI for voice and accountability is typically between 1.5 and 1.0. Gini index is typically between 0 and 30. WGI for Political Stability is typically between 1.5 and 1.0. Unemployment is typically low, and distribution of wealth and incomes is relatively uniform with little or no adverse impact on policy outcomes. There are no significant sources of social conflict that pose a material risk to political or economic outcomes. General consensus on credit-positive policy outcomes that endures through changes in government. Political transitions are routinely smooth, with negligible implications for the sovereign's credit profile. Generally harmonious geopolitical relationships and little interference from external actors. The country is not engaged in any armed or latent conflict that affects economic activity, fiscal outcomes or policymaking.	WGI for voice and accountability is typically between 1.0 and 0.5. Gini index is typically between 30 and 40. WGI for Political Stability is typically between 1.0 and 0.5. Although the distribution of employment, wealth and incomes is relatively uniform across the economy, differences across regions, socioeconomic or other groups or changes over time may have an adverse impact on policy outcomes. There are some areas of religious, ethnic or social conflict that could materially influence political or economic outcomes. Changes in government may pose challenges to the continuity of credit-positive policy outcomes, or the ability to address credit weaknesses. Political transitions are generally orderly and rarely significantly impact the administrative functions of the bureaucracy. Sometimes tense geopolitical relationships that could have some limited impact on the sovereign's credit profile. Interference from external actors does not have a material credit impact. Although the country is not engaged in armed conflict, it may be exposed to the impact of armed conflict elsewhere or to a latent conflict, with a limited impact on economic activity, fiscal outcomes or policymaking.	WGI for voice and accountability is typically between 0.5 and 0.0. Gini index is typically between 30 and 40. WGI for Political Stability is typically between 0.5 and 0.0. Although the distribution of employment, wealth and incomes is relatively uniform across the economy, differences across regions, socioeconomic or other groups or changes over time may have an adverse impact on policy outcomes. There are some areas of religious, ethnic or social conflict that could materially influence political or economic outcomes. Changes in government may pose challenges to the continuity of credit-positive policy outcomes, or the ability to address credit weaknesses. Political transitions are generally orderly and rarely significantly impact the administrative functions of the bureaucracy. Sometimes tense geopolitical relationships that could have some limited impact on the sovereign's credit profile. Interference from external actors does not have a material credit impact. Although the country is not engaged in armed conflict, it may be exposed to the impact of armed conflict elsewhere or to a latent conflict, with a limited impact on economic activity, fiscal outcomes or policymaking.	WGI for voice and accountability is typically between 0.0 and -0.5. Gini index is typically between 40 and 50. WGI for Political Stability is typically between 0.0 and -0.5. The distribution of employment, wealth and incomes is relatively unequal, and there may be deep religious, ethnic or social divisions in society. These tensions introduce a low but not insignificant probability of social tensions that could include violence and that could have a severe impact on policy outcomes. Changes in government routinely reduce policy predictability and raise the probability of credit-negative policies that could impact economic or fiscal outcomes. There may be significant succession or key-person risks, where government instability negatively impacts the administrative functions of the bureaucracy. The escalation of geopolitical tensions, possibly leading up to an armed conflict, has the potential to negatively impact economic activity, fiscal outcomes and funding conditions.	WGI for voice and accountability is typically between -0.5 and -1.0. Gini index is typically between 40 and 50. WGI for Political Stability is typically between -0.5 and -1.0. The distribution of employment, wealth and incomes is relatively unequal, and there may be deep religious, ethnic or social divisions in society. These tensions introduce a low but not insignificant probability of social tensions that could include violence and that could have a severe impact on policy outcomes. Changes in government routinely reduce policy predictability and raise the probability of credit-negative policies that could impact economic or fiscal outcomes. There may be significant succession or key-person risks, where government instability negatively impacts the administrative functions of the bureaucracy. The escalation of geopolitical tensions, possibly leading up to an armed conflict, has the potential to negatively impact economic activity, fiscal outcomes and funding conditions.	WGI for voice and accountability is typically between -1.0 and -1.5. Gini index is typically above 50. WGI for Political Stability is typically below -1.0 and -1.5. There is mass unemployment, large disparities of wealth and income, communal tensions in some cases involving internal armed conflict, which severely disrupt or impair economic activity, policymaking and the orderly operation of government institutions. There is an absence of a functioning government and/or the bureaucracy's administrative functions are severely impaired. There is no clear and credible means of transferring power, and there is significant risk that any succession will be disorderly and will damage the sovereign's credit profile. Contentious geopolitical relationships, including actual engagement in armed conflict, severely impairs or disrupts economic activity, the ability to obtain financing and/or the orderly operation of institutions.	WGI for voice and accountability is typically below -1.5. Gini index is typically above 50. WGI for Political Stability is typically below -1.5. There is mass unemployment, large disparities of wealth and income, communal tensions in some cases involving internal armed conflict, which severely disrupt or impair economic activity, policymaking and the orderly operation of government institutions. There is an absence of a functioning government and/or the bureaucracy's administrative functions are severely impaired. There is no clear and credible means of transferring power, and there is significant risk that any succession will be disorderly and will damage the sovereign's credit profile. Contentious geopolitical relationships, including actual engagement in armed conflict, severely impairs or disrupts economic activity, the ability to obtain financing, and/or the orderly operation of institutions.

FACTOR

Susceptibility to Event Risk

Sub-factor	Sub-sub-factor	aaa	aa	a	baa	ba	b	caa	ca
Government Liquidity Risk	Ease of Access to Funding	The government has a strong track record of reliable access to extremely deep domestic capital markets with a broad and diverse base of investors, including a wide range of types of institutional investors. The government has unquestioned access to an extremely broad range of non-resident investors in local-currency debt, generally reflecting the reserve currency status of its currency. The government has a strong track record of reliable access to foreign currency financing from a broad and diverse range of investors.	The government has a strong track record of reliable access to extremely deep domestic capital markets with a broad and diverse base of investors, including a wide range of types of institutional investors. The government has a strong track record of reliable access to a broad range of non-resident investors in local-currency debt. Non-resident participation in domestic capital and credit markets is extremely stable. The government has a strong track record of reliable access to foreign currency financing from a broad and diverse range of investors.	Experience suggests that the government has generally reliable access to deep domestic capital markets with a reasonably broad and diverse base of investors, including a range of institutional investors. The government has a strong track record of reliable access to a broad range of non-resident investors in local-currency debt. Non-resident participation in domestic capital and credit markets is extremely stable. The government has generally reliable access to foreign currency financing from a reasonably broad and diverse range of investors.	Experience suggests that the government has generally reliable access to deep domestic capital markets with a reasonably broad and diverse base of investors, including a range of institutional investors. Experience suggests that the government has generally reliable access to non-resident investors in local-currency debt. Non-resident participation in the domestic capital and credit markets can be volatile but is expected to remain quite stable over time. The government has generally reliable access to foreign currency financing from a reasonably broad and diverse range of investors.	The government has intermittent access to domestic capital markets which are relatively narrow and underdeveloped. Experience suggests that the government has generally reliable access to non-resident investors in local-currency debt. Non-resident participation in the domestic capital and credit markets can be volatile but is expected to remain quite stable over time. The government has intermittent access to foreign currency financing through a relatively narrow range of investors and a variety of official lenders.	The government has intermittent access to domestic capital markets which are relatively narrow and underdeveloped. The government has intermittent access to non-resident investors in local-currency debt. Non-resident participation in the domestic capital and credit markets is limited and can be volatile. The government has intermittent access to foreign currency financing through a relatively narrow range of investors and a variety of official lenders.	The government has very limited access to domestic capital markets which are narrow and underdeveloped. The government has intermittent access to non-resident investors in local-currency debt. Non-resident participation in the domestic capital and credit markets is limited and can be volatile. The government has no or virtually no access to market-based foreign currency financing, and relatively limited access to official lenders.	The government has very limited access to domestic capital markets which are narrow and underdeveloped. The government has no or very limited access to non-resident investors in local-currency debt. Non-resident participation in the domestic capital and credit markets is shallow, volatile and unreliable. The government has no or virtually no access to market-based foreign currency financing and relatively limited access to official lenders.
High Refinancing Risk		(Adjustment to Sub-factor Score)							
Banking Sector Risk	Risk of Banking Sector Credit Event (BSCE)				See Discussion of the Scorecard Factors Section				
	Total Domestic Bank Assets / GDP t				See Discussion of the Scorecard Factors Section				
Other		(Adjustment to Sub-factor Score)							

FACTOR

Susceptibility to Event Risk

Sub-factor	Sub-sub-factor	aaa	aa	a	baa	ba	b	caa	ca
External Vulnerability Risk	External Vulnerability Risk	The country benefits from a structural external surplus, as demonstrated by consistent current account surpluses resulting from a well-diversified export base. The country has a low level of net external liabilities. Alternatively, very high economic resilience and general attractiveness to investors enable it to support a high external debt load, even during times of economic and financial shock. The country has unfettered access to international capital markets, through a reserve currency.	The country benefits from a structural external surplus, as demonstrated by consistent current account surpluses resulting from a well-diversified export base. The country has a low level of net external liabilities. Alternatively, very high economic resilience and general attractiveness to investors enable it to support a high external debt load, even during times of economic and financial shock. The country is expected to have no difficulty in using immediately available foreign currency reserves to service external debt. Alternatively, the country has deep and stable access to foreign exchange markets or a strong external guarantor, limiting the need for large foreign currency buffers.	Current account deficits are expected to be small (typically less than 5% of GDP over three years) and remain fully and consistently financed by FDI inflows. The country has high or moderate economic resilience or a moderate level of economy-wide external liabilities (above 100% of current account receipts). The country is expected to have no difficulty in using immediately available foreign currency reserves to service external debt. Alternatively, the country has deep and stable access to foreign exchange markets or a credible eternal guarantor, limiting the need for large foreign currency buffers.	Current account deficits are expected to be small (typically less than 5% of GDP over three years) and remain fully and consistently financed by FDI inflows. The country has high or moderate economic resilience or a moderate level of economy-wide external liabilities (typically above 100% of current account receipts). The country displays relatively limited vulnerability in its capacity to service external debt. Foreign exchange reserves are expected to remain sufficient to prevent external liquidity pressures (typically EVI of around 100%).	Current account deficits are expected to be large and persistent (typically more than 5% of GDP over three years). Financing is partly dependent on portfolio and debt capital inflows that expose the economy to shifts in market sentiment. The country is a net debtor. It has a low economic resilience and high level of economy-wide external liabilities (typically above 200% of current account receipts) which makes it vulnerable to external shocks. The country displays relatively limited vulnerability in its capacity to service external debt. Foreign exchange reserves are expected to remain sufficient to prevent external liquidity pressures (typically EVI of around 100%).	Current account deficits are expected to be large and persistent (typically more than 5% of GDP over three years). Financing is partly dependent on portfolio and debt capital inflows that expose the economy to shifts in market sentiment. The country is a net debtor. It has a low economic resilience and high level of economy-wide external liabilities (typically above 200% of current account receipts) which makes it vulnerable to external shocks. The country displays increasing vulnerability in its capacity to service external debt. Foreign exchange reserves have fallen to low levels and external liquidity is increasingly constrained (typically EVI of around 200%).	Current account deficits are expected to be very large and persistent, indicative of a structural imbalance. Financing is highly dependent on portfolio and debt capital inflows that expose the economy to shifts in market sentiment. The export base is narrow or concentrated on commodities. The country is a net debtor. It shows very weak economic resilience and a very high level of economy-wide external liabilities (typically above 400% of current account receipts), or a large share composed of short-term debt resulting in very high external refinancing needs. The country displays increasing vulnerability in its capacity to service external debt. Foreign exchange reserves have fallen to low levels and external liquidity is increasingly constrained (typically EVI of around 200%).	Current account deficits are expected to be very large and persistent, indicative of a structural imbalance. Financing is highly dependent on portfolio and debt capital inflows that expose the economy to shifts in market sentiment. The export base is narrow or concentrated on commodities. The country is a net debtor. It shows very weak economic resilience and a very high level of economy-wide external liabilities (typically above 400% of current account receipts), or a large share composed of short-term debt resulting in very high external refinancing needs. The country displays significant vulnerability in its capacity to service external debt. Foreign exchange reserves have fallen to very low levels and external liquidity is materially constrained (typically EVI above 200%).

Source: Moody's Investors Service

Moody's Related Publications

Credit ratings are primarily determined by sector credit rating methodologies. Certain broad methodological considerations (described in one or more cross-sector rating methodologies) may also be relevant to the determination of credit ratings of issuers and instruments. An index of sector and cross-sector credit rating methodologies can be found here.

For data summarizing the historical robustness and predictive power of credit ratings, please click here.

For further information, please refer to *Rating Symbols and Definitions*, which is available here.

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Authors
Dietmar Hornung
Daniel Marty

Production Associates
Masaki Shiomi
Eri Watanabe

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