# **S&P Global** Ratings

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# Criteria | Governments | Sovereigns: Sovereign Rating Methodology

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## Criteria | Governments | Sovereigns: Sovereign Rating Methodology

(Editor's Note: We originally published this criteria article on Dec. 23, 2014. We've republished it following our periodic review completed on Dec. 20, 2016. As part of this review, we updated industry data, corrected typos, removed redundant or obsolete text, repositioned a paragraph clarifying the economic assessment when GDP per capita is borderline, and included an interpretation on sovereign obligations with contingent risks. On Nov. 14, 2016, we published our latest "GDP Per Capita Thresholds For Sovereign Rating Criteria" and updated references to that article. On June 7, 2016, we revised the article to update contact details and add Appendix D, which clarifies how we determine the economic assessment when the sovereign's GDP per capita is borderline.)

- 1. S&P Global Ratings is updating its sovereign rating methodology as part of its regular criteria review. The main changes clarify and enhance certain parts of the criteria relative to "Sovereign Government Rating Methodology And Assumptions," published June 24, 2013, which this article supersedes.
- 2. The article "Principles Of Credit Ratings," published Feb. 16, 2011, forms the basis of these criteria.

## I. SCOPE

- 3. This methodology applies to issuer and issue ratings on all sovereign governments.
- 4. All references to sovereign ratings in this article pertain to a sovereign's ability and willingness to service financial obligations to nonofficial (commercial) creditors. The issuer credit rating (ICR) on a sovereign does not reflect its ability and willingness to service other types of obligations, such as;
  - Obligations to other governments (Paris Club debt or other intergovernmental debt).
  - Obligations to supranationals, such as the International Monetary Fund (IMF) or the World Bank.
  - Obligations to honor a guarantee that does not meet our criteria for sovereign-guaranteed debt (see "Guarantee Criteria," Oct. 21, 2016).
  - Obligations issued to public-sector enterprises or local and regional governments.
- 5. However, the methodology takes into account these obligations' potential effect on a sovereign's ability to service its commercial financial obligations. In this article, "rating" refers to an ICR if not otherwise specified.

## **II. SUMMARY**

- 6. The sovereign rating methodology (we use "criteria" and "methodology" interchangeably here) addresses the factors that we think affect a sovereign government's willingness and ability to service its debt on time and in full.
- 7. The five key factors that form the foundation of our sovereign credit analysis are:
  - Institutional and governance effectiveness and security risks (reflected in the institutional assessment).
  - Economic structure and growth prospects (economic assessment).
  - External liquidity and international investment position (external assessment).

- Fiscal performance and flexibility as well as debt burden (fiscal assessment).
- Monetary flexibility (monetary assessment).
- 8. Our sovereign rating analysis involves several steps (see chart).



- 9. The first step is to assign an assessment to each of the five key factors on a six-point numerical scale from '1' (strongest) to '6' (weakest). Each assessment is based on a series of quantitative factors and qualitative considerations described in Paragraphs 30-129. We then combine the institutional and economic assessments to form a sovereign's "institutional and economic profile," and the external, fiscal, and monetary assessments to form its "flexibility and performance profile." Those two profiles are combined to determine the sovereign foreign-currency rating, after factoring in supplemental adjustments, when applicable (see Paragraphs 23-27), and after considering trends and other factors (see Paragraph 19), which could lead us to deviate from the indicative rating.
- 10. We determine a sovereign local-currency rating by applying zero to usually no more than two notches of uplift from the foreign-currency rating following our methodology outlined in Paragraphs 130-133. Sovereign local-currency ratings can be higher than sovereign foreign-currency ratings because local-currency creditworthiness may be supported by the unique powers that sovereigns possess within their own borders, including the ability to issue debt in local currency and control the domestic financial system through regulation. When a sovereign is a member of a

monetary union and, thus, cedes monetary and exchange-rate policy to a common central bank, or when it uses the currency of another sovereign, the local-currency rating is the same as the foreign-currency rating.

11. This paragraph has been deleted.

## **III. EFFECTIVE DATE AND TRANSITION**

12. The criteria described in this article are effective immediately, except in markets that require prior notification to, and/or registration by, the local regulator. In these markets, the criteria will become effective when so notified by S&P Global Ratings and/or registered by the regulator.

## **IV. METHODOLOGY**

## A. S&P Global Ratings' Sovereign Rating Calibrations

13. The overall calibration of the sovereign ratings criteria is based on our analysis of the history of sovereign defaults, the effect of financial and economic crises on sovereign creditworthiness, and our view of the credit strengths of sovereign governments compared with those of other issuers.

#### History of sovereign defaults

- 14. The review of the history of sovereign defaults uses the following main sources:
  - "Sovereign Defaults At 26-Year Low, To Show Little Change In 2007," Sept. 18, 2006, which looks at the default history of rated and unrated sovereigns since 1824.
  - "2015 Annual Sovereign Default Study And Rating Transitions," May 24, 2016, which covers the performance of S&P Global Ratings' sovereign ratings--both in terms of transition and default--from 1975-2015.
  - "Common Characteristics Of Rated Sovereigns Prior To Default," Jan. 28, 2013, which further elaborates on the confluence of factors that can be considered as leading indicators of a sovereign default.
- 15. The sources above show that since the beginning of the 19th century, most sovereign defaults have occurred because a defaulting sovereign's past policies left it badly prepared to face an unexpected turn of events. War, a regime change, other forms of political instability, and a sharp deterioration in terms of trade are examples of shocks. Following a shock, when a government's previous fiscal or monetary policies leave it little maneuvering room or when economic policy does not support sustainable economic growth, investors' perceptions tend to change quickly. This, in turn, raises financing costs and, in some cases, leaves a government with default as the preferred policy response.

#### Credit strength of sovereigns relative to other types of issuers

16. Sovereign governments have unique powers--such as the ability to raise taxes, set laws, and control the supply of money--that generally make them more creditworthy than issuers with less authority. Consequently, although S&P Global Ratings' sovereign ratings span the entire rating scale, a greater proportion of sovereign ratings are at the higher end of the scale compared with our ratings in other sectors. At end-September 2016, 9% of our sovereign local- and foreign-currency ratings were 'AAA' and roughly 14% were in the 'AA' category compared with about 0.2% and 2.4%,

respectively, for corporate issuers (excluding financial institutions). S&P Global Ratings calibrates its sovereign rating criteria based on the above observations and on its general framework for the idealized behavior of its credit ratings over time through economic cycles. Three articles outline this framework:

- "Understanding Standard & Poor's Rating Definitions," June 3, 2009;
- "Credit Stability Criteria," May 3, 2010; and
- "The Time Dimension Of Standard & Poor's Credit Ratings," Sept. 22, 2010.

## **B.** Determining A Sovereign Foreign-Currency Rating

17. S&P Global Ratings' analysis of a sovereign's creditworthiness starts with its assessment of five key rating factors (see Table 1).

#### Table 1

Assessing The Five Main Sovereign Rating Factors	
Key rating factors	Assessment assigned on a '1'-'6' scale, with '1' the strongest and '6' the weakest
Institutional effectiveness	Institutional assessment
Economic structure and growth prospects	Economic assessment
External liquidity and international investment position	External assessment
Fiscal flexibility and fiscal performance, combined with debt burden and contingent liability	Fiscal assessment
Monetary flexibility	Monetary assessment

- 18. Each factor receives an assessment using a six-point numerical scale from '1' (the strongest) to '6' (the weakest). A series of quantitative factors and qualitative considerations, described in Paragraphs 30-129, form the basis for assigning the assessments. We then combine those five assessments to form a sovereign's institutional and economic profile and its flexibility and performance profile. Those two profiles are then used to determine an indicative rating level (see Table 2).
  - The institutional and economic profile reflects our view of the resilience of a country's economy, the strength and stability of its civil institutions, and the effectiveness of its policymaking. It is the average of the institutional assessment (see Paragraphs 30-42) and the economic assessment (see Paragraphs 43-53).
  - The flexibility and performance profile reflects our view of the sustainability of a government's fiscal balance and debt burden, in light of the country's external position, as well as the government's fiscal and monetary flexibility. It is the average of the external assessment (see Paragraphs 54-76), the fiscal assessment (see Paragraphs 77-112), and the monetary assessment (see Paragraphs 113-129).

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Indicative Rating Levels From The Combination Of The Institutional And Economic Profile With The Flexibility And Performance Profile

Institutional and economic profile												
Flexibility and performance profile	Category	Superior	Extremely strong	Very strong	Strong	Moderately strong	Intermediate	Moderately weak	Weak	Very weak	Extremely weak	Poor
Category	A ssess- ment	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6
Extremely strong	1 to 1.7	aaa	aaa	aaa	aa+	88	a+	а	a-	bbb+	N/A	N/A
Very strong	1.8 to 2.2	aaa	aaa	aa+	aa	aa-	а	a-	bbb+	bbb	bb+	bb-
Strong	2.3 to 2.7	aaa	aa+	aa	88-	а	a-	bbb+	bbb	bb+	bb	b+
Moderately strong	2.8 to 3.2	aa+	aa	aa-	a+	a-	bbb	bbb-	bb+	bb	bb-	b+
Intermediate	3.3 to 3.7	aa	aa-	a+	а	bbb+	bbb-	bb+	bb	bb-	b+	b
Moderately weak	3.8 to 4.2	aa-	a+	а	bbb+	bbb	bb+	bb	bb-	b+	b	b
Weak	4.3 to 4.7	а	a-	bbb+	bbb	bb+	bb	bb-	b+	b	b-	b-
Very weak	4.8 to 5.2	N/A	bbb	bbb-	bb+	bb	bb-	b+	b	b	b-	b-
Extremely weak	5.3 to 6	N/A	bb+	bb	bb-	b+	b	b	b-	b-	'b-' and below	'b-' and below
Assigning 'CCC Ratings," Oct. 1		, 'CCC-',	and 'CC	' ratings i	s based	on "Crite	ria For A	ssigning	'CCC+', '	CCC', 'C	CC-', And	1'CC'

- 19. Absent supplemental adjustment factors (see Paragraphs 23-27), we expect that our sovereign foreign-currency rating would be within one notch of the indicative rating level. The main factors that can lead to an ICR that is one notch higher or lower than the indicative rating level are the following:
  - At least one of the five rating factors is in a positive/negative transition that supports/detracts from creditworthiness and that is not already fully captured in the indicative rating level.
  - The sovereign is a sustained and projected over/underperformer among similarly rated sovereigns for at least one of the key rating factors, unless already captured elsewhere in the methodology.
  - We view the change in a particular assessment as temporary and expect it either to revert or to be offset (over the medium to long term) by an opposite dynamic in other assessments. An example is if there were deterioration in the external assessment because of large investment projects that we expect, if successful, will improve economic growth potential over the medium term.
  - The indicative rating for certain cells in Table 2 is two notches higher or lower than that in a cell immediately adjacent horizontally or vertically, and a change in only one rating factor can lead to a two-notch change in the indicative rating in the matrix. In this case, the final rating may be set one notch apart from that indicated in the table. For example, if a sovereign has an institutional and economic profile assessment of 2.0 and a flexibility and

performance profile assessment of 4.8, the final rating might be set at 'BBB' (absent overrides), instead of 'BBB-' as indicated in the matrix, if one assessment change would be sufficient to raise the indicative rating level to 'bbb+'.

- Other factors that are not fully captured in the indicative rating and that have a positive or negative impact on our view on creditworthiness could also lead us to adjust the indicative rating level by one notch.
- 20. The first two cases above may come into play especially when a component assessment, such as the adjustment for below- or above-average growth, is at the cusp or when a component of flexibility and performance profile is at the extreme value for its range.
- 21. The points in Paragraph 19 are the frequently observed factors explaining a one-notch difference between the indicative rating level and the final rating.
- 22. A sovereign foreign-currency rating might differ by more than one notch compared with the indicative rating level if it meets one or more of the supplemental adjustment factors listed in Paragraphs 23-27. If a sovereign has several of these characteristics, the foreign-currency rating on the sovereign would be adjusted by the cumulative effect of those adjustments, and reflect the caps indicated by those adjustments. Those supplemental adjustment factors are based on a forward-looking analysis. They are important because certain components of credit risk can, at times, dominate overall creditworthiness, even if the other factors remain stable. The dominance of negative supplemental adjustment factors is based on our judgment that the supplemental risks can jeopardize debt-service capacity more than positive developments can improve them.
- 23. *Extremely weak external liquidity*. A sovereign receives a foreign-currency rating below the indicative rating level when the country's external liquidity is at, or we expect it to deteriorate to, a level that is substantially worse than the benchmark for the weakest levels of external liquidity, as defined in Table 5. An exception is when these levels are a reflection of the sovereign's strengths (for instance, reserve currency position). The supplemental adjustment factor could also be applied if we see, or expect to see, a country's access to external liquidity to deteriorate sharply and suddenly. This could be the result of various factors, including exceptional market conditions and geopolitical threats.
- 24. *Extremely high fiscal debt burden*. Similarly, a sovereign receives a foreign-currency rating below the indicative rating level when its government debt burden presents characteristics that are significantly worse (especially, if the debt dynamic is deteriorating) than the benchmark for the weakest levels as defined in Table 7. Similarly, the rating would be one notch lower if the debt assessment (before contingent liabilities adjustment but after all other adjustments as described in Table 7) is '6' and contingent liabilities are 'High' or 'Very high' in accordance with Table 8.
- 25. *Very large liquid financial government assets.* A sovereign receives a foreign-currency rating one notch above the indicative rating level when the general government is in a net asset position and has exceptionally large liquid financial assets (as defined in Appendix C) typically equivalent to more than 100% of GDP. This provides the government with an exceptional buffer during periods of economic or financial shocks.
- 26. *Very high institutional risk and high debt burden*. A sovereign with an institutional assessment of '6' cannot be rated higher than 'BB+', regardless of any potential upward adjustment for a large asset position (see Paragraph 25). The track record of sovereign defaults suggests that institutional risks are among the main causes of the poor economic policies that lead to default, which is why the institutional assessment receives this particular weight. A sovereign with an institutional assessment of '6' and a debt assessment of '5' or '6' (see Table 7) cannot be rated higher than 'B+', given the heightened risks such a combination entails.

- 27. *Event risk*. In cases of imminent or rapidly rising external or internal political risk (such as war, escalating domestic conflict, or acute and growing risk to institutional stability), a sovereign rating could differ from the indicative rating level, depending on the conflict's expected magnitude and effect on the sovereign's credit characteristics. In the other cases, when the risk of conflict is longstanding but not imminent, it affects the sovereign rating through an adjustment to the institutional assessment (see Paragraph 42). Furthermore, the occurrence of a rare but severe natural catastrophe could also lead to a material deviation from the indicative rating level, depending on the extent of damage.
- When pertinent, the final foreign-currency sovereign rating reflects the application of "Criteria For Assigning 'CCC+', 'CCC', 'CCC-', And 'CC'," Oct. 1, 2012, and "Rating Implications Of Exchange Offers And Similar Restructurings, Update," May 12, 2009.

## C. Assessing The Five Main Sovereign Rating Factors

29. The analysis of each of the five key factors consists of quantitative and qualitative elements. Some factors, such as the robustness of political institutions, are primarily qualitative, while others--such as those relating to the real economy, debt, and external liquidity--use mostly quantitative indicators.

## 1. Institutional Assessment

- 30. The institutional assessment comprises an analysis of how a government's institutions and policymaking affect a sovereign's credit fundamentals by delivering sustainable public finances, promoting balanced economic growth, and responding to economic or political shocks.
- 31. The institutional assessment captures these factors:
  - The effectiveness, stability, and predictability of the sovereign's policymaking and political institutions (primary factor).
  - The transparency and accountability of institutions, data, and processes as well as the coverage and reliability of statistical information (secondary factor).
  - The sovereign's debt payment culture (potential adjustment factor).
  - External security risks (potential adjustment factor).
- 32. To determine the initial assessment, we analyze the primary factor, and then the secondary factor provides additional information and acts as a qualifier (see Tables 3A and 3B). The tables contain the characteristics generally expected at different levels for the institutional assessment, although a government might exhibit a majority but not all of them. Finally, a sovereign's institutional assessment may be worse than the initial assessment based on debt payment culture or security risks (as explained in Tables 3A and 3B).

	Primary factor: effectiveness, stability, and predictability of policymaking, political institutions, and civil society (see Paragraphs 34-35)	Secondary factor: transparency and accountability of institutions, data, and processes (see Paragraphs 36-38)
1	<ul> <li>Proactive policymaking, with a strong track record in managing past economic and financial crises and delivering economic growth.</li> <li>Ability and willingness to implement reforms to ensure sustainable public finances and economic growth over the long term.</li> <li>High likelihood that institutions and policies will remain stable over time, ensuring the predictability of responses to future crises.</li> <li>Cohesive civil society, as evidenced by high social inclusion, prevalence of civic organizations, degree of social order, and capacity of political institutions to respond to societal priorities.</li> </ul>	<ul> <li>Extensive checks and balances between institutions.</li> <li>Unbiased enforcement of contracts and respect for the rule of law.</li> <li>Free flow of information throughout society, with open debate of policy decisions.</li> <li>Timely and reliable data and statistical information.</li> </ul>
2	Compared with '1', any of the following apply: • Generally strong, but shorter, track record of policies that deliver sustainable public finances and balanced economic growth. • Weaker ability to implement reforms due to a slow or complex decision-making process. • Shifts in the political environment or institutional framework, which raise uncertainties about the ability to sustain economic growth consistently over the long term. • Cohesive civil society, but slightly less in degree than countries assessed '1'.	<ul> <li>Generally effective checks and balances.</li> <li>Unbiased enforcement of contracts and respect for the rule of law.</li> <li>Free flow of information throughout society, with open debate of policy decisions.</li> <li>Generally timely and reliable public finance data and statistical information.</li> </ul>
3	<ul> <li>Generally effective policymaking in recent years, promoting sustainable public finances and balanced economic growth. But policy shifts are possible because of changes in administration or the potential destabilizing influences of underlying socioeconomic or significant long-term fiscal challenges.</li> <li>Cohesive civil society, but less in degree than countries assessed '1' or '2', either because of a higher level of crime.</li> </ul>	<ul> <li>Evolving checks and balances between various institutions.</li> <li>Generally unbiased enforcement of contracts and respect for the rule of law.</li> <li>Free flow of information throughout society, but with some policy decisions not fully and openly debated.</li> <li>Statistical information that may be less timely than for the higher categories or subject to larger revisions.</li> </ul>

Sovereign's debt payment culture. A sovereign with a weak debt payment culture, as defined in Paragraphs 39-41, receives an institutional assessment of '6'. (Also see the cap in Paragraph 26.)

**External security risks.** The institutional assessment is one to two categories worse than the initial assessment (depending on the magnitude of the potential impact in terms of output, fiscal expenditure, and external performance) when there is a risk of war, but the risk is not expected to materialize within two to three years (see Paragraph 42).

	BB ssing A Sovereign's Institutional Effectivenes scale from '1' to '6', with '1' the strongest and '6'	
	Primary factor: effectiveness, stability, and predictability of policymaking, political institutions, and civil society (see Paragraphs 34-35)	Secondary factor: transparency and accountability of institutions, data, and processes (see Paragraphs 36-38)
4	<ul> <li>One of the following:</li> <li>Policy choices may weaken support for sustainable public finances and balanced economic growth.</li> <li>Reduced predictability of future policy responses due to an uncertain or untested succession process or to moderate risk of challenges to political institutions resulting from highly centralized decision-making and parts of the population desiring more political or economic participation.</li> <li>Civil society with ethnic, racial, or class tensions, rising crime rates, and reduced capacity of political institutions to respond to societal priorities. Low probability, however, of social upheaval.</li> </ul>	<ul> <li>More uncertain checks and balances between institutions, enforcement of contracts, and respect for the rule of law than in the above categories.</li> <li>Relatively weak transparency, owing to interference by political institutions in the free dissemination of information, material gaps in data, or reporting delays.</li> </ul>
5	<ul> <li>One of the following:</li> <li>Policy choices likely will weaken capability and willingness to maintain sustainable public finances and, thus, timely debt service.</li> <li>High risk of challenges to political institutions, possibly involving domestic conflict, due to demands for more economic or political participation by parts of the population, or due to significant ethnic or religious challenges to the legitimacy of political institutions.</li> <li>Future policy responses are difficult to predict because of a highly polarized political landscape, highly centralized decision-making, or an uncertain or untested succession process.</li> <li>Frayed civil society with difficult ethnic, racial, or class tensions, high crime, and reduced capacity of political institutions to respond to societal priorities. Rising chance of social upheaval.</li> </ul>	<ul> <li>Unassured enforcement of contracts and respect for the rule of law.</li> <li>Impaired transparency, owing to at least one of the following factors: moderate-to-high levels of perceived corruption, material data gaps, or significant interference by political institutions in the free dissemination of information.</li> </ul>
6	One of the following: • Weak political institutions, resulting in an uncertain policy environment in periods of stress, including diminished capability and willingness to maintain timely debt service. • Considerable risk of breakdown of political institutions, including significant domestic conflict. •Distressed civil society; sharp ethnic, racial, or class tensions; inability or unwillingness of political institutions to respond to societal priorities; or present danger of social upheaval.	<ul> <li>Unassured enforcement of contracts and respect for the rule of law.</li> <li>Impaired transparency, owing to several of the following factors: frequent and material data revisions or lack/ suppression of data and information flows, high levels of perceived corruption of political institutions.</li> </ul>
Sovere 39-41, r Externa assessi externa	stitutional assessment equals the initial assessment adju- ign's debt payment culture. A sovereign with a weak debt p receives an institutional assessment of '6'. (Also see the cap in al security risks. The institutional assessment is one to two of ment (depending on the magnitude of the potential impact in t I performance) when there is a risk of war, but the risk is not e see Paragraph 42).	payment culture, as defined in Paragraphs n Paragraph 26.) categories worse than the initial terms of output, fiscal expenditure, and

33. The assessment of these factors relies mostly on our qualitative analysis, which may be informed by external sources

such as the World Bank or the IMF.

#### a) Effectiveness, stability, and predictability of policymaking, political institutions, and civil society

- 34. We analyze the effectiveness, stability, and predictability of policymaking, political institutions, and civil society based on:
  - The track record of a sovereign in managing past political, economic, and financial sector crises; maintaining prudent policymaking; and delivering balanced economic growth. This includes a timely implementation of various reforms (such as to health care or pensions, to ensure sustainable public-sector finances over the long term), prudent monetary policy management, and effective management of external pressures.
  - The predictability in the overall policy framework and developments that may affect policy responses to a future crisis or lead to significant policy shifts.
  - Actual or potential challenges to political institutions, possibly involving domestic conflict, popular demands for increased political or economic participation, or significant challenges to the legitimacy of institutions on ethnic, religious, or political grounds.
  - The cohesiveness of civil society, as evidenced by social mobility, social inclusion, prevalence of civic organizations, degree of social order, and capacity of political institutions to respond to societal priorities.
- 35. Effective policymaking and stable political institutions enable governments to address periods of economic distress and take measures to correct imbalances. This helps sustain long-term growth prospects and limit the risk of sharp deterioration of a sovereign's creditworthiness. Stable and well-established institutions generally ensure a certain degree of predictability in the general direction of policymaking, even when political power shifts between competing parties and policy details change as a result. Conversely, succession risks, a high concentration of power, and potential or actual challenges to political institutions are factors that can pose risks to institutional stability and, in turn, lead to substantial policy shifts and affect the continuity of key credit characteristics. The analysis of the risk of challenges to political institutions is based on the history of internal political conflicts, including extra-constitutional changes of government.

#### b) Transparency and accountability of institutions, data, and processes

- 36. Our view of the accountability and transparency of institutions, data, and processes is based on the analysis of the following:
  - The existence of checks and balances between institutions.
  - The perceived level of corruption in the country, which correlates strongly with the accountability of its institutions.
  - The unbiased enforcement of contracts and respect for the rule of law (especially in the area of property rights), which correlates closely with respect for creditors' and investors' interests.
  - The independence of statistical offices and the media, as well as the history of data revisions or data gaps, as measures of the transparency and reliability of the information.
- 37. The last point includes an assessment of the quality and consistency of the relevant data, which include national income accounts, fiscal accounts, monetary information, public enterprise accounts, the balance of payments, and the international investment position. These data are based on estimated values and are not always measured with precision. Thus, when there is a history of significant data revisions, poor forecasting, or data gaps and inconsistencies (either from one source or between sources), the criteria call for interpreting the data in light of these discrepancies.

38. The transparency and accountability of institutions bear directly on sovereign creditworthiness because they reinforce the stability and predictability of both political institutions and the political framework. They do this even though they may not reinforce the stability of a ruling political class or party. In addition, transparent and accountable institutions, processes, and data are important because they enhance the reliability and accuracy of information and help make known in a timely manner any significant shifts in a country's policymaking or the occurrence of risks relevant to sovereign credit risk.

#### c) A sovereign's debt payment culture

- 39. The first potential adjustment to the initial institutional assessment relates to debt payment culture. Willingness to default is an important consideration when analyzing a sovereign's creditworthiness, partly because creditors have only limited legal redress. As a result, a sovereign can, and sometimes does, default on its obligations even when it possesses the capacity for timely debt service.
- 40. The overall institutional assessment cannot be better than '6' in cases where we believe that a sovereign's debt payment culture is a credit risk. For this to happen, a sovereign would typically have one or more of the following characteristics:
  - Significant and sustained arrears on bilateral official debt, which is debt owed to foreign governments and government-owned entities.
  - A public discourse that questions the legitimacy of debt contracted by a previous administration (so-called odious debt).
  - No material policy change since the last default on commercial debt.
- 41. Academic studies suggest the relevance of the last characteristic mentioned above. History demonstrates that countries can graduate from being serial defaulters, although the path to doing so may be long. Defaults weaken political institutions because the ensuing economic decline discredits the policies that led to default and raises the population's mistrust. This greater public mistrust may make forming a consensus on economic policy more difficult and, thus, may prompt further defaults. The first default may be more costly than later ones, hence the idea that, with each successive default, serial defaulters have less of a good reputation to lose.

#### d) External security risks

42. The second potential adjustment to the initial institutional assessment relates to geopolitical/external security risks, including war or threats of war stemming from conflicts or from strained relations with neighboring countries. When there is a long-standing risk of war, but we do not foresee that this risk will likely materialize over the next two to three years, the institutional assessment would be one to two categories worse than the initial assessment, depending on the potential impact on the real economy, fiscal expenditure, and external performance. However, when these risks are imminent or rapidly rising, it would affect the overall rating (see the supplemental adjustment factor in Paragraph 27). National security is a rating concern because military threats or other risks to political stability may place a large burden on policies, reduce the flow of potential investment, or put the balance of payments under stress. They may also lead to economic sanctions.

## 2. Economic Assessment

- 43. The history of sovereign defaults suggests that a wealthy, diversified, resilient, market-oriented, and adaptable economy--coupled with a track record of sustained economic growth--provides a sovereign with a strong revenue base, enhances its fiscal and monetary policy flexibility, and ultimately boosts its debt-bearing capacity. We observe that market-oriented economies tend to produce higher wealth levels because these economies enable more efficient allocation of resources to promote sustainable, long-term economic growth.
- 44. The key drivers of our economic assessment are a sovereign's:
  - Income levels,
  - Growth prospects, and
  - Economic diversity and volatility.
- 45. The combination of these three factors determines a sovereign's economic assessment (see Table 4). We derive an initial assessment based on a country's income level, as measured by its GDP per capita (see Paragraph 46). Then, the initial assessment can receive a positive or negative adjustment by up to two categories based on the economy's growth prospects (see Paragraphs 47-52) and its potential concentration or volatility (see Paragraph 53).

## Table 4

#### A Sovereign's Economic Assessment On a scale from '1' to '6', strongest to weakest

On a scale of '1' to '6' ba	
Positive adjustment factors	Negative adjustment factors
The following factor improves the initial economic assessment by one category:	E ach of the following factors weakens the initial economic assessment by one category:
<ul> <li>Above-average economic growth, as measured by real GDP per capita trend growth*, that is consistently well above that of peers in the same GDP per capita category (see Paragraph</li> </ul>	<ul> <li>Below-average economic growth, as measured by real GDP per capita trend growth*, that is consistently well below that of peers in the same GDP category (see Paragraph 51).</li> </ul>
51).	<ul> <li>E conomic growth primarily resulting from a rapid increase in depository corporation claims on the resident nongovernment sector and in inflation-adjusted asset prices, indicating a potential credit-fueled asset bubble.§</li> </ul>
	<ul> <li>Volatile or concentrated economy resulting, for instance, from the country's significant exposure to a single cyclical industry (representing typically more than about 20% of GDP). This adjustment does not apply if the initial assessment is already '5' or' 6', or for sovereigns that have large general government liquid assets to absorb these shocks (net general government asset position exceeding 50% of GDP) (see Paragraph 53).</li> </ul>
The economic assessment equals the initial assess up or down, based on the net effect of the adjustme	
Notes: <sup>¶</sup> Current year estimate. If the GDP per capita falls with *See Paragraph 49 for the calculation of trend growth. §The measure for this adjustment factor is informed by	

#### a) Income levels

46. GDP per capita is S&P Global Ratings' most prominent measure of income. With higher GDP per capita, a country has broader potential tax and funding bases upon which to draw, which generally support creditworthiness. The determination of the economic assessment uses the current-year estimate for the GDP per capita from national statistics, converted to U.S. dollars. The regularly updated commentary "GDP Per Capita Thresholds For Sovereign Rating Criteria," provides the most updated GDP per capita ranges that we use to derive the initial economic assessments (IEAs) in Table 4. If a sovereign's GDP per capita is within 10% of the closest threshold for the current year, the IEA is informed by our forward-looking view of what would be the IEA the following year. In case our following-year forecast of GDP per capita is also within 10% of the threshold, this forward IAE would in turn be informed by our view of the IEA for the subsequent year. The same could be repeated on the forecast horizon, and qualitatively beyond the forecast horizon. Therefore, as long as we expect GDP per capita to cross the threshold into the range for an IEA, within or beyond the forecast horizon, while staying within 10% of that threshold before then, we

may assign that IEA.

#### b) Economic growth prospects

- 47. A sovereign's economic assessment is one category worse or better than the initial assessment when its growth prospects are well below or above those of sovereigns in the same GDP per capita category. The key measure of economic growth is real per capita GDP trend growth.
- 48. The term "trend growth" refers to estimates of the rate at which GDP grows sustainably over an extended period (in other words, without creating inflationary pressure, asset bubbles, or other economic dislocations). Such estimates are generally derived from empirical observations based on the recent past and longer-term historical trends, and they attempt to look through the fluctuations of an economic cycle, smoothing for peaks and troughs in output during the period being analyzed. Our analysis focuses on per capita GDP growth to standardize, in part, for growth driven more by inputs than productivity.
- 49. In order to form the trend growth measure used in Table 4, we use the average growth in a country's real per capita GDP over a 10-year period, in order to cover generally at least one economic cycle (including both a period of economic expansion and a period of contraction). More specifically, our measure of real per capita GDP trend growth is the average of six years of historical data, our current-year estimate, and three-year forecasts. The latest historical year, current-year estimate, and forecasts are weighted 100%, while previous years are assigned a lower weight to avoid a steep drop or increase when an exceptional year drops out of the 10-year average. If the selected period (10 years) does not adequately cover the country's observed economic cycle, the trend growth can be adjusted to reflect more closely past cycle's observations.
- 50. Our estimates and projections result from analysis of the government forecasts, projections from the IMF and other sources, and identification of the main factors that could lead to a change in future growth compared with the historical trend. The trend growth calculation is adjusted for one-off items such as changes in the statistical base or a one-off sizable investment.
- 51. We currently estimate that the range of per capita annual growth rates for most countries with initial economic assessments of '1' or '2' is 0.3%-1.5%; for countries with initial economic assessments of '3' or '4', this range is 1%-4%; and for countries with initial economic assessments of '5' or '6', the range is typically 1.5%-5.5%. S&P Global Ratings periodically updates these ranges. Sovereigns with growth rates above or below these thresholds would receive a positive or negative adjustment, respectively, to the initial assessment. For economies (usually resource-based) where nominal economic growth may be a better indicator of prosperity and resources, the negative adjustment may not apply if the wealth of the economy (GDP per capita at least 1.5x higher than the threshold for the initial assessment of '1') could substantially cushion potential risk.
- 52. A sovereign's economic assessment would be one category worse than the initial assessment when GDP growth seems to be fueled mostly by a rapid increase in depository corporation claims on the resident nongovernment sector, combined with sustained growth in inflation-adjusted asset prices, indicating vulnerability to a potential credit-fueled asset bubble. We believe that risks for a sovereign's creditworthiness are particularly acute when credit growth is largely funded externally. We measure this factor along the lines of the BICRA methodology (see "Banking Industry Country Risk Assessment Methodology And Assumptions," Nov. 9, 2011).

#### c) Economic diversity and volatility

53. Finally, a sovereign exposed to significant economic concentration and volatility receives an economic assessment that is one category worse than the initial assessment. More precisely, a sovereign's economic assessment would be one category worse if it carried significant exposure to a single cyclical industry (typically accounting for more than about 20% of GDP) or if its economic activity were vulnerable due to constant exposure to natural disasters or adverse weather conditions. However, the assessment would not receive an adjustment if the sovereign has an initial economic assessment of '5' or '6' or where the government is in a net asset position of 50% of GDP or more, which mitigates the effect of this volatility. Economic concentration and volatility are important because a narrowly based economy tends to be correlated with greater variation in growth than is typical of a more diversified economy. Pronounced economic cycles tend to test economic policy flexibility more harshly and impair the government's balance sheet more significantly than shallow economic cycles.

## 3. External Assessment

- 54. The external assessment reflects a country's ability to obtain funds from abroad necessary to meet its public- and private-sector obligations to nonresidents. The external assessment refers to the transactions and positions of all residents (public- and private-sector entities) vis-à-vis those of nonresidents because it is the totality of these flows and stocks that affects a country's competitiveness, exchange rate developments, foreign investor sentiment, and, ultimately, the country's international purchasing and repayment power.
- 55. Three factors determine a country's external assessment:
  - The status of a sovereign's currency in international transactions;
  - The country's external liquidity, which provides an indication of the economy's ability to generate the foreign exchange necessary to meet its public- and private-sector obligations to nonresidents;
  - The country's external position, which shows residents' assets and liabilities (in both foreign and local currency) relative to the rest of the world.

#### a) Currency status in international transactions

56. The first step in the external assessment relates to the degree to which a sovereign's currency is used in international transactions. We assign a better external assessment to sovereigns that control a "reserve currency" or an "actively traded currency." These sovereigns have a common attribute: Their currencies are widely used in financial transactions outside their own borders, which means that they may be less vulnerable to shifts in investors' portfolios of cross-border holdings than are those of other countries. The international use of these currencies, in turn, stems from (i) the credibility of the countries' policies and institutions, (ii) the strength of their financial systems, (iii) the countries' large and open capital markets, with market-determined interest and foreign exchange rates, and (iv) the use of their currencies as units of account in global capital markets. These characteristics may push the external obligations of the sovereigns that issue these currencies to relatively high levels. But this does not necessarily present the same degree of risks as for countries with non-actively traded currencies because these sovereigns' policy settings may more readily preserve foreign investor confidence. We differentiate between sovereigns with reserve currencies and those with actively traded currencies as follows.

- 57. Sovereigns with a reserve currency. A sovereign in this category benefits from a currency (which it controls) that accounts for more than 3% of the world's total allocated foreign exchange reserves based on the IMF's report "Currency Composition of Official Foreign Exchange Reserves." Its global economic and political influence supports this official demand. Demand for the debt of sovereigns that control reserve currencies tends to rise in periods of economic stress (this is the so-called flight to quality), reflecting characteristics of these countries mentioned in Paragraph 56, such as the credibility of their policies and institutions, their strong financial systems, and large and open capital markets.
- 58. Sovereigns with an actively traded currency. A sovereign in this category benefits from a currency that is bought or sold in more than 1% of global foreign exchange market turnover, based on the Bank for International Settlement (BIS) report "Triennial Central Bank Survey," that is not a reserve currency as defined above and that meets the characteristics specified in Paragraph 56.
- 59. For countries with a reserve currency or an actively traded currency, the analysis focuses on a measure of external indebtedness, defined as the ratio of narrow net external debt to current account receipts (CAR), as explained in Paragraph 65 and reflected in Table 5. The more flexible monetary positions of these countries allow less reserve accumulation and permit higher short-term debt levels than sovereigns with less monetary flexibility, making quantitative comparison based on an external liquidity ratio (described in Appendix C) less meaningful.
- 60. For the other countries, we combine the assessment of a sovereign's external indebtedness with the analysis of its external liquidity to derive its initial external assessment (see Table 5).

#### b) External liquidity

- 61. S&P Global Ratings' key measure of a country's external liquidity is the ratio of "gross external financing needs" to the sum of current account receipts plus usable official foreign exchange reserves (see the glossary in Appendix C).
- 62. The gross external financing needs in Table 5 are the average of the current-year estimate and forecasts for the next two to three years. S&P Global Ratings forecasts a country's gross external financing needs first by reviewing the country's historical balance of payments and international investment position as well as the official government forecasts, the central bank's forecasts (when available), those of independent economists, and those of the IMF. Second, S&P Global Ratings independently estimates a sovereign's gross external financing needs based on information about the country's expected exports and imports, external debt structure, and other components of the balance of payments. In cases where one-off items (items unlikely to repeat in the medium term) distort the period average, the assessment is based on the expected level of future external liquidity adjusted for the one-off items.
- 63. Usable foreign exchange reserves are the sum of liquid claims in foreign currency on nonresidents under the control of the central bank and gold holdings. The calculation of usable foreign exchange reserves is explained in Appendix C. For most sovereigns, usable foreign exchange reserves serve as a financial buffer during periods of balance-of-payments stress. However, sovereigns with freely floating exchange rates and deep foreign exchange markets typically hold a low level of reserves. Their central banks are usually not called upon to be last-resort sellers of foreign exchange, and a single external borrower having trouble rolling over its debt does not threaten the foreign exchange regime.

#### c) External indebtedness

- 64. S&P Global Ratings' key measure of a country's external indebtedness is the ratio of "narrow net external debt" to current account receipts.
- 65. The term "narrow" in the description of net external debt refers to a more restricted measure of assets than some widely used international definitions of net external debt. The calculation of "narrow net external debt" subtracts from gross external indebtedness official foreign exchange reserves and liquid external assets of the public sector and all financial sector assets (see Appendix C for more details on this calculation). We use this special definition for two reasons. First, financial sector assets may be generally more liquid than those of the nonfinancial private sector. Second, most financial institutions manage external assets and liabilities, which is not the case for many nonfinancial private-sector entities, some of which may be primarily holders of assets, and others primarily holders of liabilities. In a downside scenario, private-sector entities may not repatriate external assets, or they may even transfer their assets in the domestic financial system to foreign accounts.
- 66. A sovereign's external assessment equals the initial assessment derived from Table 5, adjusted by up to three categories based on the net effect of the positive and negative adjustment factors listed in the table.

	External Assess		st				
		,					
		Sovereigns with a reserve currency		Other sovereigns: measure of a country's external liquidity Gross External Financing Needs/ (CAR+ Usable Reserves) <sup>1</sup>			
			currency	below 50%	50- 100%	101- 150%	over 150%
Measure of a	Below (50)%	1	1	1	1	13070	2
country's	(50)-0%	1	1	1	1	2	3
external	1-50%	1	2	1	2	3	4
indebtedness: NarrowNet	51-100%	2	2	2	3	4	5
External Debt	101-150%	2	3	3	4	5	5
(assets) / CAR	151-200%	3	4	4	5	5	6
(%)*	Above 200%	3	4	5	6	6	6
Positiv	e adjustment factor	s	Neg	jative adju	ustment fa	actors	
	ing factors improves th ent by one category (s		Each of the foll- external asses Paragraph 68):				
external position net international superior to narro CAR. This reflect net external equi nonfinancial priva which may be fai • Countries with ac consistent currer	ctively traded currenci tt account surpluses.	de when the consistently 100% of significant a significant ne portion of es running	<ul> <li>Countries exp deterioration i worsening fina sector and no material publi risks, (iii) a po- availability of signi ficant los potential signi investm ents of</li> <li>Countries exp of trade, as m the change in exceeds 10% external asset 50% of CAR t</li> <li>Countries wh constraints.</li> <li>Countries with high current a 10% of CAR) by remaining The following fa assessment by</li> <li>Sovereigns v running very fi (consistently of</li> </ul>	n external ancing cor nfinancial c enterprise otential sign official fun s of nonre- ificant shift or portfolio posed to s easured b the terms § (unless) t position a o compen- ere low ex- h material h actively iccount de or with lar maturity (e- actor wors- two catego with activel ingh currer pover 20% (	financing nditions fo public ent ses facing nificant re iding, (iv) : sident dep t in foreigr equity inv significant of trade t the countri accounting sate for th demal del data inco traded cu ficits (con ge externa exceeding ens the in jories: by traded cu t account of CAR).	from: (i) r the fina erprises external duction in a potentia posits, or n direct restments volatility i ard devia hat consi y has a n g for mor- nis volatili to reflects nsistenci rrencies r sistently ( al short-tr 100% of itial externa- currencies consistenci aurrencies consistenci aurrencies consistenci aurrencies consistenci aurrencies	, (ii) funding funding al (v) a s. in terms tion of stently ret e than ty). s debt es. running over erm debt CAR). nal s
based on the net Notes: Anchor assess receive the better ass expected future level, higher, and if that sov (50)%" and "(50)-0%" informed by our view Debt (Assets) or by a "Based on the averag "Based on current-ye	essment equals the in effect of the adjustm sment measures falling al essment if trends are imp . If a sovereign's ratio of ( vereign's narrow net exter .i.e., between the first tw on whether the move bet change in CARs. ge of the current-year esti ar estimate and the expec- ion is calculated based of	ent factors out tor near cut-off p proving and the w gross external fm nal debt (Assets), o categories in th ween the two cate mate and two- to cted trend for the	tlined above. oints (within rough) orse assessment if anoing needs over (CAR ratio moves of e table, the determ agories was rather three-year forecas; next two to three ye	y 10% of the trends are (CAR + Usa up or down h in ation of th driven by a ts. ears.	e closest thr weakening, able Reserv between the e initial exte change in N	reshold) m reflecting es) are at ' categorie ern al asses	ay the 101% or s "Below ssment is

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#### d) Adjustments for the trend and funding composition of the balance of payments

- 67. Each of the following two conditions improves a sovereign's external assessment by one category (see Table 5):
  - The sovereign controls an actively traded currency and displays a current account surplus, on average, over the last historical year, the current year, and the next two forecast years.
  - The country has significant and liquid nonfinancial private-sector external assets, income-earning net direct investment abroad, and net portfolio equity investment abroad. This is reflected in a net international investment position that is more favorable than the narrow net external debt position by more than 100% of CAR.
- 68. Each of the following conditions listed below weakens a sovereign's external assessment generally by one category, as shown in Table 5. However, the maximum adjustment to the initial external assessment is limited to three categories, based on the net effect of positive and negative adjustments.
  - The sovereign has an actively traded currency and displays a high current account deficit (consistently more than 10% of CAR), likely indicating a structural problem (competitiveness, an overleveraged domestic economy, or both), or its external short-term debt by remaining maturity generally exceeds 100% of CAR. Sovereigns with an actively traded currency, displaying a very high current account deficit (consistently more than 20% of CAR) receives a negative adjustment of two categories.
  - There is a risk of marked deterioration in the cost of or access to external financing related to our assessment of the following factors: (i) the financial sector operating in a more difficult environment because of weakening asset quality or rising funding pressures; (ii) material (as a share of GDP) and systemically important financial and non-financial public enterprises are facing increasing external funding risks; (iii) a potential significant reduction in the availability of official funding due to noncompliance with the lending conditions; or (iv) a potential significant loss of nonresident deposits in sovereigns where nonresident deposits are important given the size, concentration, and vulnerabilities of the national banking system. This loss might result from a widespread change in regulations or country-specific developments hurting the country's reputation as a stable international financial center. This risk is further exacerbated if these nonresident deposits are lent onshore; (v) a potential significant shift in foreign direct investments or portfolio equity investments, especially in countries where the net external liability position is substantially worse than the narrow net external debt position (by over 100% of CAR).
  - The country is exposed to significant volatility in terms of trade (see Appendix C) because of a narrow or concentrated export base (including commodity-exporting countries), as measured, for instance, by the standard deviation of the change in terms of trade exceeding 10%, unless the country has a large net external asset position (external assets exceeding external liabilities by more than 50% of CAR) to compensate for this volatility.
  - The country's low external debt or low external financing needs reflect very limited market access, recent debt rescheduling or similar restructuring (improving the amortization profile) typically within the past 10 years (or shorter if the debt relief was modest), arrears to official external creditors, or other similar characteristics, suggesting external vulnerabilities despite the seemingly strong ratios. Although low debt levels (including due to debt forgiveness) may give sovereigns more flexibility, untested or weak debt management systems (depending on the circumstances of the debt forgiveness) will likely detract from this flexibility. Similarly, less debt, a lower interest rate, or a lighter amortization schedule following a debt rescheduling provides more fiscal room and diminishes rollover risks, but the loss of credibility and weakened payment culture can negatively affect the assessment despite stronger debt statistics. We would no longer apply this negative adjustment as a sovereign establishes a track record of predictable and effective debt management and improves its debt payment culture.
  - The external data have persistently high errors and omissions, have significant stock-flow mismatches, or the country's net income indicates a significantly worse position than the net international investment position does. We analyze the quality of the external data in the context of its consistency (lack of material stock-flow mismatches) and

coverage (inclusion of all businesses involved in international economic activity). The assessment of these factors is both quantitative and qualitative and is complemented by a review of the country's compliance with the international data standards, such as the IMF's Special Data Dissemination System.

#### e) Specific considerations for members of monetary unions

69. Each sovereign that belongs to a monetary union receives an external assessment based on its individual external position, using Table 5 and depending on the currency of the union. This is because the external liquidity and balance sheet situations of members of a monetary union may vary greatly, even though they all share a common currency and common capital markets. Where a monetary union member displays a sizable and sustained current account deficit, no exchange rate pressures are likely to ensue because exchange rate movements are more likely to be a function of the institutional, political, and economic characteristics of the union as a whole. However, a member's large and sustained current account deficit may be a sign of poor competitiveness or an overleveraged domestic economy, or both. The loss of competitiveness is unlikely to ease as a result of exchange rate adjustments, and improvements may require an extended period of little or no growth, possibly with deflationary implications. Conversely, current account surpluses could be a sign of strong competitiveness and underpin a strong external creditor position.

#### f) Effect of official funding

70. A sovereign's participation in an official program, such as IMF programs, may affect the evolution of its external performance. Successful IMF programs may help to stop a decline in or gradually improve a country's external performance. Countries with external funding pressures normally seek IMF and other official programs. Governments often decide to seek programs as a form of political cover for difficult economic policy decisions or as a way to address temporary or potential spikes in the cost of external financing. The credit-supportive aspects of a program that provides funds include low-cost external funding, the adoption of policies likely to address sources of stress and improve fundamentals, and various forms of technical assistance. However, program implementation is not always successful because it is usually a challenge in a tough political and economic environment. In some cases, sovereign defaults occur subsequently.

#### g) Sovereigns with limited external data

- 71. A few sovereigns do not have sufficient data on external stocks and flows for S&P Global Ratings to apply the previously described criteria for determining the external assessment. These sovereigns predominately use the currency of another sovereign as legal tender in their own jurisdictions. Several are offshore financial centers.
- 72. In the instances in which the data needed for the external measures are not available, the sovereign's external assessment is computed in several steps.
- 73. The first step is to assign an initial assessment, which is the same as the initial external assessment for the sovereign issuing the currency used (the "host" country).
- 74. The second step is to apply a negative adjustment to the initial assessment when the lack of external data is an information deficiency indicative of higher credit risks (see the fifth bullet point in Paragraph 68).
- 75. The third step is to apply an additional negative adjustment if we have reason to believe that:
  - The domestic economy uses external financing and we consider that there is an appreciable risk of a sudden

reduction of cross-border interbank lines, a sudden loss of nonresident deposits, or some other financial outflow that would hurt the domestic economy, in line with the second bullet point in Paragraph 68; or

- The financial business on which the domestic economy depends is facing rising risks from tax regimes or regulatory changes potentially occurring in the host country or countries with which that small sovereign is closely related; or
- Other external factors or country-specific developments hurting the country's reputation as a stable international financial center might diminish its attractiveness, leading to significant deterioration in the local economy, employment, or government revenues.
- 76. The negative adjustment explained in Paragraph 75 may not be warranted when one or more of the mitigating factors below apply.
  - If the sovereign is related to the host country by a treaty and banks domiciled in its jurisdiction have the same access to the host country's central bank's lender-of-last-resort and other supportive facilities as banks incorporated in the host country itself.
  - If the financial system is predominantly owned by foreign parents rated in the 'A' category or higher that have access to a central bank that issues a reserve or actively traded currency and that are, in our view, strategically committed to their operations in the sovereign under consideration.
  - If there is sufficient evidence that the public and private sectors bear a significantly stronger net external asset position than the host country (when public-sector assets are sufficient to cushion the impact of potential sudden external shocks on the economy).

## 4. Fiscal Assessment

- 77. The fiscal assessment reflects the sustainability of a sovereign's deficits and debt burden. This measure considers fiscal flexibility, long-term fiscal trends and vulnerabilities, debt structure and funding access, and potential risks arising from contingent liabilities.
- 78. Given the many dimensions that this assessment captures, the analysis is divided into two segments, "fiscal performance and flexibility" and "debt burden," which are evaluated separately. The overall assessment for this rating factor is the average of the two segments.

#### a) Fiscal performance and flexibility

79. To determine a sovereign's fiscal performance and flexibility assessment, we first derive an initial assessment based on the prospective change in general government debt calculated as a percentage of GDP (see Paragraph 81). Then the initial assessment receives a positive or negative adjustment by up to two categories, based on the factors listed in Table 6. Those factors relate to a government's fiscal flexibility and vulnerabilities, as well as long-term trends (see Paragraphs 84-86).

On a scale from '1' to '6', stro Change in general government debt as a percentage of GDP*	<0%	0%	4%-7%	>6%			
Initial assessment	1	:	2	3	4	5	6
Positive adjustment fa	ctors			Negat	tive adjustm	nent factors	
E ach of the following factors improv fiscal assessment by one category.				n of the follow I assessmer	-		initial
<ul> <li>Governments with large liquid fina measured by general government assets accounting typically for mo GDP.</li> <li>Government's greater ability to inc government revenues and/or cut g government expenditures in the sk (typically by more than about 3% o compared with governments in co similar level of developm ent.</li> </ul>	ial of al	<ul> <li>fiscal assessment by one category:</li> <li>Unsustainable or volatile revenue base that may boost fiscal performance over the period average, as measured, for instance, by a large share (generally above 25% of revenues) of fiscal revenue related to potentially volatile sources, such as real estate or commodities.</li> <li>Government's limited ability to raise general government revenues in the short term compared with peers because of, for instance, tax collection difficulties resulting from a large informal economy or low compliance.</li> <li>Shortfalls in basic services and infrastructure (education, health, standard of living) that are likely to create medium- to long-term spending pressure, as reflected, for instance, by a "medium" or "low" UNDP human development index.</li> <li>Unaddressed medium-term pressure due to age-related expenditures.</li> </ul>					
The fiscal performance and flexibili of two categories up or down, base Notes: *Based on the average of St When a sovereign's increase in gen possible categories, the initial asse: performance. For instance, a sover 2.9% over the four-year period could period is declining, then the soverei the initial assessment would be '3'.	d on the net andard & Po teral govern ssment is de eign with an a d receive an	effect or's cu nent d cided averag initial	of the urrent- ebt as based ge cha asses	adjustment t year estimate a percentag d on the trend nge in gener sment of '2'	factors outlin e and two-to e of GDP co l of the gove al governme or '3'. If the	ed above. three-year fould correspond mment's fiscent and debt to GE deficit trend of	forecast. nd to two cal DP of over the

#### **Fiscal performance**

80. S&P Global Ratings' key measure of a government's fiscal performance is the change in general government debt stock during the year expressed as a percentage of GDP in that year. We view this as a better indicator of fiscal performance than the reported deficit because it captures the impact of exchange rate movements, the recognition of contingent liabilities, and other factors that may be more important than headline deficits (see "Common Characteristics Of Rated Sovereigns Prior To Default," Jan. 28, 2013). In addition, the headline deficit is sometimes affected by political and other considerations, possibly creating strong incentives to move expenditures off budget. The calculation of this ratio is explained in Appendix C.

- 81. The anchor assessment in Table 6 is based on the average of the current-year estimate and forecasts for the next two or three years. Our current-year estimate and forecasts are established first by reviewing the government's own projections, as well as those of external institutions such as the IMF, and then by making adjustments, when necessary, to reflect the effect of forecast economic growth or the prospects of contingent risks. In cases where the period average is distorted by one-off items, the assessment is based on the level of change in general government debt that excludes them.
- 82. We focus on measures at the general government level, which is the aggregate of the national, regional, and local governments, including social security and eliminating intergovernmental transactions. Relative to the central government, this measure better captures the economic effect of the fiscal policy stance and is most closely aligned with issues relating to macroeconomic stability and economic growth. In addition, general government measures are the most useful comparator because the division of revenue-raising authority and expenditure responsibility differs between countries, while all tiers of government ultimately rely on the same population to pay taxes. Furthermore, a sovereign generally has the strongest influence over the distribution of public-sector responsibilities between different tiers of government.

#### Fiscal flexibility, long-term fiscal trends, and vulnerabilities

- 83. Fiscal flexibility provides governments with the room to maneuver to mitigate the effect of economic downturns or other shocks and to restore fiscal balance. Conversely, governments can also be subject to vulnerabilities or long-term fiscal challenges and trends that are likely to hurt their fiscal performances. The assessment of a sovereign's revenue and expenditure flexibility, vulnerabilities, and long-term trends is primarily qualitative.
- 84. Each of the following conditions improves a sovereign's fiscal performance and flexibility assessment by one category as shown in Table 6:
  - The general government has large liquid financial assets (typically, more than 25% of GDP) available to mitigate the effect of economic cycles on its fiscal performance. As per definition in the glossary in Appendix C, these assets are typically highly liquid and, if deposited in the central bank, available for withdrawal without disrupting macroeconomic policy, and if deposited in a commercial bank, available for withdrawal without hurting the bank's own liquidity positions or otherwise disrupting financial stability.
  - The government has a greater ability and willingness to raise revenues through increases in tax rates, in tax coverage, or through asset sales in the near term (typically by more than about 3% of GDP) compared with governments in countries with a similar level of development. Revenue flexibility is a qualitative assessment based on the government's policy or track record, but also taking into account potential constitutional, political, or administrative difficulties, as well as potential economic or social consequences of such measures. Similarly, the government has a greater ability and willingness to reduce general government expenditures in the near term despite the economic, social, or political effect compared with economies with a comparable level of development. Expenditure flexibility can be determined by looking at the level and trend of public-sector wages and entitlement expenditures (pensions and health care), the mix of operating and capital expenditures, and the government's track record and policy with regard to implementing expenditure cuts when needed.
- 85. Each of the following conditions weakens a sovereign's fiscal performance and flexibility assessment by one category as shown in Table 6:
  - A government's revenue base is potentially volatile, stemming, for example, from a high reliance on real estate

turnover taxes or royalties on the extractive industries (generally above 25% of revenues).

- A government has a more limited ability to increase tax revenues than governments in countries with a similar level of development, for instance because of a large shadow economy or low tax collection rates, or because its economic model is based on being a low tax regime, making an increase in tax rates inconsistent with the model.
- The country has a significant shortfall in basic services to the population and infrastructure that is likely to result in spending pressure for a long period of time, as reflected, for instance, by a "medium" or "low" UNDP human development index.
- The sovereign faces unaddressed medium-term pressure due to age-related expenditure (see Paragraph 86).
- 86. *Age-related expenditures.* Demographic changes and an aging population will be--and, in some cases, already are--major challenges for public finances in many countries. These sovereigns are facing a decline in the working-age population and rising outlays for age-related spending items, such as pensions and health care. While these burdens are in many cases substantial, they generally peak in a horizon of 10-20 years, and they are gradually increasing, rather than suddenly changing (see "Global Aging 2013: Rising To The Challenge," March 20, 2013). Consequently, in some cases, these potential drivers of future fiscal imbalances are far enough in the future to give governments sufficient time to take steps to remedy them. When this is not the case, age-related budgetary pressures are included in the assessment of a government's fiscal flexibility and long-term trends as a negative adjustment (see Table 6) and/or included in our budgetary projections directly.

#### b) Debt burden

- 87. The debt burden assessment reflects a sovereign's prospective debt level. Factors underpinning a sovereign's debt burden assessment are its debt relative to GDP, the interest cost of the debt relative to general government revenue, and debt structure and funding access. This assessment also reflects risks arising from contingent liabilities with the potential to become government debt if they materialize.
- 88. In general, our measure of debt burden does not include the expected net present value for pensions and other age-related benefits, whether for civil servants, retired military personnel, or for the population at large. In our view, for central governments these commitments are more akin to promises, rather than outright contractual financial obligations (such as loans and bonds). Pension and similar promises may turn out to be unaffordable and may have to be partially rescinded in order to secure long-term fiscal sustainability. We exclude those obligations from our definition of general government debt as we believe that central governments will continue to gradually reduce future public pension and other age-related benefits through legal changes on how those state-run systems operate. We also assume that in times of financial stress, central governments will typically prioritize debt service over current expenditure, such as pensions and other transfers.
- 89. The combination of these factors determines a sovereign's debt burden assessment as presented in Table 7. We derive an initial assessment from two key measures of the general government debt level and cost of debt. Then, the initial assessment receives a positive adjustment by up to one category or a negative adjustment by as many as three categories, based on our analysis of the government's debt structure, funding access, and contingent liabilities.

## Table 7

#### A Sovereign's Debt Burden Assessment On a scale from '1' to '6', strongest to weakest

		Debt level Net general government debt as a percentage of GDP¶				
ž	General government interest expenditures as a percentage of general government revenues*	Below 30%	30% - 60%	61%- 80%	81%- 100%	>100%
fde	Below 5%	1	2	3	4	5
Cost of debt	5% - 10%	2	3	4	5	6
ပိ	11% - 15%	3	4	5	6	6
	Above 15%	4	5	6	6	6
	Positive adjustment factors		Negati	ve adjustm	ent factors	
the de the in gover cover	on and benefiting from concessional lending, ebt assessment is one category better than itial assessment if we assess that a rnment's borrowing needs are likely to be red by official concessional funding during the two to three years (see Paragraph 95).	worse than the initial assessment if at least two of the four conditions below apply (see Paragraph 9				st two of graph 94): ent debt is e average a n 60% of nificant
Nega	ative adjustment for contingent liabilities					
"Mode	debt assessment is one category worse than t erate," two categories worse when they are "H Fable 8.					
categ	bebt burden assessment equals the initial ass ory and a negative adjustment of up to three or rs outlined above.					
*Base	s: ed on the current-year estimate and the exped ed on the average of the current-year estimate plicable to sovereigns with net general govern	and two-	to three-year	forecasts.	ears.	

#### Debt level and cost of debt

90. The analysis of a sovereign's debt level focuses on the following two measures:

- General government interest expenditures as a percentage of general government revenues; and
- Net general government debt as a percentage of GDP.
- 91. The calculation of net general government debt (as defined in Appendix C) is generally more restrictive than national measures of net general government debt because it deducts from the general government debt only the most liquid financial assets (as defined in Appendix C). For instance, the following assets are not deducted: (i) international monetary reserves held by the central bank, which are typically held for the country's balance of payment needs and not for government support; (ii) loans to or investments in majority-government-owned companies; and (iii) assets for

which liquidity might be impaired in a sovereign stress scenario. As such, we deduct from the general government debt only those assets to which the government will have timely access in the event of financial distress to support sovereign creditworthiness and prevent default.

- 92. Neither general government nor public-sector statistics typically include the central bank. In instances where a central bank issues debt and where this debt may be used for other than monetary policy purposes, we typically include the debt in our general government debt measure. It is often difficult to draw the line between monetary and fiscal operations. If central bank debt is issued solely for monetary purposes, it should decline when the central bank loosens its monetary stance by buying back its debt in the secondary market. We include central bank debt in general government debt if it is large enough to have an analytical impact and if it rises most years (as a percentage of GDP) and, thus, appears to be more structural than cyclical.
- 93. A sovereign's debt burden is assessed relative to its other credit characteristics rather than as an absolute trigger at a given rating level. Governments can afford varying debt levels, depending on their other credit characteristics. In particular, the debt level that a government can sustain is affected by its monetary and fiscal flexibility, domestic capital market characteristics, and the credibility that it has established in past periods of stress. A sovereign with an unblemished track record of honoring debt obligations, a growing economy, and a strong domestic capital market providing fairly low-cost market-based financing may sustain a higher debt burden than a sovereign with lower debt-to-GDP ratios but higher and more variable debt-servicing burdens. Conversely, low debt burdens may reflect a lack of financing options and high interest costs, or, in some cases, debt restructurings, rather than fiscal flexibility. Some governments with relatively low debt-to-GDP levels have defaulted.

#### Access to funding and debt structure

- 94. For sovereigns in a net general government debt position, the debt assessment is one category worse than the initial assessment if at least two of the four conditions below apply:
  - Net government debt is over 10% of GDP and has significant and unhedged exposure to exchange rate movements and refinancing risk, such that, on average, more than 40% of gross government debt is denominated in foreign currency (after swaps) or the average debt maturity is typically less than three years.
  - Net government debt is over 10% of GDP and nonresidents hold consistently more than 60% of the government commercial debt.
  - Debt service is vulnerable due to an amortization profile that varies by more than 5% of GDP one year to the next or because of possible acceleration from puts or rating triggers.
  - A large share (more than 20%) of the resident banking sector's balance sheet is exposed to the government sector via loans, government securities, or other claims on the government or its closely held agencies, indicating a limited capacity of the national banking sector to lend more to the government, without possibly crowding out private-sector borrowing.
- 95. On the other hand, if official financing is provided on concessional terms, if such financing is expected to cover the government's gross borrowing requirements in the next two to three years, and if we believe the government will meet the conditionality of official loans, the debt assessment will be adjusted positively.

#### **Contingent liabilities**

- 96. Contingent liabilities refer to obligations that have the potential to become government debt--or more broadly affect a government's credit standing--if they materialize. Some of these liabilities may be difficult to identify and measure, but they can generally be grouped in three broad categories:
  - Financial institutions' contingent liabilities (FICL). Financial institutions comprise public and private depository corporations and non-depository financial institutions;
  - Contingent liabilities related to nonfinancial public-sector enterprises (NFPEs); and
  - Guarantees and off-budget contingent liabilities.
- 97. Contingent liabilities are assessed by estimating and rank-ordering the direct costs to the government that could be incurred due to distress in these institutions. This assessment does not include the broader costs associated with an economic downturn. Specifically, it does not include fiscal costs stemming from automatic stabilizers (lower tax revenues and higher expenditure needs) or the costs associated with stimuli, liquidity, and other support typically provided through monetary and fiscal measures. These costs and rising risks would be directly reflected in our economic, fiscal, external, and monetary assessments. Previous episodes of systemic financial crises indicate that these costs may be significantly larger for a sovereign than direct recapitalization costs, although to degrees that vary widely.
- 98. As a result, the categories of contingent liabilities presented in Table 8, ranging from "Limited" to "Very High," should be interpreted as relative measures of risks. They provide only an indicative ranking of contingent liabilities' risks to the sovereign, as opposed to the broader estimate of fiscal and monetary costs. This is why this estimate of contingent liabilities is used as a qualifier when assessing a government's debt burden (see Table 7). This is not a point-in-time estimate of a financial system's recapitalization needs or other costs from contingent liabilities over the rating horizon, and, therefore, is not additive to the government's existing debt.
- 99. It is important to note that the qualitative analysis of various contingent liabilities in this section is complemented by the quantitative analysis in other parts of the sovereign analysis. For instance, banks' and public enterprises' borrowing from nonresidents (either multilaterals, financial corporations, or the international bond markets) is part of the external analysis (see Paragraphs 64 and 68). Risks related to public enterprises' domestic market bond issuance are reflected in the monetary analysis (see Paragraph 126). Finally, non-financial public enterprises' borrowing from domestic financial institutions is already included in the banks' contingent liabilities estimate.
- 100. The analysis of contingent liabilities is divided in the following steps (see Table 8):
  - First, the depositary corporations' (banks') contingent liabilities are estimated (see Paragraphs 101-104).
  - Second, the banks' contingent liability category can be adjusted down (i.e., worsened) due to risks from non-depositary financial institutions (see Paragraph 107), from non-financial public enterprises (see Paragraphs 109-111), and from other contingent liabilities (see Paragraph 112).

A Sovereign's Contingent Liabilities Assessment									
	Banks' assets/GDP								
<b>BICRA Group</b>	Below 50%	50%-100%	100%-250%	250%-500%	500% and above				
1 to 5	Limited	Limited	Limited	Limited	Limited or Moderate				
6 or 7	Limited	Limited	Limited	Limited or Moderate	Moderate or High				

#### Table 8

#### Table 8

	Banks' assets/GDP										
BICRA Group	Below 50%	50%-100%	100%-250%	250%-500%	500% and above						
8 or 9	Limited	Limited	Limited or Moderate	Moderate or High	High or Very High						
10	Limited	Limited or Moderate	Moderate or High	High or Very High	High or Very High						

\*BICRA group can be adjusted, if applicable, per Paragraph 104. Negative adjustments: (1) risks from non-deposit-taking institutions (see Paragraph 104) and (2) risks from NFPEs and other contingent liabilites (see Paragraphs 105-106).

- 101. Banks' contingent liabilities. We derive the banks' contingent liabilities category by combining the Bank Industry Country Risk Assessment (BICRA, see "Banking Industry Country Risk Assessment Methodology And Assumptions," published Nov. 9, 2011, and our monthly publication of updated BICRAs) with the size of the banking system. BICRA is a globally consistent, relative ranking of economic and industry risks across national banking systems. A BICRA is scored on a scale from 1 to 10, ranging from the lowest-risk banking systems (group 1) to the highest-risk (group 10). S&P Global Ratings maintains BICRAs on more than 80 banking systems. For those systems where S&P Global Ratings does not maintain an updated BICRA analysis, we may use BICRA internal proxies, apply the analysis of another national banking system for which BICRA assessments exist and we deem comparable, or take the weakest BICRA assessment of those that we assign.
- 102. We may improve the BICRA (to be used in Table 8) by up to two notches if the cost of the potential banks' distress is not expected to be fully borne by the government. This could be due to recapitalization from foreign banks, if the banking system is characterized by a high share of foreign ownership--provided that the parent institutions are headquartered in jurisdictions with stronger BICRA assessments than their branches in the considered country. The number of notches applied depends on the share of foreign-owned institutions in the banking system and on the parent institutions' willingness and ability to provide support in a period of stress. Provided the support from a stronger parent is available and expected, we generally improve the BICRA group by one notch if the share of foreign ownership is over 50%, and by two notches if the share is over 75%. We believe the parent is able to support the subsidiary if (1) the company's head office is located in the country with a BICRA assessment better than that of a country where the subsidiary is located and (2) the parent is rated no lower than 'BBB-' and its creditworthiness is equal or better than the stand-alone credit profile (SACP) or, if the subsidiary is unrated, an estimate of its stand-alone creditworthiness. Where possible, willingness to support is analyzed in the context of the status of a subsidiary within the group and the resulting likelihood of group support. Specifically, we believe that subsidiaries with "strategically important" or stronger status within the group, if rated under the "Group Rating Methodology," published Nov. 19, 2013, will be supported by their parents. Another example could be a track record and expectation of a "bail-in" of private-sector creditors or non-insured depositors. Yet another example could be a presence of a distinct, externally funded entity in charge of the banking sector's recapitalization.
- 103. The BICRA group (adjusted if applicable per Paragraph 102) is combined with the size of the banking system's assets to derive the category of banks' contingent liabilities. The 2008/2009 global recession has shown that contingent liabilities to the sovereign may arise both from the investment and lending portfolios. We therefore include the banking system's total assets as a share of GDP in our assessment. We exclude from total assets any bank holdings of debt issued by government asset management companies (AMCs, i.e., resolution vehicles) that was used to acquire troubled bank assets. We exclude them because we consolidate AMC debt into general government debt.

- 104. In Table 8, the resulting banks' contingent liabilities are ranked in the following four categories: "Limited," "Moderate," "High," and "Very High". When the estimate corresponds to two possible classifications, the contingent liabilities' category is chosen based on position within the range, the risk trend in the banking system as well as on any other idiosyncratic factors specific to the sovereign that are not reflected elsewhere in this assessment. The choice of category may depend, for example, on factors such as particularly low or high levels of capitalization or risk profile in the banking system, the general assessment of falling or rising banks' contingent liabilities, or a high level of public ownership of the banking sector with a degree of directed lending.
- 105. After having determined the banks' contingent liabilities category, we may adjust the assessment down (e.g., worsen from 'Limited' to 'Moderate') for each of these factors:
  - Contingent liabilities related to the non-deposit taking institutions (see Paragraph 107),
  - Contingent liabilities related to nonfinancial public enterprises (NFPEs; see Paragraphs 109-111), and
  - Guarantees or other contingent liabilities (see Paragraph 112).
- 106. These negative adjustments are typically made unless these NFPEs, guarantees, or other contingent liabilities are already captured in the general government debt or risks are addressed elsewhere in the criteria. An example of how the final contingent liability category is derived can be found in Appendix B.
- 107. *Contingent liabilities related to the non-deposit taking corporations.* Non-deposit taking institutions--such as development banks, finance companies, securities dealers, or insurance companies--as well as other public-sector financial enterprises can present contingent liabilities risk to the sovereign. We worsen banks' contingent liabilities assessment (from Paragraph 104) by one category if Condition 1 below as well as Condition 2a or 2b is met:
  - (1) The size of these institutions is material in relation to the size of deposit-taking institutions or GDP.
  - (2a) The non-deposit-taking institutions are systemically important institutions that we deem undercapitalized or operate in subsectors that we judge inadequately regulated.
  - (2b) The likelihood of the extraordinary government support for these non-deposit-taking institutions is deemed significant, as evidenced by a large (generally, by one rating category or more) rating uplift from the entity's SACP (by applying the government-related enterprise [GRE] criteria) or from the estimated stand-alone creditworthiness if unrated.
- 108. Given the data gaps from one sovereign to another, this assessment will be more qualitative than our assessment of deposit-taking institutions.
- 109. *Contingent liabilities related to nonfinancial public enterprises (NFPEs)*. NFPEs can also pose a risk to a sovereign because they are generally formed to further public policies and can suffer from weak profitability and narrow equity bases, which may leave them vulnerable to adverse economic circumstances. NFPEs include most GREs that are outside the financial sector. These are enterprises, often partially or totally under government control, that we believe are likely to benefit from extraordinary government intervention during periods of stress (see GRE criteria "Rating Government-Related Entities: Methodology And Assumptions," March 25, 2015).
- 110. Due to significant differences in the reporting and consolidation of NFPEs' data by country, the quantitative assessment of NFPEs' contingent liabilities is not always possible. Hence we incorporate an NPFE's continent liabilities qualitatively, specifically focusing on larger GREs, their financial profile, and government's propensity to support them. As such, similar to the analysis of the non-deposit-taking institutions, we review the materiality and the government's

likelihood of extraordinary support of these entities in case of distress. We worsen the banks' contingent liabilities assessment by generally one category if both of the following two conditions are met:

- The sovereign has a material exposure to one or more NFPEs, for example, through ownership, guarantees, or other channels. We usually assess the exposure as material if, when added to the government net debt stock (in case these liabilities materialize), this would result in a weaker initial debt assessment per Table 7. For instance, if the initial debt assessment is '2', based on net general government debt of 50% of GDP and an interest burden of 3% of revenues; we would consider the exposure to NFPE's sector of 15% of GDP material as it would increase the debt stock to 65% of GDP, and consequently raise the debt assessment to '3'; and
- The likelihood of the extraordinary government support for this NFPE (or a group of NFPEs) is deemed significant, as evidenced by a large (generally, by one rating category or more) rating uplift from the entity's SACP (by applying the GRE criteria) or from the estimated stand-alone creditworthiness, if unrated.
- 111. In exceptional cases, due to significant sovereign exposure to NFPEs with deteriorating credit fundamentals (as seen, for example, in rapid worsening of SACPs of the GREs), we may weaken the initial contingent liabilities by two categories (for example, to "Very High" from "Moderate").
- 112. *Other contingent liabilities.* Similar qualitative analysis (as described in Paragraph 110) is applied to other contingent liabilities, such as formal or implicit sovereign guarantees that are not already accounted for in the above categories as well as quasi-fiscal or other off-budget operations, such as extra-budgetary funds, securitizations, and public/private partnerships.

## 5. Monetary Assessment

- 113. A sovereign's monetary assessment reflects the extent to which its monetary authority can fulfill its mandate while supporting sustainable economic growth and attenuating major economic or financial shocks. Monetary policy can be an important stabilization tool for sovereigns, helping to ease credit conditions when economic growth is below potential and to tighten credit conditions when the economy overheats. Accordingly, a flexible monetary policy could be a significant factor in slowing or preventing a deterioration of sovereign creditworthiness in times of stress.
- 114. A sovereign's monetary assessment results from the analysis of the following elements:
  - The exchange rate regime.
  - The sovereign's ability to coordinate monetary policy with fiscal and other economic policies to support sustainable economic growth.
  - The credibility of monetary policy, as measured by inflation trends over an economic cycle, among other factors.
  - The impact of market-oriented monetary mechanisms on the real economy, which is largely a function of the depth and diversification of the resident financial system and capital markets.
- 115. At one end of the spectrum, an assessment of '1' corresponds to a sovereign with extensive monetary flexibility, where the monetary authority is able to lower interest rates effectively or expand its balance sheet significantly to ease liquidity conditions without stoking inflationary pressures. Or, conversely, at times of overheating, the monetary authority is able to use monetary tools effectively, supported by a robust policy mix, to tighten credit conditions. This flexibility exists only for monetary authorities with high perceived policy credibility in countries with deep and diversified capital markets.

- 116. At the other end of the spectrum are sovereigns lacking monetary flexibility. Examples include:
  - Countries using a currency controlled by another country;
  - Sovereigns that apply extensive exchange restrictions (as informed by compliance with IMF Article VIII obligations, which include members' obligations to avoid restriction on payments on current transactions, avoid discriminatory currency practices, and other provisions), or
  - Countries with persistently high inflation or high dollarization (defined as resident deposits or loans in foreign currency over 50% of total).
- 117. A sovereign with these features either has very limited or no monetary flexibility to affect domestic economic conditions, including liquidity, or has a poor track record in meeting monetary objectives. If factors outside the control of the domestic monetary authorities mostly determine monetary conditions, there may be little buffer against domestic financial stress.
- 118. Tables 9A and 9B present the characteristics generally expected for each component of our monetary assessment. A sovereign's initial assessment is derived by combining our assessments of the exchange rate regime and of the monetary policy credibility. In this combination, we assign a weight of 60% to credibility and monetary policy effectiveness and 40% to the exchange rate regime. The reason for this weighting is that a fixed or managed exchange rate regime may be less constraining if other economic policies are supportive of the link, which diminishes the risk of the currency's over- or undervaluation. The initial assessment for sovereigns that are not part of a monetary union can be adjusted down by up to two categories based on the adjustment factors listed in Paragraph 126. The assessment for sovereigns that are part of the monetary union can be adjusted down by up to two additional categories based on Paragraph 127.

1	2	3	4	5	6
a) Exchange	rate regime* (Pa	ragraph 119)			
Reserve currency (see Paragraph 57).	Actively traded (see Paragraph 58) or free-floating currency.	Managed float, crawling pegs, crawl-like arrangements, floating with a short track record or challenged by the effect of interest rates on capital flows, soft pegs other than conventional pegs; or Intermittent intervention in foreign exchange market.	Conventional pegged arrangement; or Heavy intervention in the foreign exchange market.	Hard peg (currency board).	No local currency. (The sovereign uses the currency of another country.)

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On a scale from '1' to '6', strongest to weakest					
1	2	3	4	5	6
b) Monetary policy's credibility and effectiveness and inflation trends (Paragraphs 120-123)					
(more than 10 years) of full operational ndependence. 2. Clear monetary policy objectives. 3. Wide array of monetary nstruments. 4. Ability to act as a lender of last resort for the financial system. 5. Sovereign's CPI is low and in ine with that of its trading partners, eading to stable REER over the economic cycle. 5. Broad price stability by other measures. 7. Depository corporation claims on residents in ocal currency and nonsovereign boond market capitalization combined account for over 50% of GDP.	combined account for over 50% of GDP.	as a lender of last resort for the financial system. 4. Sovereign's CPI is broadly in line with that of its trading partners over the economic cycle. 5. Depository corporation claims on residents in local currency, nonsovereign bond market, and equity market capitalizations account in total for more than 50% of GDP.	All of the following factors apply: 1. Operational independence, but shorter or less secure than at better assessments. 2. Market-based monetary instruments, but effectiveness may be untested in downside scenario. 3. Ability to act as a lender of last resort for the financial system. 4. Annual CPI is less than 10%.	Any of the following factors apply: 1. Operational independence is limited by either lack of an effective transmission mechanism or perceived political interference. 2. Limited ability to act as a lender of last resort for the financial system. 3. Monetary statistics are not viewed as credible. 4. Average CPI typically exceeds 10%.	Any of the following factors apply: 1. No ability to act as a lender of last resort for the financial system. 2. Average CPI typically exceeds 20%.
The following fa maximum two-n The transmissio	ment factors to the ctors generally w otch adjustment: n mechanisms are k imposes restriction	weak or are sign	tary assessment	<b>by one notch ea</b> g, as defined in Pa	ch, for a ragraph 126.

--Resident deposits or loans in foreign currency ("dollarization") exceed roughly 50% of total.

The following factors weaken the monetary assessment of a monetary union member by an additional category each (see Paragraph 127):

--The sovereign is part of a monetary union.

--The sovereign displays prolonged price and wage trends diverging strongly from the monetary union average.

#### a) Exchange rate regime

119. A sovereign can use monetary policy to address imbalances or shocks in the domestic economy only when it controls the dominant currency used for domestic economic and financial transactions. The exchange rate regime influences the monetary authority's ability to conduct monetary policy. Monetary objectives may conflict with objectives to sustain a certain exchange rate level. The more rigid the exchange rate regime, the more likely this disconnect is to impede the conduct of monetary policy. Sovereigns with reserve currencies have the most flexibility. For sovereigns with an actively traded currency but that operate under a fixed or currency board exchange regime, we assign a subscore of '2' if there is a long history (at least two decades) of the regime successfully withstanding severe financial and economic pressures, supported by structural changes to adapt to these shocks. Such regimes are likely found in economies that are highly flexible and have significant net external asset positions.

#### b) Monetary policy credibility and effectiveness and inflation trends

- 120. Effective monetary policy requires credible institutions conducting it. Although "credibility" cannot be objectively measured, there are certain factors that generally make a central bank more credible and, therefore, effective in its conduct of monetary policies. Operational independence is defined as the ability of the monetary authority to determine freely the best way of achieving policy goals, including the types of instruments used and the timing of their use. Management and legal independence is also important. It usually goes hand in hand with institutional settings, such as the nomination of monetary policy decision-makers for defined terms, their protection from political interference, and the independence of central banks' budgets within the confines of applicable public-sector guidelines. The length of the period of independence is relevant because reversing independent monetary policy conduct may become harder the more entrenched it has become.
- 121. Effective monetary policy is another important foundation for confidence in monetary authorities. Confidence is crucial in a period of stress because it enables policymakers to resort temporarily to unconventional tools to counter the effect of economic shocks. Monetary authorities with weak track records rarely have this flexibility.
- 122. A chief measure of the monetary policy's effectiveness is broad price stability, including low inflation over the economic cycle, absent the use of administrative controls. Inflation, in line with that of the sovereign's trading partners, creates an important foundation for confidence in local currencies as a store of value and for the development of the financial sector. For sovereigns with the highest level of monetary flexibility, we expect asset prices to move in line with fundamentals, including well-contained consumer price inflation, and the real effective exchange rate to typically not be subject to wide swings over an economic cycle. Typically, we associate a credible monetary policy with positive real interest rates (as measured by government bond yields versus consensus forecasts for inflation) when output gaps are small. Conversely, sustained periods of negative real interest rates discourage saving, promote borrowing, and generally reduce confidence in the currency as a store of value. Operating losses that central banks incur, often as a result of actions unrelated to monetary policy--such as bailouts of barely solvent (or insolvent) banks or cost of excess reserve accumulation and reserve sterilization--are also viewed as impairing monetary effectiveness. Similarly, the monetary policy's credibility and effectiveness assessment is weakest in the sovereigns with persistently high consumer price inflation. Doubtful monetary statistics also impair monetary policy's credibility.
- 123. The ability to be a lender of last resort to the financial sector enhances financial stability. A lender of last resort, typically a central bank, provides solvent financial institutions liquidity against good collateral when market conditions

impair traditional channels. The availability of such lending is intended to address systemic problems that create liquidity shortages. This ability is viewed as a source of monetary flexibility, but extensive use of such a role can also signal rising systemic problems.

#### c) Development level of financial system and capital markets

- 124. The development of the financial system and debt markets is important for monetary flexibility analysis because these are the channels through which monetary policy decisions are transmitted to the real economy. Monetary policy tools--such as the discount rate, reserve requirements, or open market operations--work by influencing the funding costs and conditions that households and businesses face. This influence is often weak when the financial sector is in its early stages of development, when lending conditions are set by administrative means, or when the use of foreign currency is prevalent. By contrast, a developed capital market allows for open market operations and a financial system in which local-currency transactions facilitate a central bank's conduct of monetary policy.
- 125. To achieve the highest policy credibility and effectiveness assessments ('1' or '2') for an effective monetary policy, we expect a high level of financial intermediation (i.e., depository corporation claims on residents in local currency and nonsovereign local currency bond market capitalization of more than 50% of GDP). Sovereigns that have vibrant financial markets but lower levels of financial intermediation may qualify for a monetary policy assessment of '3' if the depository corporation claims on residents in local currency and the nonsovereign local currency bond market capitalization are greater than 50% of GDP. Other sovereigns would fall in the lower three categories ('4', '5', or '6') for the monetary policy assessment.

#### d) Negative adjustments to the initial monetary assessment

- 126. The following negative adjustments can lower the initial assessment:
  - A country's transmission mechanisms are weak or are significantly weakening, thereby impeding monetary flexibility. Transmission mechanisms may weaken as a result of a lasting dislocation in the domestic capital markets or a significant stress in the resident financial system. The symptoms of such deterioration could include a substantial deterioration in the market capitalization of the country's largest domestically incorporated banks or a rapid widening of their funding costs. The causes of such deterioration could be sharply higher credit costs in the financial system, other losses unexpected by creditors in the financial system, or structural shifts in the wholesale funding market. These risks can be further exacerbated if public financial and nonfinancial enterprises are dominant participants in the domestic capital markets.
  - Resident deposits or loans in foreign currency (dollarization) exceed roughly 50% of total.
  - The sovereign applies extensive exchange restrictions (as informed by compliance with IMF Article VIII obligations).

#### e) Sovereigns in monetary unions

127. The monetary assessment for sovereigns in monetary unions results from a two-step process. The first step assigns an initial assessment (per Tables 9A and 9B) for the monetary union as a whole. The second step lowers this initial assessment by one category to reflect that members of monetary unions generally have less flexibility, other things being equal, relative to sovereigns with their own central banks. The central bank of the monetary union applies its monetary flexibility to the intended benefit of the zone as a whole and not of individual member states. Then the assessment can weaken by another notch if an economy of a monetary union member is unsynchronized with the zone at large, for instance if it displays prolonged price and wage trends diverging strongly from the monetary union

average. In other words, the union's monetary policy stance could be inappropriate for a particular sovereign's economic conditions. We do not apply either of these adjustments to members with economies that account for more than 50% of the zone's GDP. This is because such economic significance usually means a better alignment of monetary policy objectives with economic circumstances.

- 128. Negative adjustments cited in Paragraph 126 could also apply to members of the monetary union. Therefore, a final assessment of a monetary union member can be up to four categories away from an initial assessment of the monetary zone.
- 129. If a sovereign leaves a monetary union, its monetary assessment would be based on its own characteristics outlined in Tables 9A and 9B rather than that of the union.

## D. Determining A Sovereign Local-Currency Rating

- 130. The rating on a sovereign's local-currency debt may be higher than the foreign-currency rating on the sovereign. Historically, we have observed lower default rates on local-currency debt than on foreign-currency debt. Any divergence between sovereign local- and foreign-currency ratings reflects the distinctive credit risks of each debt type.
- 131. One might ask why sovereign local-currency ratings are not all 'AAA' given sovereigns' extensive powers within their own borders, including the ability to print money. Although the ability to print local currency gives the sovereign tremendous flexibility, heavy reliance on such an expansionary monetary stance may fuel very high inflation or even hyperinflation, which may cause more serious political and economic damage than rescheduling of local-currency debt. In such instances, sovereigns may opt to default on their local-currency obligations. In addition, in a distressed debt exchange, a sovereign may tender for both local- and foreign-currency government debt (as opposed to foreign-currency debt alone) to achieve greater debt relief.
- 132. The sovereign local-currency rating is the same as or one or two notches above the sovereign foreign-currency rating based on the following factors:
  - Independent monetary policy: A government has greater capacity to pay its local-currency debt than its foreign-currency debt only if it can manage its local currency independently. Absent exchange controls, it can do this if it can set interest rates without regard to the currency's external value.
  - Depth of the local-currency capital markets. A sovereign has greater ability to conduct monetary policy the deeper its capital markets and the broader its ancillary markets, including active secondary market trading. An important incentive in continuing to service local-currency debt, when not servicing foreign-currency debt, is that the local-currency debt may be a significant portion of the assets of local pension funds, banks, and other private-sector entities, which represent not only voters but also important elements of the local economy.
  - Institutional and fiscal flexibility. If institutional, political, or fiscal concerns are the dominant constraint on the rating, the sovereign is less likely to have sufficient flexibility to accord a higher priority to servicing local-currency obligations.
- 133. The combination of these factors and their effect on the local-currency rating on a sovereign are outlined in Table 10.

lumber of notches§	All the characteristics below should apply	
2 notches	Sovereigns with:	
	<ul> <li>An independent monetary policy with a track record of a free-floating or floating exchange rate* (excluding sovereigns that have committed to join a monetary union) and its currency is actively traded (see Paragraph 58).</li> <li>Active local-currency fixed income and money market (with a capitalization typically above 20% of GDP and an active secondary market trading).</li> <li>Neither the institutional assessment nor the fiscal assessment is more than one point weaker than the average of the four other assessments.</li> </ul>	
1 notch	Sovereigns with:	
	<ul> <li>An independent monetary policy with a track record of a free-floating or floating exchange rate* (including sovereigns that have committee to join a monetary union with a free floating or floating currency) or with a managed exchange rate regime transitioning towards a more flexible regime.</li> <li>Active local-currency fixed income and money market (with a capitalization typically above 10% of GDP and some secondary market trading).</li> <li>The fiscal assessment is not more than one point weaker than the average of the four other assessments.</li> </ul>	
Zero notches	Other sovereigns	

local-currency obligations. In this case, if Standard & Poor's expects the sovereign not to default on localcurrency obligations, the local-currency rating will stay in the 'B' category, thereby increasing the notching differential. \*E xcept in countries where dollarization of deposits or claims exceeds 50%, for sovereigns imposing exchange restrictions on payments and transfers for current international transactions or engaging in

exchange restrictions on payments and transfers for current international transactions or engaging in discriminatory currency arrangements, or for sovereigns with a track record of default on their localcurrency debt.

## **E. Issue-Specific Considerations**

- 134. The rating on an unguaranteed sovereign foreign-currency issue is the same as the sovereign foreign-currency issuer credit rating because subordination is uncommon in this sector. We do not assign recovery ratings to sovereign obligations.
- 135. The rating on an unguaranteed sovereign local-currency issue is generally the same as the sovereign local-currency issuer credit rating, except:
  - When a government issues a local-currency-payable debt instrument, for which debt service is linked to another currency. This issue receives the same rating as that on the sovereign's foreign-currency debt because in a stress

scenario, we expect this debt type to behave much like foreign-currency debt, with debtholders exchanging the local-currency debt service proceeds into foreign currency.

- When a government issues local-currency debt in the global capital markets and the debt documentation states that the obligations ranked equally with foreign-currency obligations. This issue receives the same rating as that on the sovereign's foreign-currency debt.
- 136. The approach does not reverse, however, for foreign-currency-denominated debt issued in domestic markets. Such debt always receives a foreign-currency rating. Foreign-currency debt issuance generally diminishes the buffer that a domestic capital market can provide against economic and political shocks. We observe that such issuance often indicates domestic investors' lack of confidence in the local currency.
- 137. We rate fully guaranteed debt that meets our guarantee criteria (see "Guarantee Criteria," Oct. 21, 2016) at the same level as the guarantor. Partially guaranteed debt is rated the same as unguaranteed debt as per "Rating Partially Guaranteed Sovereign Debt," May 6, 2013.

## **V. APPENDICES**

138. This paragraph has been deleted.

## A. Example Of Deriving The Contingent Liability Category

139. Example: BICRA group of a particular country is '5'. If the banking system has a significant foreign ownership (for instance, 65%) by a strong and supporting parent (as defined in Paragraph 102), we improve the BICRA to be used in Table 8 by one notch to '4'. If the banks' assets are 85% of GDP, the banks' contingent liabilities is 'Limited' (per Table 8). If large and undercapitalized nondepositary corporations are present, we will lower the banks' contingent liability category to "Moderate" (per Paragraph 107). If, in addition, the NFPE sector presents a material risk (per Paragraphs 109-111), the overall contingent liability category will be even worse at 'High'. Hence, as per Table 7, the final debt assessment will be weakened by two notches.

## **B. Glossary Of Key Indicators And Data Sources**

- 140. This section contains short definitions of the key economic terms used in Tables 3-10. Most of these measures are published regularly in "Sovereign Risk Indicators" as well as in reports on individual sovereigns.
- 141. S&P Global Ratings draws its data for its analyses from both national and global sources. Data and other information come primarily from publications by, and meetings with, officials from the treasury or finance ministry, central bank, and other ministries responsible for areas of key economic importance (such as privatization, economic planning, and resource development). Other sources include: (1) discussions with politicians in and outside government; (2) reports by and discussions with other official observers, such as foreign embassies, the IMF, the BIS, the World Bank, and regional development banks; and (3) reports by and discussions with private-sector observers of economic and political trends, such as foreign and local economists, industrialists, trade associations, foreign and local bankers,

research organizations, academics, labor unions, and representatives of the press. Global sources most commonly used include International Financial Statistics of the IMF, Central Banks, and national or supranational statistical offices.

#### Table 11

Clossary Of Ko	y Indicators In S&P Global Rati	nge' Soverei	an Datin	w Methodolog	
Glossary OI Ke	y mulcators in Sor Global Rat	ngs Soverei	gn Raun		g v

Terms	Definitions		
Economic and monetary sc	ores key indicators		
GDP per capita (USD)	Total U.S. dollar market value of goods and services produced by resident factors of production, divided by population.		
Real GDP per capita (% change)	Percent change in constant-price per capita GDP.		
Consumer price index (% change)	Average percent change in index of prices of a representative set of consumer goods bought by a typical household on a regular basis.		
Depository corporation claims (% change)	Percent change in year-end resident depository corporation claims (excluding claims of the central bank) on the resident nongovernment sector. May include claims by resident nondepository financial corporations, where these institutions are of systemic importance.		
Monetary base	Local currency in circulation plus the monetary authority's local currency liabilities to other depository corporations. The latter normally consists of these depository institutions' deposits at the central bank plus central bank securities that can be used in satisfying reserve requirements, though there are national differences in definitions.		
External score key indicato	rs		
Current account receipts (CAR)	Proceeds from exports of goods and services plus factor income earned by residents from nonresidents plus official and private transfers to residents from nonresidents.		
	In which:		
	Factor income = compensation of employees + investment income earned by residents from nonresidents		
Official reserves	Monetary authority liquid claims in foreign currency (including gold) on nonresidents.		
Usable reserves	Official reserves minus items not readily available for foreign exchange operations and repayment of external debt		
	In which :		
	Items not readily available for foreign exchange operations and repayment of external debt =		
	Reserves pledged as security for any loan, including gold repos		
	+ Reserves sold forward		
	+ Reserves deposited in domestic financial institutions, including their offshore branches		
	+ Required bank reserves on resident foreign currency deposits (Required reserves on nonresident deposits are included in reserves because the nonresident deposits are included in the short-term external debt measure in the calculation.)		
	+ Monetary base for sovereigns that have adopted a currency board or have a long-standing fixed peg with another currency (because the reserve coverage of the base is critical to maintaining confidence in the exchange-rate link).		
Narrow net external debt/CAR (%)	Stock of foreign- and local-currency public- and private-sector borrowings from nonresidents minus official reserves minus public-sector liquid claims on nonresidents minus financial sector loans to, deposits with, or investments in nonresident entities, as a percent of CAR.		
	The calculation of the narrow net external debt may exclude the external debt of foreign banks that do not have domestic financial assets, when material.		
Gross external financing needs (% of CAR plus usable reserves)	Current account payments plus short-term external debt at the end of the prior year, including nonresident deposits at the end of the prior year plus long-term external debt maturing within the year, as a percent of CAR plus usable reserves.		
Current account balance/CAR (%)	Exports of goods and services minus imports of the same plus net factor income plus official and private net transfers, as a percentage of CAR.		
Net foreign direct investment (FDI)/GDP (%)	Direct investment by nonresidents minus residents' direct investment abroad, as a percent of GDP		

#### Table 11

#### Glossary Of Key Indicators In S&P Global Ratings' Sovereign Rating Methodology (cont.)

Terms	Definitions
Net external liabilities/CAR (%)	Total public- and private-sector liabilities to nonresidents minus total external assets, as a percent of CAR.
	In which:
	Total external assets = official reserves + public-sector assets held by nonresidents + resident financial institutions' assets held by nonresidents + resident nonfinancial sector assets held by nonresidents + the stock of direct and portfolio equity investment placed abroad.
Terms of trade	Price of goods exports relative to price of goods imports.
Fiscal score key indicators	
General government	Aggregate of the national, regional, and local government sectors, including social security and other defined benefit public-sector pension systems, and excluding intergovernmental transactions.
Change in general government debt as a percentage of GDP	General government debt at year-end minus general government debt at prior year-end, as a percent of GDP.
	This measure is compared with the headline deficit, which typically ignores the impact of exchange rate movements and off-budget factors on the debt burden. Among the one-off items for which we would adjust in our analysis are changes in debt related to shifts in prefunding practices, proceeds from the privatization of government assets, shifts in exchange rates that are not expected to persist, and bank and other bailouts that are not expected to be repeated.
Net general government debt/GDP (%)	General government debt minus general government liquid financial assets, as a percent of GDP.
	Gross general government debt includes the debt of government's asset management companies used for the resolution of banks or other private sector bailouts.
General government liquid financial assets	General government deposits in financial institutions (unless the deposits are a source of support to the recipient institution), widely traded securities, plus minority arms-length holdings of incorporated enterprises that are widely traded plus balances of defined-benefit government-run pension plans or social security funds (or stabilization or other freely available funds) that are held in bank deposits, widely traded securities, or other liquid forms. Where government external assets are sufficiently large, we believe that the sovereign will be able to utilize a significant portion of them in the event of financial distress to support its creditworthiness and prevent default. As a result, general government external assets over 100% of GDP are also considered liquid financial assets for the purpose of calculating narrow net external debt (per Paragraph 65), net general government debt (per Paragraph 91) and applying Paragraph 25.
	Defined-benefit government-run pension fund balances invested in government debt are usually excluded from gross debt if the government controls the fund, and thus are not included in assets.
Gross general government debt/GDP (%)	Debt incurred by national, regional, and local governments and central bank debt (if applicable), as a percent of GDP.
	Internal holdings, including social security and defined benefit public-sector pension fund investments in government debt, are netted out.
General government interest/general government revenues(%)	Interest payments on general government debt, as a percent of general government revenues.

## C. Sovereign Obligations With Contingent Risks

142. While Sovereign Rating Methodology addresses the preponderance of the risk factors and facts needed to assess the creditworthiness of sovereign obligations exposed to contingent risks, such as long-term certificates of payment issued to a third party upon completion of specified milestones in connection with a project, we complement and complete the risk assessment and analysis by using relevant sections of "Rating Government Department Appropriation-Backed Debt in U.S. Public Finance" criteria, Nov. 7, 2007 ("Government Department Appropriation" criteria). In particular, we

believe that the Government Department Appropriation criteria may be used as a guideline to analyze the appropriation process for the payment obligations, authorization of the issuance of these obligations, the level of government involved, the mechanisms in place to facilitate payment, and where the obligation will be accounted. The Government Department Appropriation criteria will serve as a guideline to determine whether to or how to notch down from the sovereign issuer credit rating to reflect the creditworthiness of these certificates. In evaluating the potential notching between the sovereign ICR and the rating on the certificates, we will also focus on the transaction's structural features, such as arbitration proceedings and cross-default provisions to the rated debt. We include such obligations in our sovereign ratings analysis, either in the debt metrics or contingent liabilities.

## VI. RELATED CRITERIA AND RESEARCH

- GDP Per Capita Thresholds For Sovereign Rating Criteria, updated regularly
- Guarantee Criteria, Oct. 21, 2016
- Global Aging 2016: 58 Shades Of Gray, April 28, 2016
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- General Criteria: Group Rating Methodology, Nov. 19, 2013
- Methodology: Rating Partially Guaranteed Sovereign Debt, May 6, 2013
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- Common Characteristics Of Rated Sovereigns Prior To Default, Jan. 28, 2013
- Criteria For Assigning 'CCC+', 'CCC', 'CCC-', And 'CC' Ratings, Oct. 1, 2012
- General Criteria: Guarantee Default: Assessing The Impact On The Guarantor's Issuer Credit Rating, May 11, 2012
- Banking Industry Country Risk Assessment Methodology And Assumptions, Nov. 9, 2011
- Principles Of Credit Ratings, Feb. 16, 2011
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- Stand-Alone Credit Profiles: One Component Of A Rating, Oct. 1, 2010
- The Time Dimension Of Standard & Poor's Credit Ratings, Sept. 22, 2010
- Assessing The Impact Of Natural Disasters On Sovereign Credit Ratings, June 14, 2010
- Credit Stability Criteria, May 3, 2010
- Understanding Standard & Poor's Rating Definitions, June 3, 2009
- Rating Implications Of Exchange Offers And Similar Restructurings, Update, May 12, 2009
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