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Criteria | Governments | Sovereigns:

Sovereign Government Rating Methodology And Assumptions

Global Criteria Officer, Sovereigns:
Olga I Kalinina, CFA, New York (1) 212-438-7350; olga.kalinina@standardandpoors.com

Primary Credit Analysts:
Marie Cavanaugh, New York (1) 212-438-7343; marie.cavanaugh@standardandpoors.com
John B Chambers, CFA, New York (1) 212-438-7344; john.chambers@standardandpoors.com
Moritz Kraemer, Frankfurt (49) 69-33-999-249; moritz.kraemer@standardandpoors.com
KimEng Tan, Singapore (65) 6239-6350; kimeng.tan@standardandpoors.com

Secondary Contacts:
Sebastian Briozzo, Buenos Aires (54) 114-891-2120; sebastian.briozzo@standardandpoors.com
Christian Esters, CFA, Frankfurt (49) 69-33-999-242; christian.esters@standardandpoors.com
Kai Stukenbrock, Frankfurt (49) 69-33-999-247; kai.stukenbrock@standardandpoors.com

Chief Credit Officer, Americas:
Lucy A Collett, New York (1) 212-438-6627; lucy.collett@standardandpoors.com

Table Of Contents

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Table Of Contents (cont.)

Criteria | Governments | Sovereigns:

Sovereign Government Rating Methodology And Assumptions

1. Standard & Poor's Ratings Services is updating its sovereign rating methodology as part of its regular criteria review process. The main changes clarify and enhance certain parts of the criteria relative to "Sovereign Government Rating Methodology And Assumptions," published June 30, 2011, which this article supersedes. (See Appendix A for an overview of the changes compared with the previous methodology.) This methodology also supersedes "Sovereign Government Ratings Methodology Addendum For Sovereigns With Limited External Data," published Nov. 7, 2011.
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 (in other words, 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 those listed below.

- Obligations to other governments (Paris Club debt or 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 "Rating Sovereign-Guaranteed Debt," published April 6, 2009).
- Obligations issued by public-sector enterprises, government-related entities, or local and regional governments.

5. However, the methodology takes into account the potential effect that these obligations may have on a sovereign's ability to service its commercial financial obligations. In this article, "rating" refers to an ICR, if not otherwise specified.

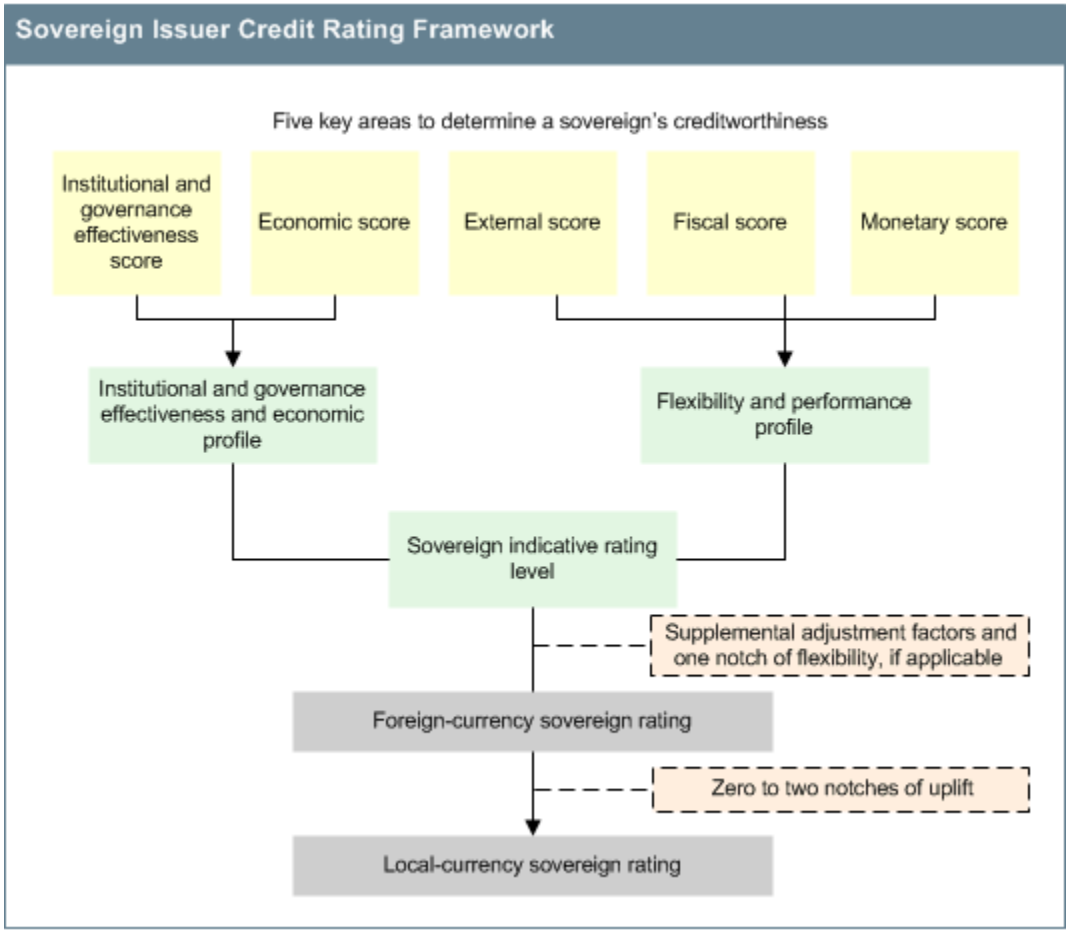
II. SUMMARY

6. The sovereign rating methodology (we use "criteria" and "methodology" interchangeably here) addresses the factors that affect a sovereign government's willingness and ability to service its debt on time and in full. The analysis focuses on a sovereign's performance over past economic and political cycles, as well as factors that indicate greater or lesser economic policy flexibility in future economic cycles.
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 and governance effectiveness score.
- Economic structure and growth prospects, reflected in the economic score.
- External liquidity and international investment position, reflected in the external score.

- Fiscal performance and flexibility, as well as debt burden, reflected in the fiscal score.
- Monetary flexibility, reflected in the monetary score.

8. Our sovereign rating analysis involves several steps (see chart).



9. The first step is to assign a score to each of the five key factors on a six-point numerical scale from '1' (the strongest) to '6' (the weakest). Each score is based on a series of quantitative factors and qualitative considerations described in subpart V.C below. The criteria then combine the institutional and governance effectiveness and economic scores to form a sovereign's "institutional and governance effectiveness and economic profile," and the external, fiscal, and monetary scores 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 subpart V.B), and after considering trends and other factors, which could lead us to raise or lower the indicative rating by one notch (see paragraph 19).

10. We determine a sovereign local-currency rating by applying zero to two notches of uplift from the foreign-currency rating following our methodology outlined in subpart V.D. 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 issuance of the local currency and regulatory control of the

domestic financial system. 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.

III. EFFECT ON OUTSTANDING RATINGS

11. Based on preliminary testing, we currently do not expect that the update of the criteria will lead to any changes in sovereign issuer and issue ratings.

IV. EFFECTIVE DATE AND TRANSITION

12. The criteria described in this article are effective immediately.

V. METHODOLOGY

A. Standard & Poor's 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 the 2008-2009 financial and economic crisis 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," published Sept. 18, 2006, which looks at the default history of rated and unrated sovereigns since 1824.
- "Sovereign Defaults And Rating Transition Data, 2012 Update," published March 29, 2013, which covers the performance of Standard & Poor's sovereign ratings, both in terms of transition and default, from 1975-2012.
- "Common Characteristics Of Rated Sovereigns Prior To Default," published 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 government's past policies left it ill prepared to face an unexpected turn of events. War, regime change, other forms of political instability, and 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 room for maneuver, 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. Central governments have unique powers, such as the ability to raise taxes, set laws, and control the supply of money, which generally make them more creditworthy than other issuers with less authority. Consequently, although Standard & Poor's sovereign ratings span the entire rating scale, a greater proportion of sovereign ratings are at the higher end

of the scale compared with Standard & Poor's ratings in other sectors. At year-end 2012, almost 11% of our sovereign local- and foreign-currency ratings were 'AAA', and roughly 15% were in the 'AA' category, compared with about 0.3% and 5%, respectively, for private-sector issuers. Standard & Poor's 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 our framework:

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

B. Determining A Sovereign Foreign-Currency Rating

17. Standard & Poor's analysis of a sovereign's creditworthiness starts with its assessment and scoring of five key rating factors (see table 1).

Table 1
Scoring Of The Five Main Sovereign Rating Factors

Key rating factors	Score assigned, on a '1'-'6' scale, with '1' the strongest and '6' the weakest
Institutional and governance effectiveness	Institutional and governance effectiveness score
Economic structure and growth prospects	Economic score
External liquidity and international investment position	External score
Fiscal flexibility and fiscal performance, combined with debt burden	Fiscal score
Monetary flexibility	Monetary score

18. Each factor receives a score, using a six-point numerical scale from '1' (the strongest) to '6' (the weakest). A series of quantitative factors and qualitative considerations, described in subpart V.C below, form the basis for assigning the scores. The criteria then combine those five scores to form a sovereign's institutional and governance effectiveness 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 governance effectiveness 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 and governance effectiveness score (see section V.C.1) and the economic score (see section V.C.2).
- 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 score (see section V.C.3), the fiscal score (see section V.C.4), and the monetary score (see section V.C.5).

Table 2
Indicative Rating Levels From The Combination Of (1) The Institutional And Governance Effectiveness And Economic Profile With (2) The Flexibility And Performance Profile

		Institutional and governance effectiveness 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	Score	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+	aa	a+	a	a-	bbb+	N/A	N/A
Very strong	1.8 to 2.2	aaa	aaa	aa+	aa	aa-	a	a-	bbb+	bbb	bb+	bb-
Strong	2.3 to 2.7	aaa	aa+	aa	aa-	a	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+	a	bbb+	bbb-	bb+	bb	bb-	b+	b
Moderately weak	3.8 to 4.2	aa-	a+	a	bbb+	bbb	bb+	bb	bb-	b+	b	b
Weak	4.3 to 4.7	a	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-	ccc/cc*	ccc/cc*

*Assigning 'CCC+', 'CCC', 'CCC-', and 'CC' ratings is based on "Criteria For Assigning 'CCC+', 'CCC', 'CCC-', And 'CC' Ratings," published on Oct. 1, 2012.

19. Absent supplemental adjustment factors (see paragraphs 21-26), we expect that our sovereign foreign-currency rating would fall 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 in its peer group for at least one of the key rating factors, unless already captured elsewhere in the methodology. The peer group is composed of sovereigns rated within a notch of the indicative rating and with a similar economic structure.
- We view the change in a particular score as temporary and expect it to be offset (over the medium to long term) by an opposite dynamic in other scores. For instance, deterioration in the external score is stemming from large investment projects, which we expect, if successful, to 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 governance effectiveness and economic profile score of

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

20. 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 21-26. 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; the caps indicated by those adjustments; or, when pertinent, would be based on the application of "Criteria For Assigning 'CCC+', 'CCC', 'CCC-', And 'CC'," published Oct. 1, 2012, or "Rating Implications Of Exchange Offers And Similar Restructurings, Update," published May 12, 2009. 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.

21. ***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, levels that are substantially worse than the benchmark for the weakest levels of external liquidity, as defined in table 5. An exception to this occurs 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 expect a country's access to external liquidity to deteriorate sharply and suddenly as a result of a variety of factors, including exceptional market conditions and geopolitical threats.

22. ***Extremely weak fiscal position.*** Similarly, a sovereign receives a foreign-currency rating below the indicative rating level when its fiscal performance or its debt burden presents characteristics that are significantly worse than the benchmark for the weakest levels as defined in tables 6 and 7. For instance, the rating would be one notch lower if the debt score is '6' based on the sovereign's debt level, as defined in table 7, and contingent liabilities are moderate in accordance with table 8. The rating would be three notches lower if the debt score is '6', but the sovereign's debt burden is significantly higher than the level commensurate with a '6' score in table 7 and contingent liabilities are very high in accordance with table 8.

23. ***Very high liquid fiscal assets.*** A sovereign receives a foreign-currency rating one notch above the indicative rating level when it has exceptionally large liquid assets (typically accounting for more than 100% of GDP), providing the government with an exceptional buffer during periods of economic or financial shocks.

24. ***Very high institutional and governance effectiveness risk and high debt burden.*** A sovereign with an institutional and governance effectiveness score of '6' cannot be rated higher than 'BB+', or 'B+' if the institutional and governance effectiveness score of '6' is combined with a debt score of '5' or '6' (see table 7), regardless of any potential upward adjustment for a large asset position (see paragraph 23). The track record of sovereign defaults suggests that institutional and governance effectiveness risks are among the main causes of the poor economic policies that lead to default, which is why the institutional and governance effectiveness score receives this particular weight.

25. ***Event risk.*** In cases of imminent or rapidly rising external or internal political risk (such as war, escalating domestic conflict, and 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 long-standing but not imminent, it affects the sovereign rating through an adjustment to the institutional and governance effectiveness score (see subsection V.C.1.d). 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 and the effect on the country's fundamentals.

26. ***Rescheduling risk/assigning 'CCC'/'CC' ratings.*** When pertinent, the final foreign-currency sovereign rating reflects the application of the following criteria "Criteria For Assigning 'CCC+', 'CCC', 'CCC-', And 'CC'," published Oct. 1, 2012, and "Rating Implications Of Exchange Offers And Similar Restructurings, Update," published May 12, 2009.

C. Assessing The Five Main Sovereign Rating Factors

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

1. Institutional And Governance Effectiveness Score

28. The institutional and governance effectiveness score assesses 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.

29. The institutional and governance effectiveness score captures the factors listed below:

- 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).

30. To determine the initial score, 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 and governance effectiveness score, although a government might exhibit a majority but not all of them. Finally, a sovereign's institutional and governance effectiveness score may be worse than the initial score based on debt payment culture and security risks (as explained in tables 3A and 3B).

Table 3A
Assessing A Sovereign's Institutional And Governance Effectiveness Score
On a scale from '1' to '6', strongest to weakest (scores '1'-'3')

Score	Primary factor: effectiveness, stability, and predictability of policymaking, political institutions, and civil society (see paragraphs 32-33)	Secondary factor: transparency and accountability of institutions, data, and processes (see paragraphs 34-36)
1	• Proactive policymaking, with a strong track record in managing past economic and financial crises and delivering economic growth. • Ability and willingness to implement reforms to ensure sustainable public finances and economic growth over the long term. • High likelihood that institutions and policies will remain stable over time, ensuring the predictability of responses to future crises. • 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.	• Extensive checks and balances between institutions. • Unbiased enforcement of contracts and respect for the rule of law. • Free flow of information throughout society, with open debate of policy decisions. • Timely and reliable data and statistical information.
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 scored '1'.	• Generally effective checks and balances. • Unbiased enforcement of contracts and respect for the rule of law. • Free flow of information throughout society, with open debate of policy decisions. • Generally timely and reliable public finance data and statistical information.
3	• 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. • Cohesive civil society, but less in degree than countries scored '1' or '2', either because of ethnic, racial, or class tensions or because of a higher level of crime.	• Evolving checks and balances between various institutions. • Generally unbiaised enforcement of contracts and respect for the rule of law. • Free flow of information throughout society, but with some policy decisions not fully and openly debated. • Statistical information that may be less timely than for the higher categories or subject to larger revisions.

The institutional and governance effectiveness score equals the initial score adjusted for:
Sovereign's debt payment culture. A sovereign with a weak debt payment culture, as defined in paragraphs 37-39, receives an institutional and governance effectiveness score of '6'. (Also see the cap in paragraph 24.)
External security risks. The institutional and governance effectiveness score is one to two categories worse than the initial score (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 40).

Table 3B
Assessing A Sovereign's Institutional And Governance Effectiveness Score
On a scale from '1' to '6', strongest to weakest (scores '4'-'6')

Score	Primary factor: effectiveness, stability, and predictability of policymaking, political institutions, and civil society (see paragraphs 32-33)	Secondary factor: transparency and accountability of institutions, data, and processes (see paragraphs 34-36)
4	One of the following: • Policy choices may weaken support for sustainable public finances and balanced economic growth. • 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. • 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.	• More uncertain checks and balances between institutions, enforcement of contracts, and respect for the rule of law than in the above categories. • Relatively weak transparency, owing to interference by political institutions in the free dissemination of information, material gaps in data, or reporting delays.
5	One of the following: • Policy choices likely will weaken capability and willingness to maintain sustainable public finances and, thus, timely debt service. • 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. • 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. • 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.	• Unassured enforcement of contracts and respect for the rule of law. • 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.
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.	• Unassured enforcement of contracts and respect for the rule of law. • 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.

The institutional and governance effectiveness score equals the initial score adjusted for:
Sovereign's debt payment culture. A sovereign with a weak debt payment culture, as defined in paragraphs 37-39, receives an institutional and governance effectiveness score of '6'. (Also see the cap in paragraph 24.)
External security risks. The institutional and governance effectiveness score is one to two categories worse than the initial score (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 40).

31. The assessment of these factors relies mostly on our qualitative analysis, which may be complemented by external

sources such as the World Bank, IMF, and other reports.

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

32. The criteria 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 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, from popular demands for increased political or economic participation, or from 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.

33. Effective policymaking and stable political institutions enable governments to address periods of economic distress and to take measures to correct imbalances. This helps to sustain long-term growth prospects and limits 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, 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 from 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

34. The accountability and transparency of institutions, data, and processes are 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 to the accountability of the institutions.
- The unbiased enforcement of contracts and respect for the rule of law (especially in the area of property rights), which correlates closely to 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.

35. 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.

36. The transparency and accountability of institutions bear directly on sovereign creditworthiness because they reinforce

the stability and predictability both of 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

37. The first potential adjustment to the initial institutional and governance effectiveness score 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 to pay timely debt service.

38. The overall institutional and governance effectiveness score cannot be better than '6' in cases where we believe that a sovereign's debt payment culture represents a credit risk. For this to happen, a sovereign would typically present 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.

39. 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 "graduation" 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 reputation to lose.

d) External security risks

40. The second potential adjustment to the initial institutional and governance effectiveness score 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 and governance effectiveness score would be one to two categories worse than the initial score, 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 25). 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 Score

41. 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.

42. The key drivers of a sovereign's economic score are:

- Income levels,
- Growth prospects, and
- Economic diversity and volatility.

43. The combination of these three factors determines a sovereign's economic score (see table 4). The criteria derive an initial score based on a country's income level, as measured by its GDP per capita (see paragraphs 44-45). Then, the initial score receives a positive or negative adjustment by up to two categories based on the economy's growth prospects (see paragraphs 46-51) and its potential concentration or volatility (see paragraph 52).

Table 4
Assessing A Sovereign's Economic Score
On a scale from '1' to '6', strongest to weakest

GDP per capita in US$[¶]	Over $38,000	$27,001 - $38,000	$16,001 - $27,000	$5,501 - $16,000	$1,100 - $5,500	Below $1,100
Initial score	1	2	3	4	5	6

Positive adjustment factors	Negative adjustment factors
The following factor improves the initial economic score by one category: • 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 50).	Each of the following factors weakens the initial economic score by one category: • 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 50). • Economic 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.§ • 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 score 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 52).

The economic score equals the initial score, adjusted by a maximum of two categories up or down, based on the net effect of the adjustment factors outlined above.

Notes:
[¶]Latest actual available. If the last available GDP per capita falls within 10% of the closest threshold, we will raise or lower the initial economic score to the score indicated by our projections for the current year and the following year.
*See paragraph 48 for the calculation of trend growth.
§The measure for this adjustment factor is informed by the BICRA methodology (see paragraph 51).

a) Income levels

44. GDP per capita is Standard & Poor's most prominent measure of income. With higher GDP per capita, a country has broader potential tax and funding bases upon which to draw, factors that generally support creditworthiness. The determination of the economic score uses the latest GDP per capita from national statistics, converted to U.S. dollars. If a country's GDP per capita fluctuates between two score categories (specifically, falling within 10% of the closest threshold), then the economic score will be raised or lowered to the score indicated by our GDP per capita projections for the current year and the following year (see table 4).

45. Standard & Poor's periodically raises the thresholds of the income levels in line with the world nominal annual GDP growth. GDP per capita has risen for many decades as the world has grown richer. The greater wealth has not generated a declining trend in sovereign default rates, so we adjust to preserve the relativities in our analysis. We expect to make such adjustments periodically, and we do not expect these changes to have a rating impact. The

changes may not be the same across the scoring scale, either in absolute terms or on a percentage basis. The changes are incremental and are based on our judgment of how global economic growth and exchange rate movements may affect countries at different stages of development.

b) Economic growth prospects

46. A sovereign's economic score is one category worse or better than the initial score when its growth prospects are well above or below those of peers in the same GDP per capita category. The key measure of economic growth is real per capita GDP trend growth.

47. 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.

48. In order to form the trend growth measure used in table 4, the criteria use the average growth in a country's real per capita GDP over a 10-year period, which generally covers at least one economic cycle (including both a period of economic expansion and a period of contraction). More specifically, the 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.

49. 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.

50. As of 2012, the range of per capita growth rates for most countries with initial economic scores of '1' or '2' was 0.3%-1.5%; for countries with initial economic scores of '3' or '4', this range was 1%-4%; and for countries with initial economic scores of '5' or '6', the range was typically 1.5%-5.5%. Standard & Poor's periodically updates these ranges. Sovereigns with growth rates above or below these thresholds would receive a positive or negative adjustment, respectively, to the initial score. For the 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 score of '1') could substantially cushion potential risk.

51. A sovereign's economic score would be one category worse than the initial score 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," published Nov. 9, 2011).

c) Economic diversity and volatility

52. Finally, a sovereign exposed to significant economic concentration and volatility receives an economic score that is one category worse than the initial score. More precisely, a sovereign's economic score 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 score would not receive an adjustment if the sovereign has an initial economic score of '5' or '6' or if it displays very large general government liquid assets (typically above 50% of GDP, net of debt) that can be used to mitigate 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 Score

53. The external score reflects a country's ability to obtain funds from abroad necessary to meet its public- and private-sector obligations to nonresidents. The external score 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.

54. Three factors determine a country's external score:

- 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

55. The first step in the assessment of the external score relates to the degree to which a sovereign's currency is used in international transactions. The criteria assign a better external score to sovereigns that control a "reserve currency" or an "actively traded currency." These sovereigns have a common attribute: Their currencies are used (widely for reserve currencies) 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 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 these sovereigns 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. The criteria differentiate between sovereigns with reserve currencies and those with actively traded currencies as follows.

56. ***Sovereigns with a reserve currency.*** A sovereign in this category benefits from a currency 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," and the sovereign's 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"). At the time of publishing these criteria, this category of sovereigns includes the U.S., the U.K., Japan, France, and Germany. The latter two, the largest members of the eurozone, benefit, in our view, from the reserve currency status of the euro. Given that each accounts for more than 20% of the zone's GDP, it is unlikely that the European Central Bank's monetary stance would be at odds with their economic fundamentals for a long time, as was the case with some of the smaller EMU members that suffered large lending bubbles.

57. ***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," and which is not a reserve currency as defined above. At the time of publishing these criteria, this category includes Australia, Switzerland, Canada, Hong Kong, Sweden, New Zealand, Korea, Singapore, Norway, and Mexico. In addition, all eurozone countries are included, with the exception of France and Germany, which are included in the previous category.

58. 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 64 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 B) less meaningful.

59. For the other countries, the criteria combine the assessment of a sovereign's external indebtedness with the analysis of its external liquidity to derive its initial external score (see table 5).

b) External liquidity

60. Standard & Poor's 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 B).

61. 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. Standard & Poor's 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 and the central bank's forecasts (when available), and those of independent economists and the IMF. Second, Standard & Poor's 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 (i.e., items unlikely to repeat in the medium term) distort the period average, the score is based on the level of future external liquidity adjusted for the one-off items.

62. 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 B. 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

63. Standard & Poor's key measure of a country's external indebtedness is the ratio of "narrow net external debt" to current account receipts.

64. 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 B for more details on this calculation). The criteria 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.

65. A sovereign's external score equals the initial score derived from table 5, adjusted by up to three categories based on the net effect of the positive and negative qualitative factors listed in the table.

Table 5
Assessing A Sovereign's External Score
On a scale from '1' to '6', strongest to weakest

		Sovereigns with a reserve currency	Sovereigns with an actively traded currency	Other sovereigns: measure of a country's external liquidity			
				Gross External Financing Needs/ (CAR+ Usable Reserves)¶			
				below 50%	50-100%	101-150%	over 150%
Measure of a country's external indebtedness: Narrow Net External Debt (assets) / CAR (%)*	Below (50)%	1	1	1	1	1	2
	(50)-0%	1	1	1	1	2	3
	1-50%	1	2	1	2	3	4
	51-100%	2	2	2	3	4	5
	101-150%	2	3	3	4	5	5
	151-200%	3	4	4	5	5	6
	Above 200%	3	4	5	6	6	6

Positive adjustment factors	Negative adjustment factors
Each of the following factors improves the initial external score by one category (see paragraph 66): • Countries displaying a significantly stronger net external position. An adjustment is made when the net international investment position is consistently superior to narrow net external debt by 100% of CAR. This reflects either the country's significant net external equity asset position or its significant nonfinancial private-sector assets, some portion of which may be fairly liquid. • Countries with actively traded currencies running consistent current account surpluses.	Each of the following factors weakens the initial external score by one category (see paragraph 67): • Countries exposed to a risk of marked deterioration in external financing from: (i) worsening financial sector conditions, (ii) potential significant reduction in availability of official funding, (iii) potential significant loss of nonresident deposits, (iv) potential significant shift in foreign direct investments or portfolio equity investments. • Countries exposed to significant volatility in terms of trade, as measured by a standard deviation of the change in the terms of trade that consistently exceeds 10%§ (unless the country has a net external asset position accounting for more than 50% of CAR to compensate for this volatility). • Countries where low external debt reflects debt constraints. • Countries with material data inconsistencies. • Countries with actively traded currencies running high current account deficits (consistently over 10% of CAR) or with large external short-term debt by remaining maturity (exceeding 100% of CAR). The following factor worsens the initial external score by two categories: • Sovereigns with actively traded currencies running very high current account deficits (consistently over 20% of CAR).

The external score equals the initial score, adjusted by a maximum of three categories, based on the net effect of the adjustment factors outlined above.

Notes:
¶Based on the average of the current-year estimate and two- to three-year forecasts.
*Based on current-year estimate and the expected trend for the next two to three years.
§The standard deviation is calculated based on data over the past 10 years, adjusted for one-off items.

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

66. Each of the following two conditions improves a sovereign's external score 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 (i.e., lower) than the narrow net external debt position by more than 100% of CAR.

67. Each of the following conditions listed below weakens a sovereign's external score by one category as shown in table 5. However, the maximum adjustment to the initial external score 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 or overleveraged domestic economy, or both), or its external short-term debt by remaining maturity generally exceeds 100% of CAR.
- 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) a potential significant reduction in the availability of official funding due to noncompliance with the lending conditions; and (iii) 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 wide-spread 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; (iv) 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 B) 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 (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) give sovereigns more flexibility, the 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 negatively affect the score 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 country has persistently high errors and omissions, significant stock-flow mismatches, or net income indicates a significantly worse position than the net international investment position indicates. 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

68. Each sovereign that belongs to a monetary union receives an external score 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 since 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

69. 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, which would be reflected through the forecasts used to assign the external score in table 5. 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

70. A few sovereigns do not have sufficient data on external stocks and flows for Standard & Poor's to apply the previously described criteria for determining the external score. These sovereigns predominately use the currency of another sovereign as legal tender in their own jurisdictions. Several are offshore financial centers.

71. In the instances in which the data needed for the external measures are not collected, the sovereign's external score is computed in several steps.

72. The first step is to assign an initial score, which is the same as the initial external score for the sovereign issuing the currency used (the "host" country).

73. The second step is to apply a negative adjustment to the initial score when the lack of external data is an information deficiency indicative of higher credit risks (see the fifth bullet point in paragraph 67).

74. 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 ascertain 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 first bullet point in paragraph 67; 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.

75. The negative adjustment explained in paragraph 74 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 Score

76. The fiscal score 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.

77. Given the many dimensions that this score captures, the analysis is divided into two segments, "fiscal performance and flexibility" and "debt burden," which are scored separately. The overall score for this rating factor is the average from the two segments.

a) Fiscal performance and flexibility

78. To determine a sovereign's fiscal performance and flexibility score, the criteria first derive an initial score based on the prospective change in general government debt calculated as a percentage of GDP (see paragraph 80). Then the initial score 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 79-85).

Table 6
Assessing A Sovereign's Fiscal Performance And Flexibility Score
On a scale from '1' to '6', strongest to weakest

Change in general government debt as a percentage of GDP*	<0%	0%-3%	2%-4%	3%-5%	4%-7%	>6%
Initial score	1	2	3	4	5	6

Positive adjustment factors	Negative adjustment factors
Each of the following factors improves the initial fiscal score by one category: • Governments with large liquid assets, as measured by general government liquid assets accounting typically for more than 25% of GDP. • Government's greater ability to increase general government revenues and/or cut general government expenditures in the short term compared with peers with a similar level of development (typically by more than about 3% of GDP).	Each of the following factors worsens the initial fiscal score by one category: • 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. • 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. • 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. • Unaddressed medium-term pressure on age-related expenditures.

The fiscal performance and flexibility score equals the initial score, adjusted by a maximum of two categories up or down, based on the net effect of the adjustment factors outlined above.

Notes: *Based on the average of Standard & Poor's current-year estimate and two- to three-year forecast. When a sovereign's increase in general government debt as a percentage of GDP could correspond to two possible categories, the initial score is decided based on the trend of the government's fiscal performance. For instance, a sovereign with an average change in general government debt to GDP of 2.9% over the four-year period could receive an initial score of '2' or '3'. If the deficit trend over the period is declining, then the sovereign would receive a '2' initial score. If the trend is increasing, then the initial score would be '3'.

Fiscal performance

79. Standard & Poor's 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," published 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 B.

80. The anchor score 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 economic growth prospects or the occurrence of contingent risks. In cases where the period average is distorted by one-off items that are unlikely to recur in the medium term, the score is based on the level of change in general government debt adjusted for the one-off items.

81. The criteria 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. In addition, 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

82. 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.

83. Each of the following conditions improves a sovereign's fiscal performance and flexibility score by one category as shown in table 6:

- 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, compared with peers with a comparable 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 peers 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.
- The general government has large liquid assets (typically, more than 25% of GDP) available to mitigate the effect of economic cycles on its fiscal performance.

84. Each of the following conditions weakens a sovereign's fiscal performance and flexibility score 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 peers 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 ineffective.
- 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 on age-related expenditure (see paragraph 85).

85. ***Age-related expenditures.*** Demographic change and population aging 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," published 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 may be included in the assessment of a government's fiscal flexibility and long-term trends as a negative adjustment (see table 6), or included in our budgetary projections directly.

b) Debt burden

86. The debt burden score reflects a sovereign's prospective debt level. Factors underpinning a sovereign's debt burden score are: its debt relative to GDP, the interest cost of the debt relative to general government revenue, and debt structure and funding access. This score also reflects risks arising from contingent liabilities with the potential to become government debt if they materialize.

87. The combination of these factors determines a sovereign's debt burden score as presented in table 7. The criteria derive an initial score from two key measures of the general government debt level and cost of debt. Then, the initial score 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
Assessing A Sovereign's Debt Burden Score
On a scale from '1' to '6', strongest to weakest

		Debt level				
		Net general government debt as a percentage of GDP¶				
Cost of debt	General government interest expenditures as a percentage of general government revenues*	Below 30%	30% - 60%	61% - 80%	81% - 100%	>100%
	Below 5%	1	2	3	4	5
	5% - 10%	2	3	4	5	6
	11% - 15%	3	4	5	6	6
	Above 15%	4	5	6	6	6

Positive adjustment factors	Negative adjustment factors
For sovereigns in a net general government debt position and benefiting from concessional lending, the debt score is one category better than the initial score if we assess that a government's borrowing needs are likely to be covered by official concessional funding during the next two to three years (see paragraph 93).	For sovereigns in a net general government debt position, the debt score is one category worse than the initial score if at least two of the four conditions below apply (see paragraph 92): • More than about 40% of gross government debt is denominated in foreign currency**, or the average maturity is typically less than three years. • Nonresidents hold consistently more than 60% of government commercial debt**. • The debt service profile is subject to significant variations. • The banking sector's exposure to the government is above 20% of its total assets.

Negative adjustment for contingent liabilities:

The debt score is one category worse than the adjusted score when contingent liabilities are "moderate," two categories worse when they are "high," and three when they are "very high" in accordance with table 8.

The debt burden score equals the initial score with a positive adjustment of up to one category and a negative adjustment of up to three categories based on the net effect of the adjustment factors outlined above.

Notes
¶Based on the current-year estimate and the expected trend for the next two to three years.
*Based on the average of the current-year estimate and two- to three-year forecasts.
**Applicable to sovereigns with net general government debt over 10% of GDP.

Debt level and cost of debt

88. 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.

89. The calculation of net general government debt (as defined in Appendix B) is generally more restrictive than national measures of net general government debt because it deducts from the general government debt only the most liquid assets. 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.

90. 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 percent of GDP) and, thus, appears to be more structural than cyclical.

91. A sovereign's debt burden is assessed relative to its other credit characteristics, as explained in subparts V.A and V.B, 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

92. For sovereigns in a net general government debt position, the debt score is one category worse than the initial score if at least two of the four conditions below apply:

- Government debt is over 10% of GDP on a net basis and has significant exposure to exchange rate movements and refinancing risk, such that, on average, more than 40% of gross government debt is denominated in foreign currency or the average debt maturity is typically less than three years.
- Government debt is over 10% of GDP on a net basis 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.

93. 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 score will be adjusted positively.

Contingent liabilities

94. 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:

- Contingent liabilities related to the financial sector (public and private depository corporations and nondepository financial institutions);
- Contingent liabilities related to nonfinancial public-sector enterprises (NFPEs); and
- Guarantees and other off-budget and contingent liabilities.

95. Contingent liabilities related to the depository corporations are assessed by estimating their potential recapitalization needs in a stress scenario. However, this assessment does not include the broader costs associated with an economic downturn. Specifically, it does not include costs stemming from automatic stabilizers (lower tax revenues and higher expenditure needs) or the costs associated with stimuli, liquidity, and other support more often provided through monetary and fiscal measures. Previous episodes of systemic banking crises indicate that these costs may be significantly larger for a sovereign than the direct recapitalization cost, although to degrees that vary widely.

96. 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 range of the potential direct costs that could arise for a sovereign from its contingent liabilities, as opposed to the broader fiscal and monetary effects. 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 what we expect a country's financial system's recapitalization needs to be over the rating horizon and, therefore, does not add to the government's existing debt.

Table 8
Assessing A Sovereign's Contingent Liabilities

Categories of contingent liabilities	Contingent liabilities assessment is based on the sum of: - Estimated recapitalization cost of a systemic financial sector crisis in a stress scenario* - Estimated sovereign support to NFPEs¶ - Risks from other guarantees, off-budget and contingent liabilities.
Limited	Less than 30% of GDP
Moderate	Between 30% and 60% of GDP
High	Between 61% and 80% of GDP
Very High	More than 80% of GDP

Notes:
* Calculation explained in paragraphs 98-102.
¶ Calculation explained in paragraphs 103-104.

97. ***Contingent liabilities related to the financial sector.*** Contingent liabilities related to the financial sector are assessed by estimating the potential recapitalization needs in case of a systemic banking crisis in a 'A' stress scenario. This scenario, defined in "Understanding Standard & Poor's Ratings Definitions," published on June 3, 2009, corresponds to a GDP decline by as much as 6%, an unemployment rise up to 15%, and a stock market drop by up to 60%.

98. The first step consists of estimating the potential unexpected losses that a country's banking sector would incur over a three-year period under the stress scenario. This calculation uses the risk-adjusted capital (RAC) framework explained in "Bank Capital Methodology And Assumptions," published Dec. 6, 2010.

99. The second step entails calculating the potential recapitalization needs (or potential capital shortfall) for rated

depository corporations.

100. In the final step, we extrapolate the estimate from paragraph 99 to estimate the potential capital shortfall (or recapitalization needs) for the entire depository corporation sector to provide an estimate of contingent liabilities.

101. In the following cases, we try to use consolidated banking sector data to build a simplified balance sheet for the banking sector, and we apply risk-weighting similar to those of countries that have the most comparable banking sector:

- When countries have no or a limited number of rated banks that are representative of the banking industry.
- When depository corporations for which we have sufficient information account for less than 40% of total depository corporation claims on the resident nongovernment sector.
- When we do not have a BICRA score or estimate for the banking system.

102. Some nondepository financial institutions (such as finance companies, securities dealers, or insurance companies) and public-sector financial enterprises (such as national development banks, export credit agencies, or housing institutions), which may not be included in the above calculation, may affect sovereign credit standing when they are of a material size. In the absence of comparable statistics for those sectors, the estimate of contingent liabilities for those entities is done on an individual basis.

103. ***Contingent liabilities related to NFPEs.*** NFPEs can 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 government-related entities (GREs) that are outside the financial sector. These are enterprises, partially or totally under government control, that we believe are likely to be affected by extraordinary government intervention during periods of stress (see "Rating Government-Related Entities: Methodology And Assumptions," published Dec. 9, 2010).

104. The assessment of contingent liabilities related to NFPEs applies a loss estimate under a significant downside scenario to NFPE borrowings from nonresidents (either multilaterals, financial corporations, or the international bond markets) and NFPE domestic market bond issuance. The borrowing from domestic financial institutions is already included in the previous estimate of contingent liabilities related to the financial sector. This assessment focuses on the largest NFPEs (typically those with debt of more than about 1% of GDP). It generally excludes the debt of enterprises that have an investment-grade stand-alone credit profile (SACP) (for details on SACPs, see "Stand-Alone Credit Profiles: One Component Of A Rating," published Oct. 1, 2010), or for which we assess a low or moderate likelihood of support under our GRE methodology.

105. ***Guarantees and other off-budget and contingent liabilities.*** Contingent liabilities include other types of risks, including guarantees, when relevant in our view, such as:

- The estimated potential loss on formal or implicit sovereign guarantees that are not already accounted for in the above categories.
- Quasi-fiscal or other off-budget operations, such as, for example, extra-budgetary funds, securitizations, and public-private partnerships.

5. Monetary Score

106. A sovereign's monetary score 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.

107. A sovereign's monetary score results from the analysis of the following elements:

- 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, among other factors, by inflation trends over an economic cycle.
- Market-oriented monetary mechanisms' impact on the real economy, which is largely a function of the depth and diversification of the resident financial system and capital markets.

108. On one end of the spectrum, a score 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.

109. On 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), and countries with persistently high inflation or high dollarization (defined as resident deposits or loans in foreign currency over 50% of total). 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.

110. Tables 9A and 9B present the characteristics generally expected for each score for this factor. A sovereign's initial score 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 under-valuation. The initial score for sovereigns that are not part of the monetary union can be adjusted down by up to two categories based on the adjustment factors listed in paragraph 118. The score for sovereigns that are part of the monetary union can be adjusted down by up to two additional categories based on paragraph 119.

Table 9A
Assessing A Sovereign's Monetary Score: Initial Score
On a scale from '1' to '6', strongest to weakest

1	2	3	4	5	6
a) Exchange rate regime* (paragraph 111)					
Reserve currency (see paragraph 56).	Actively traded (see paragraph 57) 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.)

*Definitions from the IMF System Annual Report on Exchange Arrangements And Exchange Restrictions. While using those definitions, our classification of countries may differ from that of the IMF.

Table 9B
Assessing A Sovereign's Monetary Score: Initial Score
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 112-117)					
All of the following factors apply: 1. Strong and long-established track record (more than 10 years) of full operational independence. 2. Clear monetary policy objectives. 3. Wide array of monetary instruments. 4. Ability to act as a lender of last resort for the financial system. 5. Sovereign's CPI is low and in line with that of its trading partners, leading to stable REER over the economic cycle. 6. Broad price stability by other measures. 7. Depository corporation claims on residents in local currency and nonsovereign bond market capitalization combined account for over 50% of GDP.	All of the following factors apply: 1. Track record of operational independence. 2. Market-based monetary instruments. 3. Ability to act as a lender of last resort for the financial system. 4. Sovereign's CPI is low and broadly in line with that of its trading partners, leading to fairly stable REER over the economic cycle. 5. Broad price stability by other measures. 6. Depository corporation claims on residents in local currency and nonsovereign bond market capitalization combined account for over 50% of GDP.	All of the following factors apply: 1. Operational independence, although shorter track record or less secure. 2. Market-based monetary instruments, but heavier reliance on reserve requirements. 3. Ability to act 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 scores. 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%.

Negative adjustment factors to the initial monetary score (see calculation in paragraph 110):
The following factors weaken the monetary score by one category each, for a maximum two-notch adjustment:
--The transmission mechanisms are significantly weakening, as defined in paragraph 118.
--The central bank imposes restrictions on payments to nonresidents on current transactions or engages in discriminatory currency arrangements.
--Resident deposits or loans in foreign currency ("dollarization") exceed roughly 50% of total.
The following factors weaken the monetary score of a monetary union member by an additional category each (see paragraph 119):
--The sovereign is part of a monetary union.
--The sovereign displays prolonged price and wage trends diverging strongly from the monetary union average.

a) A sovereign's ability to use monetary policy and the exchange rate regime

111. 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 authorities' 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 impeding 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's credibility and effectiveness and inflation trends

112. 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 its status has become.

113. 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.

114. 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 score is weakest in the sovereigns with persistently high consumer price inflation. Doubtful monetary statistics also impair monetary policy's credibility.

115. 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 when market conditions impair traditional

channels. The availability of such lending is intended to address systemic problems creating 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

116. 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.

117. To achieve the highest subscores ('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 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 subscore of '3' if the depository corporation claims on residents in local currency plus the nonsovereign bond market and the equity market capitalizations are greater than 50% of GDP. Other sovereigns would fall in the lower three categories ('4', '5', or '6') for the second monetary subscore.

d) Negative adjustments to the initial monetary score

118. The following negative adjustments can lower the initial score:

- A country's transmission mechanisms 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.
- 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

119. The monetary score for sovereigns in monetary unions results from a two-step process. The first step assigns an initial score per tables 9A and 9B for the monetary union as a whole. The second step lowers this initial score by one category to reflect that members of monetary unions generally have less flexibility 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 score 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 whose economies account for more than 50% of the zone's GDP. Such economic significance usually

means a better alignment of monetary policy objectives with economic circumstances.

120. Negative adjustments cited in paragraph 118 could also apply to members of the monetary union. Therefore, a final score of a monetary union member can be up to four categories away from an initial score of the monetary zone.

121. If a sovereign leaves a monetary union, its monetary score 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

122. 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.

123. 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 the risk of 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.

124. 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 governance effectiveness 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.

125. The combination of these factors and their effect on the local-currency rating on a sovereign are outlined in table 10.

Table 10
Uplift From The Sovereign Foreign-Currency Rating To Determine The Local-Currency Rating

Number of notches§	All the characteristics below should apply
2 notches	Sovereigns with: • An independent monetary policy with a track record of free-floating or floating exchange rate* (excluding sovereigns that have committed to join a monetary union) and its currency is widely traded¶ • Active local-currency fixed income and money market (with a capitalization typically above 20% of GDP and an active secondary market trading). • Neither the institutional and governance effectiveness score nor the fiscal score is more than one point weaker than the average of the four other scores.
1 notch	Sovereigns with: • An independent monetary policy with a track record of a free-floating or floating exchange rate* (including sovereigns that have committed 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. • Active local-currency fixed income and money market (with a capitalization typically above 10% of GDP and some secondary market trading). • The fiscal score is not more than one point weaker than the average of the four other scores.
Zero notches	Other sovereigns

Notes:
§Fewer notches could be applied in consideration of underlying trends. In addition, when a foreign-currency rating moves to the 'CCC' range, indicating a near-term risk of default, there is a greater visibility on potential differences in default scenarios between a sovereign's foreign-currency and local-currency obligations. In this case, if Standard & Poor's expects the sovereign not to default on local-currency obligations, the local-currency rating will stay in the 'B' category, thereby increasing the notching differential.
*Except 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 discriminatory currency arrangements, or for sovereigns with a track record of default on their local-currency debt.
¶As reflected by a currency that is listed for global foreign exchange market turnover in the Bank for International Settlement (BIS) report, "Triennial Central Bank Survey."

E. Issue-Specific Considerations

126. 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.

127. 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.

128. 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.

129. We rate fully guaranteed debt that meets our guarantee criteria (see "Rating Sovereign-Guaranteed Debt," published April 6, 2009) at the same level as the guarantor. Partially guaranteed debt is rated the same as unguaranteed debt as per "Rating Partially Guaranteed Sovereign Debt," published May 6, 2013.

VI. APPENDICES

A. Key Changes From Previous Methodology

- The political factor has been renamed "institutional and governance effectiveness" to represent better the type of risks and issues analyzed in this section. We have added references to social inclusion and civil society cohesiveness as well as incorporated domestic security risks more transparently.
- In the economic section, we have updated the GDP per capita thresholds to reflect the world nominal GDP growth over the past two years and introduced some flexibility when the initial score is borderline.
- In the external section, we expanded the maximum notches of adjustments to the initial score to three from two to give more weight to a variety of risks associated with a country's balance-of-payment and external positions. In addition, we have incorporated the analysis of external scores for sovereigns with limited external data. (These criteria were previously published as an addendum to the sovereign methodology.)
- In the monetary section, we have simplified the metric by combining three subscores into two. We also have expanded and clarified the type of analysis we conduct and trends we monitor when assessing monetary policy.
- Outside of the five key factors, we have clarified and expanded the list of instances that might lead to a one-notch differential between the indicative rating and the foreign-currency ICR (see paragraph 19). We have also included a new section (see subpart V.E) on sovereign issue-specific considerations.

B. Glossary Of Key Indicators And Data Sources

130. 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.

131. Standard & Poor's 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 industrialists, trade associations, foreign and local bankers, research organizations, academics, labor unions, and representatives of the press. Global sources most commonly used include Eurostat, central banks of monetary unions, and the International Financial Statistics of the IMF.

Table 11

Glossary Of Key Indicators In Standard & Poor's Sovereign Rating Methodology

Terms	Definitions
Economic and monetary scores 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 indicators	
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 (unless the loan is due within a year)
	+ Mark-to-market losses on reserves sold forward
	+ Reserves deposited in domestic financial institutions, including offshore branches
	+ Required 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).
Gross external financing needs (% of CAR plus usable reserves)	Current account payments plus short-term external debt at the end of the prior year plus 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.
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 assets held by 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.

Table 11

Glossary Of Key Indicators In Standard & Poor's Sovereign Rating Methodology (cont.)	
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
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) plus minority arms-length holdings of incorporated enterprises that are widely traded plus balances in 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.
	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.

VII. RELATED CRITERIA AND RESEARCH

- Methodology: Rating Partially Guaranteed Sovereign Debt, May 6, 2013
- Sovereign Defaults And Rating Transition Data, 2012 Update, March 29, 2013
- Global Aging 2013: Rising To The Challenge, March 20, 2013
- Common Characteristics Of Rated Sovereigns Prior To Default, Jan. 28, 2013
- Banking Industry Country Risk Assessment Methodology And Assumptions, Nov. 9, 2011
- Principles Of Credit Ratings, Feb. 16, 2011
- Bank Capital Methodology And Assumptions, Dec. 6, 2010
- Rating Government-Related Entities: Methodology And Assumptions, Dec. 9, 2010
- 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
- Rating Sovereign-Guaranteed Debt, April 6, 2009
- Sovereign Defaults At 26-Year Low, To Show Little Change In 2007, Sept. 18, 2006
- Sovereign Foreign And Local Currency Rating Differentials, Oct. 19, 2005

132. These criteria represent the specific application of fundamental principles that define credit risk and ratings opinions. Their use is determined by issuer- or issue-specific attributes as well as Standard & Poor's Ratings Services' assessment of the credit and, if applicable, structural risks for a given issuer or issue rating. Methodology and assumptions may change from time to time as a result of market and economic conditions, issuer- or issue-specific factors, or new empirical evidence that would affect our credit judgment.

Additional Contacts:

Cathy L Daicoff, New York (1) 212-438-6766; cathy.daicoff@standardandpoors.com
Laura J Feinland Katz, CFA, New York (1) 212-438-7893; laura.feinland.katz@standardandpoors.com
Curt Moulton, New York (1) 212-438-2064; Curt.Moulton@standardandpoors.com