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Criteria | Governments | Sovereigns:

Sovereign Government Rating Methodology And Assumptions

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Sovereign Government Rating Methodology And Assumptions

(Editor's Note: This criteria article should be read in conjunction with the addendum "Sovereign Government Ratings Methodology Addendum For Sovereigns With Limited External Data," published Nov. 7, 2011.)

1. This sovereign criteria update follows the publication of "Request for Comment: Sovereign Government Rating Methodology and Assumptions," on Nov. 26, 2010. This update provides additional clarity by introducing a finer calibration of the five major rating factors that form the foundation of a sovereign analysis and by articulating how these factors combine to derive a sovereign's issuer credit ratings. It also aims to incorporate the information derived from the 2008-2009 global recession, particularly regarding the potential effect of financial sector difficulties on governments' fiscal profiles. Specific considerations on the credit analysis of sovereigns in monetary unions are also covered. (See the related CreditMatters TV segment, "S&P's Updated Sovereign Ratings Methodology Aims To Provide A Clear Reflection Of The Fiscal Climate," dated June 30, 2011.)

2. The "Principles Of Credit Ratings," published Feb. 16, 2011, form the basis of these criteria. This article replaces Standard & Poor's methodology addressed in "Sovereign Credit Ratings: A Primer," published May 29, 2008.

I. SCOPE

3. This methodology applies to ratings on all sovereign governments (also known as central 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. A sovereign's issuer credit rating does not reflect its ability and willingness to service other types of obligations listed below.

   - Obligations to other governments (such as 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.

   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.

5. Moreover, this article does not address post-default recovery prospects and their effect on specific issue ratings. A separate criteria article "Introduction Of Sovereign Recovery Ratings," published June 14, 2007, covers these topics.

6. In this article, "rating" refers to an issuer credit rating, if not otherwise qualified.

II. SUMMARY

7. The sovereign rating methodology ("criteria" and "methodology" are used interchangeably herein) addresses the factors that affect a sovereign government's willingness and ability to service its debt on time and in full. The

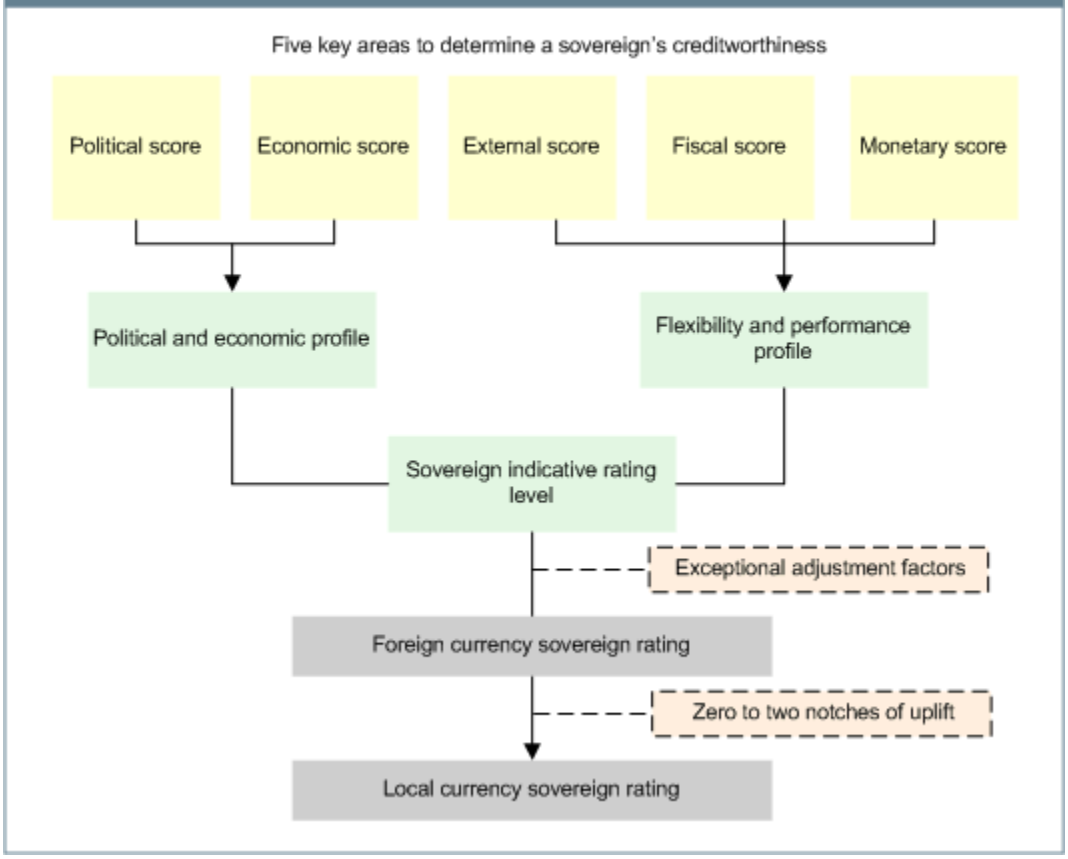
analysis focuses on a sovereign's performance over past economic and political cycles, as well as factors that indicate greater or lesser fiscal and monetary flexibility over the course of future economic cycles.

8. The five key factors that form the foundation of our sovereign credit analysis are:

- Institutional effectiveness and political risks, reflected in the political 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.

9. Our sovereign rating analysis involves several steps, which the chart below summarizes.

Chart 1
Sovereign Rating Framework



10. 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 VI.C below. The criteria then combine the political and economic scores to form a sovereign's "political and economic profile," and the external, fiscal, and monetary scores to form its "flexibility and performance profile." Those two profiles combine to determine the sovereign foreign-currency rating, after factoring in exceptional adjustments when applicable (see subpart VI.B).

11. A sovereign local-currency rating is determined by applying zero to two notches of uplift from the foreign-currency rating following our methodology outlined in subpart VI.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 equal to the foreign-currency rating.

III. CHANGES FROM RFC

12. On Nov. 26, 2010, Standard & Poor's published "Request for Comment: Sovereign Government Rating Methodology and Assumptions." Market participants who responded were generally positive about the increased transparency and clarity of the criteria. Some of them provided comments about parts of the text that could be further clarified or specified, or possible different weighting of certain factors. Those comments led to the following main changes between these criteria and the proposal presented in the request for comment:

- The political score puts more emphasis on factors such as risks of political instability, the effect of social and economic factors and the potential effect of international organizations on national policy setting.
- The economic, external and fiscal scores are further clarified by changes in presentation and a better specification of the adjustment factors.
- The assessment of contingent liabilities related to the financial sector provides a more comprehensive measure of credit risks, market risks, and operational risks by using the "Bank Capital Methodology And Assumptions" published on Dec. 6, 2010.
- The effect of financing from another government, the IMF, or a multilateral lender such as the World Bank or a similar institution (also called 'official funding' in the rest of this article) on the rating of the recipient of such programs is further developed.
- The monetary score puts less emphasis on the exchange rate regime and provides more details to assess the development of the financial system and the capital market.
- Factors leading to an uplift of the local-currency rating from the foreign-currency rating put more emphasis on monetary flexibility.

IV. EFFECT ON OUTSTANDING RATINGS

13. We expect few changes to existing foreign-currency sovereign ratings from the updated criteria. On the other hand, we expect the revised criteria to lead to more numerous changes to local-currency ratings. Where gaps between foreign- and local-currency sovereign ratings exist, the rating differential should narrow in about half of the cases, most often with the sovereign local-currency ratings being lowered by one or two notches. The lowering of some sovereign local-currency ratings could affect our ratings on other issuers, such as government-related entities (GREs).

V. EFFECTIVE DATE AND TRANSITION

14. The criteria described in this article are effective immediately. We intend to complete our review of all issuers affected with the next six months.

VI. METHODOLOGY

A. Standard & Poor's Sovereign Rating Calibrations

15. 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 what we view to be the credit strength of sovereign governments compared with other types of issuers.

History of sovereign defaults

16. The review of the history of sovereign defaults uses the following main sources:

- Standard & Poor's "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: 2010 Update," published Feb. 23, 2011, which covers the performance of Standard & Poor's sovereign ratings, both in terms of transition and default, over the period 1975 to 2010.
- The data that Carmen Reinhart and Kenneth Rogoff gathered in their book "This Time Is Different," covering over 250 sovereign external default episodes over the period 1800-2009 and at least 68 cases of default on domestic debt. However, the book's definition of default is broader than our own.

17. 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 (in other words, a shock). War, regime change, other forms of political instability and sharp deterioration in terms of trade are examples of shocks. Some defaults also followed governments' decision to abandon the gold standard, under which they backed their paper currencies with gold at fixed conversion rates. Following a shock, when a government's previous fiscal or monetary policies left it little room for maneuver, or when economic policy did not support sustained economic growth then investors' perceptions tended to change quickly. This, in turn, raised financing costs and, in some cases, left a government with default as the preferred policy response.

Effect of the 2008-2009 global recession

18. The recent global recession has not triggered a wave of sovereign defaults, though this chapter in economic history is not over yet. However, the number of downgrades of sovereigns rated by Standard & Poor's, especially those in Europe, rose sharply in the past couple of years. The 2008-2009 global recession was the first synchronized recession since the establishment of the European Monetary Union (EMU). Our scoring calibration reflects the importance of a sovereign's external and fiscal performance inside a monetary union relative to the rest of the zone. Those sovereigns more reliant on funding sourced outside their national boundaries, and those that have experienced unexpected deterioration in their borrowing requirements or their growth prospects, have witnessed a sharp rise in their funding costs relative to those of other EMU members.

Credit strength of sovereigns relative to other types of issuers

19. 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, there is a greater proportion of sovereign ratings at the higher end of the scale compared with Standard & Poor's ratings in other sectors. Almost 15% of our sovereign foreign-currency ratings stood at the 'AAA' level at year-end 2010 and 11% in the 'AA' category, compared with about 1% and 8%, respectively, for corporate issuers. As of the date of this article, Standard & Poor's rates 126 sovereign governments. The global sovereign universe is over 200 governments when taking into account the 192 member states of the U.N. and other states and territories outside the U.N. If Standard & Poor's rated all sovereign governments, we believe that the proportion of ratings in the lower categories would likely rise.

20. Standard & Poor's elaborates and 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.

21. We believe that the calibration of sovereign ratings in table 2 in subpart VI.B below achieves increased comparability with other Standard & Poor's ratings across different sectors.

B. Determining A Sovereign Foreign-currency Rating

22. 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 effectiveness and political risks	Political 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

23. 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 VI.C below, form the basis for assigning the scores. The criteria then combine those five scores to form a sovereign's "political and economic profile," and its "flexibility and performance profile" as described below.

- The political and economic profile. The political and economic profile reflects our view of the resilience of a

country's economy, the strength and stability of the government's institutions, and the effectiveness of its policy-making. It is the average of the political score (see section VI.C.1) and the economic score (see section VI.C.2).

- The flexibility and performance profile. 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 VI.C.3), the fiscal score (see section VI.C.4), and the monetary score (see section VI.C.5).

24. Those two profiles are then used in table 2 below to determine an indicative rating level.

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

		Political 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

25. We expect that our sovereign foreign-currency rating would in most cases fall within one notch of the indicative rating level, based on the sovereign's positioning relative to peers. For example, for a sovereign we view as having a "moderately strong" political and economic profile and a "very strong" flexibility and performance profile, we would most likely assign a rating within one notch of 'AA-'.

26. 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 exceptional characteristics listed below in paragraphs 27 to 33. If a sovereign combines several of the exceptional factors, its foreign-currency rating would be adjusted by the cumulative effect of those adjustments. Those exceptional adjustments 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.

27. ***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. For instance, the rating would be one notch lower if the external score is '6' and we expect the ratio of gross external financing needs as a percentage of current account receipts and usable foreign exchange reserves to reach more than about 1.5x the level commensurate with the benchmark for the weakest external liquidity in table 5. The rating would be two notches lower if we expect them to reach more than twice that level.

28. ***Extremely weak fiscal situation.*** 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 1.5 times the level commensurate with a '6' score in table 7, and, in addition, contingent liabilities are 'very high' in accordance with table 8.

29. ***Exceptionally large net general government asset position.*** A sovereign receives a foreign-currency rating one notch above the indicative rating level when it has exceptionally large liquid assets compared to peers at the same rating level (typically accounting for more than 100% of GDP), providing the government with an exceptional buffer during periods of economic or financial shocks.

30. ***Very high political risk and high debt burden.*** A sovereign with a political score of '6' cannot be rated higher than 'BB+,' or 'B+' if the political 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 net asset position (see paragraph 29). The track record of sovereign defaults suggests that governance and political risks are among the main drivers of the poor economic policies that lead to default, which is why the political score receives this particular weight.

31. ***Rescheduling risk.*** When a government is likely to engage in a debt rescheduling that qualifies as a distressed exchange, the sovereign's rating would be determined in accordance with the criteria "Rating Implications Of Exchange Offers And Similar Restructurings," published May, 12 2009.

32. ***High security risk.*** In cases of imminent or rapidly rising risk of war, 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. History provides several examples of defaults, such as the former Yugoslavia, linked to a sovereign government ceasing to exist following a war. In the other cases when the risk of conflict is long-standing but not imminent, such as in the Gulf states, it affects the sovereign rating through an adjustment to the political score (see subsection VI.C.1.d)).

33. ***Severe natural catastrophes.*** The occurrence of a rare, but highly severe, natural catastrophe could lead to a material deviation from the indicative rating level depending on the extent of damage and the effect on the country's fundamentals. An example is the financial costs for Grenada, linked to damage from Hurricane Ivan (we estimate these costs at close to 200% of the country's 2004 GDP), which, in our view, acted as the main trigger event for Grenada's ensuing default from its pre-hurricane rating level of 'BB-.' However, more generally, when a country is constantly exposed to natural disasters or adverse weather conditions, such as in the Caribbean region, this vulnerability affects our analysis of its economic structure, the potential volatility of its economic output, and the government's readiness to respond to those events. For more information, see "Assessing The Impact Of Natural Disasters On Sovereign Credit Ratings," published June 14, 2010.

34. A sovereign that becomes unable to attract credit at a sustainable interest rate may receive lower-cost financing from another sovereign, the IMF, the World Bank or similar institutions, also called official funding. Participation in this type of program addresses part of the recipient's funding needs for a defined period of time and often entails conditions for continued access, such as the implementation of economic reforms or domestic fiscal consolidation. Where the program may facilitate reforms and the official funding is likely to remain in place to cover the recipient's borrowing requirements, it could break the downward trend in the recipient's credit quality. In other cases, participation in these programs may not prove successful and thus may not positively affect the recipient's creditworthiness. The effect of this official funding on the recipient's rating is reflected in three of the five key rating factors: the political score (see subsection VI.C.1.e)), the external score (see subsection VI.C.3.e)) and the fiscal score (see paragraph 96 and table 7), and not as an exceptional adjustment factor. Appendix C illustrates the application of this approach by an example.

C. Assessing The Five Main Sovereign Rating Factors

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

1. Political Score

36. The political 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.

37. The political score captures the factors listed below, which are uncorrelated with any particular political system:

- 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 government's payment culture (potential adjustment factor).
- External security risks (potential adjustment factor).
- The potential effect of external organizations on policy setting (potential adjustment factor).

38. Table 3 shows the interplay of the factors listed in paragraph 37. The primary factor for determining the political score is the effectiveness, stability, and predictability of the sovereign's policymaking and political institutions. The secondary factor provides additional information on the transparency and accountability and acts as a qualifier to the primary factor in determining the initial political score (see table 3). The table contains the characteristics generally expected at different levels for the political score, although a government might exhibit a majority but not all of them. Finally, a sovereign's political score may be better or worse than the initial score based on the last three factors, payment culture, security risks, and effect of external organizations, as explained in table 3.

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

Score	Primary factor: effectiveness, stability and predictability of policymaking and political institutions (see subsection VI.C.1.a)	Secondary factor: transparency and accountability of institutions, data, and processes (see subsection VI.C.1.b)
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 over the long term. • High likelihood that institutions and policies will remain stable over time, ensuring the predictability of responses to future crises.	• 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 public finance data and statistical information.
2	Compared to 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 public finances consistently over the long term.	• 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.	• Evolving checks and balances between various institutions. • Generally unbiased 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 political score equals the initial score adjusted for the factors outlined below:
Government's debt payment culture. A government with a weak debt payment culture, as defined in subsection VI.C.1.c), receives a political score of '6'.
External security risks. The political score is one to two categories worse than the initial score, when there is risk of war within the country's territory, but the risk is not expected to materialize within 3-5 years (see subsection VI.C.1.d).
Impact of external organization on policy making. The political score is one category better than the initial score if support from an external organization improves policy making. Conversely, it is one category worse if constraints imposed by an external organization weaken policy making (see subsection VI.C.1.e)).

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

Score	Primary factor: effectiveness, stability and predictability of policymaking and political institutions (see subsection VI.C.1.a)	Secondary factor: transparency and accountability of institutions, data, and processes (see subsection VI.C.1.b)
4	Either 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.	• 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 due to a highly polarized political landscape, highly centralized decision making, or an uncertain or untested succession process.	• 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	Either 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.	• Unassured enforcement of contracts and respect for the rule of law. • Impaired transparency, owing to several of the following factors: material data gaps, frequent and material data revisions, high levels of perceived corruption of political institutions, and suppressed information flows.

The political score equals the initial score adjusted for the factors outlined below:
Government's debt payment culture. A government with a weak debt payment culture, as defined in subsection VI.C.1.c), receives a political score of '6'.
External security risks. The political score is one to two categories worse than the initial score, when there is risk of war within the country's territory, but the risk is not expected to materialize within 3-5 years (see subsection VI.C.1.d).
Impact of external organization on policy making. The political score is one category better than the initial score if support from an external organization improves policy making. Conversely, it is one category worse if constraints imposed by an external organization weaken policy making (see subsection VI.C.1.e)).

39. The assessment of these factors relies mostly on our qualitative analysis, which may be complemented by external sources such as:

- The World Bank's "Doing Business" reports.
- The World Bank's "Worldwide Governance Indicators," which measure six broad dimensions of governance

(voice and accountability, governance effectiveness, rule of law, regulatory quality, control of corruption, and political stability and absence of violence).
- The United Nations Development Programme's "Human Development Indicators", with a particular focus on the "human development index."
- Transparency International's "Corruption Perception Index."
- IMF and World Bank Reports on the Observance of Standards and Codes.

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

40. The criteria analyze the effectiveness, stability, and predictability of policymaking and institutions based on:

- The track record of a sovereign in managing past political, economic, and financial crises; maintaining prudent policy-making in good times; and delivering balanced economic growth.
- A sovereign's ability and willingness to implement reforms to address fiscal challenges, such as health care or pensions, to ensure sustainable public finances over the long term.
- The predictability in the overall policy framework and developments that may affect policy responses to 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.

41. Effective policymaking and stable political institutions enable governments to address proactively 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

42. 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.

43. The last point includes an assessment of the quality and consistency of the relevant data, which include national income accounts, fiscal accounts, monetary surveys, 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, where 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 as reflected in table 3.

44. 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 government's debt payment culture

45. The first potential adjustment to the initial political 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 financial capability for timely debt service. Therefore, the analysis aims to assess to what degree policymakers likely are willing to prioritize debt service to avoid default in difficult situations.

46. The overall political score cannot be better than '6' in cases where we believe that a government's debt payment culture represents a credit risk. For this to happen, a government would typically present one or more of the following characteristics:

- Arrears on bilateral official debt, which is debt owed to other 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.

47. Academic studies suggest the relevance of the last characteristic mentioned just above. In their 2003 article "Debt Intolerance," Reinhart, Rogoff, and Savastano find that countries can graduate from being serial defaulters, although the path to "graduation" is 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 in the future. The evidence that the study presents also suggests that the first default may be much 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

48. The second potential adjustment to the initial political score relates to geopolitical and external security risks, including war or threats of war stemming from conflicts or strained relations with neighboring countries. When there is a long-standing risk of war within the country's territory, but we do not foresee that this risk will likely materialize in the next three to five years, the political score would be one to two categories worse than the initial score. However, when these risks are imminent or rapidly rising, it would affect the sovereign's political risk and the overall rating to a greater extent, depending on what the magnitude and effect of the conflict would be on the sovereign's economic and political situation (see exceptional adjustment factors in paragraph 32). National security is a rating concern because military threats may place a large burden on fiscal policy, reduce the flow of potential investment, or put the balance of payments under stress. It may also lead to economic sanctions.

e) Effect of external organizations on policy making

49. At times, membership in supranational organizations can affect policy setting. Membership in military alliances, political unions, monetary unions, and trading blocks, for example, brings with it not only benefits but obligations as well. This issue is most evident when a sovereign seeks exceptional official funding, for example from the IMF or the European Union. Such funding often provides much needed financing, either for balance of payment support (see subsection VI.C.3.e) or for budgetary support (see paragraph 96) for short- to medium-term tenors, but it also entails conditions for that support to be disbursed over time.

50. When participation in a supranational program--either in the guise of conditions for membership or conditions for exceptional financial assistance--gives greater predictability and effectiveness of policymaking, then a sovereign's political score would be one category better. Conversely, if a sovereign's commitment to external organizations is not credible with investors or its domestic population such that policy outcomes or access to funding is more uncertain, then a sovereign's political score would be one category worse.

2. Economic Score

51. The history of sovereign defaults suggests that a wealthy, diversified, resilient, market-oriented, and adaptable economic structure, coupled with a track record of sustained economic growth, provides a sovereign government 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.

52. The following three factors are the key drivers of a sovereign's economic score:

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

53. The combination of those three factors determines a sovereign economic score as presented in table 4. The criteria derive an initial score based on a country's income level, as measured by its GDP per capita (see subsection VI.C.2.a). Then the initial score receives a positive or negative adjustment by up to two categories, based on the economy's growth prospects (see subsection VI.C.2.b), as well as its potential concentration or volatility (see subsection VI.C.2.c).

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

GDP per capita in US$¶	Over $35,000	$25,000 - $35,000	$15,000 - $25,000	$5,000 - $15,000	$1,000 - $5,000	Below $1,000
Initial score	1	2	3	4	5	6

Positive adjustment factors	Negative adjustment factors
The following factors impact the initial economic score by one category: • Undervalued currency suggests the GDP per capita category understates prosperity. This would be the case, for instance, if a country with a non-market determined exchange rate runs sustained current account surpluses and posts sizeable usable reserves (covering consistently more than 12 months current account payments) (see paragraph 55). • Above-average economic growth compared with peers, as measured by a real GDP per capita trend growth* that is consistently well above the median trend growth for peers in the same GDP per capita category (typically above 1.5% for an initial score of '2', 4% for an initial score of '3' and '4', and 6% for an initial score of '5' and '6') (see paragraph 59).	The following factors impact the initial economic score by one category: • Overvalued currency suggests the GDP per capita category overstates prosperity. This would be the case, for instance, if a country with a non-market determined exchange rate runs sustained current account deficits (see paragraph 55). • Below-average economic growth compared with peers, as measured by a real GDP per capita trend growth* that is consistently well below the median trend growth for peers in the same GDP category (typically below 0.5% for an initial score of '1' and '2', 1% for an initial score of '3' and '4', and 1.5% for an initial score of '5') (see paragraph 59). • Economic growth primarily driven by a combined rapid increase in domestic credit to the private sector and inflation-adjusted asset prices, indicating a potential credit-fueled asset bubble.§ • Very 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 those shocks (net general government asset position exceeding 50% of GDP) (see paragraph 61).

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:
* The calculation of trend growth is explained in paragraph 58.
¶Latest actual available.
§The measure for this adjustment factor follows the BICRA methodology (see paragraph 60).

a) Income levels

54. GDP per capita is Standard & Poor's most prominent measure of income levels. With higher GDP per capita, a country has a broader potential tax and funding base upon which to draw, a factor that generally supports creditworthiness. The determination of the economic score uses the latest GDP per capita from national statistics, converted to U.S. dollars. In cases where a country's GDP per capita fluctuates around the border between two score categories (see table 4), then the score is based on a moving three–year average of GDP per capita.

55. A sovereign's economic score would be one category better or worse than the initial score, if the GDP per capita in

U.S. dollars was not an adequate reflection of a country's income level due to, respectively, a significant currency under- or over-valuation. A currency might be significantly undervalued, for instance, when a country with a non-market determined exchange rate runs sustained current account surpluses and holds sizeable usable reserves (covering consistently more than 12 months current account payments). Conversely, a currency might be significantly overvalued, for instance, when a country with capital controls runs consistent current account deficits.

b) Economic growth prospects

56. 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.

57. 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 in order to normalize for growth driven more by changes in population than productivity.

58. 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 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 in order to avoid a cliff effect when an exceptional year drops out of the 10-year average. The source for historical data is national statistics. Our estimate and forecasts result from analysis of the government forecasts, projections from the IMF and other sources, as well as identification of the main factors that could lead to a change in future growth compared to 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.

59. In order to derive the median growth rate in real per capita GDP for a group of peer countries used in table 4, the criteria use Standard & Poor's and IMF data for almost all rated and unrated countries. We derive one median growth rate for countries with an initial economic score of '1' or '2' (GDP per capita above US$ 25,000), one for countries with an initial economic score of '3' or '4' (GDP per capita between US$ 5,000 and 25,000), and one for countries with an initial economic score of '5' or '6' (GDP per capita below US$ 5,000). We have observed that countries in those combined categories have relatively comparable growth levels and that statistics for narrower peer categories are less meaningful.

60. 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 banking sector domestic claims on the private sector, combined with a sustained growth in inflation-adjusted asset prices, indicating vulnerability to a potential credit-fueled asset bubble. We measure this factor along the lines of the BICRA methodology (see "Request for Comment: Methodology For Determining Banking Industry Country Risk Assessments," published May 13, 2010).

c) Economic diversity and volatility

61. Finally, a sovereign exposed to significant economic concentration and volatility compared with its peers 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 country had an initial economic score of '5' or '6' or if it displayed very large net general government liquid assets (typically above 50% of GDP) that can be used to mitigate the effect of this volatility. Economic concentration and volatility are important because a narrowly based economic structure 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

62. The external score reflects a country's ability to generate receipts from abroad necessary to meet its public- and private-sector obligations to nonresidents. It refers to the transactions and positions of all residents (public- and private-sector entities) versus those of nonresidents because it is the totality of these transactions that affects the exchange rates of a country's currency.

63. Three factors drive 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 indebtedness, 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

64. 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 liquidity 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 debt 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 debt of these sovereigns to relatively high levels. But this does not present the same degree of risks as for countries with non-actively traded currencies, because these sovereigns' policy settings can more readily preserve foreign investor confidence. The criteria differentiate between sovereigns with reserve currencies and those with actively traded currencies as follows.

65. ***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 writing 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 they account individually for more than 20% of the zone's GDP, it is unlikely that the ECB'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.

66. ***Sovereigns with an actively traded currency.*** A sovereign in this category benefits from a currency that accounts for 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 writing 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. This list may vary over time.

67. 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, as explained in paragraph 73 and reflected in table 5. The more flexible monetary position of these countries allows less reserve accumulation and permits higher short-term debt levels compared to the sovereigns with less monetary flexibility, making quantitative comparison based on an external liquidity ratio (described in paragraph 69) less meaningful.

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

b) External liquidity

69. The 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 A).

70. The "gross external financing needs" in table 5 is 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, the official government and the central bank's own forecasts (when available), and those of independent economists and the IMF. In addition, Standard & Poor's independently estimates a sovereign's gross external financing needs based on information about the country's expected imports, the terms of trade, and external debt structure. When compositional data on the tenors of private sector external debt are not available, Standard & Poor's makes estimates based on observations of the international investment positions of other countries at similar stages of development when this information is available. In cases where one-off items (i.e., items unlikely to repeat in the next three to five years) distort the period average, then the score is based on the level of future external liquidity adjusted for the one-off items.

71. Usable foreign exchange reserves represent 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 A. 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

72. Standard & Poor's key measure of a country's external indebtedness is the ratio of "narrow net external debt" to current account receipts (see the glossary in Appendix A).

73. The term "narrow" in the description of net external debt refers to a more restricted measure than some widely used

international definitions of net external debt. The calculation of "narrow net external debt" subtracts from gross external indebtedness only the most liquid external assets from the public sector and the financial sector (see Appendix A for more details on this calculation). The criteria use this special definition for two reasons. First, financial sector assets are generally more liquid than those of the non-financial private sector. Second, most financial institutions manage external assets and liabilities, which is not the case for many non-financial 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 transfer their assets in the domestic financial system to foreign accounts.

74. A sovereign's external score equals the initial score derived from table 5, adjusted by up to two categories based on the net effect of the positive and negative qualitative factors listed in the table. The paragraphs following the table provide a detailed explanation for each adjustment factor.

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+ Useable Reserves)¶			
				below 50%	50-100%	100-150%	over 150 %
Measure of a country's external indebtedness: Narrow Net External Debt (assets) / CAR (%)*	Below (50)%	1	1	1	1	1	2
	0-(50)%	1	1	1	1	2	3
	0-50%	1	2	1	2	3	4
	50-100%	2	2	2	3	4	5
	100-150%	2	3	3	4	5	5
	150-200%	3	4	4	5	5	6
	Above 200%	3	4	5	6	6	6

Positive adjustment factors	Negative adjustment factors
The following factors impact the initial external score by one category (see paragraph 76): • Sovereigns 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 thanks to significant liquid assets in the non-financial private sector. • Sovereigns with an actively traded currency running consistent current account surpluses.	The following factors impact the initial external score by one category (see paragraph 76): • Countries exposed to a risk of marked deterioration in external financing from: (i) sudden reduction in availability of official funding, (ii) sudden reduction of cross-border interbank lines, (iii) sudden loss of non-resident deposits, (iv) sudden 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 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. • Sovereigns with an actively traded currency running high current account deficits (consistently over 10% of CAR) or with large external short-term debt (exceeding about 100% of CAR). The following factor impacts the initial external score by two categories: • Sovereigns with an actively traded currency running very high current account deficits (consistently over 20% of CAR).

The external 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 current year estimate and the expected trend for the next two to three years.
¶Based on the average of the current year-estimate and three-year forecasts.
§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

75. Either of the following two conditions improves a sovereign's external score by one category as shown in 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 non-financial private sector external assets and income-earning net direct investment. This is as reflected by a net international investment position that is more favorable than the narrow net external debt position by more than 100% of CAR.

76. One of the following conditions weakens a sovereign's external score by one category as shown in table 5:

- The sovereign has an actively traded currency and displays a high current account deficit (consistently over 10% of CAR), likely indicating a structural problem (competitiveness or overleveraged domestic economy, or both), or its external short-term debt generally exceeds 100% of CAR.
- There is a risk of marked deterioration in the country's external financing, based on our qualitative assessment of the following factors: (i) a sudden reduction in the availability of official funding due to non compliance with the program's conditions (for countries reliant on an IMF or similar program); (ii) a sudden reduction of cross-border interbank lines resulting from perceptions of increasing stress in the financial sector; (iii) a sudden loss of non-resident deposits, due to the importance of non-resident deposits in relation to the size, concentration and vulnerabilities of the national banking system. This sudden loss might result from a wide-spread change in regulatory environment or country-specific developments hurting the country's reputation as a stable international financial center. This risk is further exacerbated if these non-resident deposits are on-lent onshore; (iv) a sudden 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 A) due to a narrow or concentrated export base (including commodity-exporting countries), as measured for instance by a standard deviation of the change in terms of trade that exceeds 10%, unless the country has a large net external asset position (over 50% of CAR) to compensate for this volatility.
- The country's low external debt or low external financing needs reflect debt constraints such as lack of market access, recent debt rescheduling (improving the amortization profile), debt forgiveness, or other similar characteristics, all of which suggest external vulnerabilities despite the seemingly strong ratios. Or the country has arrears on the official external debt.
- The country's balance of payments has significant stock-flow mismatches or other gaps/inconsistencies between the balance of payments and the international investment position.

e) Specific considerations for members of currency or monetary unions

77. Each sovereign that belongs to a currency or monetary union receives an external score based on its individual external performance, 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 currency union may vary greatly, even though they all share a common currency and common capital markets. Where a currency 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 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 be eased through exchange rate adjustments and

improvements may require an extended period of slow 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

78. A sovereign's participation in an official program, such as IMF programs, may affect the evolution of its external performance. Successful IMF programs may result in breaking a downward trend or in a gradual improvement in a country's external performance, which would be reflected through the forecasts used to assign the external score in table 5. IMF and other official programs are normally sought by sovereigns in countries with external funding pressures. 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.

4. Fiscal Score

79. 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.

80. 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

81. To determine a sovereign's fiscal performance and flexibility score, these criteria first derive an initial score based on the prospective change in nominal general government debt calculated as a percentage of GDP (see paragraph 82). Then the initial score receives a positive or negative adjustment by up to two categories, based on the factors listed in the table below. Those factors relate to a government's fiscal flexibility and vulnerabilities, as well as long-term trends (see paragraphs 85 to 88).

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
The following factors impact 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 ability to increase general government revenues and/or cut general government expenditures in the short term, typically by more than about 3% of GDP. This factor is based on a qualitative assessment of a government's policy and track-record and takes into account the various constitutional, political, and administrative impediments, as well as economic or social consequences of such measures.	The following factors impact 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 a potentially volatile sector, such as real estate or commodities. • Government's limited ability to raise general government revenues in the short term due to tax collection difficulties resulting from a large informal economy or low compliance. • Shortfalls in basic services and infrastructure (education, health, standard of living) that may 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 three-year forecast. When a sovereign's increase in general government debt as a percentage of GDP could correspond to two possible categories, then 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

82. The 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 believe that the former is a better indicator of fiscal performance rather than the reported deficit. The 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 A.

83. The change in general government debt used in table 6 is the average of the current-year estimate and forecasts for the next 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 (see section VI.C.2) 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 next three to five years, the score is based on the level of change in general government debt adjusted for the one-off items.

84. 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. 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

85. Fiscal flexibility provides governments with the "room to maneuver" to mitigate the effect of economic downturns or other shocks and to restore its fiscal balance. Conversely, government finances can also be subject to vulnerabilities or long-term fiscal challenges and trends that are likely to hurt their fiscal performance. The assessment of a sovereign's revenue and expenditure flexibility, vulnerabilities and long-term trends is primarily qualitative.

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

- The government is able and willing to raise revenues through increases in tax rates, in tax coverage, or through asset sales in the near term. Revenue flexibility is a qualitative assessment based on the government's policy or track-record, but also taking into account the potential constitutional, political, or administrative difficulties, as well as potential economic or social consequences of such measures.
- The government is able and willing to reduce general government expenditures in the near term despite the economic, social or political effect. Expenditure flexibility can be determined by looking at the level and trend of public sector wages and entitlement expenditures (pensions and health care), its 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 liquid assets available to mitigate the effect of economic cycles on its fiscal performance.

87. One of the following conditions weakens a sovereign's fiscal performance and flexibility score by one category as shown in table 6:

- The government's revenue base is volatile, stemming, for example, from a high reliance on real estate turnover taxes or royalties on the extractive industries (generally above 25% of revenues).
- The government has limited ability to increase tax revenues for instance due to a large shadow economy or low tax collection rates, making an increase in tax rates ineffective.
- The country has a significant shortfall in basic services to the population and infrastructure, which 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.

88. ***Age-related expenditures.*** Demographic change and population aging will be, and in some cases already are, major challenges for public finances in many countries. 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 to 20 years, and they are gradually increasing, rather than suddenly changing (see "Global Aging 2010: An Irreversible Truth," published Oct. 7, 2010). Consequently, in some cases, these potential drivers of future fiscal imbalances are far enough in the future to give governments sufficient time to take steps to remedy them. When this is not the case, age-related budgetary pressures are included in the assessment of a government's fiscal flexibility and long-term trends, and in our budgetary projections (see table 6 above).

b) Debt burden

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

90. The combination of those 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 (see table 7). 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%	60%-80%	80%-100%	>100%
	Below 5%	1	2	3	4	5
	5% - 10%	2	3	4	5	6
	10% - 15%	3	4	5	6	6
	Above 15%	4	5	6	6	6

Positive adjustments factors	Negative adjustments factors
For sovereigns in a net debt position, the debt score is one category better than the initial score if we assess that a government's refinancing needs are likely to be covered by official funding during the next two to three years (see paragraph 96).	For sovereigns in a net 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 94): • More than about 40% of gross debt is denominated in foreign currency, or the average maturity is typically less than three years. • Non-residents hold consistently more than 60% of the central government commercial debt. • The debt service profile is subject to significant variations. • A large share of the resident banking sector's balance sheet is central government debt (above 20%).

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 or a negative adjustment of up to three categories based on the net effect of the adjustment factors outlined above.

Notes
* Based on the average of the current year estimate and three-year forecasts.
¶ Based on the current year estimate and the expected trend for the next two to three years.

Debt level and cost of debt

91. 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.

92. The calculation of net general government debt (as defined in Appendix A) is generally more restrictive than national measures of net general government debt, as 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 balance of payment purposes and not for budgetary 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.

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

VI.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 by the credibility that it has established in past periods of stress. A sovereign with an unblemished track record of honoring debt obligations, a growing economy, and a strong domestic capital market providing fairly low-cost market-based financing may sustain a higher debt burden than a sovereign with lower debt-to-GDP ratios but higher and more variable debt-servicing burdens. Conversely, low debt burdens may reflect a lack of financing options and high interest costs, or, in some cases, debt restructurings, rather than fiscal flexibility. Some governments with relatively low debt to GDP levels have defaulted.

Access to funding and debt structure

94. For sovereigns in a fiscal debtor position, the debt score is one category worse than the initial score if at least two of the four conditions below apply:

- The central government debt has significant exposure to exchange rate movements and refinancing risk and, on average, more than 40% of the debt denominated in foreign currency or the average maturity is typically less than three years.
- Non-residents hold consistently more than 60% of the central government commercial debt.
- The debt service is vulnerable due to an amortization profile that varies by more than 5% of GDP one year to the next or due to possible acceleration from puts or rating triggers.
- The resident banking sector balance sheet has a large share of central government debt (above 20%), indicating a limited capacity of the national banking sector to lend more to the central government, without possibly crowding out private sector borrowing.

95. These measures help to assess a government's sensitivity to an increase in its refinancing costs and refinancing risk. They are based on data at the central government level rather than general government. This is because sovereign ratings address the ability of the central government to repay its own direct financial obligations, and not those of other public sector entities or local and regional governments included in the scope of general government data.

96. When bilateral or multilateral official creditors are or are expected to become an important component of a government's creditor base, the access to this official funding usually depends on the ability of the government to satisfy the conditions they impose. If the government is likely to satisfy those conditions and the official financing is likely to remain in place to cover the government's borrowing requirements and refinancing needs, the debt score is positively adjusted (see table 7).

Contingent liabilities

97. Contingent liabilities refer to obligations that have the potential to become government debt or more broadly affect a government's credit standing, if they were to 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 bank and non-bank financial institutions);
- Contingent liabilities related to nonfinancial public sector enterprises (NFPEs); and
- Guarantees and other off-budget and contingent liabilities.

98. In table 8, contingent liabilities related to the financial sector are assessed by estimating a country's banking sector's potential recapitalization needs in a stress scenario. This assessment does not include, however, the broader fiscal

cost for a sovereign that would derive from the economic downturn normally associated with a banking crisis and, more specifically, from the loss of tax revenues. Previous episodes of systemic banking crisis indicate that these costs may be significantly larger for a sovereign than the direct recapitalization cost, although to degrees that could vary widely.

99. As a result, the categories of contingent liabilities presented in table 8 below, 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 effect. This is why this estimate of contingent liabilities is used as a qualifier when assessing a government's debt burden in table 7, and not as a measure that could simply be added to the government's existing debt level.

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 60% and 80% of GDP
Very High	More than 80% of GDP

Notes:
* Calculation explained in paragraph 100 and after.
¶ Calculation explained in paragraph 104 and after.
NFPE – non financial public sector enterprises; GDP – gross domestic product

100. ***Contingent liabilities related to the financial sector.*** The largest of these contingent liabilities is the risk posed by a systemic crisis in 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 an 'A' stress scenario. Such 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 the stock market drop by up to 60%. This assessment involves several steps.

101. The first step consists in estimating the potential unexpected losses that a country's banking sector would incur over a three-year period under such stress scenario. This calculation uses the risk-adjusted capital (RAC) framework explained in "Bank Capital Methodology And Assumptions" published Dec. 6, 2010. The calculation of the RAC losses consist of estimating a bank's total risk-weighted assets by multiplying its main risk exposures by the relevant risk weights, stated as a percentage. Risk weights adjust the exposures to reflect our view of their relative degree of risk. This means, the greater the risk we see, the higher the risk weight we apply. The main exposure categories in our computation are credit risk, market risk, and operational risk. The relevant risk weights are based on the country's BICRA score, as these risks vary by jurisdiction (see "Request for Comment: Methodology For Determining Banking Industry Country Risk Assessments," published May 13, 2010). This measure is calculated by using Standard & Poor's data on rated banks and by extrapolating the estimated losses to the aggregated banking sector. For countries with no or a very limited number of rated banks that are not representative of the banking

industry, we use central bank data to build a simplified balance sheet for the aggregated banking sector and we apply risk-weighting similar to those of countries that have the most comparable banking sector.

102. The second step entails calculating the potential recapitalization needs for the banking sector under such stress scenario. This calculation is the difference between a banking system's aggregate total adjusted capital and the sum of (a) the above-defined RAC losses and (b) the capital needed in order to reconstitute a minimum capital base for the domestic banking sector. We have fixed this minimum risk-adjusted capital at 7% of risk-weighted assets, which corresponds to the minimum regulatory Common Equity Tier 1 capital under Basel III (unless the national requirements differ significantly from that level).

103. Some non-bank 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 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 using an analytical framework similar to that described above in paragraph 100.

104. ***Contingent liabilities related to non-financial public sector enterprises (NFPE).*** 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).

105. 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 in the international bond markets) and NFPE domestic market bond issuance, along the lines of paragraph 100. (NFPEs' borrowing from the banking system is excluded to avoid double counting.) 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 excludes the debt of enterprises that have a stand-alone credit profile (SACP) in investment grade (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 on our GRE methodology.

106. ***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

107. A sovereign's monetary score reflects the extent to which its monetary authority can support sustainable economic growth and attenuate major economic or financial shocks, thereby supporting sovereign creditworthiness. Monetary policy is a particularly important stabilization tool for sovereigns facing economic and financial shocks. Accordingly, it could be a significant factor in slowing or preventing a deterioration of sovereign creditworthiness in times of stress.

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

- The sovereign's ability to use monetary policy to address domestic economic stresses particularly through its control of money supply and domestic liquidity conditions.
- The credibility of monetary policy, as measured by inflation trends.
- The effectiveness of mechanisms for transmitting the effect of monetary policy decisions to the real economy, largely a function of the depth and diversification of the domestic financial system and capital markets.

109. On one end of the continuum, a score of '1' corresponds to a sovereign with extensive monetary flexibility where the monetary authority is able to lower interest rates effectively or even expand its balance sheet significantly, and therefore ease tight liquidity conditions without stoking inflationary pressures. This flexibility exists only for monetary authorities with high perceived policy credibility in countries with deep and diversified credit and capital markets. This type of extensive monetary flexibility provides important benefits to contain financial crises and their implications for sovereign creditworthiness.

110. On the other end of the spectrum, a score of '6' corresponds to a sovereign without meaningful monetary flexibility. Examples include sovereigns using the currency of another, sovereigns that apply extensive foreign exchange controls affecting the current account, and countries with persistent high inflation. A sovereign with these constraining features either has very limited or no flexibility to affect domestic economic conditions, including liquidity, or has a poor track record in meeting monetary objectives. Where a sovereign does not have an independent monetary policy, monetary conditions are mostly determined by factors outside the control of the domestic monetary authorities and therefore cannot provide any meaningful buffer against domestic financial stress.

111. Table 9 below presents the characteristics expected for each score category between 1 and 5 for this factor. A sovereign's initial score is derived from the majority of the sub-factors a), b), c) at a given level. When there is no majority, it is based the average score of those sub-factors. The initial score can be adjusted by one or two categories down based on the adjustment factors listed in the table.

Table 9A
Assessing A Sovereign's Monetary Score: Initial Score From 1 to 5
On a scale from 1 to 6, strongest to weakest

Initial Score	1	2	3	4	5
a) Exchange rate regime (see paragraph 112)					
National exchange rate regime	Free floating¶	Floating¶	Free floating¶ or floating¶ with a short track-record or challenged by the effect of interest rates on capital flows, or soft pegs other than conventional pegs¶	Conventional pegged arrangement¶ or peg¶ consistent with the monetary policy of the host country.	Hard peg (currency board)¶
b) Credibility of monetary policy (see paragraphs 113 to 115)					
Central bank operational independence & objectives	Strong and long-established track record (>10 years) of full operational independence, clear monetary policy objectives. Wide array of monetary instruments.	Track record of full operational independence. Market-based monetary instruments.	Wide-ranging operational independence, although shorter track record or less secure. Market-based monetary instruments, but heavier reliance on reserve requirements.	Operational independence but shorter or less secure than at better score levels. Market-based monetary instruments, but effectiveness may be untested in downside scenario.	Operational independence is limited by either lack of an effective transmission mechanism or perceived political interference.

Table 9B
Assessing A Sovereign's Monetary Score: Initial Score From 1 to 5
On a scale from 1 to 6, strongest to weakest

Initial Score	1	2	3	4	5
c) Effectiveness of transmission mechanisms via financial system and capital markets (see paragraphs 116 and 117) This sub-score is the average of the three factors below					
Central government issues meaningful amounts of local currency fixed-rate bonds with:	Original maturity >20 years, with market-determined rates, and an active secondary market.	Original maturity >10 years, with market-determined rates, and an active secondary market.	Original maturity between 5 and 10 or >10 years but over half of the debt is held by resident banks or public sector entities. Maturities may shorten in a crisis.	Original maturity less than 5 years or between 5 and 10 years, but over half the debt is held by resident banks or public sector entities. Maturities may shorten in a crisis.	Original maturity less than 5 years, held heavily by the resident banking system, incl. the central bank, or limited fixed-rate issuance.
Domestic claims in local currency	>100% of GDP	80 to 100% of GDP	60 to 80% of GDP	40 to 60% of GDP	< 40% of GDP
Market capitalization*	>75% of GDP	50 to 75% of GDP	50 to 25% of GDP	25 to 10% of GDP	< 10% of GDP

Table 9C
Assessing A Sovereign's Monetary Score: Adjustments To The Initial Scores '1' To '5' And Monetary Score of '6'
On a scale from 1 to 6, strongest to weakest

Negative adjustment factors to the monetary scores 1 to 5:
The following factors weaken the monetary score by one category: • The five-year average consumer price inflation (t-1 to t+3) is negative (deflation). • A significant share of deposits or loans are denominated in a foreign currency in parallel to the national currency (dollarization). • The sovereign is part of a monetary union (see paragraph 118). • The sovereign has imposed exchange restrictions on payments and transfers for current international transactions or engages in discriminatory currency arrangements. The following factor weakens the monetary score by two categories: • The sovereign is part of a monetary union and displays prolonged price and wage trends diverging strongly from the monetary union average (see paragraph 118). In addition, the monetary score is capped at '4' if the five-year average consumer price inflation (t-1 to t+3) is between 10% and 15% and at '5' if it is between 15% and 20%.
Monetary score '6'
A sovereign receives a '6' monetary score if its monetary conditions are mostly determined by external factors. This would be the case if either of the following factors apply: • The sovereign uses unilaterally the currency of another country as its local currency, i.e., exchange arrangement with no separate legal tender¶ and no arrangement with the government of the host currency. • Dollarization of deposits or claims exceeds 75%. • The five-year average consumer price inflation (t-1 to t+3) exceeds 20%.
Notes to Tables 9A, 9B, and 9C: * Source: BIS - Domestic fixed income instruments (public and private sector) ¶ Definitions from the IMF System of Classification of Exchange Rate Arrangements. While using those definitions, our classification of countries may differ from that of the IMF at times due to the periodicity of the IMF's updates.

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

112. 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 ability of the monetary authorities to conduct monetary policies effectively, as 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.

b) Credibility of the monetary policy and inflation trends

113. Effective monetary policy requires credible institutions conducting it. While "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 important for effective policy formulation and implementation. Independence of central banks is itself not a measurable variable, but it usually goes hand in hand with institutional settings such as the nomination of members of the monetary policy board for defined terms, the protection of board members 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, as reversing independent monetary policy conduct may become harder the more entrenched its status has become.

114. 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 (for example, implementing quantitative easing without triggering sharp increases in interest rates). Monetary authorities with weak track records rarely have this flexibility.

115. A chief measure of effectiveness of monetary policy is low and stable inflation, which is the primary objective of modern monetary policy. Low and stable inflation is also an important foundation for confidence in local currencies as a store of value and for the development of the financial sector. Consequently, sovereigns where persistently high consumer price inflation prevails receive the weakest score (see adjustment factors in table 9). On the other hand, for sovereigns with the highest level of monetary flexibility, inflation is expected to remain well contained (defined as averaging between 0% and 3% per year).

e) Monetary policy effectiveness and development level of financial system and capital markets

116. A financial system and capital markets are necessary to transmit monetary policy decisions to the real economy, because monetary policy tools, such as policy interest rates, 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 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. Financial system and capital market developments can be assessed by evaluating the following factors:

- A government's ability to issue, at market-determined rates, long-term fixed-rate nominal local-currency bonds, which provides an indication of the confidence in a market's long-term liquidity. Better scores are associated with a higher proportion of local-currency fixed-rated bonds with a long maturity.
- The existence of an active money market and corporate bond market, and a developed banking system. The availability of multiple sources of financing, both through capital markets and the banking system, reduces the risks of a funding squeeze when one funding channel faces difficulties.
- The share of bank intermediation in local currency, because monetary policy tools are more effective if a country actively uses its local currency for domestic economic and financial transactions.

d) Case of sovereigns in a monetary union

118. The monetary score for sovereigns in monetary unions result from a two-step process. The first step assigns an initial score to reflect our view of the effectiveness of the monetary policy of the union as a whole, based on the characteristics in table 9. The second step weakens this initial score by one category, reflecting the lower flexibility that members of a monetary union generally have 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. The score would be worse by two categories rather than one where the economy of a sovereign in a monetary union is unsynchronized with the zone at large and displays prolonged price and wage trends diverging strongly from the union average. In other words, the union's monetary policy stance would be detrimental to a particular sovereign's creditworthiness.

119. In the case of a sovereign that leaves a monetary union, the monetary score would be based on the characteristics outlined in table 9.

D. Determining A Sovereign Local-Currency Rating

120. A sovereign's local-currency debt may be rated above its foreign-currency rating. 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.

121. One might ask why sovereign local-currency ratings are not all rated 'AAA' given sovereigns' extensive powers within their own borders, including the ability to print money. While 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.

122. The sovereign local-currency rating is between zero and 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.
- Political and fiscal flexibility. If 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.

123. The combination of those factors and effect on a sovereign's local-currency rating is outlined in table 10 below.

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 political 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:
*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."
§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 stays in the 'B' category, thereby increasing the notching differential.

124. ***Issue-specific considerations.*** There are two cases when our rating on a local-currency debt instrument might differ from the sovereign local-currency rating:

- 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 debt holders exchanging the local-currency debt service proceeds into foreign currency. A typical example of this kind of instrument was the dollar-indexed "tesobonos" that the Mexican government issued in its domestic market in the 1990s.
- When a government issues local-currency debt in the global capital markets and the debt documentation states that the obligations rank pari passu with foreign-currency obligations. This issue receives the same rating as that on the sovereign's foreign-currency debt.

125. The approach does not reverse, however, for foreign-currency-denominated debt issued in domestic markets. Such debt always receives a foreign-currency rating to such debt. 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.

VII. APPENDICES

Appendix A. Glossary Of Key Indicators And Data Sources

126. This section contains short definitions of the key economic terms used in tables 3 through 10. Most of these measures are published twice a year in "Sovereign Risk Indicators," as well as in annual reports on individual sovereigns.

127. Standard & Poor's draws its data for its analyses from both national and supranational sources. The data are found in the national income accounts, fiscal accounts, monetary survey, balance of payments, and international investment position compiled by national sources such as the national statistical agency, the central bank, the ministry of finance, or other key line ministries. Supranational sources most commonly 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 US 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.
Domestic claims (% change)	Percent change in outstanding resident depository institution claims (at year end) on the resident private sector and nonfinancial public sector enterprises (NFPEs). May include claims by resident non-depository institutions, where these institutions are of systemic importance.
Monetary base	The monetary base consists of 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 + factor income earned by residents from nonresidents + official and private transfers to residents from nonresidents.
	In which:
	Factor income = compensation of employees + investment income earned by residents from nonresidents
Gross external financing needs (% of CAR plus usable reserves)	= Gross external financing needs/ (CAR + usable reserves) .
	In which :
	Gross external financing needs = current account payments + plus short-term external debt at the end of the prior year + non-resident deposits at the end of the prior year + long term external debt maturing within the year).
	In our projections of gross external financing needs, we make in adjustment in cases where we expect a shift in the portfolio of investments due to weakening economic fundamentals or changes to the regimes for taxes or capital repatriation.
Narrow net external debt/CAR (%)	
	= Narrow net external debt/CAR
	In which :

Table 11

Glossary Of Key Indicators In Standard & Poor's Sovereign Rating Methodology (cont.)	
	Narrow net external debt = stock of foreign and local currency public and private sector borrowings from nonresidents - liquid external assets
	In which:
	Liquid external assets =
	official foreign exchange reserves
	+ other liquid assets of the public sector held by non-residents
	+ resident financial sector loans to, deposits with, or investments in nonresident entities.
	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.
Reserves	Reserves are monetary authority liquid claims in foreign currency (including gold) on nonresidents.
Foreign exchange usable reserves	= foreign exchange reserves - 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 longstanding fixed peg with another currency (because the reserve coverage of the base is critical to maintaining confidence in the exchange-rate link).
Current account balance/CAR (%)	= current account balance/CAR
	In which:
	Current account balance = exports of goods and services - imports of the same + net factor income + official and private net transfers, as a percentage of current account receipts.
Net foreign direct investment (FDI)/GDP (%)	= (direct investment by nonresidents - residents' direct investment abroad)/GDP
	Net FDI in the tradable sector = net FDI - investments in the non-tradable sector
Net external liabilities/CAR (%)	= net external liabilities/CAR
	In which:
	Net external liabilities = (total external debt + stock of direct and portfolio equity investment from abroad) - (total external assets)
	In which:
	Total external assets = official reserves + other public sector assets held by nonresidents + resident financial institutions' assets held by nonresidents + resident non-financial sector assets held by nonresidents + the stock of direct and portfolio equity investment placed abroad.
Terms of trade	= exports price/imports price
	In other words, it means what quantity of imports can be purchased through the sale of a fixed quantity of exports.
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 - general government debt at prior year-end)/Annual GDP
	For the calculation of the change in gross general government debt, the following items are adjusted:
	- Changes in cash reserves/deposits are deducted for governments that pre-fund deficits or that issue debt for the purpose of market presence rather than budget funding.
	- Changes in debt that are due to debt relief or debt restructuring are deducted.

Table 11

Glossary Of Key Indicators In Standard & Poor's Sovereign Rating Methodology (cont.)	
	- Large shifts in exchange rates that are not expected to be repeated
	- Quasi-fiscal activities that represent debt-like obligations are added (e.g., leases, project financing operations).
Net general government debt/GDP (%)	=(Gross general government debt - general government financial assets)/GDP
	Gross general government debt includes the debt of government's asset management companies used for the resolution of banks or other private sector bail-outs
General government financial assets	General government financial assets =
	general government deposits in financial institutions (unless the deposits are a source of support to the recipient institution)
	+ minority arms-length holdings of incorporated enterprises that are widely-traded
	+ balances in defined-benefit 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 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 (%)	= Gross debt incurred by national, regional, and local governments/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/general government revenues
Central government debt service / central government revenues (%)	interest + principal repayment on central government debt/central government revenues

Appendix B. Application Of Standard & Poor's Ratings Definitions To Sovereigns Emerging From Default

128. A sovereign that undertakes a debt rescheduling qualifying as a distressed exchange under our criteria would receive a 'SD' rating (see "Rating Implications Of Exchange Offers And Similar Restructurings," published May 12, 2009). However, emergence from default also can be a complicated analytical issue for a sovereign. Sovereigns often undertake debt restructurings through exchange offers that, we find, rarely close the books on the restructured debt. For a number of reasons, ranging from difficulty in contacting all debt holders to holdouts seeking payment in accordance with original terms, we have observed that participation in sovereign distressed debt exchanges usually does not reach 100%. This stands in contrast with corporate debt restructurings in the U.S. and in many other jurisdictions, where all obligations are typically addressed in bankruptcy reorganization. A corporate reorganizing outside of bankruptcy generally must continue payments on the holdouts' debt or face the prospect of an involuntary bankruptcy filing.

129. Less common among sovereign defaults is the repudiation of debt, which most often follows a revolutionary change of regime (as occurred in the Soviet Union in 1917, China in 1949, and Cuba in 1960). Standard & Poor's takes no position on the propriety of government debt defaults, repudiations, and the like. Nor do we take a position on the course of negotiations (or the absence thereof) between creditors and the government about working out debt that is repudiated, or on the parameters of any settlements between creditors and governments that could occur. Instead, Standard & Poor's places the defaulted obligations in "selected default" but its issuer credit rating reflects its current

opinion of the creditworthiness of a sovereign government on a forward-looking basis. Historical defaults inform our view to the extent that they suggest how political and economic risks could affect sovereign decision-making in the future.

130. In general, Standard & Poor's sovereign ratings apply only to debt that the present government acknowledges as its own. If there is no resolution of a default through the courts or by the parties involved, Standard & Poor's eventually withdraws the default ratings based on the diminished prospects for resolution and the lack of relevance of the default ratings in the context of the market. For example, Standard & Poor's has no rating on direct and guaranteed debt of the government of China issued prior to the founding of the People's Republic of China in 1949 because we first rated China in 1992, long after the new government repudiated pre-1949 debt.

Appendix C. Example Of Application Of The Methodology For A Sovereign Receiving Official Funding

131. Paragraph 34 explains that the effect of this official funding on the recipient government's rating is reflected in three of the five key rating factors: the political score (see subsection VI.C.1.e)), the external score (see subsection VI.C.3.e)) and the fiscal score (see paragraph 96 and table 7). The purpose of this appendix is to illustrate this approach through an example. The example below illustrates a case of fiscal support program, aiming to cover a government's refinancing needs (as opposed to a case of balance of payment support aiming to address a country's external funding pressures).

132. Sovereign X has a relatively wealthy but slowly growing economy (leading to an economic score of '3'). It displays very large external imbalances (leading to an external score of '6'), large fiscal deficits and a very high debt burden (leading to a fiscal score of '6'), and little monetary flexibility but only modest inflationary risk (leading to a monetary score of '4'). Sovereign X is faced with a sharp rise in its funding costs and finds it difficult to refinance its debt at a sustainable cost. In this context, it benefits from a lower-cost loan from an international public institution that covers its refinancing needs over the next three years. Continuous access to this loan entails conditions, such as sovereign X committing to implementing a series of economic reforms and fiscal consolidation measures. The effect of this support program on sovereign A's rating could follow different scenarios:

- Scenario 1. We believe that this program improves the predictability and effectiveness of X's policy making. It positively affects its political score which is assessed at '3' based on table 3. At the same time, we estimate that A is likely to meet the conditions attached to the loan, which covers its refinancing needs over the next two to three years. As a result, its debt score is '5' based on table 7. External liquidity is unlikely to improve sufficiently to affect the external score of '6.' In this case, sovereign X's indicative rating level appears as 'bb' in table 2 (before any exceptional adjustment factor).
- Scenario 2. We believe that sovereign X's commitment to this program is not credible to the investors or the population, such that policy outcomes or access to funding becomes more uncertain. This is reflected in the political score of '4' based on table 3, while the debt score is '6' based on table 7. External liquidity is unlikely to improve sufficiently to affect the external score of '6'. In this case, X's indicative rating level appears as 'b' in table 2 (before any exceptional adjustment factor).

RELATED CRITERIA AND RESEARCH

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- Sovereign Government Ratings Methodology Addendum For Sovereigns With Limited External Data, Nov. 7, 2011
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- Rating Government-Related Entities: Methodology And Assumptions, Dec. 9, 2010
- Stand-Alone Credit Profiles: One Component Of A Rating, Oct. 1, 2010

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.