

Criteria | Governments | Request for Comment:

Sovereign Government Rating Methodology And Assumptions

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RELATED CRITERIA AND RESEARCH

Sovereign Government Rating Methodology And Assumptions

1. Standard & Poor's Ratings Services is requesting comments on its proposed updated methodology for rating sovereign governments.
2. The proposed criteria update aims to incorporate the information derived from the 2008-2009 global recession, particularly regarding the potential impact of financial sector difficulties on governments' fiscal profiles.
3. Our proposal provides additional clarity on how we determine our issuer credit ratings on sovereigns by introducing what we believe is a finer calibration of the five major rating factors we use in our sovereign analysis and by articulating how we combine these factors to derive our sovereign ratings. We also propose specific considerations on the credit analysis of sovereigns in monetary unions.
4. The proposed methodology, if adopted, would replace Standard & Poor's current methodology explained in "Sovereign Credit Ratings: A Primer," published May 28, 2008.
5. We base these proposed criteria on "Principles Of Corporate And Government Ratings," published June 26, 2007.

SCOPE OF THE REQUEST FOR COMMENT

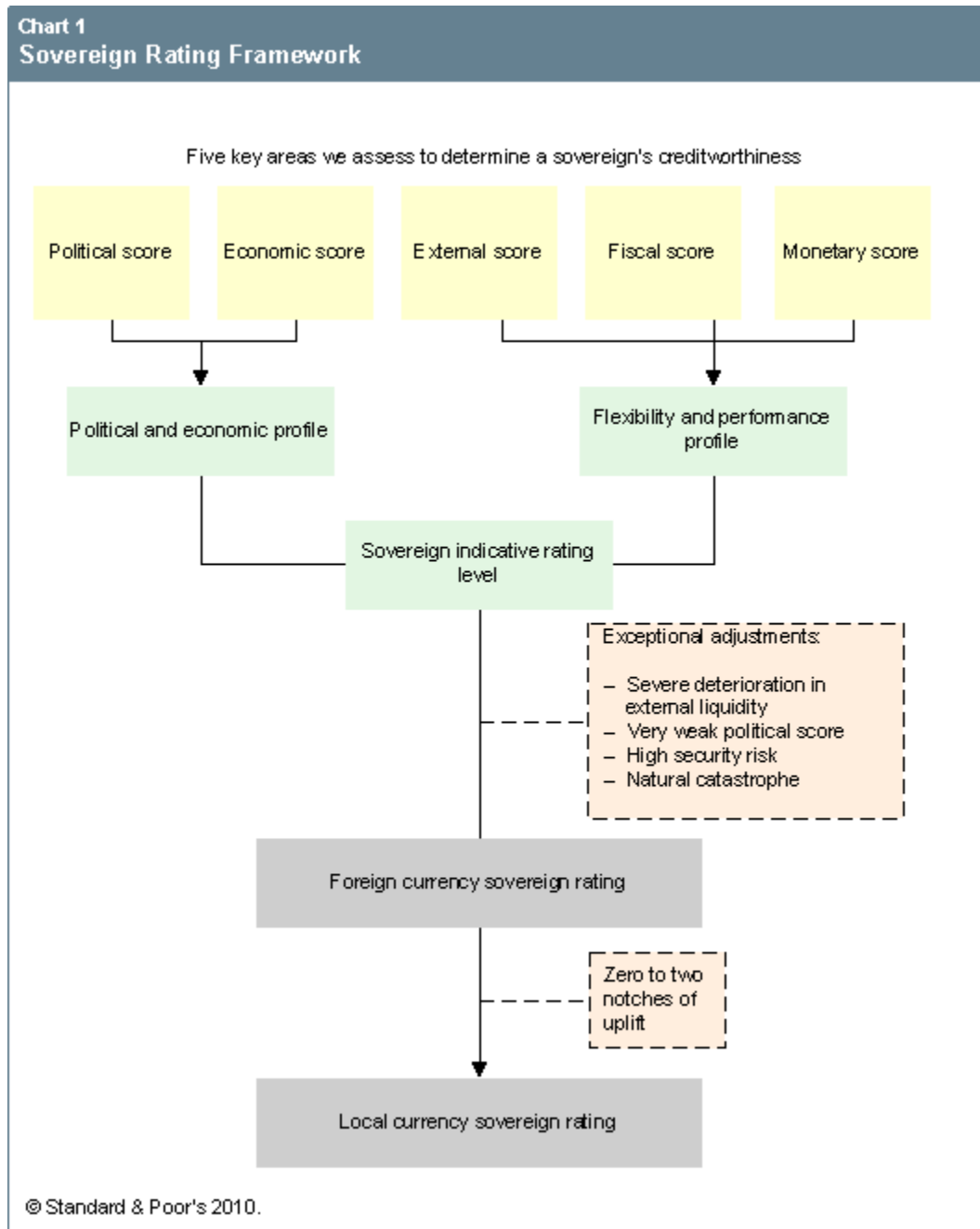
6. This request for comment applies to ratings on all sovereign governments (also known as central governments).
7. All references to sovereign ratings in this article pertain to our view of a sovereign's ability and willingness to service financial obligations to nonofficial, in other words commercial, lenders. Our ratings do not address creditworthiness with respect to:
 - Obligations to other governments (such as the Paris Club debt or debt to local and regional governments);
 - Obligations to supranationals, such as the International Monetary Fund (IMF) or the World Bank; and
 - Obligations that a sovereign government guarantees and that do meet our criteria for sovereign guaranteed debt (see "Rating Sovereign-Guaranteed Debt," published April 6, 2009).
8. Moreover, we do not address post-default recovery prospects and their impact on specific issue ratings in this article. We address them in a separate criteria article "Introduction Of Sovereign Recovery Ratings," published June 14, 2007.
9. In this article, "rating" refers to the issuer credit rating, if not otherwise qualified.

PROPOSAL SUMMARY

10. We are proposing to update our criteria ("criteria" and "methodology" are used interchangeably herein) for rating sovereign governments to provide additional clarity on how we determine our issuer credit ratings on sovereigns. We are introducing what we believe is a finer calibration of the five major rating factors we use in our sovereign analysis and are articulating how we combine these factors to derive our sovereign ratings. We also propose specific

considerations on the credit analysis of sovereigns in monetary unions.

11. The proposed criteria update aims to incorporate the information derived from the 2008-2009 global recession, particularly regarding the potential impact of financial sector difficulties on governments' fiscal profiles.
12. The proposed methodology addresses the factors that, in our opinion, affect a sovereign government's willingness and ability to service its debt on time and in full.
13. Standard & Poor's analysis of a sovereign's creditworthiness involves several steps, which we summarize in the chart below.



14. We propose to start by assessing the five key factors that form the foundation of our sovereign credit analysis:
 - Institutional effectiveness and political risks, for which we assign a political score;
 - Economic structure and growth prospects, for which we assign an economic score;
 - External liquidity and international investment position, for which we assign an external score;
 - Fiscal performance and flexibility, as well as debt burden, for which we assign a fiscal score; and
 - Funding and monetary flexibility, for which we assign a monetary score.
15. The score that we propose to assign to each of these factors is on a six-point numerical scale from '1' (the strongest) to '6' (the weakest). To derive our scores, we apply a series of quantitative factors and qualitative considerations that we describe in section C below. In doing so, we analyze a sovereign's performance over past economic and political cycles, as well as factors we believe suggest greater or lesser fiscal and monetary flexibility over the course of future economic cycles.
16. We propose to group these five scores into two profiles, combining the political and economic scores to form the sovereign's "political and economic profile," and the external, fiscal, and monetary scores to form its "flexibility and performance profile." We then combine the two profiles in order to determine our sovereign foreign currency rating, after factoring in exceptional adjustments when applicable (see section B).
17. Finally, we propose to assign a sovereign local currency rating, based on zero to two notches of uplift with respect to the sovereign foreign currency rating, following our methodology outlined in section D. Sovereign local currency ratings tend to be higher than sovereign foreign currency ratings because we generally view local currency creditworthiness to 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 is thus ceding monetary and exchange-rate policy to a common central bank, or when it uses the currency of another sovereign, we equalize the local currency rating with the foreign currency rating.
18. The main changes between this criteria proposal and our current sovereign rating methodology follow:
 - We further explain how we assess and score the five main factors we analyze to evaluate a sovereign's creditworthiness.
 - We introduce a new step to explain how we combine the scores to determine the sovereign's foreign currency rating.
 - We develop specific considerations for rating sovereigns in monetary unions.
 - We explain how we assess refinancing risk for sovereign governments and how we reflect in our ratings the potential support from other governments or multilateral institutions.
 - We propose to reduce the maximum notching differential between a sovereign foreign currency rating and local currency rating to two notches, from three previously.

SPECIFIC QUESTIONS FOR WHICH WE ARE SEEKING A RESPONSE

19. Standard & Poor's is seeking market feedback on its proposed methodology and responses to the following questions:
 - Does this methodology incorporate the key factors affecting sovereign creditworthiness? Do you agree with the

main variables that we are proposing to use for assessing the different factors? If not, what is missing and what is extraneous?

- Does our explanation of this methodology provide sufficient clarity on the process and standards we apply to evaluate and weight the factors that in our view generally affect sovereign creditworthiness? If not, in which areas would more transparency be beneficial?
- Do you agree with the proposed changes listed in paragraph 18 above?

RESPONSE DEADLINE

20. We encourage interested market participants to submit written comments on the proposed criteria by Feb. 28, 2011. Please send your written comments to CriteriaComments@standardandpoors.com. Once the comment review period is over, we will review the comments and publish the updated criteria.

IMPACT ON OUTSTANDING RATINGS

21. We expect few changes to existing foreign currency sovereign ratings. When gaps between foreign and local currency sovereign ratings are wide, we may lower sovereign local currency ratings by one or two notches. In cases where we lower a sovereign local currency rating, we could lower our ratings on other issuers, such as government-related entities (GREs).

PROPOSED METHODOLOGY

A. Standard & Poor's Sovereign Rating Calibrations

22. We calibrate our sovereign ratings criteria on our analysis of the history of sovereign defaults, the impact 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.
 1. History of sovereign defaults
23. The main sources that we have used to review the history of sovereign defaults are:
 - 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 not rated sovereigns since 1824;
 - "Sovereign Defaults And Rating Transition Data 2009 Update," published March 17, 2010, which covers the performance of Standard & Poor's sovereign ratings, both in terms of transition and default, over the period 1975 to 2009; and
 - 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. We note, however, that the book's broader definition of default does not consistently coincide with our definition.
24. Based on the above studies, we observe that since the beginning of the 19th century, most sovereign defaults have occurred because the defaulting government's past policies left it ill prepared to face an unexpected turn of events (in other words, a shock). Wars, regime change, other forms of political instability, or sharp deterioration in terms of

trade are examples of shocks. We also note that some defaults followed governments' historic shift from the gold standard, under which governments backed their paper currencies with gold at fixed exchange rates, to more varied monetary standards. 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 growth in national income, then investors' perceptions have tended to change quickly. This has, in turn, raised financing costs and left governments with default as the preferred policy response.

2. Impact of the 2008-2009 global recession

25. The recent global recession has so far not triggered a wave of many sovereign defaults, although this chapter in economic history is not over yet. However, the number of downgrades of sovereigns we rate, 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). It underlined the importance of the relative external and fiscal performance inside a monetary union, which we are proposing to reflect in our scoring calibration within our sovereign rating criteria. Those sovereigns more reliant on funding sourced outside their national boundaries and those that have experienced unexpected deterioration in their government borrowing requirements or their medium-term growth prospects have witnessed a sharp rise in their funding costs relative to that of other EMU members.

3. Credit strength of sovereigns relative to other types of issuers

26. Central governments have unique powers, such as the ability to raise taxes, set laws, or control the supply of money, which, in our opinion, can 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 2009 and 11% in the 'AA' category, compared with about 1% and 8%, respectively, for other corporate issuers. As of the date of this request for comment, Standard & Poor's rates 126 sovereign governments. Taking the 192 members of the U.N. and territories and other states outside the U.N. into account, we estimate the global sovereign universe at over 200 governments. If Standard & Poor's rated all sovereign governments, we believe that the proportion of ratings in the lower categories would likely rise.
27. Standard & Poor's calibrates its sovereign rating criteria based on the above observations and on its general framework for the idealized behavior of its credit ratings over time through economic cycles. We outline our framework in three articles:
- "Understanding Standard & Poor's Rating Definitions," published June 3, 2009, hereafter called the "stress scenario article";
 - "Credit Stability Criteria," published May 3, 2010; and
 - "The Time Dimension Of Standard & Poor's Credit Ratings," published Sept. 22, 2010.
28. We believe that the proposed calibration of sovereign ratings in table 2 in the section below achieves increased comparability with other Standard & Poor's ratings across different sectors.

B. Determining A Sovereign Foreign Currency Rating

29. Standard & Poor's proposed 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	
Factors we assess	Score we assign, on a 1-6 scale, with '1' being 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
Funding and monetary flexibility	Monetary score

Source: Standard & Poor's.

30. We propose to assign a score to each factor, using a six-point numerical scale from '1' (the strongest) to '6' (the weakest). We base our scores on a series of quantitative factors and qualitative considerations that we describe in section C below. Then, we propose to combine the scores into two profiles to determine the sovereign foreign currency rating.

The political and economic profile

- This profile reflects our view regarding the resilience of a country's economy, the effectiveness of the government's institutions, and the coherence of its policies to support economic growth. We propose to derive the profile from the average of our political score (see section C.1) and the economic score (see section C.2).

The flexibility and performance profile

- This profile reflects our view regarding 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, funding, and monetary flexibility. We propose to derive the profile from the average of our external score (see section C.3), fiscal score (see section C.4), and monetary score (see section C.5).

31. We then propose to combine the two profiles to determine a sovereign indicative rating level (see table 2).

Table 2
Determining A Sovereign Indicative Rating Level
 On a scale from 1-6, strongest to weakest

We combine the political and economic profile and the flexibility and performance profile to determine a sovereign indicative rating level:

Flexibility and performance profile	Political and economic profile										
	Superior	Extremely strong	Very strong	Strong	Moderately strong	Intermediate	Moderately weak	Weak	Very weak	Extremely weak	Risky
Extremely strong	AAA	AAA	AA+	AA	AA-	A+	A	N/A	N/A	N/A	N/A
Very strong	AAA	AAA	AA	AA-	A+	A	A-	BBB+	N/A	N/A	N/A
Strong	AAA	AA+	AA	AA-	A	A-	BBB+	BBB	BBB-	N/A	N/A
Moderately strong	AA+	AA	AA-	A+	A	BBB	BBB-	BB+	BB	BB-	B+
Intermediate	AA	AA-	A+	A	BBB+	BBB-	BB+	BB	BB-	B+	B
Moderately weak	AA-	A+	A	A-	BBB	BB+	BB	BB-	B+	B	B
Weak	A	A-	BBB+	BBB	BB+	BB	BB-	B+	B	B-	B-
Very weak	N/A	BBB	BBB-	BB+	BB	BB-	B+	B	B	B-	B-
Extremely weak	N/A	BB	BB-	B+	B	B-	B-	B-	CCC/CC	CCC/CC	CCC/CC

NOTE: We derive the political and economic profile from the average of our political score and economic score. We derive the flexibility and performance profile from the average of our external score, fiscal score, and monetary score. For further details, see paragraph 29 in the article text.

Political and economic profile legend

- 1 - superior
- 1.5 - extremely strong
- 2 - very strong
- 2.5 - strong
- 3 - moderately strong
- 3.5 - intermediate
- 4 - moderately weak
- 4.5 - weak
- 5 - very weak
- 5.5 - extremely weak
- 6 - risky

Flexibility and performance profile legend

- 1-1.7 - extremely strong
- 1.8-2.2 - very strong
- 2.3-2.7 - strong
- 2.8-3.2 - moderately strong
- 3.3-3.7 - intermediate
- 3.8-4.2 - moderately weak
- 4.3-4.7 - weak
- 4.8-5.2 - very weak
- 5.3-6 - extremely weak

N/A--Not applicable. We view these combinations as mutually exclusive. For instance, we consider that a government that runs a policy resulting in a "very weak" flexibility and performance profile would not qualify for a "1" political score as defined in table 3A. Similarly, a government with an "extremely weak" political and economic profile would not, in our opinion, be in a position to present a flexibility and performance profile better than "moderately strong."

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- 32. 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 'A+'.
- 33. We see possible exceptions where we propose that a sovereign foreign currency rating might differ by more than one notch compared with the indicative rating level:
 - We propose to assign a sovereign 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 (see tables 5 and 6). For instance, the rating would be one notch lower if we expected the ratio of the current account deficit as a percentage of current account receipts (see table 5) or the

ratio of gross external financing needs as a percentage of current account receipts and usable foreign exchange reserves (see table 6) to reach more than about 1.5x the level commensurate with the benchmark for the weakest external liquidity in those tables. The rating would be two notches lower if we expected them to reach more than twice that level. We propose this adjustment because historical observations show that a steep deterioration in external liquidity preceded numerous sovereign debt crises. We believe this is because external financing may present risks that can compound more quickly than is typically the case with domestic financing.

- We propose to cap a sovereign foreign currency rating in the 'B' category when the political score is '6' (see table 3B). Characteristics associated with a '6' score include what we view to be a weak credit culture and limited transparency and reliability of information. We give particular weight to these factors because the track record of sovereign defaults suggests that they are among the main drivers of default in the sector. For more information on rated sovereign default history, see Standard & Poor's "Sovereign Defaults And Rating Transition Data 2009 Update," published March 17, 2010.

34. Furthermore, we have identified two circumstances in which the deviation between the sovereign indicative rating level and the foreign currency rating is likely to be wider than one notch but also more difficult to anticipate with precision:

- 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 impact on the sovereign's credit characteristics. History provides several examples of defaults, such as former Yugoslavia, linked to a sovereign government ceasing to exist following regime change or a war. In the other cases when the risk of conflict is long-standing but not imminent, such as in the Persian Gulf, we propose to reflect this through an adjustment of the political score (see paragraph 48).
- Natural catastrophes. The occurrence of a low-frequency, high-severity natural catastrophe could lead to a material deviation from the indicative rating level depending on the extent of damages and the impact on the country's fundamentals. An extreme example is the financial costs for Grenada, linked to Hurricane Ivan damage (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, we reflect this vulnerability in our analysis of its economic structure and the potential volatility of its economic output. We also assess 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.

C. Assessing The Five Main Sovereign Rating Factors

35. Standard & Poor's assesses each of the key five factors based on a combination of quantitative and qualitative elements. Some factors, such as the robustness of political institutions, we approach primarily qualitatively, while we analyze others, such as the economy, debt, and external liquidity using quantitative indicators.

1. Political Score

36. Our political score summarizes our view of the effectiveness of a government's institutions in responding to economic or political shocks and in stabilizing the sovereign's credit fundamentals during downturns.

37. We propose to base our sovereign political score on our qualitative analysis of the following factors:
- The effectiveness and predictability of the sovereign's policymaking and political institutions;
 - The transparency and accountability of institutions, data, and processes, as well as the coverage and reliability of statistical information;
 - The government's payment culture; and
 - Internal and external security risks.
38. Our proposed criteria combine the first two factors we analyze to determine the political score: effectiveness and predictability of the sovereign's policymaking and political institutions; and transparency and accountability of institutions, data, and processes (see tables 3A and 3B). The two tables contain the characteristics that we would generally expect to see at different levels for this score, although a government might exhibit a majority but not all of them. Our analysis of the last two factors, payment culture and security risks, would lead us to make a negative adjustment to the initial score we derive according to the tables (see paragraphs 45 to 48).

Table 3A Assessing A Sovereign's Political Score <i>On a scale from 1-6, strongest to weakest (scores 1-3)*</i>		
For the initial political score, we assess the two factors below:		
Score	Primary factor: effectiveness and predictability of policymaking and political institutions¶	Secondary factor: transparency and accountability of institutions, data, and processes¶
1	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • 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	<p>Any of the following apply:</p> <ul style="list-style-type: none"> • Generally strong but shorter track record of policies that deliver economic growth, prosperity, and sustainable public finances. • Weaker ability to implement reforms, due to a slow or complex decision-making process. • Shifts in the political environment or institutional framework that raise uncertainties about the ability to consistently sustain public finances over the long term. 	<ul style="list-style-type: none"> • Generally effective checks and balances. • 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. • Generally timely and reliable public finance data and statistical information.
3	<ul style="list-style-type: none"> • Generally effective policymaking in recent years, promoting economic growth and sustainable public finances. But policy shifts are possible because of changes in administration or the potential destabilizing influences of underlying socioeconomic or significant long term fiscal challenges. 	<ul style="list-style-type: none"> • Evolving checks and balances between various institutions. • Generally unbiased enforcement of contracts and respect for the rule of law. • Statistical information that may be less timely than for the higher categories or subject to material revisions. • Somewhat restricted information flow and open public debate.
<p>*This table describes the characteristics we assess for initial political scores of 1-3, or the top half of our 1-6 scale, and should be read in conjunction with table 3B. Please see table 3B below for the characteristics we assess for scores 4-6, or the lower half of our scale. Table 3B also details the potential adjustments we apply to the initial political score, as derived according to both tables 3A and 3B.</p> <p>¶See table 3B for references to our definition of this factor.</p> <p>© Standard & Poor's 2010.</p>		

Table 3B Assessing A Sovereign's Political Score <i>On a scale from 1-6, strongest to weakest (scores 4-6)*</i>		
For the initial political score, we assess the two factors below:		
Score	Primary factor: effectiveness and predictability of policymaking and political institutions¶	Secondary factor: transparency and accountability of institutions, data, and processes¶
4	Either of the following: <ul style="list-style-type: none"> • Less than effective policymaking track record of delivering economic growth and sustainable public finances. • Limited predictability of future policy responses, due to recently changed or untested political institutions, a highly polarized political landscape, highly centralized decision making, or an uncertain or untested succession process. 	<ul style="list-style-type: none"> • More uncertain checks and balances between institutions, enforcement of contracts, and respect for the rule of law than in the higher categories. • Relatively weak transparency, owing to interference by political institutions in the free dissemination of information, material gaps in data, or reporting delays.
5	Either of the following: <ul style="list-style-type: none"> • Poor track record of maintaining consistent economic growth and sustainable public finances. • Policy choices or political conditions that weaken political capability and willingness to maintain timely debt service. 	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • A weak credit culture, resulting in highly uncertain political capability and willingness to maintain timely debt service. 	<ul style="list-style-type: none"> • Unassured enforcement of contracts and respect for the rule of law. • Impaired transparency, owing to several of the following factors: frequent and material data revisions, high levels of perceived corruption of political institutions, and suppressed information flows.
<p>For the final political score, we adjust the initial score for a government's debt payment culture and a country's internal and external security risks:</p> <p>When a government's debt payment culture represents a credit risk, we cap the final political score at '6' (see paragraph 45 in the article text).</p> <p>When we believe that there is a persistent risk of domestic conflict or war, but we do not expect the risk to materialize within 3-5 years, we lower the initial score by one category. If we believe the risk is imminent or rapidly rising, we could adjust the final political score to a greater extent and take a negative rating action (see paragraphs 48 and 33).</p> <p>*This table describes the characteristics we assess for initial political scores of 4-6, or the bottom half of our 1-6 scale, and should be read in conjunction with table 3A. Please see table 3A above for the characteristics we assess for scores 1-3, or the top half of our scale.</p> <p>¶For our definitions of effectiveness and predictability of policymaking and political institutions, and of transparency and accountability of institutions, data, and processes, see paragraphs 39-40 and 41-44, respectively.</p> <p>© Standard & Poor's 2010.</p>		

a. Effectiveness and predictability of policymaking and political institutions

39. We propose to base our analysis of the effectiveness and predictability of policymaking and institutions on:
- The track record of the authorities in managing past political and economic and financial crises and delivering economic growth;
 - Our view of their ability and willingness to implement reforms to address fiscal challenges, such as healthcare or pensions, to ensure sustainable public finances over the long term; and
 - The predictability in the overall policy framework or the developments that may affect policy responses to future crisis or lead to significant policy shifts.
40. In our view, effective policymaking and stable political institutions enable governments to proactively address periods of economic distress and to take measures to correct imbalances. This helps to sustain long-term growth prospects and limits the risk of sharp deterioration of the 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 or high concentration of power are factors that can pose risk to institutional stability, and in turn lead to substantial policy shifts and affect the continuity of key credit characteristics.

b. Transparency and accountability of institutions, data, and processes

41. We propose to base our analysis of the accountability and transparency of institutions, data, and processes on:
- The existence of checks and balances between institutions;
 - Our perception of the level of corruption in the country, which in our experience correlates strongly to the accountability of the institutions;
 - Unbiased enforcement of contracts and respect for the rule of law (especially in the area of property rights), which in our experience correlates closely to respect of creditors' and investors' interests; and
 - 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.
42. As part of the last point, we propose to make a qualitative assessment of the quality and consistency of the data we use, which include national income accounts, fiscal accounts, monetary surveys, public enterprise accounts, the balance of payments, and the international investment position. Those data are based on estimated values and are, in our view, 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), our criteria would call for interpreting the data in light of these discrepancies as reflected in tables 3A and 3B.
43. To supplement our internal qualitative analysis, we propose using 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);
 - Transparency International's "Corruption Perception Index";
 - IMF Article IV Consultation reports; and
 - IMF and World Bank Reports on the Observance of Standards and Codes.
44. In our opinion, the transparency and accountability of institutions bears directly on sovereign creditworthiness

because they reinforce the stability and predictability of both political institutions and the political framework. They do this even though they may not reinforce the stability of a ruling political class or party. In addition, transparent and accountable institutions, processes, and data are important because they ensure our analysis of a sovereign's creditworthiness is based on reliable and accurate information, and that any significant shift in a country's policymaking or the occurrence of risks is made known in a timely manner and that it can be reflected in our assessment of a sovereign's credit risk.

c. A government's debt payment culture

45. The first potential adjustment to the initial political score relates to our view of the government's 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, Standard & Poor's aims to assess to what degree policymakers likely are willing to prioritize debt repayment to avoid default in difficult situations.
46. More broadly, we propose to cap the overall political score at '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"); or
 - No material policy change since the last default on commercial debt.
47. Academic studies have suggested 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 in the future 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. Internal and external security risks

48. The second potential adjustment to the initial political score derived from the characteristics shown in tables 3A and 3B relates to internal and external security risks. In cases where we believe that there is a persistent risk of domestic conflict or war, but we do not foresee that this risk will likely materialize in the next three to five years, we propose to lower the score by one category (which is reflected in a higher number according to our scale). However, in cases where we believe that these risks are imminent or rapidly rising, we could adjust the sovereign's political risk and the overall rating to a greater extent, depending on what we expect the magnitude and impact of the conflict would be on the sovereign's economic and political situation (see exceptional adjustment factors in paragraph 33).
49. Internal risks include risks stemming from internal divisions along racial or economic lines, rising crime, political violence, or widespread civil unrest in association with severe budget cuts or economic reform. To analyze this risk, we look at the history of internal political conflicts, including extra constitutional changes of government.
50. Important geopolitical and external security risks include war or threats of war stemming from conflicting relations

with neighboring countries. National security is a rating concern when military threats place a large burden on fiscal policy, reduce the flow of potential investment, or put the balance of payments under stress. Other risks include protectionist measures enacted by trading partners, or economic sanctions.

2. Economic Score

51. The history of sovereign defaults suggests to us 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. To assess a country's economic score, Standard & Poor's looks at the following factors:
 - Income levels;
 - Growth prospects; and
 - Economic diversity and volatility.
53. Under our proposed criteria, we combine our analyses of income levels and economic growth prospects to determine our sovereign economic score (see table 4). We propose to derive an initial score based on the combination of the country's GDP per capita and its real (inflation adjusted) GDP trend growth, which are the measures we use to assess income levels and prospective economic growth (see paragraphs 54 and after). Then we propose to raise or lower the initial score by one category, based on the economy's diversification or volatility (see paragraph 64).

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

For the initial economic score, we associate a sovereign's ranges for economic growth prospects and income levels:

		Economic growth prospects					
		Real GDP trend growth ^a					
Income levels	GDP per capita ^a	Over 5%	4%-5%	3%-4%	2%-3%	1%-2%	Below 1%
	Over \$35,000	1	1	1	1	1	2
	\$25,000-\$35,000	1	1	2	2	2	3
	\$15,000-\$25,000	2	2	3	3	3	4
	\$8,000-\$15,000	3	3	3	4	4	5
	\$3,000-\$8,000	3	4	4	4	5	6
	Below \$3,000	4	5	5	5	6	6

To arrive at the final economic score, we raise or lower the initial score by one category for the following positive and negative factors:

Positive factor*

Broadly based economic structure or important globally competitive sectors, likely leading to greater resilience than that of peers in the same GDP cohort.

Negative factor*

Economic growth is very volatile or driven by a rapid increase in domestic credit, likely leading to greater vulnerability than that of peers in the same GDP cohort.

*For our definition of real GDP trend growth, see paragraphs 56-63 in the article text; for our definition of GDP per capita, see the glossary in the Appendix; and for our definitions of the adjustment factors, see paragraph 64.

GDP--Gross domestic product.

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a. Income levels

54. Standard & Poor's focuses on GDP per capita as the 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 we believe generally supports creditworthiness. To determine the economic score, we propose to use the latest GDP per capita in U.S. dollars available from national statistics. In cases where a country's GDP per capita fluctuates around the border between two score categories (see table 4) because its currency historically trades in a broad range against the dollar, then we would assign the score based on a moving three-year average of GDP per capita. We also periodically review and adjust the ranges in table 4 to take into account changes over time in real GDP per capita, inflation, and exchange rates.

b. Economic growth prospects

55. Because our ratings are forward looking, we propose to complement our measure of current GDP per capita with an analysis of economic growth over a time horizon of three to five years. Our key measure of economic growth is real local currency GDP trend growth.
56. The term "trend growth" refers to estimates of the rate at which GDP can grow 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.

57. Standard & Poor's estimates of trend growth generally look ahead three to five years. In order to form the trend growth measure used in table 4, we propose to start by reviewing base-line GDP growth, which is the average of at least 10 years of historical data. We propose to use national statistics for historical data. This base-line growth, which generally covers at least one economic cycle (including both a period of economic expansion and a period of contraction), provides us with information about an economy's growth pattern and its volatility.
58. Then, we propose to adjust this base-line GDP growth in cases where we believe that certain factors are likely to lead to a change in trend growth in the next three to five years. In order to estimate the changes in nominal and real GDP, we look at government forecasts, as well as projections from the IMF and other sources, and we identify the main factors that we believe could lead to a change in future growth compared to the base-line trend. We have listed below the main adjustment factors, which reflect mostly supply and demand considerations. We expect to adjust base-line GDP growth by one "column" to the left or to the right in table 4 in cases where one of the adjustment factors applies, and by two columns when two or more of these factors apply.
59. ***Decrease in domestic credit to the private sector.*** We propose to adjust trend growth downward in cases where we observe or expect a reduction in domestic credit to the private sector (as measured by an average annual decrease in the ratio of domestic credit to GDP by more than 10% over a three-year moving average). This may suggest the potential unwinding of a bubble or a sharp rise in inflation. In the aftermath of a financial and economic downturn, such as the one in 2008-2009, some highly leveraged economies may undergo several years of government-initiated adjustments to return to more sustainable debt levels. This process may hurt economic growth because it typically reduces both the demand for and the supply of credit, which then affects investment and consumption growth.
60. ***Change in country's competitiveness.*** We propose to adjust trend growth downward in cases where we perceive that a country's competitiveness is materially deteriorating, as measured by a significant increase in the country's relative unit labor cost according to the IMF or other independent international organizations.
61. ***Exposure to adverse trade shocks.*** We propose to adjust trend growth downward in cases where we perceive that a country is vulnerable to adverse terms-of-trade shocks because an increase in exports of a single product type, such as a commodity, has largely driven the country's nominal GDP growth over the past five years.
62. ***Weak productivity growth.*** When a population increase principally fuels a country's real GDP growth, then we propose adjusting trend growth downward by the rate of population growth.
63. ***One-off items that distort base-line growth.*** We propose adjusting our trend growth estimates up or down in cases where we believe that one-off items distort the period average we use for our base-line calculation and are unlikely to recur in the next three to five years. Such one-off items could include, for instance, changes in the statistical base or a one-off sizable investment.

c. Economic diversity and volatility

64. Based on the matrix in table 4, we propose to raise or lower the initial economic score by one category, according to a country's economic diversity and volatility compared with its peers'. Economic diversity and resilience or, on the opposite side, economic concentration and volatility are important, in our view, because a narrowly based economic structure tends to be correlated with greater variation in growth than is typical of a more diversified economy. Deep economic cycles tend to test economic policy flexibility more harshly and impair the government's balance sheet

more significantly than shallow economic cycles. Our proposed adjustments follow:

- For countries with an initial economic score between 1 and 4, we propose to lower the economic score by one category when we believe that growth is volatile, as measured by one standard deviation of nominal GDP growth over a historical 10-year period exceeding about 10%. This volatility can be the result of recurrent natural disasters or a large exposure to a single vulnerable or cyclical industry, exacerbated by a narrow economic base. It would be the case, for instance, when one standard deviation of the nominal GDP growth over a historical 10-year period is higher than about 10%. However, we would not lower the score for countries that have very large fiscal reserves (above 50% of GDP) that can be used to mitigate the impact of this volatility.
- In cases where we observe a rapid increase in domestic credit to the private sector, which could indicate vulnerability to a potential credit-fueled asset bubble, we propose to lower the initial economic score by one category. We would lower the score when the following two conditions apply: the average annual increase in the ratio of domestic credit to GDP over a three-year period (including the current year estimate and the past two years) is above 10%; and the estimated change for the current year is above zero (meaning that the bubble has not yet unwound). This adjustment generally would not apply to countries with under-developed financial systems (as defined in paragraph 121), where rapid credit growth is often a sign of deepening financial intermediation and a developing banking sector.
- Alternatively, we propose to raise the economic score (reflected in a lower number on our scale) by one category for countries with an initial score of '5' or '6'--meaning those with what we view to be weaker economies--when we believe they benefit from better economic diversification compared with other countries at a similar stage of development. We would measure this either by low sector concentration or by the existence of some sectors that are highly competitive internationally, which their market share would show.

3. External Score

65. Standard & Poor's external score reflects our view regarding the capability of an economy to generate the foreign exchange necessary to meet its public- and private-sector obligations to nonresidents. Our external analysis refers to the transactions and positions of residents (public- and private-sector entities, the latter including households) versus those of nonresidents because it is the totality of these transactions that affects the exchange rate of a country's currency and ultimately its international purchasing power. We assess the economy's expected ability to earn foreign exchange revenues through exports of goods and services, remittances, and other sources, as well as to attract foreign investment and to borrow from nonresidents relative to the economy's foreign exchange needs and the cushion that foreign exchange reserves provide.
66. To assess a country's external score, Standard & Poor's proposes to analyze two key factors:
- The country's external liquidity, which we believe provides an indication of the economy's ability to generate the foreign exchange necessary to meet its public- and private-sector obligations to nonresidents; and
 - The country's international investment position (or external balance sheet), which shows residents' assets and liabilities (in both foreign and local currency) against those of the rest of the world.

The first step in our assessment of the external score relates to the degree to which a sovereign's currency is used in international transactions. We propose to assign a higher external liquidity score to sovereigns that control a "reserve currency" or an "actively traded currency." These sovereigns have a common attribute: Their currencies are

widely used in financial transactions outside their own borders, which means that they are less vulnerable to shifts in investors' portfolios of debt holdings than are other countries. This demand in turn stems from:

- The credibility of the countries' policies and institutions;
- The strength of their financial systems;
- The countries' large and open capital markets, with market-determined interest and foreign exchange rates; and
- The use of their currencies as units of account in global capital markets.

67. These characteristics may push the external debt of these sovereigns to relatively high levels. But in our view, this does not present risks of the same degree as for countries with less actively traded currencies because we believe these sovereigns' policy settings can more readily preserve foreign investor confidence.
68. We propose to differentiate between sovereigns with reserve currencies and those with actively traded currencies as follows.
69. **Sovereigns with a reserve currency.** Sovereigns in this category benefit 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. Historically, demand for the debt of sovereigns that control reserve currencies has tended to rise in periods of economic stress (this is the so-called "flight to quality"). At the time of writing this proposal, we believe that this category of sovereigns includes the U.S., the U.K., Japan, France, and Germany; but this list may vary over time.
70. **Sovereigns with an actively traded currency.** Sovereigns in this category benefit 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, this category includes Australia, Switzerland, Canada, Hong Kong, Sweden, New Zealand, Korea, Singapore, Norway, and Mexico. We also include all eurozone countries, with the exception of France and Germany, which are included in the previous category. However, this list too may vary over time.
71. We propose one set of measures for determining a sovereign's external score for countries with a reserve currency or an actively traded currency (see table 5) and a second set for all other countries (see table 6). We propose to start by deriving an initial external score for a sovereign by combining our assessments of key measures of the country's external liquidity (see paragraph 72) and the country's international investment position (see paragraph 75). We then propose to raise or lower the initial score, based on the net effect of the qualitative factors related to the external liquidity and international investment position characteristics that we list in the tables. The paragraphs following the tables provide a detailed explanation for each adjustment factor.

Table 5

Assessing An External Score For Sovereigns With A Reserve Currency Or An Actively Traded Currency*On a scale from 1-6, strongest to weakest***For the initial external score, we associate a sovereign's ranges for its international investment position and external liquidity:**

		International investment position					
		Ratio of narrow net external debt to CAR*					
External liquidity	Ratio of current account balance to CAR*	Below 0%	0% - 50%	50% - 100%	100% - 150%	150% - 200%	Above 200%
	Above 0%	1	1	2	2	3	3
	0% to -10%	1	2	3	3	4	4
	-10% to -20%	2	3	3	4	4	5
	-20% to -30%	3	3	4	4	5	5
	Below -30%	4	4	5	5	6	6

For the final external score, we raise the initial score by one or two categories for the following positive factors and we lower it by one category for the following negative factors:**Positive factors***

- 1) Control of a reserve currency (improvement by one category).
- 2) Control of a reserve currency that accounts for more than 50% of the world's allocated foreign exchange reserves (currently the U.S. dollar; improvement by two categories).

Negative factors*

- 1) Cases where we anticipate a marked deterioration in external financing from a sudden reduction of cross-border interbank lines.
- 2) Cases of persistently high negative levels of errors and omissions (over about 10% of CAR), suggesting potential data quality issues or an understatement of external liquidity ratios.

*The ratio of narrow net external debt to CAR is based on latest available data; for its definition, refer to paragraphs 75-77 in the article text and the glossary in the Appendix. The ratio of the current account balance to CAR is based on the average of Standard & Poor's current-year estimate and three-year forecasts; for its definition, refer to the glossary in the Appendix. For our definition of the positive and negative adjustment factors, refer to paragraphs 79 and 80, respectively.

CAR—Current account receipts.

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Table 6
Assessing An External Score For Sovereigns With No Reserve Or Actively Traded Currency
 On a scale from 1-6, strongest to weakest

For the initial external score, we associate a sovereign's ranges for its international investment position and external liquidity:

		International investment position					
		Ratio of narrow net external debt to the sum of CAR and usable reserves*					
External liquidity	Ratio of gross external financing needs to the sum of CAR and usable reserves*	Below 0%	0% - 50%	50% - 100%	100% - 150%	150% - 200%	Above 200%
	Below 50%	1	1	2	3	4	5
	50% - 100%	1	2	3	4	5	6
	100% - 150%	2	3	4	5	6	6
	Over 150%	4	4	5	6	6	6

For the final external score, we raise or lower the initial score by one category for the following positive and negative factors:

Positive factor*

Net FDI covers more than about two-thirds of the current account deficit.

Negative factors*

- 1) Cases where we anticipate a marked deterioration in external financing from a sudden reduction of cross-border interbank lines.
- 2) Cases of persistently high negative levels of errors and omissions (over about 10% of CAR), suggesting potential data quality issues or an understatement of external liquidity ratios.

*The ratio of narrow net external debt to the sum of CAR and usable reserves is based on latest available data; for its definition, refer to paragraphs 75-77 in the article text and the glossary in the Appendix. The ratio of gross external financing needs to the sum of CAR and usable reserves is based on the average of Standard & Poor's current-year estimate and three-year forecasts; for its definition, refer to paragraph 72-73 and the glossary in the Appendix. For our definitions of the adjustment factors, refer to paragraphs 79-80.

FDI--Foreign direct investment.

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a. External liquidity

72. Our key measures of a country's external liquidity are:

- For countries with a reserve currency or an actively traded currency, the ratio of the current account balance to current account receipts (CAR; see the glossary in the Appendix);
- For other countries, the ratio of "gross external financing needs" to the sum of CAR plus usable official foreign exchange reserves (see the glossary in the Appendix).

73. In tables 5 and 6, we use the average of a period covering our current-year estimate and our forecasts for the next three years. Standard & Poor's projects a country's gross external financing needs by starting with the country's historical balance of payments and international investment position. We then review the central bank's own forecasts (when available), and those of independent economists and the IMF. We make our own estimates based on

information about the country's export potential, the terms of trade, and the availability of external finance. 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.

74. In cases where we believe that one-off items unlikely to repeat in the next three to five years distort the period average, then we propose to assign the score based on the structural level of future external liquidity adjusted for the one-off items.

b. International investment position

75. Our key measure of a country's international investment position is the ratio of "narrow net external debt" to the sum of CAR and usable foreign exchange reserves (see the glossary in the Appendix).
76. The term "narrow" in the description of net external debt refers to our belief that our measure is more conservative than some widely used international definitions of net external debt. Standard & Poor's definition is "narrow" because it subtracts from gross external indebtedness only the most liquid external assets--including the central bank usable foreign exchange reserves and gold, other short-term foreign exchange assets of the public sector, and foreign exchange assets of the financial sector. We also exclude the external debt of foreign banks that don't have a domestic loan book.
77. Measures of usable foreign exchange reserves appear both in the external liquidity and external debt ratios. Usable foreign exchange reserves represent liquid claims in foreign currency on nonresidents under the control of the central bank or other monetary authority, plus gold holdings, which relate to the control of the supply of money and domestic liquidity conditions. Usable reserves exclude items not readily available for foreign exchange operations and repayment of external debt such as reserves deposited in domestic financial institutions, including offshore branches, required bank reserves on resident foreign currency deposits and any other encumbered assets. In addition, for sovereigns that have adopted a currency board or have a long-standing fixed peg with another currency we subtract the monetary base from reserves, because the reserve coverage of the base is critical to maintaining confidence in the exchange-rate link. Sovereigns with freely floating exchange rates and deep foreign exchange markets typically hold a low level of reserves. Their central banks are 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. For others, usable reserves typically serve as a financial buffer during periods of balance-of-payments stress.

c. Adjustments for the trend and funding composition of the balance of payments

78. We propose to raise or lower the initial external score, as derived in tables 5 and 6, based on the trend and funding composition of the balance of payments, as follows:
79. *Cases when current account deficits are largely covered by net foreign direct investment.* We propose to raise the initial external score, as derived in table 6, in cases where current account deficits are predominantly covered (two-thirds or more) by net foreign direct investment (FDI) in the tradable sector. This adjustment reflects FDI's attribute of generating a residual claim (equity), rather than a fixed claim (debt). In our opinion, FDI funding of the current account deficit poses less risk than debt funding because FDI is usually long term and less susceptible to liquidation in a period of stress. FDI creates a more flexible liability because dividends are usually not paid unless profits are generated, and disinvestment may be a more difficult process than for portfolio flows.

80. **Cases of financial account vulnerabilities.** We propose to lower the initial external score, as derived in tables 5 and 6, in the following cases:

- If we anticipate a marked deterioration in external financing from a sudden reduction of cross-border interbank lines due to perceptions of increasing stress in the sovereign's financial system; or
- In case of a persistent high negative level of errors and omissions (over about 10% of CAR), suggesting potential data quality issues with the balance of payment or suggesting that the external liquidity ratios are understated.

d. Specific considerations for members of currency or monetary unions

81. We propose to determine an external score for each sovereign we rate that belongs to a currency or monetary union based on its individual external performance, using our matrix in tables 5 and 6 and depending on the currency of the union. This is because the external liquidity situations of members of a currency union may vary greatly, even though they all share a common currency and common capital markets. Where the current account displays a sizable and sustained deficit, no generalized exchange rate crisis is likely to ensue, since the economically imbalanced economy typically is shielded by the union's stability. However, a 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, based on our experience, to be eased through exchange rate adjustments and improvements may require an extended period of slow growth, possibly with deflationary implications. In a monetary union, external imbalances may grow large in the absence of pressure on the currency. Given the detrimental impact of a potential real adjustment on growth, we take into account in our assessment emerging signs of competitive challenges and rising external imbalances, even if external liquidity for the union as a whole remains satisfactory. Conversely, current account surpluses could be a sign of strong competitiveness and underpin a strong external creditor position. Both of these factors, in our opinion, support a sovereign's creditworthiness.

4. Fiscal Score

82. The fiscal score reflects our view regarding the sustainability of a sovereign's deficits and debt burden, based on the government's fiscal flexibility, its refinancing risk, and the potential risks arising from contingent liabilities.

83. Given the many dimensions that we evaluate in this area, we propose to divide our analysis into two segments, "fiscal performance and flexibility" and "debt burden," which we would score separately. The overall score for this rating factor would be the average we obtain for the two segments.

a. Fiscal performance and flexibility

84. When assessing a sovereign's fiscal performance and flexibility, Standard & Poor's analyzes the following factors:

- Fiscal flexibility;
- Fiscal performance; and
- Contingent liabilities.

85. To determine a sovereign's fiscal performance and flexibility score, we start by deriving an initial score from the combination of our respective performance and flexibility measures: the annual fiscal deficit as a percentage of GDP (see paragraph 89), and our qualitative assessment of the government's flexibility (see table 8). We then propose to lower the initial score by up to three categories, based on our view of contingent liabilities. The paragraphs following the table provide a detailed explanation for each of the adjustment factors.

Table 7
Assessing A Sovereign's Fiscal Flexibility And Fiscal Performance Score
On a scale from 1-6, strongest to weakest

For the initial score, we associate a sovereign's fiscal performance and its fiscal flexibility:

		Fiscal performance ^a				
		Fiscal deficit as a percentage of GDP ^{¶¶}				
Fiscal flexibility ^a	Qualitative assessment	Surplus	0%-3%	3%-5%	5%-7%	Above 7%
	Extensive	1	2	3	4	5
	Moderate	2	3	4	5	6
	Limited	3	4	5	6	6

For the final score, we raise or lower the initial score by one or more categories for the following negative factors*:

- 1) When we assess contingent liabilities as "moderate," "high," or "very high," we would lower the initial score by one, two, or three categories, respectively.
- 2) When unsustainable revenue growth or sizable quasi-fiscal activities positively affect the period average, we would adjust negatively the initial score, in line with our expectations for performance.

*Please refer to paragraph 89 in the article text for our definition of the fiscal deficit as a percentage of GDP, and to table 8 for further details regarding our fiscal flexibility qualifiers. For further details on our adjustments relative to contingent liabilities and unsustainable revenue growth, see table 9 and paragraph 92, respectively.

¶¶Based on the average of Standard & Poor's current-year estimate and three-year forecasts.

GDP--Gross domestic product.

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b. Fiscal flexibility and ability to run a countercyclical fiscal policy

86. Standard & Poor's assessment of a sovereign's fiscal flexibility is primarily qualitative. It reflects our view regarding the track record of use of countercyclical measures in previous economic cycles and of the respective flexibility of the structure of a sovereign's revenues and expenditures. We propose to assess fiscal flexibility as "extensive," "moderate," or "limited," based on a set of specific characteristics (see table 8). A sovereign may not exhibit each and every characteristic listed in a given score category, but we generally expect it to display most of the characteristics in that category, versus those associated with other categories.

Table 8 Assessing A Sovereign's Fiscal Flexibility	
We assess a sovereign's fiscal flexibility as "extensive," "moderate," or "limited," according to the characteristics below:	
Extensive	<p>The government has flexibility to increase the number or scope of taxes because of:</p> <ul style="list-style-type: none"> • A broad tax base, with a variety of direct and indirect sources of taxation. • A lower tax burden than that of countries offering a comparable level of public services. • The capacity to adjust both bases and rates without material constitutional, political, or administrative difficulties. <p>The government has what we view to be a clear policy, supported by a track record of countercyclical measures and public spending cuts when necessary for budgetary consolidation.</p>
Moderate	<p>Compared with the above, one of the following applies.</p> <ul style="list-style-type: none"> • The tax burden is already at or above that of countries offering a comparable level of public services; or • The tax base is narrower; or • Unaddressed age-related spending pressures are above those of peers; or • The government has a limited track record of public spending cuts.
Limited	<p>The government's capability to increase tax revenues is limited because of one of the following:</p> <ul style="list-style-type: none"> • Already high taxes and fees; or • A large informal economy or low tax collection rates; or • Constitutional, political, or administrative impediments to raising taxes. <p>The government's capability to cut expenditures is limited because of either:</p> <ul style="list-style-type: none"> • Constitutional rigidities, political pressures, or corruption; or • High infrastructure needs, unaddressed age-related spending pressures, and shortfalls in basic services (education, health care).
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87. Countercyclical policy flexibility allows a sovereign to use fiscal tools, or, in other words, exercise its budgetary "room to maneuver," in an effort to mitigate the impact of whatever developments are causing economic growth to deviate from a sustainable pace, or to restore its fiscal balance. Some measures may be one off, such as stimulus packages, while others are built into the fiscal structure via automatic stabilizers.
88. We observe that demographic change and population aging will be, and in some cases already are, major challenges for public finances in many countries. Governments are facing a fall of the share of the population in working age and rising outlays for age-related spending items such as pensions and health care. While these burdens are in many cases substantial, our analysis suggests that they generally peak in a horizon of 10 to 20 years, and that they are gradually increasing, rather than suddenly changing (See "Global Aging 2010: An Irreversible Truth," published Oct. 7, 2010). Consequently, in some cases, we believe that 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, we would reflect age-related budgetary pressures in our assessment of the government's fiscal flexibility and in our budgetary projections (see tables 7 and 8 above).

c. Fiscal performance

89. Our key measure of a government's fiscal performance is the annual fiscal deficit as a percentage of GDP. We measure the annual fiscal deficit by calculating the change in general government debt, because we believe that it is a better indicator of fiscal performance than the deficit that governments report, which is sometimes affected by political and other attention, possibly creating strong incentives to move expenditures off budget.
90. In order to calculate the fiscal deficit used in table 7, we take the average of our current-year estimate and our forecasts for the next three years. In order to establish our current-year estimate and our forecasts, we start by reviewing the government's own projections, as well as those of external institutions such as the IMF, and we make adjustments, when necessary, in our opinion, to reflect our analysis of economic growth prospects (see section C.2) or the occurrence of contingent risks. In cases where we believe that the period average is distorted by one-off items that are unlikely to recur in the next three to five years, we propose to assign the score based on the structural level of deficit adjusted for the one-off items.
91. We focus on measures at the general government level, which is the aggregate of the national, regional, and local governments, including social security and eliminating intergovernmental transactions. We believe this measure better captures the economic impact 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, in our experience, 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, and because the sovereign generally has the strongest influence over the distribution of public sector responsibilities between different tiers of government.
92. In certain exceptional cases, we may consider that the period average does not fully reflect a government's structural fiscal performance. This likely would lead us to lower the initial fiscal flexibility and fiscal performance score, as derived in table 7, by one category. This is likely to occur, for instance, when:
- What we view as unsustainable or temporary factors, such as housing or commodity bubbles, boost fiscal revenue growth (see paragraph 64); or
 - We estimate that off-budget fiscal activities account for more than 10% of GDP, which would mean that general government accounts do not reflect a large part of the government's activities.

e. Contingent liabilities

93. Standard & Poor's defines contingent liabilities as any obligation with the potential to become a fiscal burden and to impair fiscal flexibility. 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
 - Other contingent liabilities.
94. We propose to score a sovereign's contingent liabilities, using qualifiers ranging from "limited" to "very high," based on a set of main characteristics (see table 9).

Table 9
Four Categories For A Sovereign's Contingent Liabilities

To assess contingent liabilities, we calculate the sum of the following three factors as a percentage of GDP:

Categories for contingent liabilities	<ul style="list-style-type: none"> • Percentage of gross problematic assets times domestic credit • Domestic capital market debt and external debt of NFPE^A • Potential risks from other contingent liabilities
Limited	Less than 40% of GDP
Moderate	Between 40% and 70% of GDP
High	Between 70% and 100% of GDP
Very high	More than 100% of GDP

NOTE: Standard & Poor's defines contingent liabilities as any obligation that could become a fiscal burden and impair fiscal flexibility.

^ABased on Standard & Poor's current-year estimate for the largest NFPE.

NFPE--Nonfinancial public sector enterprises. GDP--Gross domestic product.

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95. **Contingent liabilities related to the financial sector.** The largest sovereign contingent liability is typically, based on historical observations, that posed by the risk of a systemic crisis in the financial sector. This is because bank liquidity and solvency problems that lead to sovereign support can impair a sovereign's credit standing.
96. We propose to assess contingent liabilities related to the financial sector by using the risk estimate measure that we use to determine our Banking Industry Country Risk Assessments (BICRAs). We describe how we derive BICRAs in "Methodology: Banking Industry Country Risk Assessments," published June 6, 2006, to which we are currently proposing changes in our "Request for Comment: Methodology For Determining Banking Industry Country Risk Assessments," published May 13, 2010.
97. Standard & Poor's current measure for a banking sector's risks is the percentage of gross problematic assets (GPA), multiplied by domestic credit, and then divided by GDP. We assess this measure for each country. It is intended to serve as a proxy for the upfront financial assistance that could be required of shareholders, in the first instance, and of government in the second, in the event of a recession. We believe this projection is most useful as a relative gauge. We estimate the peak level of GPA for a country's banking system in a prolonged and deep recession, including reported nonperforming loans, restructured loans, evergreen loans, and repossessed collateral.
98. Public-sector banks may weigh heavily in the contingent liability category when they engage in various quasi-fiscal activities (e.g. directed lending, subsidized lending, bank rescue operations, or exchange-rate guarantees), but we reflect their potentially poorer credit lending standards in the GPA calculation. We typically deduct the share of GPA related to banks with foreign ownership from the calculation of a government's contingent liabilities in cases where we believe that financial assistance to those entities in times of need would most likely come from their foreign parent rather than from the government.

99. While the GPA measure refers to a country's banking system, non-bank financial institutions (NBFI) may also be a source of possible financial stress to a sovereign. In the absence of comparable statistics on NBFI, and due to the fact that, for the majority of countries (except possibly larger OECD members), the credit that these institutions extend is relatively small, we use the GPA measure as a most representative proxy for the financial system's recapitalization cost. However, if we identified particular NBFI or broader financial industry groups that could affect a sovereign's credit quality, we would add an estimate of the related contingent liability to the sum of contingent liabilities in table 9. For example, as of the date of publication of our proposed criteria, we would apply a GPA type of measure for Fannie Mae and Freddie Mac in our assessment of contingent liabilities for the U.S.
100. **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.
101. Standard & Poor's incorporates in its analysis of a contingent liability an estimate of potential sovereign support for the domestic capital market external debt of NFPEs. (We include estimates for public sector financial enterprises in our GPA estimates; see paragraph 98). In order to make this estimate, we focus on the largest NFPEs (typically those with debt of more than about 1% of GDP). We exclude from this calculation the loans that the banking system provides, which are already counted as part of the GPA measure, as well as the debt of enterprises that have a stand-alone credit profile (SACP) that we assess in the investment-grade category (for details on SACPs, see "Stand-Alone Credit Profiles: One Component Of A Rating," published Oct. 1, 2010). NFPEs include most non-financial enterprises that we consider to be government-related entities (GREs). These are enterprises, partially or totally under government control that we believe are likely to be affected, positively or negatively, by extraordinary government intervention during periods of stress. (For more information on GREs, see "Enhanced Methodology And Assumptions For Rating Government-Related Entities," published June 29, 2009).
102. **Other contingent liabilities.** We propose to include in our estimate of contingent liabilities other types of risks, when relevant in our view, such as:
- The estimated potential loss on formal or implicit sovereign guarantees to non-financial private entities (which are not accounted for in the above categories); and
 - The government's involvement in quasi-fiscal operations, which lead to an off-budget transfer of public sector resources to the private sector, such as, for example, extra-budgetary funds, securitizations, and public-private partnerships.

f. Debt burden

103. Our debt burden score reflects our view regarding the sustainability of a sovereign's debt level, factoring in the government's liquidity and debt service profile. When assessing a sovereign's debt burden, Standard & Poor's proposes to analyze the government's debt level and cost of debt, as well as its refinancing risk.
104. We propose to combine our assessments of debt level and cost of debt to determine the debt burden score (see table 10). We start by deriving an initial score based on our two key measures of the general government debt level (see paragraph 105). We then propose to lower the initial score by up to as many as three categories, based on our analysis of the government's refinancing risk (see table 11).

Table 10
Assessing A Sovereign's Debt Burden Score
On a scale from 1-6, strongest to weakest

For the initial debt burden score, we associate a sovereign's ranges for debt level and cost of debt:

		Debt level			
		Net general government debt as a percentage of GDP ^a			
Cost of debt	General government interest expenditure as a percentage of general government revenues ^a	Below 30%	30%-60%	60%-100%	Above 100%
	Below 10%	1	2	3	5
	10%-15%	2	3	4	6
	15%-20%	3	4	5	6
	Above 20%	4	5	6	6

For the final debt burden score, we lower the initial score by one or more categories for the following negative factor:

When we assess refinancing risk as "moderate," "high," or "very high," we lower our score by one, two, or three categories, respectively.

^aBoth ratios are based on Standard & Poor's current-year estimate and forecast trend for the next three years. Please refer, in the article text, to paragraph 106 for our definition of net government general debt as a percentage of GDP. For further details on how we assess refinancing risk, see table 11.

GDP--gross domestic product.

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g. Debt level and cost of debt

105. In analyzing a sovereign's debt level, Standard & Poor's proposes to focus on the following two measures:

- General government interest as a percentage of general government revenues; and
- Net general government debt as a percentage of GDP.

106. We believe our calculation of net general government debt (as defined in the Appendix) is generally more conservative than national measures of net general government debt, which often include a broader array of government assets. We do not include international monetary reserves held by the central bank in the government's liquid financial assets because they are typically held for balance of payment purposes and not for budgetary support. In addition, we do not include loans to or investments in majority-government-owned companies in liquid assets, nor do we include certain other assets for which the liquidity we believe might be impaired in a sovereign stress scenario.

107. We propose to assess a government's debt burden relative to a sovereign's other credit characteristics, as we explain in sections A and B, rather than as an absolute trigger at a given rating level. In analyzing a sovereign's debt burden, Standard & Poor's believes that governments can afford varying debt levels, depending on their other credit

characteristics. In particular, we view the debt level that a government likely can sustain to be affected by its monetary and fiscal flexibility, and by its domestic capital market characteristics, as well as 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 long-term and fairly low-cost market-based financing may have more flexibility and 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. Sovereign default history includes some defaults with relatively low debt levels.

h. Refinancing risk

108. Standard & Poor's proposes to complement its assessment of a sovereign's debt burden by analyzing the government's refinancing risk. Our assessment of refinancing risk combines our review of a government's debt service profile and its access to funding.
109. Our proposed criteria establish four broad score categories for a sovereign's potential exposure to refinancing risks. Table 11 below contains the specific characteristics that we would generally expect to see at our different assessment levels for this factor, ranging from "low" to "very high." We explain the characteristics described in this table in the paragraphs that follow.

Table 11
Assessing A Sovereign's Refinancing Risk

We assess a sovereign's refinancing risk as "low," "moderate," "high," or "very high," according to the characteristics below:

Low	<p>Any of the following characteristics apply:</p> <ul style="list-style-type: none"> • The government controls the supply of money, and more than about 90% of its debt is denominated in local currency. • The government has a broad and diverse investor base, and its debt is predominantly fixed rate (more than about 80%) and long term (with an average maturity of longer than five years and less than about 20% of total debt maturing in the next 12 months). • The government is a substantial net creditor, with net general government assets representing about 25% of GDP or more.
Moderate	<p>Either the first two, or the last, of the following characteristics apply:</p> <ul style="list-style-type: none"> • More than 50% of the government's debt is denominated in local currency. • The government has a broad investor base and its debt is mostly fixed rate (more than about 60%) and long term (with an average maturity of longer than three years, and less than about 35% of total debt maturing in the next 12 months). • The government benefits from external support, with sufficient available credit lines to cover funding needs in the next 12 months.*
High	<p>At least two of the following characteristics apply:</p> <ul style="list-style-type: none"> • A majority of the government's debt is denominated in foreign currency. • The government has a narrow investor base. • Nonresidents hold more than about 75% of debt. • The government often uses direct financing from the central bank. • The government has a weak liquidity profile.* • The government's debt profile may markedly change because of a lumpy amortization profile or possible acceleration from puts or rating triggers.
Very high	<p>In addition to at least two characteristics in the "high" category:</p> <ul style="list-style-type: none"> • The central government's debt service (principal plus interest) exceeds 25% of its revenues.
<p>*For our definitions of external support and a weak liquidity profile, see paragraphs 113 and 114, respectively, in the article text.</p> <p>© Standard & Poor's 2010.</p>	

110. **Access to funding.** A sovereign's access to funding refers to its access to capital markets and bank financing. As a result, we propose to analyze a government's vulnerability to refinancing risks by looking at the following factors:

- The currency in which most of a sovereign's debt is denominated and how the government conducts its monetary policy. For sovereigns with their own currency, we believe that the central bank can influence financial conditions and, in extreme conditions, can purchase government debt in the secondary market or even directly from the government itself.
- The composition of the government's creditor classes, including the share of resident versus nonresident investors and the diversity of the investor base. We believe that sovereigns with a broad and diverse investor base and a low proportion of nonresident investors are usually less exposed to risks of sudden shifts in investor sentiment, due to home market bias and the sovereign's regulatory control of the financial system.

111. **Government's debt service profile.** To assess a government's debt service profile, we propose to focus on central government debt rather than general government debt (the latter includes the debt of local and regional governments). We propose to start by reviewing the government's debt management strategy, focusing on the following metrics:
- The share of central government debt denominated in local currency;
 - The share of floating debt versus fixed rate, as well as the government's policy regarding the use of derivative instruments, the existence of puts, and rating triggers; and
 - The average maturity of the central government's debt, as well as the lumpiness of the amortization profile, and the proportion of the debt coming due in the next 12 months.
112. These measures are intended to help us to assess a government's sensitivity to an increase in its refinancing costs, or, in the extreme, to refinancing risk. Table 11 presents the characteristics that we propose to associate with the different levels of refinancing risk for the above metrics.
113. **General liquidity profile.** When analyzing a government's debt service profile, we would also review liquidity. We consider as having weak liquidity those governments that lengthen their accounts payable as a means of financing--most often debt to suppliers, but also in some cases pension payments or civil-servant wages--or that are in arrears on debt that Standard & Poor's does not rate (see paragraph 6). We believe that these characteristics generally correspond to a "high" refinancing risk (see table 11).
114. **External support.** Certain governments are receiving, or have agreements to receive, external support from a multilateral organization such as the IMF or the European Financial Stability Facility (EFSF). Funding from other multilateral lending institutions or from other governments often complements this support. Standard & Poor's views the IMF and other official programs, which sovereigns with external funding pressures frequently seek out, as generally supportive of sovereign creditworthiness. Governments often decide to seek programs to bolster domestic political support for difficult economic policy decisions with medium-term, rather than near-term, benefits, or as a way to address temporary or potential difficulties in accessing external capital markets. These programs may limit refinancing risk for a short time period and thus the downward pressure on the sovereign ratings. However, in some cases, sovereign defaults can still occur subsequently, usually when a tough political and economic environment challenges program implementation. When external support provides available lines sufficient to cover expected funding needs in the next 12 months, we propose to limit the refinancing risk to "moderate," as table 11 shows.

5. Monetary Score

115. Our monetary score reflects our view regarding the extent to which a sovereign's monetary authorities can support sustainable economic growth and attenuate major economic or financial shocks, thereby supporting sovereign creditworthiness. Monetary policy in our experience 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.
116. Standard & Poor's proposes to assess a sovereign's monetary score based on 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 effectiveness of transmission mechanisms of the monetary policy to the real economy, as measured by the depth and diversification of the domestic financial system and capital markets; and
 - The effectiveness of the country's monetary policy, as measured by inflation trends.

117. Table 12 below presents the characteristics for these three factors that we would generally expect to see for each score category on our 1-6 scale.

Table 12 Assessing A Sovereign's Monetary Score <i>On a scale from 1-6, strongest to weakest</i>	
Score	We assess a sovereign's monetary score based on the characteristics below:
1	<p>Monetary policy flexibility is supported by <u>all</u> of the following:</p> <ul style="list-style-type: none"> • A floating currency, with few restrictions on external capital account transactions (except for small and open economies*). • "Developed" financial and capital markets.¶ • Low and stable inflation. <p>We generally assign a '1' score to sovereigns that control a main internationally traded currency.</p>
2	<p>Monetary policy flexibility is supported by <u>all</u> of the following:</p> <ul style="list-style-type: none"> • A floating currency with a small and open economy*, or a fixed or quasi-fixed exchange rate regime with usable foreign exchange reserves covering the monetary base more than four times. • "Developed" financial and capital markets.¶ • Low and stable inflation.
3	<p>Monetary policy flexibility is supported by <u>all</u> of the following:</p> <ul style="list-style-type: none"> • A floating currency, with few restrictions on external capital account transactions, or a fixed or quasi-fixed exchange rate regime with usable foreign exchange reserves covering the monetary base more than two times. • "Moderately developed" financial and capital markets.¶ • Low and stable inflation.
4	<p>Monetary policy flexibility is limited by <u>at least two</u> of the following:</p> <ul style="list-style-type: none"> • A fixed or quasi-fixed currency, with usable foreign exchange reserves covering the monetary base between one and two times. • "Moderately developed" financial and capital markets in which banks almost exclusively purchase government debt.¶ • Inflation that is volatile or persistently above 10%.
5	<p>Monetary policy flexibility is limited by <u>at least two</u> of the following:</p> <ul style="list-style-type: none"> • A fixed or quasi-fixed currency, with usable foreign exchange reserves covering the monetary base once or less. • "Underdeveloped" financial and capital markets.¶ • Inflation persistently above 15%.
6	<p>Monetary policy flexibility is limited by <u>at least two</u> of the following:</p> <ul style="list-style-type: none"> • The sovereign's use of another country's currency. • "Underdeveloped" financial and capital markets.¶ • Inflation persistently above 20%.
<p>We would likely assign a final monetary score that is one category lower than that shown in the table in either of the following two cases:</p> <p>1) If we observe persistent deflation over a three-year period (see paragraph 123 in the article text).</p> <p>2) If the sovereign belongs to a monetary union. In this case, we would first score the union as a whole, based on the characteristics above, and we would then lower the score by one category to reflect the lower flexibility of individual countries within the union (see paragraph 125)</p> <p>*We define small and open economies as those economies whose nominal GDP is below 0.5% of the world's GDP and whose exports represent more than about 25% of national GDP. ¶See paragraph 122 for the definition of "developed," "moderately developed," and "underdeveloped" financial and capital markets.</p> <p>© Standard & Poor's 2010.</p>	

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

118. Sovereigns can use monetary policy to address imbalances or shocks in the domestic economy only when they control the dominant currency used for domestic economic and financial transactions. We assess a sovereign's monetary flexibility based on its exchange rate regime. We assign our top score of '1' to sovereigns that control their currency and whose currency floats. In these cases, we view monetary policy flexibility as greatest. We typically place sovereigns that use another country's currency in our lowest score category of '6', since we view these sovereigns as having the lowest monetary policy flexibility. Table 12 describes the characteristics that we associate with each score category.
119. In countries where the local currency is pegged--either fixed or quasi-fixed--to a foreign currency, the scope for the sovereign to pursue independent monetary policy is, in our opinion, constrained. We observe that, with a pegged exchange rate, strict capital controls may afford limited monetary flexibility, but capital controls are rarely effective for sustained periods. Therefore, we propose to complement our analysis of monetary flexibility for countries with currency pegs by looking at the coverage of the monetary base by usable foreign exchange reserves. We believe that countries with usable foreign exchange reserves that are several times larger than the monetary base have a greater margin of maneuver to run an independent monetary policy and manage threats to their foreign exchange regime.

b. Effectiveness of transmission mechanisms of the monetary policy to the real economy and development of financial and capital markets

120. Financial and capital markets are necessary to transmit monetary policy decisions to the real economy, because monetary policy tools, such as policy interest rates or exchange rates, usually work through 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, especially when the use of foreign currency is prevalent. By contrast, a developed financial system in which local currency transactions dominate and that is resilient to shocks is particularly important for monetary flexibility in stressed conditions.
121. We propose to assess financial and capital market developments by evaluating the following:
- The government's ability to issue long-term fixed-rate local currency bonds, because we believe that confidence in a market's long-term liquidity can be deduced from the frequency of issuances of longer dated debt securities;
 - The existence of an active money market and corporate bond market, and the maturity of the banking system. We believe that 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; and
 - The share of bank deposits and lending in local currency, because we believe that monetary policy tools are more effective if a country actively uses its local currency for domestic economic and financial transactions.
122. Based on these characteristics, we propose to establish three categories of financial and capital market developments: "developed," "moderately developed," and "underdeveloped."
- In "developed" financial and capital markets, the government regularly issues long-term fixed-rate local currency bonds with a maturity of 10 years or longer, corporate bond markets and domestic credit account for more than 60% of GDP; and more than 90% of both deposits and lending are in local currency (except in the case of global financial or trading centers).
 - In "moderately developed" financial and capital markets, the government regularly issues long-term fixed-rate local currency bonds with a maturity of up to five years; corporate bond markets and domestic credit represent 35%-60% of GDP, or a higher proportion but with over half of the financial sector assets being held by public

sector financial institutions; and 50%-90% of either deposits or lending is in local currency.

- In "underdeveloped" financial and capital markets, the government infrequently issues long-term fixed-rate local currency bonds with a maturity of longer than three years, and, in certain countries, bonds are mostly bought by local banks or public sector pension funds; domestic credit accounts for less than 35% of GDP, and there is no material money market or corporate bond market; and less than 50% of either deposits and lending is in local currency.

c. Credibility of the monetary policy and inflation trends

123. 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, we propose to reflect cases of volatile or persistently high inflation through a negative impact on the monetary score (see table 12). We would also lower the initial monetary score by one category, as derived in table 12, in the event of persistent deflation during a three-year period.
124. Effective monetary policy is another important foundation for confidence in monetary authorities. Confidence can be crucial in a period of stress because it enables policymakers to resort temporarily to unconventional tools to counter the impact of economic shocks (for example, implementing quantitative easing without triggering sharp increases in interest rates). Monetary authorities with weak track records, however, rarely have this flexibility in our experience.

d. Case of sovereigns in a monetary union

125. We propose to assign the monetary score to sovereigns in monetary unions through a two-step process. First, we would assign an initial score to reflect our view regarding the effectiveness of the monetary policy of the union as a whole, based on the characteristics we present in table 12. Second, we propose to lower the initial score by one category to reflect the lower flexibility that members of a monetary union generally have relative to sovereigns with their own central bank. Sovereigns in a monetary or currency union benefit from monetary flexibility at the union level, but the positive impact is not always uniformly felt at the national level. A monetary union is well adapted to address economic imbalances or financial shocks affecting the zone as a whole. However, when a country is faced with an idiosyncratic economic or financial crisis, it cannot resort to monetary policy tools to address this shock.
126. In the case of a sovereign that leaves a monetary union, we would determine a monetary score based on the characteristics outlined in table 12.

D. Determining The Sovereign Local Currency Rating Based On The Foreign Currency Rating

127. Standard & Poor's may rate a sovereign's local currency debt higher than it rates the sovereign's foreign currency debt, based on historically lower default rates on local currency debt compared with foreign currency debt, and on an evaluation of a government's higher fiscal and monetary flexibility with respect to local currency obligations. Any divergence between sovereign local and foreign currency ratings reflects what we view to be the distinctive credit risks of each debt type.
128. One might ask why sovereign local currency ratings are not all 'AAA' if sovereigns have such extensive powers within their own borders, including the ability to print money. The reason is that, 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 and, in historically rare cases, hyperinflation, which may cause more serious political and economic damage than restructuring of local currency debt. In such instances, sovereigns may opt to default on their local currency obligations (see "Sovereign Foreign And Local Currency Rating Differentials," published Oct. 19, 2005).

129. We propose to reduce the maximum differential between the foreign and local currency ratings on a sovereign to two notches, instead of three previously. This change reflects our belief that the differential between local currency and foreign currency default rates will likely decrease in the future, as the globalization of financial markets and, in particular, rising cross-border investment in local currency debt, changes the dynamics of sovereign debt restructuring. We believe that the incentives for governments to continue servicing local currency debt relative to foreign currency debt can diminish in situations where a large share of the local currency debt is in the form of bonds held by nonresidents. The increased presence of pari passu and cross-default clauses contained in the bond documentation for local currency sovereign debt and, in some jurisdictions, reduced issuance of local currency debt subject exclusively to domestic law, highlights one factor that can change government behavior in a stress scenario and that we believe favors a narrower rating differential. A large share of foreign investors may make a debt restructuring of foreign currency debt that excludes local currency debt more difficult to conclude, which our proposal for a reduced rating differential also reflects.
130. We propose to determine a sovereign local currency rating by adding zero to two notches to the sovereign foreign currency rating (see table 13). We base our criteria for the notching mainly on our view of the sovereign's fiscal and monetary flexibility. In addition, we would factor in the share of local currency debt in the form of bonds held by nonresident investors.

Table 13 Determining The Sovereign Local Currency Rating By Adding Zero To Two Notches To The Foreign Currency Rating	
The number of notches we add to a sovereign foreign currency rating depends on our assessment of the following characteristics:	
0-notch differential	<p>At the issuer rating level, at least one of the following characteristics applies:</p> <ul style="list-style-type: none"> • The sovereign has limited monetary flexibility, either because it is a member of a currency union or will likely join a currency union in the near term, or because it has a pegged exchange rate or uses the currency of another country. • The three-year moving average of the share of local currency debt held in the form of bonds owned by nonresidents is above 35%. • General government debt exceeds 100% of GDP and is mainly denominated in local currency. <p>At the issue rating level*, either of the following characteristics applies:</p> <ul style="list-style-type: none"> • Bond documentation contains <i>pari passu</i> or cross-default clauses with foreign currency debt instruments. • The bond is payable in local currency, but debt service is linked to another currency.
One-notch differential	<p>Both of the following characteristics apply:</p> <ul style="list-style-type: none"> • We have assigned a monetary score of '4' and fiscal score of '4' or higher. • The three-year moving average of the share of local currency debt held in the form of bonds owned by nonresidents is between 5% and 35%.
Two-notch differential	<p>Both of the following characteristics apply:</p> <ul style="list-style-type: none"> • The monetary score and the fiscal score are better than or equal to '3'. • The three- year moving average of the share of local currency debt held in the form of bonds held by non residents is below 5%.
<p>*For our issue-specific considerations that might lead to a difference between our rating on a sovereign local currency debt issue and our local currency sovereign rating, see paragraph 131 in the article text.</p> <p>NOTE: When a foreign currency rating moves to the 'CCC' category, Standard & Poor's believes there is a near-term risk of default. At this point, it is easier to ascertain whether a sovereign potentially defaulting on its foreign currency obligations might also default on its local currency obligations. If Standard & Poor's does not anticipate the sovereign defaulting on local currency obligations, it will maintain the local currency rating in the 'B' category, thereby increasing the notch differential.</p> <p>© Standard & Poor's 2010.</p>	

a. Issue-specific considerations

131. We have identified 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, we assign this issue the same rating as that on the sovereign's foreign currency debt. We do this because, in a stress scenario, we expect this debt type to behave much like foreign currency debt, with debtholders exchanging the local currency debt service proceeds into foreign currency. A typical example of this kind of instrument is 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, Standard & Poor's assigns this issue the same rating as that on the sovereign's foreign currency debt.

132. We do not take the reverse approach, however, when we rate foreign-currency-denominated debt issued in domestic markets. We always assign a foreign currency rating to such debt. We believe that 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.

Appendix: Glossary Of Key Indicators And Data Sources

133. This section contains short definitions of the key economic terms used in Tables 3 through 13. Most of these measures are published twice a year in "Sovereign Risk Indicators," as well as in annual reports on individual sovereigns.
134. Standard & Poor's draws its data for its analyses primarily from 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 include Eurostat, central banks of monetary unions, and the International Financial Statistics of the IMF.

Table 14

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

Term	Definition
Economic and monetary scores	
GDP per capita (US\$)	Total value of annual domestic economic output, expressed in U.S. dollars, divided by the population
Real GDP per capita (% change)	Percent change in constant-price GDP per capita.
Domestic credit (% change)	Percent change in outstanding loans (at year end) that a country's deposit money banks and other financial institutions extend to the private sector and nonfinancial public sector enterprises (NFPEs).
Monetary base	The monetary base refers to the amount of money circulating in an economy. It consists of highly liquid money that consists of coins, paper money, and commercial banks' reserves with the central bank.
External score	
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
	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)
	Gross external financing needs = current account payments + plus short-term external debt + non-resident deposits + amortization of the current portion of long term external debt
	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 tax or capital repatriation regimes.
Narrow net external debt (% of CAR)	= Narrow net external debt / CAR
	Narrow net external debt = stock of foreign and local currency public and private sector borrowings from nonresidents - (official foreign exchange reserves + other liquid public sector external assets + financial institutions' deposits with and lending to nonresidents)
Reserves	Reserves are liquid claims in foreign currency on nonresidents (including gold) under the control of the central bank.
Foreign exchange usable reserves	= Foreign exchange reserves - items not readily available for foreign exchange operations and repayment of external debt
	Items not readily available for foreign exchange operations and repayment of external debt = reserves pledged as security for any loan, including gold repurchases (unless the loan is due within a year)

Table 14

Glossary Of Key Indicators In Standard & Poor's Sovereign Rating Methodology (cont.)	
	+ mark-to-market losses on reserves sold forward
	+ reserves deposited in domestic financial institutions, including offshore branches
	+ required reserves on resident foreign currency deposits
	+ monetary base (for sovereigns that have adopted a currency board or have a longstanding fixed peg with another currency)
Current account balance (% of CAR)	= Current account balance / CAR
	Current account balance = exports of goods and services - imports of the same + net factor income + official and private net transfers
Net foreign direct investment (% of GDP)	= (Direct investment by nonresidents - residents' direct investment abroad) / GDP
	Net foreign direct investment (FDI) in the tradable sector = net FDI – investments in the real estate sector
Net external liabilities (assets) (% of CAR)	= Net external liabilities (assets) / CAR
	Net external liabilities = (total external debt + stock of direct and portfolio equity investment from abroad) – total external assets
	Total external assets = official reserves + other public sector foreign assets + financial institutions' deposits with and lending to nonresidents + other private sector deposits with and lending to nonresidents + the stock of direct and portfolio equity investment placed abroad.
Fiscal score	
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 (% of GDP)	= (General government debt at year end - general government debt at prior year end) / GDP
	The change in general government debt as a percentage of GDP is typically approximately equal to a general government's deficit, but also takes into account the impact of exchange rate movements, the recognition of off-budget and contingent liabilities, and drawdown of assets.
Net general government debt (% of GDP)	= (Gross general government debt – general government financial assets) / GDP
	Gross general government debt includes the debt of a government's asset management companies, used for bank or other private sector bailouts.
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 or social security funds (or stabilization or other freely available funds) that are held in bank deposits, widely-traded securities, or other liquid forms
	+ fund balances invested in government debt (if the government controls the fund)
Gross general government debt (% of GDP)	= Gross debt incurred by national, regional, and local governments / GDP
	We net out internal holdings, including social security and defined benefit public sector pension fund investments in government debt.
General government interest (% of general government revenues)	= Interest payments on general government debt / general government revenues
Central government debt service (% of central government revenues)	= (Interest + principal repayment on central government debt) / central government revenues

Source: Standard & Poor's.

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135. 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.

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