General Criteria:

Principles Of Credit Ratings

February 16, 2011

(Editor’s Note: On Feb. 15, 2019, we republished this criteria article to make nonmaterial changes. See the “Revisions And Updates” section for details.)

1. S&P Global Ratings uses a principles-based approach for assigning and monitoring ratings globally. These broad principles apply generally to ratings of all types of corporates, governments, securitization structures, and asset classes. However, for certain types of issuers, issues, asset classes, markets, and regions, S&P Global Ratings complements these principles with specific methodologies and assumptions.


3. S&P Global Ratings assigns credit ratings to both issuers and issues, and strives to maintain comparability of ratings across sectors and over time. That is, S&P Global Ratings intends for each rating symbol to connote the same general level of creditworthiness for issuers and issues in different sectors and at different times. Enhancing comparability requires calibrating the criteria for determining ratings. S&P Global Ratings calibrates criteria through various means including measuring default behavior across sectors and over time, applying common approaches to risk analysis, and using a common set of macroeconomic scenarios associated with the different rating levels. The scenario associated with the 'AAA' rating level is one of extreme macroeconomic stress—on par with the Great Depression of the 1930s. The scenarios associated with the lower rating levels are successively less stressful. Credits rated in each category are intended to be able to withstand the associated level of macroeconomic stress without defaulting (although we might significantly lower the ratings on those credits as economic stresses increase).

SCOPE OF THE CRITERIA

4. These criteria apply to ratings of all issuers and issues rated by S&P Global Ratings.

SUMMARY OF CRITERIA

5. The analytic framework for structured finance securitization ratings includes five key areas:

- Credit quality of the securitized assets;
- Legal and regulatory risks;
- Payment structure and cash flow mechanics;

See complete contact list at end of article.
General Criteria: Principles Of Credit Ratings

- Operational and administrative risks; and
- Counterparty risk.

6. The analytic framework for corporate and government ratings includes three key areas:
- Creditworthiness before external support;
- External support; and
- Analysis of specific instruments.

7. This paragraph has been deleted.

FUNDAMENTAL PRINCIPLES OF STRUCTURED FINANCE RATINGS AND CRITERIA

Credit Quality Of The Securitized Assets

8. In most securitization transactions, the first key step in analyzing the credit quality of the securitized assets is determining the amount of credit support necessary, in our opinion, to maintain a rating at the 'AAA' level. That determination is equivalent to estimating the amount of losses that the assets would suffer under conditions of extreme stress. The estimation can include reference to historical studies of the subject asset class or, when such studies are not available and as we deem appropriate, comparison or benchmarking relative to asset classes for which such studies do exist.

9. For some asset classes, the estimation may proceed in stages: We might separately estimate asset default frequencies and loss severities under extreme stress conditions and then combine those components to form the overall loss estimate. Similarly, for some asset classes, the estimation may use generalizations based on historical studies, such as the notion that losses under extreme stress conditions can be estimated as a multiple of expected losses, with the multiple potentially varying for different asset classes.

10. For some asset classes, S&P Global Ratings defines an archetypical asset pool and uses it as a comparison benchmark for gauging the estimated losses under extreme stress for pools underlying actual transactions in such asset classes. In some cases, the maximum rating for the highest rated security may be below 'AAA' based on our assessment of factors such as country risk, or transfer and convertibility risk, and we would adjust the analysis accordingly.

11. In many securitization transactions, a key step in analyzing the credit quality of the securitized assets is estimating the level of expected losses. The level of expected losses generally corresponds to the amount of credit enhancement associated with the 'B' rating level. Estimation of expected losses generally uses the recent performance of similar assets as a guide. The estimation may include adjustments based on our assessment of current trends, as well as evolving market practices.

12. Interpolation is one of the methods we may use when we analyze the amount of credit enhancement associated with the rating levels between 'AAA' and 'B' for transactions in certain asset classes. For other asset classes, we create specific benchmarks, such as coverage multiples or simulated default rates, within a mathematical simulation model.

13. Our view on the credit quality of a pool of assets may change over time. The performance of the pool may diverge from expectations and that divergence may reveal credit strengths or weakness.
that were not previously apparent. Through our surveillance processes, we reassess the credit quality of the pool based on certain information regarding the observed performance and other factors we deem relevant.

Legal And Regulatory Risks

S&P Global Ratings' assessment of legal and regulatory risks focuses primarily on the degree to which a securitization structure isolates the securitized assets from the bankruptcy or insolvency risk of entities that participate in the transaction. Typically, our analysis focuses on the entity or entities that originated and owned the assets before the securitization, although the creditworthiness of other entities also may be relevant. A true sale of the subject assets from the originator/seller to a special purpose entity (SPE) is one method commonly used by an arranger seeking to achieve asset isolation in a securitization. From a legal perspective, a true sale is generally understood to result in the assets ceasing to be part of the seller's bankruptcy or insolvency estate. There may also be other legal mechanisms, apart from true sale, that may achieve analogous comfort. SPES are entities that typically are used in a securitization transaction to "house" the assets that will back the payment obligations usually represented by the securities issued by the SPE. In the context of our analysis, S&P Global Ratings forms an opinion about the insolvency remoteness of an SPE based on our evaluation of the specific facts and circumstances that we view as applicable to a particular transaction. Among other things, the analysis considers whether the separate legal identity of the SPE would be respected by bankruptcy courts or bodies charged with similar functions. In addition, we assess the presence of features intended to minimize the likelihood that the SPE itself becomes the subject of bankruptcy.

Payment Structure And Cash Flow Mechanics

The rating analysis for structured finance typically includes an analysis of payment structure and cash flow mechanics. This portion of the analysis may involve both assessing the documentation for a security and testing the cash flows using quantitative models. In both cases, the objective is to assess whether the cash flow from the securitized assets would be sufficient, at the applicable rating levels, to make timely payments of interest and ultimate payment of principal to the related securities, after taking account of available credit enhancement and allowing for transaction expenses, such as servicing and trustee fees. The analysis may encompass diverse features of the payment structure and cash flow mechanics, ranging from the basic payment priorities inherent in a deal (i.e., the subordination hierarchy of tranches) to the impact of performance covenants (i.e., so-called "triggers") that may operate as switches that materially change the distribution priorities if they are breached. Finally, for securities that embody support facilities from third parties, such as insurance policies, guarantees, bank credit and liquidity facilities, and derivatives instruments, the analysis focuses on the payment mechanics for those obligations.

Operational And Administrative Risks

The analysis of operational and administrative risks is another part of the structured finance rating analysis. This part of the analysis focuses on key transaction parties to determine whether they are capable of managing a securitization over its life. Key transaction parties may include a transaction's servicer or manager, the asset manager of a collateralized debt obligation (CDO), the trustee, the paying agent, and any other transaction party; herein we collectively refer to these parties as servicers.

In securitizations involving many asset classes, the analysis focuses on evaluating a servicer's or
manager's ability to perform its duties, such as receiving timely payments, pursuing collection efforts on delinquent assets, foreclosing on and liquidating collateral, tracking cash receipts and disbursements, and providing timely and accurate investor reports. For transactions that involve revenue-producing assets (e.g., commercial property), the analysis may include, as we deem appropriate, assessment of certain incremental risks associated with managing the assets. For actively managed portfolios, the analysis considers the asset manager's capabilities and past performance as an asset manager.

18. The analysis of operational and administrative risks generally considers the possibility that a servicer may become unable or unwilling to perform its duties during the life of the transaction. In that vein, the analysis may consider both the potential for hiring a substitute or successor servicer and any arrangements that provide for a designated backup servicer. That portion of the analysis would typically consider the sufficiency of the servicing fee to attract a substitute, the seniority of the fee in the payment priorities, and the availability of substitute servicers.

Counterparty Risk

19. The fifth part of the rating analysis is the analysis of counterparty risk. That analysis focuses on third-party obligations to either hold assets (including cash) or make financial payments that may affect the creditworthiness of structured finance instruments. Examples of counterparty risks include exposures to institutions that maintain key accounts and exposures to the providers of derivative contracts such as interest rate swaps and currency swaps. The counterparty risk analysis considers both the type of dependency and the rating of the counterparty for each counterparty relationship in a transaction.

FUNDAMENTAL PRINCIPLES OF CORPORATE AND GOVERNMENT RATINGS AND CRITERIA

Creditworthiness Before External Support

20. The most important step in analyzing the creditworthiness of a corporate or governmental obligor is gauging the resources available to it for fulfilling its commitments relative to the size and timing of those commitments. Assessing an obligor's resources for fulfilling its financial commitments is primarily a forward-looking exercise. It may entail estimating or projecting future income and cash flows. It may include consideration of economic conditions, the regulatory environment, and economic projections and forecasts. For business entities, future income and cash flows may come primarily from ongoing operations or investments. For governmental entities, income and cash flows may come primarily from taxes. In some cases, other resources, including liquid assets or, in the case of a sovereign obligor, the ability to print currency, may be relevant.

21. The assessment of resources considers both the expected level of future income and cash flows and their potential variability. For all types of obligors, the assessment includes both qualitative and quantitative factors.

22. The quantitative side of the analysis focuses primarily on financial analysis and may include an evaluation of an obligor's accounting principles and practices.

23. For business entities, key financial indicators generally include profitability, leverage, cash flow adequacy, liquidity, and financial flexibility. For financial institutions and insurers, other critical factors may include asset quality, reserves for losses, asset-liability management, and capital adequacy. Off-balance sheet items, such as securitizations, derivative exposures, leases, and
pension liabilities, may also be part of the quantitative analysis. Cash flow analysis and liquidity assume heightened significance for firms with speculative-grade ratings ('BB+' and lower).

24. For governmental entities, the quantitative factors we assess are different from the factors we assess for business entities; they generally include both economic factors and budgetary and financial performance, as well as additional items for sovereign obligors. The economic side of the analysis typically encompasses demographics, wealth, and growth prospects. The budgetary and financial side generally includes budget reserves, external liquidity, and structural budget performance. For sovereign obligors, additional quantitative factors that may, in our view, be relevant to our analysis include fiscal policy flexibility, monetary policy flexibility, international investment position, and contingent liabilities associated with potential support for the financial sector.

25. Trends over time and peer comparisons may be part of the quantitative analysis for both business and governmental entities.

26. On the qualitative side, the analysis of business entities focuses on various factors, including: country risk, industry characteristics, and entity-specific factors. We intend for our analysis of the country risk factor to capture our assessment of the financial and operating environment that applies broadly to businesses in a particular country, including a country's physical, legal, and financial infrastructure. Historically, this assessment has often operated to constrain the ratings of business entities in countries that have high country risk.

27. Industry characteristics typically encompass growth prospects, volatility, and technological change, as well as the degree and nature of competition. Broadly speaking, the lower the industry risk, the higher the potential credit rating for an obligor in that sector. The analysis also considers certain entity-specific factors that we believe can distinguish an individual obligor from its peers. These may include diversification of the obligor's products and services as well as risk concentrations, particularly for a financial institution. Obligor-specific factors also may include operational effectiveness, overall competitive position, strategy, governance, financial policies, risk management practices, and risk tolerance.

28. Qualitative factors for governmental entities are somewhat different from the factors for business entities. Our analysis may encompass political risks, including the effectiveness and predictability of policymaking and institutions and the transparency of processes and data and the accountability of institutions. In addition, for sovereign obligors, consideration of political risks may include an assessment of the potential for war, revolution, or other security-related events to affect creditworthiness. Other qualitative considerations that may be part of an analysis of a governmental obligor include revenue forecasting, expenditure control, long-term capital planning, debt management, and contingency planning. Finally, the assessment of a governmental obligor focuses on the potential that the obligor might default even when it has the resources to meet its financial commitments.

**External Influence**

29. In addition to our assessment of an obligor's stand-alone creditworthiness, S&P Global Ratings' analysis considers the likelihood and potential amount of external support (or influence) that could enhance (or diminish) the obligor's creditworthiness. When an obligor's creditors have the benefit of contractual support, such as a guarantee from a higher-rated guarantor, the analysis may assign the guarantor's rating to the supported issue or issuer. However, this occurs only when the guarantee satisfies stringent conditions and guarantees full and timely payment of the underlying obligation.

30. Apart from formal guarantees, the analysis considers the potential for other support from
affiliated business entities, governments, and multilateral institutions. For affiliated business
entities, the analysis considers both the degree of strategic importance of subsidiaries or
affiliates to determine the likelihood and degree of support by a stronger parent and - the parent's
capacity to provide such support.

31. For governmental support, the analysis considers the potential for various forms of support. For
example, the analysis considers potential support for government-related entities (GREs), such as
certain public utilities, transportation systems, and financial companies. The analysis of a GRE
considers the role that the entity plays and the nature of its links to its government. A similar line
of analysis applies to the potential for extraordinary government support to banks that, in our
view, have systemic importance in a national economy. In the case of a sovereign obligor, the
analysis considers the potential for support from multilateral institutions (e.g., the International
Monetary Fund [IMF]).

32. The assessment of potential external support generally does not include the benefits that an
obligor receives merely by being part of a system or framework. We consider those benefits in the
assessment of industry characteristics or otherwise in the analysis of stand-alone
creditworthiness. For example, the stand-alone analysis of a bank includes consideration of
benefits that we believe it may receive from supervision within its regulatory framework and from
access to low-cost borrowings from its central bank. Likewise, the analysis of governments (e.g., a
school district) may include an evaluation of system support provided by a higher level entity (e.g.,
a city or state).

33. In some cases, external support can have a negative influence on an entity’s creditworthiness. For
example, this can happen when a weaker parent company drains cash flows or assets from a
stronger subsidiary through dividends or in other ways. Similarly, a sovereign government can be a
negative factor for a company’s creditworthiness if it intervenes by withdrawing resources or
limiting the company’s financial flexibility.

Notching And Analysis Of Specific Instruments

34. The analysis of specific instruments includes consideration of priorities within an obligor’s capital
structure and the potential effects of collateral and recovery estimates in the event of the obligor’s
default. The analysis may apply notching to instruments that rank above or below their obligor’s
senior, unsecured debt. For example, subordinated debt would generally receive a rating below
the senior debt rating. Conversely, secured debt may receive a rating above the unsecured debt
rating.

35. Notching also applies to the structural subordination of debt issued by operating subsidiaries or
holding companies that are part of an enterprise viewed as a single economic entity. For example,
the debt of a holding company may be rated lower than the debt of its subsidiaries that have the
enterprise’s assets and cash flows. We extend the notching approach to analyzing the
creditworthiness of instruments involving payment priority. For example, we would generally rate
preferred stock and so-called hybrid capital instruments lower than senior debt to indicate that
payment could be deferred.

REVISIONS AND UPDATES

This article was originally published on Feb. 16, 2011.

Changes introduced after original publication:

- Following our periodic review completed on Dec. 21, 2016, we updated the contact information.
Following our periodic review completed on Dec. 15, 2017, we updated the contact information and updated the heading above paragraph 29 to "External Influence" from "External Support."

- On Jan. 2, 2019, we republished this criteria article to make nonmaterial changes. We updated the contact information and made editorial changes.

- On Feb. 15, 2019, we republished this criteria article to make nonmaterial changes. We updated the contact information and a reference to a related criteria article.

RELATED CRITERIA AND RESEARCH

Superseded Criteria
- Principles Of Corporate And Government Ratings, June 26, 2007
- Principles-Based Rating Methodology For Global Structured Finance Securities, May 29, 2007
- CDO Spotlight: Quantitative Modeling Approach To Rating Index CPDO Structures, March 22, 2007
- Corporate Securitizations: The Role Of Risk Capital In Aligning Stakeholder Interests, Sept. 18, 2003
- Structured Investment Vehicle Criteria, March 13, 2002

Related Criteria
- Methodology: Credit Stability Criteria, May 3, 2010
- Understanding S&P Global Ratings’ Rating Definitions, June 3, 2009

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 S&P Global Ratings 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.
## Contact List

<table>
<thead>
<tr>
<th>PRIMARY CONTACT</th>
<th>SECONDARY CONTACT</th>
<th>SECONDARY CONTACT</th>
</tr>
</thead>
<tbody>
<tr>
<td>James M Wiemken</td>
<td>Matthew B Albrecht, CFA</td>
<td>Marta Castelli</td>
</tr>
<tr>
<td>New York</td>
<td>Centennial</td>
<td>Buenos Aires</td>
</tr>
<tr>
<td>(1) 212-438-1150</td>
<td>+ 1 (303) 721 4670</td>
<td>(54) 114-891-2128</td>
</tr>
<tr>
<td><a href="mailto:james.wiemken@spglobal.com">james.wiemken@spglobal.com</a></td>
<td><a href="mailto:matthew.albrecht@spglobal.com">matthew.albrecht@spglobal.com</a></td>
<td><a href="mailto:marta.castelli@spglobal.com">marta.castelli@spglobal.com</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SECONDARY CONTACT</th>
<th>SECONDARY CONTACT</th>
<th>SECONDARY CONTACT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lapo Guadagnuolo</td>
<td>Andrea Quirk</td>
<td>Katrien Van Acoleyen</td>
</tr>
<tr>
<td>London</td>
<td>London</td>
<td>London</td>
</tr>
<tr>
<td>(44) 20-7176-3507</td>
<td>(44) 20-7176-3736</td>
<td>(44) 20-7176-3860</td>
</tr>
<tr>
<td><a href="mailto:lapo.guadagnuolo@spglobal.com">lapo.guadagnuolo@spglobal.com</a></td>
<td><a href="mailto:andrea.quirk@spglobal.com">andrea.quirk@spglobal.com</a></td>
<td><a href="mailto:katrien.vanacoleyen@spglobal.com">katrien.vanacoleyen@spglobal.com</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SECONDARY CONTACT</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Takamasa Yamaoka</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tokyo</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(81) 3-4550-8719</td>
<td></td>
<td></td>
</tr>
<tr>
<td><a href="mailto:takamasa.yamaoka@spglobal.com">takamasa.yamaoka@spglobal.com</a></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Copyright © 2018 by Standard & Poor’s Financial Services LLC. All rights reserved.

No content (including ratings, credit-related analyses and data, valuations, model, software or other application or output therefrom) or any part thereof (Content) may be modified, reverse engineered, reproduced or distributed in any form by any means, or stored in a database or retrieval system, without the prior written permission of Standard & Poor’s Financial Services LLC or its affiliates (collectively, S&P). The Content shall not be used for any unlawful or unauthorized purposes. S&P and any third-party providers, as well as their directors, officers, shareholders, employees or agents (collectively S&P Parties) do not guarantee the accuracy, completeness, timeliness or availability of the Content. S&P Parties are not responsible for any errors or omissions (negligent or otherwise), regardless of the cause, for the results obtained from the use of the Content, or for the security or maintenance of any data input by the user. The Content is provided on an “as is” basis. S&P PARTIES DISCLAIM ANY AND ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, FREEDOM FROM BUGS, SOFTWARE ERRORS OR DEFECTS, THAT THE CONTENT’S FUNCTIONING WILL BE UNINTERRUPTED OR THAT THE CONTENT WILL OPERATE WITH ANY SOFTWARE OR HARDWARE CONFIGURATION. In no event shall S&P Parties be liable to any party for any direct, indirect, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs or losses caused by negligence) in connection with any use of the Content even if advised of the possibility of such damages.

Credit-related and other analyses, including ratings, and statements in the Content are statements of opinion as of the date they are expressed and not statements of fact. S&P’s opinions, analyses and rating acknowledgment decisions (described below) are not recommendations to purchase, hold, or sell any securities or to make any investment decisions, and do not address the suitability of any security. S&P assumes no obligation to update the Content following publication in any form or format. The Content should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. S&P does not act as a fiduciary or an investment advisor except where registered as such. While S&P has obtained information from sources it believes to be reliable, S&P does not perform an audit and undertakes no duty of due diligence or independent verification of any information it receives. Rating-related publications may be published for a variety of reasons that are not necessarily dependent on action by rating committees, including, but not limited to, the publication of a periodic update on a credit rating and related analyses.

To the extent that regulatory authorities allow a rating agency to acknowledge in one jurisdiction a rating issued in another jurisdiction for certain regulatory purposes, S&P reserves the right to assign, withdraw or suspend such acknowledgment at any time and in its sole discretion. S&P Parties disclaim any duty whatsoever arising out of the assignment, withdrawal or suspension of an acknowledgment as well as any liability for any damage alleged to have been suffered on account thereof.

S&P keeps certain activities of its business units separate from each other in order to preserve the independence and objectivity of their respective activities. As a result, certain business units of S&P may have information that is not available to other S&P business units. S&P has established policies and procedures to maintain the confidentiality of certain non-public information received in connection with each analytical process.

S&P may receive compensation for its ratings and certain analyses, normally from issuers or underwriters of securities or from obligors. S&P reserves the right to disseminate its opinions and analyses. S&P’s public ratings and analyses are made available on its Web sites, www.standardandpoors.com (free of charge), and www.ratingsdirect.com and www.globalcreditportal.com (subscription), and may be distributed through other means, including via S&P publications and third-party redistributors. Additional information about our ratings fees is available at www.standardandpoors.com/usratingsfees.

STANDARD & POOR’S, S&P and RATINGSDIRECT are registered trademarks of Standard & Poor’s Financial Services LLC.