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## Criteria | Insurance | General:

# Insurers: Rating Methodology

### Criteria Officers:

Emmanuel Dubois-Pelerin, Global Criteria Officer, Financial Services, Paris (33) 1-4420-6673;  
emmanuel.dubois-pelerin@standardandpoors.com

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

Michelle Brennan, European Financial Services Criteria Officer, London (44) 20-7176-7205;  
michelle.brennan@standardandpoors.com

### Primary Credit Analysts:

Rodney A Clark, FSA, New York 212-438-7245; rodney.clark@standardandpoors.com

Rob C Jones, London (44) 20-7176-7041; rob.jones@standardandpoors.com

Mark Button, London (44) 20-7176-7045; mark.button@standardandpoors.com

### Secondary Contacts:

Gregory S Gaskel, New York 212-438-2787; greg.gaskel@standardandpoors.com

Karin Clemens, Frankfurt (49) 69-33-999-193; karin.clemens@standardandpoors.com

Matthew T Carroll, CFA, New York 212-438-3112; matthew.carroll@standardandpoors.com

John Iten, New York (1) 212-438-1757; john.iten@standardandpoors.com

Lotfi Elbarhdadi, Paris (33) 1-4420-6730; lotfi.elbarhdadi@standardandpoors.com

Angelica G Bala, Mexico City (52) 55-5081-4405; angelica.bala@standardandpoors.com

Kevin T Ahern, New York 212-438-7160; kevin.ahern@standardandpoors.com

David Laxton, London (44) 20-7176-7079; david.laxton@standardandpoors.com

Michael J Vine, Melbourne (61) 3-9631-2102; michael.vine@standardandpoors.com

Connie Wong, Singapore (65) 6239-6353; connie.wong@standardandpoors.com

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# Insurers: Rating Methodology

*(Editor's Note: This article supersedes those in Appendix F.)*

## I. INTRODUCTION

1. These criteria comprise Standard & Poor's Ratings Services' global framework for rating insurance companies, as well as the methodology for assessing their stand-alone creditworthiness and, together with criteria on group and government support, assigning ratings.
2. This article follows our Request for Comment, where Standard & Poor's solicited public feedback to the proposed criteria: "Request for Comment: Insurers: Rating Methodology," published on July 9, 2012, on RatingsDirect. The comments we received contributed to changes that we included in these criteria, outlined in Appendix C. The criteria constitute specific methodologies and assumptions under "Principles Of Credit Ratings," published on Feb. 16, 2011. For other key criteria for rating insurance companies, see "Methodology For Linking Short-Term And Long-Term Ratings For Corporate, Insurance, And Sovereign Issuers," "Enterprise Risk Management," and "Group Rating Methodology," published on May 7, 2013, as well as the criteria in the Related Criteria And Research section at the end of this article.

## II. SCOPE OF THE CRITERIA

3. The criteria apply to all global-scale foreign and local currency, long-term issuer credit, financial strength, and financial enhancement ratings on insurers in the business of life, health, and property/casualty insurance and reinsurance sectors. Property/casualty (or P/C) insurance is also known as non-life. The criteria also apply to ratings on obligations other than equity hybrid instruments. The criteria do not apply to ratings on bond insurers, insurance brokers, and mortgage and title insurers.

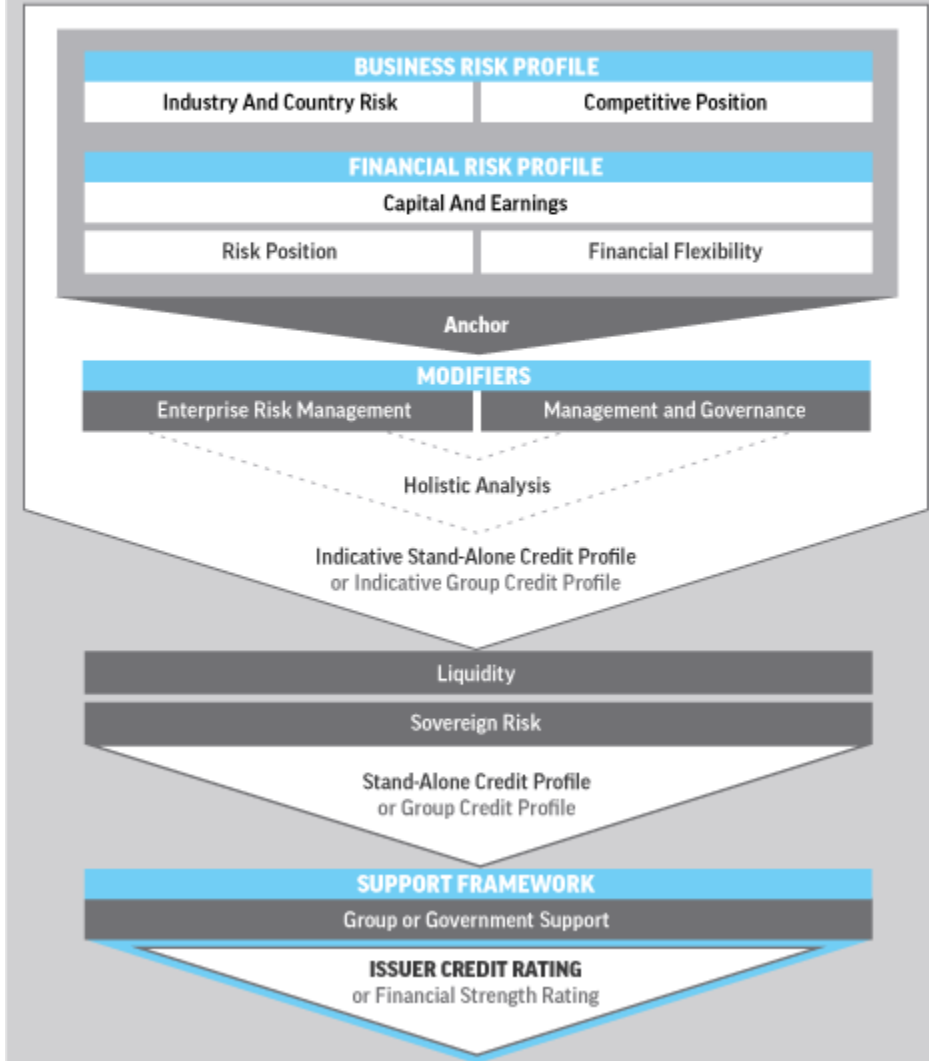
## III. SUMMARY OF THE CRITERIA

4. The methodology consists of assessing the stand-alone credit profile (SACP) and then group or government support (see chart 1). For groups, the SACP is referred to as a group credit profile (GCP). Once the likelihood of extraordinary support is evaluated, then the criteria determine the insurer's issuer credit rating (ICR). For most companies, the financial strength rating and financial enhancement rating, if any, are identical to the ICR. The SACP or GCP are subject in certain situations to an adjustment of one notch up or down. SACP and GCP are as defined in "Stand-Alone Credit Profiles: One Component Of A Rating," published on Oct. 1, 2010, and "Group Rating Methodology," published on May 7, 2013.
5. The assessments of the SACP and GCP rest on eight rating factors:

- Insurance Industry And Country Risk Assessment (IICRA),
  - Competitive position,
  - Capital and earnings,
  - Risk position,
  - Financial flexibility,
  - Enterprise risk management (ERM),
  - Management and governance, and
  - Liquidity.
6. The criteria include quantitative and qualitative metrics for evaluating the rating factors as well as group or government support. The analysis is mainly qualitative for industry and country risk, competitive position, management and governance, ERM, and support, and mostly quantitative for the others. The basis for calibration is explained in more detail in Appendix D.

## Insurance Ratings Framework

To produce a long-term rating on an operating insurance company, Standard & Poor's assesses eight rating factors, adjusts them in a holistic analysis, and assesses sovereign risk. Lastly, we analyze the potential for the insurer to benefit from extraordinary group or government support.



## IV. CHANGES FROM REQUEST FOR COMMENT

7. For a summary of changes from the Request for Comment, see Appendix C.

## V. IMPACT ON OUTSTANDING RATINGS

8. We expect that a significant majority of our ratings will not change as a result of the publication of these criteria in combination with "Group Rating Methodology," published May 7, 2013. Where rating changes occur, the new rating is most likely to be within one notch of the current rating--we expect only a very few cases where a rating changes by

more than one notch. Preliminary results suggest that positive rating actions will likely slightly outweigh negative rating actions. During our testing, we have not identified any sectors or regions where the distribution of ratings is likely to change significantly.

## VI. EFFECTIVE DATE AND TRANSITION

9. These criteria are effective immediately on the date of publication. We intend to complete our review of our insurer ratings within the next six months.
10. To the extent that elements of these criteria apply to Lloyd's Syndicate Assessments, the effective date is Nov. 1, 2013.

## METHODOLOGY

### A. Determining The Ratings: Key Steps

11. The criteria determine an operating insurance company's long-term rating in seven steps:
  - The business risk profile is derived from the combination of the relevant industry and country risk assessments, and the insurer's competitive position.
  - The financial risk profile is derived from the combination of the assessments for capital and earnings, risk position, and financial flexibility.
  - The anchor is derived from the combination of the assessments for the business and financial risk profiles according to table 1 (unless the present default risk leads to an ICR of 'CCC+' or lower).
  - The indicative SACP or GCP is equivalent to the anchor, unless modified up or down by the ERM and management assessment, and any adjustment due to the application of paragraph 17.
  - The SACP is equivalent to the indicative SACP, and the GCP is equivalent to the indicative GCP, unless the liquidity test or sovereign risk imply a lower SACP or GCP, or where the insurer is considered vulnerable to non-payment, it is set according to the separate criteria: "Criteria For Assigning 'CCC+', 'CCC', 'CCC-', And 'CC' Ratings" published Oct. 1, 2012).
  - The ICR results from the combination of the SACP or GCP and the support framework, which determines the extent of uplift, if any, for group or government support. Only this step, or the application of paragraph 17, may lead to an 'AAA' rating on an insurer.
  - The FSR, if any, equals the ICR unless the present default risk leads to a rating conclusion of 'CCC+' or lower, or unless policyholder obligations, and not other financial obligations, are supported by a more creditworthy counterparty, according to section VII.F of "Group Rating Methodology," published on May 7, 2013.
12. Where table 1 specifically indicates two possible anchors, they are used to differentiate when an insurer:
  - Is scoring consistently close to—but not crossing—the boundary of a higher or lower assessment for several significant business or financial risk subfactors. Note that crossing the boundary would raise or lower the anchor.
  - Has particularly strongly positive or negative business or financial risk characteristics on a subfactor that has only three possible scores (e.g., positive, neutral, or negative) and so may undervalue the contribution of those characteristics to the insurer's overall creditworthiness.

**Table 1**

<b>Anchor</b>										
<b>Financial risk profile (from table 8)</b>										
<b>Business risk profile (from table 2)</b>	<b>Extremely strong</b>	<b>Very strong</b>	<b>Strong</b>	<b>Moderately strong</b>	<b>Upper adequate</b>	<b>Lower adequate</b>	<b>Less than adequate</b>	<b>Weak</b>	<b>Very weak</b>	<b>Extremely weak</b>
Excellent	aa+	aa	aa-	a+	a	a-	bbb+	bbb-	N/A	N/A
Very strong	aa	aa-	aa- or a+	a+ or a	a	a-	bbb	bb+	bb	N/A
Strong	a+	a+ or a	a or a-	a-	a-	bbb+	bbb	bb+	bb-	b+
Satisfactory	a or a-	a-	a-	bbb+	bbb+	bbb	bbb-	bb	bb-	b
Fair	bbb+	bbb+	bbb+ or bbb	bbb	bbb	bbb-	bb+	bb	b+	b
Vulnerable	bbb-	bbb-	bbb-	bb+	bb+	bb+	bb	bb-	b	b
Highly vulnerable	bb-	bb-	bb-	bb-	bb-	bb-	b+	b	b	b- or lower

Note: When outcomes in adjacent cells diverge by two or more notches, the anchor may be set one notch higher or lower based on relative business risk or financial risk strength or weakness within the cell or a trend in these risks. N/A--Not applicable.

13. A holding company rating is assigned by notching down from the group's GCP, typically by a maximum of three notches (see "Group Rating Methodology," published on May 7, 2013) absent present default risk.
14. GCPs and SACPs are assessed using the same rating factors as in paragraph 5, and the assignment of the GCP follows the steps in paragraph 11. The scope of the GCP analysis is the entire group. By contrast, for a group member, the scope of the SACP is the entity itself or, if it has subsidiaries, the subgroup.
15. Specific considerations apply to insurers in start-up or run-off (see Appendix A).
16. The methodology for analyzing the creditworthiness of insurers is forward-looking. The metrics use projections for the current and upcoming two years, as informed by the past five years, unless otherwise stated, and take into consideration:
  - Developments since the most recent public or nonpublic information was released, such as dividend payments, new debt issuance, and repayment of existing debt;
  - Negative developments that we expect, such as increased debt, planned dividends and share repurchases, increased investment risk, and exposure growth; and
  - Positive developments that have a reasonably high degree of certainty, such as expected retained earnings or repayments of existing debt. An insurer's plans for equity market or hybrid instrument issuance, or reductions in investment risk would rarely carry a reasonably high degree of certainty.
17. The assessment of an insurer's SACP and GCP is adjusted by up to one notch in either direction to capture a more holistic view of creditworthiness; and to recognize sustained, predictable operating and financial underperformance or outperformance, informed by comparative analysis (see paragraphs 18 to 20 on peer groups). The holistic analysis includes rare or strongly positive or negative characteristics, including the insurer's legal constitution and ownership, which the criteria do not separately identify. The 'bb+'/'BB+' and 'b-'/'B-' limits posed by "less than adequate" and

"weak" liquidity (see paragraph 168) are not subject to the adjustment in this paragraph. This paragraph does not apply in case of present default risk.

18. To assess comparative performance (and for the assessment of competitive position), the criteria define peers generally as insurers in the same sector as the insurer under consideration for global reinsurers, global marine protection and indemnity (P&I) insurers, global trade credit insurers, and global multiline insurers. Otherwise peers often have the same country and sector combination (e.g., French life insurers or Japanese P/C insurers). Peers may include insurers occupying similar niches in different countries or may include insurance companies with similar SACPs. Insurers can be members of several peer groups. Peer groups may change through time as operating conditions or insurer-specific features necessitate.
19. If the peer group contains a small number of rated peers, it may be broadened to include rated or unrated insurers in markets with similar business profiles (e.g., bancassurers in developed markets) or with similar SACPs or GCPs.
20. If the group of insurers meeting the characteristics of the two previous paragraphs is overly large, it may be delineated according to business line, such as in the U.S. where the P/C insurance sector can be delineated between personal and commercial lines.
21. Insurance is typically classified as either P/C (non-life) insurance or life insurance by national laws or regulations. However, certain products may be classified as P/C in one country and life in another. Furthermore, health insurance may be variously classified as P/C insurance, life insurance, or split between the two. Certain health products may have their own laws and regulatory framework.
22. For both primary insurers and reinsurers, we apply either the life or P/C metrics in these criteria depending on the underlying characteristics of the business. Accordingly, even where a certain type of product is legally designated as life insurance, we may use P/C metrics if they better explain its profit drivers, for example for short-term life. Similarly, even where a certain line of business is legally designated as P/C insurance we may use life metrics, for example, for extended warranty.
23. We apply the same principle for health insurance even if it is subject to its own laws and regulatory framework in a market. For example, where health products have long-term savings features, such as in Germany, we follow the methodology for life insurers and consider health-specific industry and country risk. Where health products are short-term indemnity contracts, such as in the U.S., Australia, and New Zealand, we follow the methodology for P/C insurers, and consider health-specific industry and country risk.

## **B. Assessing The Business Risk Profile**

### **B1. Deriving The Business Risk Profile**

24. The business risk profile (BRP) assesses the risk inherent in the insurer's operations and therefore the potential sustainable return to be derived from those operations on a scale from '1' (excellent) to '7' (highly vulnerable).



25. The BRP is based on the IICRA specific to the insurer and on the insurer's competitive position. In certain cases, it may be modified by reinsurance utilization (see table 2).

**Table 2**

IICRA	Competitive position assessment (from table 6)					
	1 (Extremely strong)	2 (Very strong)	3 (Strong)	4 (Adequate)	5 (Less than adequate)	6 (Weak)
1 (Very low risk)	Excellent	Very strong	Strong	Satisfactory	Fair	Vulnerable or highly vulnerable
2 (Low risk)	Excellent	Very strong	Strong	Satisfactory	Fair	Vulnerable or highly vulnerable
3 (Intermediate risk)	Very strong	Very strong	Strong	Satisfactory	Fair	Vulnerable or highly vulnerable
4 (Moderate risk)	Strong	Strong	Satisfactory	Fair	Vulnerable	Highly vulnerable
5 (High risk)	Fair	Fair	Fair	Vulnerable	Vulnerable	Highly vulnerable
6 (Very high risk)	Vulnerable	Vulnerable	Highly vulnerable	Highly vulnerable	Highly vulnerable	Highly vulnerable

See also paragraphs 27 to 29. Certain restrictions may apply. If we expect an insurer's two-year average reinsurance utilization ratio (see Appendix E) to exceed 20%, its business risk profile (BRP) cannot be stronger than '2' (very strong). If we expect this ratio to exceed 40%, its BRP cannot be stronger than '3' (strong). If we expect this ratio to exceed 60%, its BRP cannot be stronger than '4' (satisfactory). In three cases, table 2 indicates two possible BRP outcomes for a "weak" competitive position. The weaker outcome prevails for an insurer that consistently and materially underperforms peers. This is to offset the table's lack of granularity at that point. IICRA--Insurance Industry And Country Risk Assessment.

26. To determine the SACP of a group member, the criteria assess BRP from a stand-alone perspective. Where there are controlled distribution channels, these are assessed from a group perspective (see paragraphs 83 to 86).
27. Insurers with relatively high- or low-risk product offerings, or target markets with unfavorable or favorable competitive dynamics, can be assessed as weaker or stronger than the unadjusted BRP score by one category. We apply this adjustment infrequently, and only in cases where:
- The insurer has large and predictable noninsurance sources of earnings with low balance-sheet risk;
  - Conversely, it has noninsurance sources of earnings that are large and fairly unpredictable, or entail significant balance-sheet risk; or
  - Most of the insurer's liabilities or premiums exhibit a higher or lower BRP than that of peers operating in the same sectors (e.g., health, life, or P/C) and countries.
28. Some examples of stronger risk profiles include the following:
- An insurer that focuses on products that have meaningful risk-sharing features, such as participating whole-life insurance and some with-profit products with minimal investment return guarantees, provided that the insurer has demonstrated the willingness and ability to share adverse experience with policyholders in spite of the commercial implications.
  - An insurer that avoids markets where high-risk "secondary guarantees" have become prevalent, such as no-lapse guarantees on universal life insurance, or living benefit riders on variable annuity contracts.
  - An insurer that focuses on niche or underpenetrated markets with few competitors, effective barriers to entry, and sustainably strong margins.
29. An example of a weaker risk profile is:

- An insurer that focuses on regions or countries where catastrophe risk is highest. For example, a purely Florida-based P/C writer or a P/C insurer operating solely in hurricane-exposed southeastern coastal U.S. states or earthquake-exposed western U.S. states would not benefit from factors that support U.S. P/C financial strength as a whole.

## B2. Insurance Industry And Country Risk Assessment

30. The Insurance Industry And Country Risk Assessment (IICRA) addresses the risks typically faced by insurers operating in specific industries and countries, and is generally determined at a country or regional level. For example, we assign an IICRA to the Canadian P/C sector, one to the Australian health sector, and one to the Japanese life sector. We also analyze industry and country risk on a global basis for four specific sectors (see paragraphs 38 to 40). The IICRA provides the context for our analysis of an insurer's BRP, since industry and country risks are closely linked with the analysis of competitive position, as is the case for most corporate sectors.
31. The risk assessment applicable to each industry and country combination is derived by combining the average of the four country-related assessments into a country-risk assessment and the average of the five industry-related assessments into an industry-risk assessment, each on a scale (from weakest to strongest) of "very high risk," "high risk," "moderate risk," "intermediate risk," "low risk," and "very low risk." The IICRA assessment is the equally weighted average of the industry and country risk assessments, with two exceptions: If one is "moderate risk" or "high risk" while the other is stronger, the former receives a 70% weight. If one is "very high risk" while the other is stronger, the former receives 90% weight. Additionally, the IICRA can be no stronger than "moderate" if the insurance market is at a less-mature stage of development. One indicator that the market is less mature is that P/C or life insurance premiums comprise less than 1.5% of GDP. In cases where risk profiles weaken suddenly to an extreme degree and the IICRA subscores understate risk as a result, the IICRA assessment may weaken from high risk to very high risk.
32. Four country-related subfactors--economic, political, financial system risk, and payment culture and rule of law--as well as the institutional framework subfactor, which is industry-related, are assessed on a scale from '1' to '6'. The other four industry-related subfactors are assessed as positive ('1'), neutral ('3'), or negative ('6'). For the four sectors discussed in paragraph 38 to 40, each of the four country-related subfactors is assessed as "intermediate risk." This is an approximation of the global weighted average of the country-related subfactor assessments of the countries where these sectors' participants operate.
33. Table 3 shows how we identify and assess the IICRA subfactors:
  - Economic risk,
  - Political risk,
  - Financial system risk,
  - Payment culture and the rule of law,
  - Return on equity,
  - Product risk,
  - Barriers to entry,
  - Market growth prospects, and
  - Institutional framework.

34. The first four subfactors are country risks that affect all industries including insurance while the last five, although influenced by country risks, are specific to the insurance industry. The first three assessments draw from Standard & Poor's sovereign and bank industry criteria (see table 3). The inclusion of the first four subfactors reflects our views that:

- The industry's revenue and profitability dynamics are highly sensitive to the local economic environment.
- The industry is typically highly regulated.
- The industry depends on the banking sector for the transmission of money and the provision of loans and facilities and, both with respect to fixed-income investment instruments and to its own financing, on deep and liquid debt capital markets.
- The industry is affected by the quality of the legal framework and the judicial system.

Table 3 Assessing The IICRA Subfactors*			
Subfactor	Assessed on a 1-6 scale		
Economic risk (paragraph 41)	The assessment draws on sovereign ratings criteria (paragraphs 51-61)		
Political risk (paragraph 41)	The assessment draws on sovereign ratings criteria (paragraphs 36-50)		
Financial system risk (paragraph 41)	The assessment draws on BICRA criteria (paragraphs 73-113)		
Payment culture and the rule of law (paragraph 42)	The assessment is informed by certain external indicators		
Institutional framework (paragraphs 63 to 67)	The assessment is based on regulatory framework, regulatory track record, and governance and transparency		
Subfactor	1	3	6
Return on equity (paragraphs 43 to 46)§	Expected ROE is 10% or higher and no excessive risk taking exists	Expected ROE is between 4% and 10% and no excessive risk taking exists	Expected ROE is under 4% or excessive risk taking exists
Product risk (paragraphs 47 to 52)*	Sources of potential ROE volatility are low	Sources of potential ROE volatility are moderate	Sources of potential ROE volatility are high
Barriers to entry (paragraphs 53 to 57)	Barriers to entry are high due to regulatory or operational factors	Barriers to entry are moderate due to regulatory or operational factors	Barriers to entry are low due to regulatory or operational factors
Market growth prospects (paragraphs 58 to 62)	Insurance premiums are expected to grow significantly and no excessive risk taking exists	Insurance premiums are not expected to grow nor reduce significantly, or excessive risk taking exists	Insurance premiums are expected to reduce significantly
<p>*The IICRA score applicable to an insurer may be modified to neutralize the effect of a "negative" product risk assessment (see paragraphs 47 to 52) if, for more than approximately four-fifths of the insurer's liabilities (for life business) or premiums (for P/C business), none of the sources of product risk applies. For example, the insurer may not be materially exposed to property catastrophe risk nor write casualty business to a material extent. §In a given jurisdiction, the ROE assessment may be adjusted positively by one category where nominal ROE reflect exceptionally low long-term risk-free rates, or negatively where nominal ROE reflect exceptionally high long-term risk-free rates. BICRA--Banking Industry Country Risk Assessment. IICRA--Insurance Industry And Country Risk Assessment. ROE--Return on equity.</p>			

35. Under the criteria, an insurer operating in a single country and single insurance industry sector is assigned the IICRA associated with that country and sector.
36. For insurers operating in more than one country or sector, we assign a weighted-average IICRA assessment by calculating the rounded-off average of the IICRA assessments for the insurer's country and sectors. This average is weighted by its gross premiums unless this would misrepresent the distribution of risks, in which case insurance

liabilities or other appropriate alternatives are used. We combine the scores from the insurer's main markets to cover at least 80% of its business by premiums, including all countries representing more than 5%, and up to 20 countries. In the rare cases of insurers writing more than 5% of premiums in a country or sector that has no IICRA, we would use the IICRA of the country-sector combination whose country and industry characteristics we consider most similar to those of the country or sector where the insurer operates.

37. When the averages of the country- or industry-related subfactors described in paragraph 31 or, for a given insurer, the premium- (or insurance liability-) weighted-average of the relevant IICRAs, falls within 0.25 of a cutoff point (for example, within 2.25-2.75), the assessment also factors in: (1) the directional trend of the overall IICRA; (2) for industry risk, the rare cases in which the industry is especially strong or weak compared with other industries assessed positive or negative using the subfactor assessments; or (3) for country risk, the rare situations where the economywide assessments of the country risk subfactors lead to a nuanced conclusion regarding insurance specifically. In such cases, the IICRA may be modified by one category. For example, of the averages in this paragraph, one might fluctuate from one year to the next from 3.4 to 3.6. We then assess whether, over the coming five years, the directional trend points more clearly to "moderate" versus "intermediate" risk.

### **Insurers operating in global industries**

38. Insurers operating in the P/C reinsurance, life reinsurance, trade credit insurance, and marine protection and indemnity (P&I) sectors are assigned the sector's global score for the relevant proportion of their business. This is because they typically write this type of business in multiple countries around the world, resulting in high levels of geographic diversification. In addition, the domicile of the insurer has relatively little impact on the aggregate industry and country risks it faces.
39. However, if an insurer or reinsurer in these four sectors focuses on a single country or region, an IICRA is applied at a country or regional level using the process that applies to all other insurers.
40. For the purpose of the criteria, P/C reinsurance includes certain large commercial and industrial business lines that have similar characteristics to reinsurance, i.e., where risks are commonly underwritten on a subscription or coinsurance basis, or are placed on similar terms and conditions with several insurers.

### **1. Economic, political, and financial system risk**

41. The economic and political risk assessments draw on our sovereign criteria while the financial system risk assessment draws on our Banking Industry Country Risk Assessment (BICRA) criteria. These assessments are adjusted for insurance-specific considerations in the rare cases where we believe the sovereign or BICRA criteria would significantly misrepresent factors affecting insurance risk (for example, under political risk, where a country's public authorities consistently treat the insurance sector more or less favorably than other sectors). The economic risk subfactor in IICRA draws on the criteria for the sovereign economic score, with potential adjustments considering the criteria for the sovereign monetary and external scores, and the criteria for the BICRA score for economic imbalances. The financial system risk subfactor draws on the criteria for the BICRA's banking industry risk score, although additional weight is given to the breadth or narrowness of domestic capital markets, and the domestic private sector's access to external funding.

## 2. Payment culture and rule of law

42. The payment culture and rule of law influences an insurer's performance, given how important long-term contractual arrangements are to the industry. The assessment of this subfactor addresses the predictability of the legal framework. The analysis is informed by external indicators, such as the World Bank's governance indicators for the rule of law, ease of enforcing contracts and control of corruption, and Transparency International's corruption perceptions index.

## 3. Return on equity (ROE)

43. The criteria assess ROE (see Appendix E: Glossary) on the aggregate profits and the aggregate total capital of at least 60% of industry participants by premiums (including all rated participants) if available, or else of all rated participants. This may be based on individual insurer data or aggregated data produced by regulators or industry associations.
44. Where there is insufficient public data to meet the 60% threshold or for markets where ROE is not available, we may assess the subfactor based on credible alternative evidence or metrics (see table 4).
45. If there is insufficient evidence to form an opinion, or the available evidence suggests excessive risk-taking is taking place, the assessment is "negative."

**Table 4**

### Alternative Metrics For Assessing ROE

Subfactor	1 (positive)*	3 (neutral)*	6 (negative)
<b>Life insurance</b>			
Operating return on embedded value (see Appendix E)	We expect the average return to exceed approx. 12%	The assessment is neither positive nor negative	We expect an average return of approx. 5% or lower
Return on assets or prebonus pretax earnings/total assets*	We expect the average return on assets to exceed approx. 1% and the prebonus return to exceed approx. 2%	The assessment is neither positive nor negative	For either of the two metrics, we expect an average return of approx. 0.5% or lower
<b>P/C insurance</b>			
Return on revenue and combined ratio	We expect the average return on revenue to exceed approx. 12% and the average combined ratio to be approx. 100% or lower	The assessment is neither positive nor negative	We expect an average return on revenue of approx. 5% or lower, or an average combined ratio that exceeds approx. 105%

\*Unless there is insufficient evidence to form an opinion or the available evidence suggests excessive risk-taking is taking place, in which case the assessment is "negative" (see paragraphs 44 and 45). P/C--Property/casualty.

46. In our opinion, risk taking is excessive if we perceive that any of the following conditions exists:
- The industry has significantly relaxed its underwriting standards. For example, premiums, prices, or policy terms and conditions have been or are being significantly reduced or weakened; or new and unproven products have been introduced and are growing rapidly;
  - Mis-selling risk is heightened; for example, policy lapse rates are unusually high or policyholders are making, or are expected to make, compensation claims for products sold to them;
  - Commissions to intermediaries have significantly increased; or
  - Premiums are insufficient to achieve long-term profitability.

## 4. Product risk

47. Some product-specific elements can cause ROE, or the metrics in table 4, to be more volatile over time. We may identify and assess further industry- or country-specific sources of volatility stemming from product risk. Current

examples include:

- Property insurance underwriting results may be materially affected by natural catastrophes.
- Casualty insurance underwriting results may be materially affected by unpredictable settlements, for example, where legal systems include jury-awarded or punitive damages, or where claimant compensation arrangements or liability laws change frequently.
- P/C underwriting results may be materially affected by fraud.
- Life insurance results may be affected in markets where asset-liability mismatch risk affects most liabilities. Such mismatches include: variable annuities with living benefit guarantees; long-term care insurance; no lapse-guarantee universal life; insurance liabilities backed materially by equities; or where the risk of low or negative spreads exist due to current interest rates at or below contractual guaranteed rates. Asset-liability mismatch risk includes risks associated with lapses and how they are mitigated by product design, tax disincentives, or other mitigants.

48. Each of the sources of volatility described in the previous paragraph is assessed as "high," "intermediate," or "low," depending on how much it can affect ROE volatility. If a source of volatility is "high" before the impact of mitigants, but is comprehensively and effectively reinsured or otherwise mitigated, that source of volatility is assessed as "intermediate." If a source of volatility is "intermediate" before the impact of mitigants, but is comprehensively and effectively reinsured or otherwise mitigated, that source of volatility is assessed as "low."
49. As a result of the above, for example, the P/C reinsurance sector is likely to be assessed as "high." By contrast, most primary P/C insurance sectors that are significantly exposed to natural catastrophe risk, but where the risk is comprehensively and effectively reinsured, are likely to be assessed as "intermediate." Risk in life insurance sectors that are focused on protection and unit-linked products or offer minimal investment-based guarantees, for example, is likely to be assessed as "low."
50. Product risk is assessed as "positive" if each of the sources of potential volatility is assessed as low risk.
51. The assessment is "negative" if any of the sources of potential volatility is assessed as high risk.
52. In all other cases, product risk is assessed as "neutral."

## 5. Barriers to entry

53. Insurance is typically prudentially regulated, usually resulting in at least moderate barriers to entry. These barriers may be regulatory or operational (see paragraphs 55 and 56). They are assessed as high, moderate, or low.
54. If either of the regulatory or operational barriers is assessed as high, the overall assessment is "positive." The overall assessment is "negative" if both barriers are assessed as low. In all other cases, the overall assessment is "neutral."
55. Regulatory barriers are assessed as high where regulatory practices involve either exceptionally demanding or lengthy procedures for licensing new insurers or where access is limited to named insurers under the law or as part of government policy in the relevant industry-country combination. Regulatory barriers are assessed as low where either insurance is unregulated or where the regulatory procedures for licensing new insurers are undemanding.
56. Operational barriers are assessed as high if availability is low and costs are high for resources such as management, staff, systems, data, and sources of distribution in the relevant industry-country combination. Operational barriers are assessed as low if availability is high and costs are low for resources such as management, staff, systems, data, and

sources of distribution in the relevant industry-country combination.

57. Regulatory or operational barriers are otherwise assessed as moderate.

## **6. Market growth prospects**

58. Here, the criteria assess the potential for the industry to grow. The assessment is based on the growth of or contraction in life and P/C insurance premiums.
59. The subfactor is assessed as "neutral" for the industries assessed at a global level, i.e., P/C reinsurance, life reinsurance, trade credit insurance, and marine P&I. However, if a major industry development (e.g., a regulatory change) results in substantially increased or decreased product demand, the assessment is "positive" or "negative," respectively.
60. The subfactor is assessed as "positive" if we expect insurance premiums to grow significantly in the current year and subsequent two years. Typically, significant growth correlates with more than approximately 5% a year on average in real terms over this period. But if growth is likely to result mainly from excessive risk-taking, the assessment is reduced to "neutral" (see paragraphs 45 and 46).
61. The subfactor is assessed as "negative" if we expect insurance premiums to reduce significantly on average in real terms over the current and subsequent two years.
62. In all other cases, market growth prospects are assessed as "neutral." In such cases, no penalty is incurred for excessive risk taking, which the ROE subfactor already addresses. Examples of excessive risk taking are provided in paragraph 46.

## **7. Institutional framework**

63. Our assessment of the strength of the institutional framework chiefly depends on our views of the regulatory framework and of the regulatory track record of the industry, and separately on the standards of governance or transparency.
64. Under the criteria, the assessments of the regulatory framework and of the regulatory track record ("strong," "intermediate," or "weak") combine into a preliminary assessment of the institutional framework on a scale of '1' to '5'. The final assessment of the institutional framework is the preliminary assessment, reduced by one category (for example, from '2' to '3') where we observe a clear deficiency in the standards of either governance or transparency for the industry-country combination. The preliminary assessment of the institutional framework is '1' if regulatory framework and track record are both "strong." It is '2' if one is "strong" and the other "intermediate." It is '4' if one is "weak" and the other "intermediate." It is '5' if both are "weak." In all other cases, the assessment is '3'.
65. The regulatory framework addresses how sophisticated and effective the authorization and ongoing supervision requirements of insurers are in the relevant industry-country, including group- and entity-based solvency requirements, as well as incentives for good risk management and onus on management to assess the insurer's own risk. Regulatory track record assesses the depth and frequency of monitoring of insurers and the regulator's track record of intervening to reduce or mitigate the effects of insurer failures.
66. Under the criteria, we assess governance standards by evaluating the balance of stakeholder interests among owners,



managers, lenders, and policyholders. We consider that corporate governance that is transparent, prudent, and independent of undue external influences lowers the risk for an insurance industry. Conversely, opaque or imprudent governance that does not materially constrain those external influences increases that risk.

67. Under the criteria, we assess transparency by evaluating the frequency and timeliness of reporting, and the quality and standardization of financial reports. We examine the quality of accounting and disclosure standards, including whether an insurance industry has adopted International Financial Reporting Standards (IFRS), U.S. generally accepted accounting principles (GAAP), or publicly available comprehensive regulatory returns. The assessment is also informed by the extent and effectiveness of a country's auditing requirements.

### B3. Competitive Position

68. Under the criteria, we assess the level of an insurer's competitive position under six subfactors as "positive," "neutral," or "negative" (see table 5):
- Operating performance,
  - Differentiation of brand or reputation,
  - Market position,
  - The level of controlled distribution channels,
  - Geographic diversification, and
  - Other diversification.
69. Table 6 shows how the ratings framework for insurers uses these subfactors to assess competitive position on a scale from '1' (extremely strong) to '6' (weak).
70. Underperformance or outperformance directly influences the operating performance assessment, and limits that of three other subfactors. The market position, geographic diversification, and other diversification subfactors are assessed as no stronger than "neutral" if the insurer shows consistent and material underperformance, overriding the subfactor assessment otherwise derived from subsections 3, 5, and 6 in this section. Underperformance indicates to us that the insurer has not successfully exploited its other strengths assessed by these subfactors.

**Table 5**

Assessing The Competitive Position Subfactors			
Subfactor or assessment	Positive	Neutral	Negative
Operating performance (paragraphs 71 to 74)	The insurer consistently and materially outperforms competitors.	The insurer does not consistently and materially underperform or outperform competitors.	The insurer consistently and materially underperforms competitors.
Differentiation of brand or reputation (paragraphs 75 to 78)	Meaningfully and positively differentiated on a very substantial portion of its business from peers by current or potential policyholders or their intermediaries.	Not meaningfully differentiated from peers, positively or negatively, by current or potential policyholders or their intermediaries.	Negatively differentiated on a significant portion of its business from peers by current or potential policyholders or their intermediaries.

**Table 5**

<b>Assessing The Competitive Position Subfactors (cont.)</b>			
Market position (paragraphs 79 to 82)	The insurer has a strong market position and does not consistently and materially underperform peers.	The insurer does not have a strong market position or consistently and materially underperforms peers.	N/A
Level of controlled distribution (paragraphs 83 to 86)	The insurer exerts strong control over its distribution channels and does not overly depend on a single one.	The insurer does not exert strong control over its distribution channels.	N/A
Geographic diversification (paragraphs 87 to 92)	The insurer has a large geographic presence with high insurance penetration and does not consistently and materially underperform peers.	The assessment is neither negative nor positive.	The insurer has a small geographic presence with low insurance penetration.
Other diversification (paragraph 93)	The insurer does not consistently and materially underperform peers. Also, additional diversification sources contribute significantly to the insurer's EBIT, and one of the following situations arises: the insurer writes P/C and life insurance business, and each represents approximately 20% or more of its gross premiums; the insurer writes primary insurance and reinsurance business, and each represents approximately 20% or more of its total gross premiums; or the insurer has noninsurance businesses representing approximately 20% or more of total EBIT.	The assessment is neither negative nor positive.	The insurer has one P/C line of business or a life insurance product type that contributes over 80% of the insurer's gross premium.

P/C--Property/casualty insurance. EBIT—Earnings before interest and taxation. N/A--Not applicable.

**Table 6**

<b>Competitive Position Assessment</b>		
<b>Assessment*</b>	<b>What it means</b>	<b>Guidance (see table 5)</b>
Extremely strong	An insurer's business operations make it significantly less vulnerable to adverse operating conditions than its competitors.	Almost all subfactors are positive and it is rare for one to be negative.
Very strong	An insurer's business operations make it somewhat less vulnerable to adverse operating conditions than its competitors.	The overall impact of positive subfactors clearly outweighs that of negative subfactors.
Strong	An insurer's business operations present risks comparable to those of its competitors.	The overall impact of positive subfactors slightly outweighs that of negative subfactors.
Adequate	An insurer's business operations make it somewhat more vulnerable to adverse operating conditions than its competitors.	The overall impact of positive and negative subfactors balance each other; or most subfactors are neutral and a minority is negative.
Less than adequate	An insurer's business operations make it significantly more vulnerable to adverse operating conditions than its competitors.	The overall impact of negative subfactors outweighs that of any positive subfactors.
Weak	An insurer's business operations make it considerably more vulnerable to adverse operating conditions than its competitors.	Most subfactors are negative and it is rare for one to be positive.

\*Given the importance of risk diversification to all insurance businesses, the assessment is limited to less than adequate ('5') if either the insurer's gross annual premiums or its total assets do not consistently exceed approximately \$50 million or equivalent unless the insurer's niche product is sufficiently differentiated from that of larger competitors or it uses a niche distribution channel through which no larger competitors operate. If operating performance is negative, the assessment is limited to strong ('3').

## 1. Operating performance

71. The analysis of the operating performance subfactor complements that of the other subfactors in that a "positive" assessment is a likely consequence of a healthy competitive position. An insurer achieves a "positive" assessment if we consider that its operating performance is consistently and materially stronger than that of its competitors.
72. Consistent and material operating underperformance or outperformance is assessed based on an insurer's expected

bottom- or top-quartile performance, respectively, versus its competitors in the current year and subsequent two years, as adjusted for nonrecurring items. The metrics used for this assessment are defined in Appendix E. They are:

- For all insurers: ROE.
- For P/C insurers, including composite insurers: Return on revenue and combined ratio.
- For life insurers, including composite insurers: One or more of return on assets, prebonus pretax earnings/total assets, and operating return on embedded value. Because of different accounting and reporting frameworks, not all of these metrics are applicable or available for all insurers involved in life insurance. For insurers that do not report under U.S. GAAP or IFRS, or where the accounting framework does not recognize the long-term economic value of writing life insurance policies, the assessment may include U.S. GAAP or IFRS adjustments where available.
- For noninsurance businesses: Based on the applicable criteria for those sectors.

73. An insurer may also achieve a positive assessment if it has a sustainable expense advantage that allows it to offer favorable pricing (and if its profit metrics are currently similar to peers', where we expect it to outperform them in the longer term). This is typically the case if its net expense ratio is consistently at least 10% lower than the average of competitors with similar distribution channels and similar products (i.e., under 27% if the average is 30%). These ratios are defined in Appendix E. Where an insurer has very high reinsurance utilization rates (see Appendix E), which can distort net expense ratios, the assessment reflects the gross expense ratio.

74. An insurer has a "negative" assessment if it consistently and materially underperforms competitors. It has a "neutral" assessment if it does not meet the requirements for either a "positive" or "negative" assessment.

## 2. Differentiation of brand or reputation

75. The insurer's differentiation of brand or reputation relative to its competitors is assessed from the perspective of current or potential policyholders and, for intermediated business, their intermediaries.

76. Most insurance markets are competitive and commoditized to a large degree, leaving most industry participants relatively undifferentiated from their competitors. Therefore, most insurers are likely to be assessed as "neutral." Only a small minority of rated insurers are likely to achieve a "positive" assessment. An insurer has a "neutral" assessment if it does not meet the requirements for either a "positive" or "negative" assessment.

77. The assessment is "positive" if we consider that the insurer's brand and reputation give it a significant commercial advantage relative to competitors. The advantage should affect a very substantial proportion of an insurer's business--typically at least half of consolidated gross premiums. Under the criteria, we assess commercial advantage by looking at any of the following factors:

- Consistent, high ranking among leading insurers in reputable independent brand assessments.
- Consistently positive media commentary or consistently positively differentiated results in policyholder or intermediary surveys. Media commentary includes insurance trade publications as well as brand surveys and the broader media, but excludes any commentary related to the insurer's financial performance. Policyholder or intermediary surveys are those undertaken by independent organizations and may be publicly available or requested privately by several insurers.
- Consistent success in product innovations, i.e., the insurer is early to market in new product design, and is among the first to raise premium rates when rates start to rise or among the last to lower premium rates when rates start to fall.

- A majority of its business being written on a subscription or coinsurance basis, or placed on similar terms and conditions with several insurers (this applies to reinsurance and large commercial or industrial business) and the insurer leads well over half of the business it writes and is a leader in terms of premium rates and product design. Leaders significantly influence premium rates and product design and there are generally only one or two leaders on each placement.
- Consistently high retention (or low lapse) rates.

78. The assessment is "negative" if we consider that the insurer's brand and reputation give it a significant commercial disadvantage relative to competitors. This may apply in commoditized sectors or, for example, through (on a significant proportion--typically half or more of consolidated gross premiums--of the overall business of an insurer):

- Consistently negative media commentary or consistently negatively differentiated results in policyholder or intermediary surveys (see details in paragraph 77).
- Consistent lack of success in product innovations, i.e., the insurer is slow to market in new product design, and is among the last to raise premium rates when rates start to rise or among the first to lower premium rates when rates start to fall.
- A majority of the insurer's business being written on a subscription or coinsurance basis, or placed on similar terms and conditions with several insurers (this applies to reinsurance and large commercial or industrial business) and the insurer leads under 50% of the business it writes as a follower, rather than a leader, in terms of premium rates and product design (leader is defined in paragraph 77).
- Consistently low retention (or high lapse) rates.

### 3. Market position

79. The market position subfactor is assessed as either "positive" or "neutral." Market position is assessed primarily by an insurer's share of gross premiums for the market where it participates. For a life insurer, it may additionally be assessed by its share of policyholder liabilities.

80. The subfactor is assessed as "positive" if we consider that an insurer has a strong market position. Examples of strong market position include the following:

- The insurer has a sustainable global market share of approximately 20% or more in one of the following global industries: P/C reinsurance, life reinsurance, trade credit insurance, and marine P&I insurance (examples of each are very rare);
- The insurer has a sustainable market share of approximately 20% or more in at least one significant country or significant U.S. state (see table 7); or
- The insurer consistently ranks among the top five insurers by market share in three or more significant markets (see table 7).

81. For the purposes of assessing market position, a significant market is defined as a P/C insurance line of business or a life insurance product type for each significant country or U.S. state or region (see table 7).

Table 7

Definition Of Significant Market		
Sector	Significant countries, U.S. regions or states*	Lines of business or product types
<b>P/C lines of business§</b>		
	Significant countries: U.S., Canada, Japan, China, U.K., France, Germany, Italy, Spain, Netherlands, Australia, Brazil, South Korea, and Russia	Auto or motor (liability and property); personal property; commercial property; ships, aircraft, and cargo (liability and property); workers' compensation or employers' liability; other liability; personal accident and short-term health; and credit, surety, or pecuniary
	Significant U.S. regions: Northeast, Midwest, West, and South	
	Significant U.S. states: California, Florida, New York, and Texas	
<b>Life insurance product types§</b>		
	Significant countries: U.S., Canada, Japan, China, U.K., France, Germany, Italy, Spain, Sweden, Switzerland, Netherlands, Australia, Brazil, South Korea, India, Taiwan, and South Africa	Individual life protection, individual long-term health protection, group life and health protection, group pension, unit-linked or separate account savings (including U.S. variable annuities), nonunitized savings (including with-profit and U.S. fixed annuities), and annuities (or pensions) in payment
	Significant U.S. regions: Northeast, Midwest, West, and South	
	Significant U.S. states: California, Florida, New York, and Texas	

\*These criteria assumptions reflect sector total insurance premiums written exceeding \$30 billion in each country based on Swiss Re's most recent Sigma "World Insurance," study but excluding financial centers comprising mainly captive insurers of corporates or global insurers. §Includes reinsurance of these lines of business. Reinsurance is assessed using aggregate P/C reinsurance and aggregate life reinsurance in each country. Examples of significant markets include: German individual life or health insurance protection, reinsurance of Japanese P/C insurance, and insurance of Californian workers' compensation.

82. Insurers with large market shares in nonsignificant countries are not assessed as "positive," nor are insurers with large market shares in narrow subclasses of business (e.g., subclasses of "other liability," see table 7).

#### 4. Level of controlled distribution channels

83. Under the criteria, we assess the degree to which an insurer distributes its products directly or can control (or significantly influence) its distribution channels for approximately half of its premiums, and the extent to which we consider that these relationships provide a competitive advantage. The assessment includes affiliates' distribution channels.
84. Controlled distribution channels typically include:
- Direct marketing (direct mail, telephone, or Internet);
  - Employed sales forces;
  - Distribution through the insurer's affinity groups (including certain industries, professions, associations, trades unions, public service employees, and the armed forces);
  - Distribution through banks owned by the insurer or its parent or under common control;
  - Distribution through banks not owned by the insurer or its parent or under common control, but under exclusive bancassurance contractual relationships (i.e., the bank's network distributes only that insurer's policies) that we expect to last a decade or more; and
  - Tied agents (see Appendix E).
85. Controlled distribution channels typically do not include:

- Independent intermediaries or brokers;
- Non-tied agents (see Appendix E);
- Premiums produced from price comparison websites; and
- Distribution through banks not owned by the insurer or its parent, or under common control that does not qualify as controlled under the preceding paragraph.

86. However, to the extent we consider any such relationship to be a source of demonstrable competitive advantage, we treat it as a controlled distribution channel.

## 5. Geographic diversification

87. Diversification, particularly geographic, is fundamental to the insurance business.

88. The subfactor is assessed as "positive," "neutral," or "negative" based on:

- The insurer's geographic presence, i.e., the insurer's footprint in the context of the surface area and size of markets where it writes business; and
- The level of insurance penetration, defined as the ratio of life and P/C premiums to GDP, in that geographic area.

89. The assessment, if not positive or neutral, is negative, particularly for insurers concentrated in a small market. In all countries apart from the U.S., a meaningful presence in most significant populated regions of a country is necessary for a P/C or life insurer's presence to support a "positive" assessment.

90. In each of the following situations, the assessment is typically positive:

- More than 50% of the insurer's business is derived from one or more of the four global insurance sectors defined in paragraphs 38 to 40.
- The insurer is globally diverse, for example, it is present in three or more regions (out of the U.S., Europe, Canada, as well as large Asian insurance markets) where each represents approximately 15% or more of its premiums, or in at least two where each represents approximately 25% or more of its premiums.
- The insurer is diverse within the U.S., for example, it is present in 10 or more U.S. states where each state represents at least 2% of premiums, and where five or more of these states each represents more than 5%.
- The insurer is diverse within Europe. For example, if it is present in three or more significant European countries where each contributes 15% or more to the insurer's premiums
- The insurer is diverse within large Asian insurance markets, for example, it derives more than 15% of premiums from each of three countries.
- The insurer is diverse within China, using principles similar to those applied for the U.S.

91. In each of the following situations, the assessment is typically neutral:

- Insurers (not otherwise meeting characteristics for "positive" nor "negative") diversified in large developing insurance markets, e.g., with operations representing more than 50% of premiums in countries such as China, India, or Brazil.
- Insurers (not otherwise meeting characteristics for "positive" nor "negative") somewhat diversified in developed insurance markets with operations representing more than 50% of premiums in countries that include any of the following: the U.S., Canada, or significant developed countries in Europe and Asia-Pacific.

92. In paragraphs 90 and 91, "Europe" and "European countries" means countries of the EEA (European Economic Area) and Switzerland. "Large Asian insurance markets" means Japan, China, South Korea, India, Taiwan, and Australia.

Premiums mean an insurer's total gross premiums.

## 6. Other diversification

93. An insurer's competitive position may benefit from other sources of diversification, which is assessed according to table 5, where lines of business and product types are defined as in table 7. A "negative" assessment is typically consistent with one P/C line of business or life insurance product type contributing over 80% of the insurer's gross premiums. A "positive" assessment is typically consistent with a situation where diversification sources contribute significantly to the insurer's EBIT, and that the insurer either:
- Writes P/C and life insurance business, and each represents approximately 20% or more of its total gross premiums;
  - Writes primary insurance and reinsurance business, and each represents approximately 20% or more of its total gross premiums; or
  - Has noninsurance businesses representing approximately 20% or more of total EBIT.

## C. Assessing The Financial Risk Profile

### C1. Deriving The Financial Risk Profile

94. The criteria view the financial risk profile (FRP) as the consequence of decisions that management makes in the context of its business risk profile and its risk tolerances. These decisions include the extent and manner in which the insurer is capitalized, factoring in prospective growth and retained earnings, its risk position, and the amount and types of financial flexibility it maintains, relative to its risks.
95. The starting point for evaluating an insurer's FRP is the analysis of capital and earnings (paragraph 97 to 118), including the regulatory capital filter and the representativeness of modeling modifier, resulting in an assessment on a '1' to '8' scale. We then adjust this assessment, as described in table 8 below, for the risk position (paragraph 119 to 148) and financial flexibility (paragraph 149 to 167) assessments. The FRP assessment ranges from '1' (extremely strong) to '10' (extremely weak).
96. An insurer's FRP assessment is also limited by its total asset quality: it cannot be more than strong ('3') when the latter is "adequate," '7' (less than adequate) when it is "less than adequate," or '8' (weak) when it is "weak." Total asset quality is the weighted-average credit quality of bonds, loans, and bank deposits representing shareholders' equity and nonparticipating insurance liabilities. It is "adequate" when weighted-average credit quality is in the 'BBB' category, "less than adequate" when in the 'BB' category, and "weak" when 'B+' or lower. However, our total asset quality assessment improves by one category if the investment portfolio diversification subfactor in risk position is "positive."

**Table 8**  
**Financial Risk Profile Assessment**

Capital and earnings assessment	FRP results from the capital and earnings assessments in column 1, after two sets of adjustments (-1,0, 1, 2, or 3 or more) associated with the 1-5 assessments for risk position (see table 12) and the 1-4 assessment for financial flexibility (see paragraph 153).*				
	1: Strong financial flexibility or low-risk position	2: Adequate financial flexibility or intermediate risk position§	3: Less than adequate financial flexibility or moderate risk position	4: Weak financial flexibility or high risk position	5: Very high risk position
1: Extremely strong	-1§	0	1	2	3 or more
2: Very strong					
3: Strong					
4: Moderately strong					
5: Upper adequate					
6: Lower adequate					
7: Less than adequate					
8: Weak					

\*The FRP is scored extremely weak ('10') and the SACP or GCP is limited to 'b+' if the regulatory capital adequacy subfactor is assessed 'at significant risk' (see paragraph 98). The FRP is limited to very weak ('9') and the SACP or GCP is capped at 'bb-' if we expect the fixed-charge coverage ratio not to exceed 1.5x. §The impact is zero if the capital and earnings score is '1', '2', or '3'; in addition, the FRP is limited to strong ('3') if capital and earnings is moderately strong ('4'). If capital and earnings is strong or better, a strong risk position assessment does not offset a less-than-adequate financial flexibility assessment or vice versa. For example, if capital and earnings is strong ('3'), the FRP is only moderately strong ('4'). Note: The impacts of financial flexibility and risk position are cumulative but if both are in the weakest category, the combined impact is reduced by one. Additionally, the FRP is limited to weak ('8') if the insurer has some investment risk characteristics that could cause severe capital stress and lead to a "very high" risk position score (see table 12). FRP-- Financial risk profile.

## C2. Capital And Earnings

97. Capital and earnings measures an insurer's ability to absorb losses by assessing capital adequacy prospectively, using quantitative and qualitative measures. Capital adequacy first compares currently available capital resources with capital requirements by applying Standard & Poor's capital model and then assesses the insurer's ability and willingness to build capital through net retained earnings and thereby fund growth. (For more on the capital model criteria, see "Refined Methodology And Assumptions For Analyzing Insurer Capital Adequacy Using The Risk-Based Insurance Capital Model," published on June 7, 2010, and Appendix E).
98. Under the criteria, an insurer's capital and earnings is assessed on a scale of '1' (extremely strong) to '8' (weak) (see table 9) according to three subfactors: regulatory capital adequacy (assessed as either "low risk" or "at significant risk"), capital adequacy (assessed on a scale of '1' to '8'), and representativeness of modeling (assessed as "positive," "moderately negative," "negative," or "neutral"). The last two subfactors are relevant only when the first one is assessed



as "low risk." In this case, the capital and earnings score is equal to the capital adequacy score, unless modified by representativeness of modeling according to paragraphs 99 to 101. If regulatory capital adequacy is "at significant risk" the SACP or GCP is limited to 'b+' and the FRP is limited to '10'. Also, since a smaller insurer is typically more susceptible to a single event impairing capitalization, the capital and earnings assessment is generally limited to '4' (moderately strong) if total adjusted capital (TAC) is consistently below approximately \$100 million or equivalent, and to '6' (lower adequate) if TAC is consistently below approximately \$25 million or equivalent.

99. "Positive" representativeness of modeling strengthens capital and earnings by one category if capital adequacy is assessed in the weakest three categories (e.g., it can raise it to "less than adequate," instead of "weak"). For other categories, positive representativeness of modeling is neutral. We expect positive assessments to be infrequent, and to relate mainly to insurers operating primarily in markets or products that are significantly lower-risk than assumed in our capital model criteria (for instance, in a subclass of business that exhibits lower risk than the broad class of business used in our criteria).
100. Similarly, "moderately negative" representativeness of modeling weakens capital and earnings by one category (e.g., to very strong from extremely strong) if capital adequacy is assessed in the strongest three categories. For other categories, moderately negative representativeness of modeling is neutral.
101. "Negative" representativeness of modeling lowers our assessment of capital and earnings by two categories if capital adequacy is assessed in the strongest two categories, or by one category if it is assessed in the third-strongest category. For other categories, negative representativeness of modeling is neutral.

### **1. Regulatory capital adequacy**

102. The regulatory capital adequacy subfactor addresses near-term regulatory intervention risk that increases the risk of a restructuring of, or generally of default on, policyholder or debt obligations. The subfactor is assessed "low risk" or "at significant risk." "At significant risk" assessments are expected to be exceptional. If the evidence suggests that the regulator is unlikely to intervene, the assessment is "low risk." Otherwise, the analysis focuses on the buffer between the insurer's available regulatory capital and the intervention level that would trigger the regulator's "ultimate regulatory action" to address current or expected deficiencies in capital or liquidity over the next year. Ultimate regulatory action includes required closure to new business, withdrawal of license, or placement under formal regulatory control.
103. If no clear quantitative regulatory capital requirement exists against which to measure intervention risk, the analysis looks for evidence in the regulatory framework and historical experience to gauge the proximity of intervention.
104. Where quantitative regulatory capital requirements are clear, the assessment is "at significant risk" if the insurer's available regulatory capital:
  - At the latest measurement date, was very close to the intervention level and is likely to remain so on the next measurement date; or
  - Given observed and potential volatility, is highly likely to be very close to breaching the intervention level at its next measurement date or within one year, whichever is later.
105. Examples of jurisdictions that we consider to have clear quantitative regulatory requirements include the U.S. and

Switzerland. In the U.S., regulatory requirements include four different levels of regulatory action based on a solvency ratio determined by a standardized risk-based capital model. At a ratio of 200%, the insurer must file a capital restoration plan. At 150%, the regulator must conduct an examination of the insurer. At 100%, the regulator is authorized to seize the insurer, and at 70%, the regulator is required to seize the insurer. In the 70% scenario, our rating on the insurer would likely be 'R' (under regulatory supervision owing to its financial condition). At or near 100%, our assessment of regulatory capital adequacy would likely be "at significant risk." Otherwise, our assessment would likely be "low risk."

106. In Switzerland, regulatory requirements include different levels of regulatory action, also based on a solvency ratio determined by a standardized risk-based capital model--the Swiss Solvency Test (SST) ratio. SST ratios of 100%, 80%, 60%, and 33.3% trigger a reporting requirement, an onsite regulatory inspection and distribution restrictions, restrictions on business written, and regulatory control, respectively. In the 33.3% scenario, our rating on the insurer would likely be 'R'. At or near 60%, our assessment of regulatory capital adequacy would likely be "at significant risk." Otherwise, our assessment would likely be "low risk."
107. Where no clear quantitative requirements exist, the assessment is "at significant risk" if we believe there is a high risk of regulatory intervention. The assessment is "low risk" in all other cases.

## 2. Capital adequacy

108. The capital adequacy subfactor considers capital prospectively by evaluating, at four confidence levels, the amount of TAC relative to risk-based capital requirements that an insurer is likely to hold over the current and next two years to cover, over the expected life of its portfolio, losses from the various risks it carries. Prospective capital adequacy is the level where, at the end of the projection period, TAC most closely matches the risk-based capital (RBC) requirement (see table 9), subject to the front- versus back-loaded nature of any improvement in capital adequacy.
109. Capital adequacy is assessed from extremely strong ('1') to weak ('8').
110. The primary source of capital generation depends on an insurer's ability and willingness to increase TAC through, notably, retained earnings. Thus, the quantitative analysis compares an insurer's TAC with its RBC requirements at four confidence levels, factoring in prospective TAC generation, RBC requirement growth, and changes in risk profile. Additions or reductions are made to RBC requirements as determined in "A New Level Of Enterprise Risk Management Analysis: Methodology For Assessing Insurers' Economic Capital Models," published on Jan. 24, 2011. The size factor adjustment and asset concentration risk charge in the capital model criteria (see paragraphs 127 to 132 of the capital model criteria) do not apply any longer since both are already factored in the representativeness of modeling and investment portfolio diversification subfactors.
111. The capital adequacy analysis follows three steps:
- For the past financial year-end, the insurer's TAC and RBC requirements at various confidence levels are determined through the capital model's quantitative analysis.
  - For the end of the current and two subsequent years, the RBC requirement is projected using the RBC requirement at the end of the previous financial year and RBC requirement growth or contraction over the year based on expected business growth or contraction and changes in risk profile.
  - Prospective TAC is calculated for each of the current and two subsequent years.

112. The capital and earnings assessment is set by comparing, according to table 9, the redundancy or deficiency of TAC relative to the RBC requirement at four confidence levels at the end of the projection period. The projection does not raise the assessment by more than three assessment categories. This is to reflect the inherent uncertainties in projecting a sustainable improvement in capital adequacy. In addition, the assessment gives greater weight to projected improvements that are primarily expected in the current and next year.

**Table 9****Capital Adequacy Assessment (see paragraphs 108 to 118)**

Score	Assessment	Guidance
1	Extremely strong	Prospective TAC exceeds the prospective RBC requirement at the 'AAA' confidence level.
2	Very strong	Prospective TAC stands below the prospective RBC requirement at the 'AAA' confidence level but above, or only slightly below, the prospective RBC requirement at the 'AA' confidence level.
3	Strong	Prospective TAC stands slightly above the prospective RBC requirement at the 'A' confidence level, but significantly below the prospective RBC requirement at the 'AA' confidence level.
4	Moderately strong	Prospective TAC stands significantly above the prospective RBC requirement at the 'BBB' confidence level, but slightly below the prospective RBC requirement at the 'A' confidence level.
5	Upper adequate	Prospective TAC stands slightly above the prospective RBC requirement at the 'BBB' confidence level, but significantly below the prospective RBC requirement at the 'A' confidence level.
6	Lower adequate	Prospective TAC stands 0%-15% below the prospective RBC requirement at the 'BBB' confidence level.
7	Less than adequate	Prospective TAC stands 15%-50% below the prospective RBC requirement at the 'BBB' confidence level.
8	Weak	Prospective TAC stands more than 50% below the prospective RBC requirement at the 'BBB' confidence level.

Note: Rating symbols in this table refer to "confidence levels" according to paragraph 11 of the capital model criteria. RBC— Risk-based capital.

113. In the example in table 10, regulatory capital adequacy is low risk. The insurer's TAC is growing faster than its business, strengthening capital adequacy. At year-end 2012, TAC was closest to a 'BBB' RBC requirement level and would have been assessed '5' without forward-looking analysis. But the analysis indicates that TAC will be closest to an 'A' level at year-end 2015, and it is therefore strong enough at year-end 2013 for a capital adequacy assessment of moderately strong ('4').

**Table 10****Illustrative Example Of Capital Adequacy Assessment**

	Forecast for subsequent year (e.g., 2015)	Forecast for next year (e.g., 2014)	Expected for current year (e.g., 2013)	End of last year (e.g., Dec. 31, 2012)
RBC requirement growth during the year (%)	5	5	5	N/A
<b>Year-end RBC requirement at various confidence levels (US\$)</b>				
At 'AAA'	13,892	13,230	12,600	12,000
At 'AA'	12,734	12,128	11,550	11,000
At 'A'	11,576	11,025	10,500	10,000
At 'BBB'	9,261	8,820	8,400	8,000
Beginning-of-year TAC	10,450	9,900	8,900	N/A
After tax operating income (after minority interests) as a component of change in TAC during the year	1,500	1,200	1,500	N/A
Other changes in TAC during the year	(700)	(650)	(500)	N/A
Year-end TAC	11,250	10,450	9,900	8,900

**Table 10****Illustrative Example Of Capital Adequacy Assessment (cont.)**

Rating symbols in this table refer to confidence levels in paragraph 11 of the capital model criteria. N/A--Not applicable. RBC--Risk-based capital.

**3. Representativeness of modeling**

114. The representativeness of modeling subfactor determines whether the analysis of prospective capital adequacy has overstated or understated capital and earnings.
115. The representativeness subfactor is assessed as "positive," "moderately negative," "negative," or "neutral." Most large diversified primary insurers are likely to be assessed as "neutral" under the criteria.
116. Representativeness of modeling is positive if the capital model materially overstates the insurer's specific product risks.
117. Examples of "moderately negative" representativeness of modeling include those where:
- The capital model materially understates the insurer's specific product risks;
  - TAC is small (which generally corresponds to a TAC consistently under approximately \$1 billion or equivalent), making it more vulnerable to single-event losses than assumed in the capital model;
  - There is a propensity for acquisitions or unpredictable shareholder-distributions that may weaken capital adequacy beyond what we believe can be reliably quantified;
  - The assumption of capital fungibility and risk diversity in consolidated capital models overstates capital adequacy owing to legal, contractual, or regulatory requirements that limit the ability to transfer capital or risk between entities; or
  - The capital model results depend heavily on weaker forms of capital (for example, if value of in-force, discount on P/C reserves, hybrid instruments or other weak forms of capital contribute more, in aggregate, than 50% of TAC).
118. Representativeness of modeling is "negative" if the insurer's capital adequacy is significantly overstated in the capital model. This is the case, for example, if a number of the situations highlighted in paragraph 117 are present, if any one of them has the potential to significantly distort the outcome, or generally if TAC is consistently lower than approximately \$250 million or equivalent.

**C3. Risk Position**

119. Risk position assesses material risks that the capital and earnings analysis does not incorporate and specific risks that it captures, but that could make an insurer's TAC significantly more, or significantly less, volatile.
120. Risk position is assessed on a scale of low risk ('1') to very high risk ('5') based on an analysis of the five subfactors listed in table 11.
121. To determine the SACP of a group member, risk position is assessed from a stand-alone perspective.
122. The five risk position subfactors are:
- Exposure to employee benefits (see paragraphs 123 to 126),
  - Foreign exchange risk exposure (see paragraphs 127 to 131),
  - Investment leverage (see paragraphs 132 to 136),

- Investment portfolio diversification (see paragraphs 137 to 145), and
- Additional sources of capital and earnings volatility (see paragraphs 146 to 148).

**Table 11**

<b>Risk Position Subfactor Assessment</b>			
<b>Subfactor</b>	<b>Positive</b>	<b>Neutral</b>	<b>Negative</b>
Exposure to employee benefits (paragraphs 123 to 126)	N/A	Employee benefit obligations are modest compared to TAC.	Employee benefit obligations are large compared to TAC.
Foreign-exchange risk exposure (paragraphs 127 to 131)	N/A	On aggregate over material currencies, total unhedged assets in mismatched currencies do not exceed approx. 10% of the insurer's total liabilities.	On aggregate over material currencies, total unhedged assets in mismatched currencies exceed approx. 10% of the insurer's total liabilities.
Investment leverage (paragraphs 132 to 136)			
a) High profit-sharing contribution case	Holdings of high-risk general account assets are very modest compared to TAC.	The assessment is neither positive nor negative.	Holdings of high-risk general account assets significantly exceed TAC.
b) Low profit-sharing contribution case	Holdings of high-risk general account assets are extremely modest compared to TAC.	The assessment is neither positive nor negative.	Holdings of high-risk general account assets exceed TAC.
Investment portfolio diversification (paragraphs 137 to 145)	The investment portfolio is well diversified among sectors and obligors.	The assessment is neither positive nor negative.	The investment portfolio exhibits significant concentrations to certain sectors or obligors.
Additional sources of capital and earnings volatility (paragraphs 146 to 148)	The volatility of capital and earnings results is low.	The assessment is neither positive nor negative.	The volatility of capital and earnings results may be high.

Material is defined as a currency in which the insurer's liabilities consistently represent about one-tenth or more of the insurer's consolidated liabilities excluding shareholders' equity. TAC--Total adjusted capital. N/A--Not applicable.

**Table 12**

<b>Risk Position Assessment</b>		
<b>Score</b>	<b>Descriptor</b>	<b>Guidance (see table 11 and paragraphs 123 to 148)</b>
1	Low risk	The insurer's prospective capital adequacy has a low volatility risk with respect to all material risks, and the insurer has no material risk concentrations. This is typically associated with at least two subfactors being assessed as positive and the others neutral.
2	Intermediate risk	The insurer's prospective capital adequacy has average volatility risk, or certain risks are not incorporated in the capital model or risk concentrations exist, but are not material. This is typically associated with all subfactors being neutral; or with "additional sources of capital volatility" being neutral or positive, and at most one of the other subfactors being negative.
3	Moderate risk	The insurer's prospective capital adequacy has somewhat above-average volatility risk, certain risks are not incorporated in the capital model, or risk concentrations exist, and these may be material. This is typically associated with "additional sources of capital volatility" being negative; or with two subfactors being negative when the ERM risk controls subfactor is not negative.
4	High risk	The insurer's prospective capital adequacy has above-average volatility risk or certain risks are not incorporated in the capital model and risk concentrations exist (and these are significant). This is typically associated with most subfactors being negative or one potentially being very material to the insurer's risk profile.
5	Very high risk	The insurer's prospective capital adequacy has clearly above-average volatility risk or certain risks are not incorporated in the capital model and risk concentrations exist (and these are significant), or some investment risk characteristics exist that could cause severe capital stress (i.e., the capital position would be so weakened that the company is no longer able to effectively compete in markets, and may simultaneously face liquidity strain). This is typically associated with almost all subfactors being negative or one potentially being very material to the insurer's risk profile.

### 1. Exposure to employee benefits

123. This subfactor seeks to capture an insurer's exposure to employee postemployment defined-benefit obligations (including pension and retiree health care benefits) in terms of both liability and asset risks, and beyond the funding level already reflected in TAC, and whether these are recognized on the balance sheet or not. To do this, the criteria calculate the ratio of total pretax gross employee defined benefit obligations (for pensions, the projected benefit obligation) to TAC.
124. The subfactor is assessed as "negative" if the ratio indicates that employee benefits represent a high proportion of TAC, typically of more than one-quarter except in the presence of strong and sustainable overfunding. Otherwise, the subfactor is "neutral."
125. If an insurer does not disclose liabilities and asset values with sufficient precision to calculate the ratio, unless there is other evidence to indicate that employee benefit risk is low, the subfactor is assessed as "negative."
126. This subfactor complements the capital model by reflecting the risk of the net employee benefit obligation changing significantly, as well as the significant dependence of asset and liability values on choices of key assumptions, including sustainable asset values, life expectancy, discount rates, and future increases in pensionable earnings.

### 2. Foreign exchange risk exposure

127. This subfactor assesses currency mismatches between assets and liabilities (including equity), which the capital model does not capture.
128. The assessment is "neutral" unless there is a significant mismatch, in which case it is "negative."
129. The criteria define a significant mismatch as a situation where, on aggregate over material currencies, total unhedged assets in mismatched currencies exceed approximately 10% of the insurer's total liabilities.
130. Exposure to foreign exchange rate fluctuations can pose a risk to capital for an insurer with material obligations or assets denominated in currencies other than its primary operating currency. Most insurers mitigate this risk by, for example, holding foreign currency assets of a similar amount to their foreign currency liabilities. If a company has demonstrated a good track record of effectively hedging currency mismatches (including tenor mismatches, and counterparty risks coverage by collateral), its hedged amounts are excluded when calculating the mismatch. For example, euro-denominated assets swapped to yen in support of yen liabilities are excluded from the mismatch calculation.
131. The criteria focus on material foreign exchange exposure because an insurer operating in numerous foreign jurisdictions may often post small or short-term mismatches that may not be practical or efficient to eliminate at all times. Such mismatches do not appreciably alter our assessment of an insurer's capital position.

### 3. Investment leverage

132. The investment leverage subfactor identifies a very high or low proportion of high-risk assets in the asset base. To do this, we calculate the investment leverage ratio, defined as the ratio of volatile or illiquid assets to TAC. The capital model does not fully capture an insurer's exposure to volatile or illiquid investments. The assessment is "neutral," "positive," or "negative."

133. Slightly different cutoffs in the criteria apply to an insurer if its liabilities with significant profit-sharing characteristics (such as participating whole-life policies in the U.S. and "with-profit" contracts sold in Europe) exceed approximately one-quarter of general account liabilities. These insurers can transfer to their policyholders a higher proportion of the investment risk associated with high-risk assets by reducing crediting rates, bonuses, or dividends to policyholders.
134. For insurers with significant profit sharing, the subfactor is assessed as positive if the investment leverage ratio is consistently low (for example, under about 20%), negative if significantly above 100% (for example, over 150%); otherwise, the subfactor is assessed as neutral.
135. For other insurers, which cannot transfer as much of the investment risk to policyholders, the subfactor is assessed as "positive" if the investment leverage ratio is consistently very low (for example, under about 10%), and "negative" if clearly in excess of 100%.
136. For the purpose of this subfactor, the criteria define high-risk assets as the sum of the values, net of hedges, of:
  - Bonds and loans rated 'BB+' or lower, and deposits at banks rated 'BB+' or lower;
  - Unrated bonds and loans, except if demonstrably of a credit quality equivalent to 'BBB-' or higher;
  - Unaffiliated equity investments in common stock and preferred stocks;
  - Equity real estate assets, excluding those the insurer uses for its own operations and those in markets that the capital model identifies as lower risk, like Switzerland; and
  - Investments in partnerships, joint ventures, and other alternative investments.

#### **4. Investment portfolio diversification**

137. The investment portfolio diversification subfactor addresses the risk of an insurer's exposure to a given asset sector (see Appendix E) or obligor. The capital model does not factor in correlation risks beyond an assumed average degree of asset diversity. This subfactor identifies insurers with more or less risk than the average by using ratios that gauge sector and obligor concentration.
138. The subfactor is assessed as "positive" when the investment portfolio is well-diversified among sectors and obligors, unless approximately 50% or more concentrated in government obligations, as defined in paragraph 143. Typically, this means where no more than 15% of the portfolio is held within any one sector and no more than approximately 5% per obligor.
139. The subfactor is generally assessed as "neutral" when the investment portfolio is moderately diversified among sectors and obligors; that is, typically where concentrations are within 15%-30% to any one sector, or 5%-10% to any one obligor.
140. The subfactor is assessed as "negative" in all other cases.
141. The sector ratio in paragraphs 138 and 139 is, for each asset sector (as defined in Appendix E) in an insurer's portfolio, the ratio of the related asset value (combining all obligations related to that asset sector) to the insurer's total invested assets.
142. The obligor ratio in paragraphs 138 and 139 is, for each obligor in an insurer's portfolio, the ratio of the insurer's investment in that obligor's equity and debt obligations to the insurer's total invested assets.

143. For both ratios, the criteria define total invested assets as the sum of cash, cash equivalents, and invested assets, including government obligations. "Government obligations" are excluded from the numerator of the sector and counterparty ratio tests because the criteria already capture the related sovereign risk in section D3. Government obligations are defined as financial obligations issued or guaranteed by an insurer's domestic national government, or those of highly systemically important domestic banks and of domestic government-related entities (GREs), including banks, with an "almost certain" or "extremely high" likelihood of extraordinary government support (according to paragraph 18 and table 1 of "Rating Government-Related Entities: Methodology And Assumptions," Dec. 9, 2010).
144. The criteria define "domestic national government" as the sovereign governments where the insurer conducts material operations, or those in whose currency the insurer has underwritten policies. In the latter case, given the absence of currency mismatch, the obligations are excluded only to the extent that they cover such insurance policies.
145. For the purposes of the above-mentioned ratios, the definitions of "sector" given in Appendix E apply.

### **5. Additional sources of capital and earnings volatility**

146. The criteria broadly analyze the volatility of capital and earnings across all insurance sectors and consider the unique risks that each insurer has within its exposure portfolio. The assessment takes into account several sources of volatility that are not otherwise captured in the risk position (or capital and earnings) analysis.
147. Additional sources of capital and earnings volatility are assessed as "positive" when the volatility in the capital model outcomes is low for an insurer, "negative" when it may be high, and "neutral" otherwise.
148. Examples of additional sources of capital and earnings volatility that are considered negative include:
- Material deficiencies in reinsurance protection relative to the risk profile;
  - For life insurers that issue variable annuities with guaranteed living benefits, unhedged market exposures that have significant potential to cause volatility.
  - Pronounced changes expected in inflation generally, or specifically in insured claims trends;
  - Large discrete portfolios of legacy liabilities with significant potential for volatility;
  - Material potential aggregations in casualty claims (sometimes referred to as casualty clash);
  - Material potential aggregations in property risk;
  - Material terrorism risk; or
  - Extreme mortality or morbidity risk.

## **C4. Financial Flexibility**

149. Our assessment of financial flexibility uses qualitative and quantitative measures to estimate the balance between an insurer's sources and uses of external capital and liquidity over the current and next two years.
150. The assessment focuses on external sources of capital and liquidity because the criteria assess internal sources through other factors.
151. Under the criteria, we use three subfactors to assess financial flexibility. Each is assessed as "positive," "neutral," or "negative":



- Access to sources of external capital and liquidity (see paragraphs 156 to 161),
  - Financial leverage (see paragraphs 162 to 165), and
  - Fixed-charge coverage (see paragraphs 166 and 167).
152. The last two subfactors consider that a company with high leverage and a low fixed-charge coverage ratio is likely to have less capacity and flexibility to attract external capital and liquidity.
153. The assessments on the subfactors combine to determine the assessment of an insurer's financial flexibility as follows:
- Strong: If "access to other sources of external capital and liquidity" is positive and the other subfactors are not negative,
  - Adequate: If "access" is neutral and none is negative,
  - Less than adequate: If one subfactor is negative, or
  - Weak: If two or three subfactors are negative.
154. Under the criteria, access to sources of external capital and liquidity is assessed at the consolidated group level (or at the boundaries of the insurance portions of groups that include noninsurance businesses) for the GCP and for the SACP of group members assigned "core," "highly strategic," or "strategically important" group status, although such group members would rarely be assessed as "positive" in the absence of access to substantial sources independent of their parents. For other group members, all subfactors are evaluated at the subsidiary level, although access to sources of external capital and liquidity can benefit from ongoing arrangements and other aspects of the ongoing relationship with the parent group. A subsidiary's financial flexibility assessment is typically capped by its parent group's because the subsidiary's access to capital and liquidity would likely be constrained if it belonged to a weaker group.
155. However, a subsidiary's financial flexibility could exceed its majority owner's financial flexibility if a substantial minority interest in it is held by a stronger group or held publicly and widely.

### **1. Access to sources of external capital and liquidity**

156. The first financial flexibility subfactor addresses the insurer's ability to access sufficient amounts of external capital or liquidity at reasonable economic terms.
157. The subfactor is assessed as:
- "Positive" for a given insurer if it has access to a broad range of substantial sources, with market access that significantly exceeds its liquidity and capital needs;
  - "Negative" if it has access to limited sources, or to sources that have only limited or inadequate availability relative to its current or future needs; and
  - "Neutral" otherwise.
158. The assessment factors in:
- The diversity in accessible bank-loan and capital markets (such as public markets for common equity, debt and hybrid instruments, and commercial paper), as shown, for example, by the insurer's history of market access;
  - An insurer's ability and demonstrated willingness to obtain reinsurance from reinsurers with higher credit quality than the insurer;
  - An insurer's ability and demonstrated willingness to use securitization techniques to source capital and liquidity;
  - For a life insurer, the ability to adjust policyholder bonuses, dividends, or crediting rates to an extent not recognized

in the capital and earnings factor; and

- For certain P/C insurers, such as marine P&I insurers, the ability to retroactively raise premiums.

159. In addition, the subfactor takes into account market indicators, including share, hybrid, and debt prices, and observable credit spreads, to the extent they provide insights into the insurer's cost of capital and ability to access cost-effective funding. For example, materially adverse trends in the market price of an issuer's equity and wide or widening spreads (relative to peers) weigh on the subfactor.
160. The subfactor also factors in an insurer's track record in accessing the equity and debt capital markets or regularly receiving parent funding, utilizing reinsurance or securitization, adjusting policyholder bonuses or dividends or crediting rates, or calling for additional premiums on insurance policies already in force. An insurer's willingness and capacity to access capital and liquidity is also important in assessing this subfactor. Even with an excellent capital-raising track record, limited current capacity drives a negative assessment.
161. For mutual insurers, this subfactor is typically "neutral." Mutual insurers do not generally have access to equity markets, but often have access to other sources of capital and liquidity, such as the debt or hybrid capital markets. Their ability to adjust policyholder dividends or bonuses can be another source of flexibility. The subfactor is assessed relative to capital needs, which are often low for mutual insurers that maintain excess capital and have low risk profiles. The subfactor may be negative; for example, where the mutual insurer does not have excess capital and its access to other sources of capital is limited relative to its needs. In rare cases, the subfactor may be positive; for example, for companies with a demonstrated track record of accessing diverse sources of capital (including willingness to adjust dividends or bonuses) that significantly exceed their needs.

## 2. Financial leverage

162. The financial leverage subfactor addresses the degree of an insurer's indebtedness relative to its total capitalization.
163. Financial leverage (see Appendix E) is assessed as "positive" if leverage is low, "negative" if it is high, and "neutral" otherwise.
164. The financial leverage subfactor is assessed based on the insurer's:
- Financial leverage ratio, which supports a "positive" assessment when consistently less than approximately 20%, and a "negative" one when consistently above approximately 40%, if the ratio of intangibles to equity is under half and the debt maturity profile is neutral.
  - Ratio of intangibles to equity. Intangibles exceeding half of equity weaken the subfactor assessment. For the purpose of this subfactor, intangibles are defined as the sum of goodwill, intangible assets, deferred acquisition costs (DAC), value of in-force, value of business acquired, and deferred tax assets (as reported on the primary and any supplementary financial statements used to calculate financial leverage).
  - Debt maturity profile, which is unfavorable if several significant maturities are concentrated in the near-to-medium term, and otherwise is neutral. In this analysis, debt maturities include hybrid securities with simultaneous call and step-ups, because we typically expect the issuer to then call the instruments. The assessment is typically unfavorable if aggregate maturities of debt and hybrids falling due or stepping up over the next three years (net of the holding company's surplus cash and short-term equivalents over ongoing dividends and operating and financial expenses) exceed 15% of TAC.

165. For example, the assessment is typically "negative," despite financial leverage of 35%, if the ratio of intangibles to equity is 70% and the debt maturity profile is unfavorable.

### 3. Fixed-charge coverage

166. The fixed-charge coverage subfactor addresses an insurer's ability to service interest on financial obligations out of EBITDA.

167. A fixed-charge coverage consistently exceeding 8x is assessed as "positive." A fixed-charge coverage unlikely to consistently exceed 4x is "negative." Otherwise, the assessment is "neutral."

## D. Other Assessments

168. The criteria use three additional assessments that may modify the ratings. These are not specific to the business risk or financial risk profiles. They are:

- The ERM and management assessment, which combines with the anchor according to table 13 to produce the indicative SACP or GCP (see section D1).
- The liquidity assessment, which is assessed from '1' (exceptional) to '5' (weak). The three strongest assessments do not affect an insurer's SACP, GCP, or long-term ICR. By contrast, without external support "less than adequate" ('4') liquidity limits the SACP or GCP to 'bb+' and the ICR to 'BB+'. And, without external support, "weak" liquidity limits the SACP or GCP to 'b-' and the ICR to 'B-' (see section D2).
- The relevant sovereign ratings and transfer and convertibility (T&C) assessments (see section D3).

169. These assessments apply cumulatively. For example, an 'aa-' anchor and an ERM and management assessment of "adequate" lead to an 'a+' indicative GCP. The group's core operating companies are then rated 'A+' if the two other assessments in this section are met. But the ICRs are at most 'BB+' if liquidity is "less than adequate." If the sovereign rating implies a 'BB' constraint, the ICRs are at most 'BB'.

170. An insurer with weak liquidity is considered more likely to default than an identical insurer with stronger liquidity. Even if an insurer's creditworthiness is otherwise consistent with a rating 'BBB-' or higher, it may fall abruptly under extreme stress if liquidity is "less than adequate" or "weak." This could compromise the insurer's ability to pay claims, despite its other strengths. For that reason, the assessment is absolute and not relative to peers or insurers in the same rating category.

171. Conversely, the criteria do not uplift the SACP or GCP for strong liquidity because it does not enhance an insurer's overall creditworthiness.

## D1. ERM And Management Assessment

172. The criteria combine ERM and management and governance into a single assessment ranging from "very strong" ('1') to "weak" ('5') that addresses risks not otherwise captured in the anchor.

173. ERM examines whether risk management practices are executed in a systematic, consistent, and strategic manner that provides for the control of losses within an optimal risk-reward framework. ERM analysis allows for a prospective view

of the insurer's risk profile and capital needs (see "Enterprise Risk Management," published on May 7, 2013).

174. The management and governance subfactor addresses how management's strategic competence, operational effectiveness, financial management, and governance practices shape the insurer's competitiveness in the marketplace, the strength of its financial risk management, and the robustness of its governance. Stronger management of important strategic and financial risks may enhance creditworthiness (see "Methodology: Management And Governance Credit Factors For Corporate Entities And Insurers," published on Nov. 13, 2012).

**Table 13**

Indicative SACP Or GCP Assessment						
Anchor (from table 1)	ERM and management assessment (from table 14)					
	Very strong	Strong	Adequate	Less than adequate	Weak*	
aa+	aa+	aa+	aa-	a	bbb	
aa	aa	aa	aa-	a	bbb	
aa-	aa-	aa-	a+	a	bbb	
a+	a+	a+	a+	a-	bbb-	
a	a+	a	a	a-	bbb-	
a-	a	a-	a-	bbb+	bbb-	
bbb+	a-	bbb+	bbb+	bbb	bb+	
bbb	bbb+	bbb	bbb	bbb-	bb+	
bbb-	bbb	bbb-	bbb-	bb+	bb	
bb+	bbb-	bb+	bb+	bb	bb-	
bb	bb+	bb	bb	bb-	b+	
bb-	bb	bb-	bb-	b+	b	
b+	bb-	b+	b+	b	b-	
b	b+	b	b	b-	b-	
b-	b	b-	b-	b-	b-	

Note: The indicative SACP or GCP is also subject to paragraph 17. ERM--Enterprise risk management. GCP--Group credit profile. SACP--Stand-alone credit profile. \*Additionally, the outcome is no higher than 'bb' if both the ERM and management assessments are assessed in the weakest category, or if either is assessed as potentially harmful to the insurer's overall risk profile.

**Table 14**

ERM And Management Assessment							
ERM assessment	Management and governance assessment						
	Strong		Satisfactory		Fair		Weak
	Importance of enterprise risk management (ERM)*						
	High	Low	High	Low	High	Low	High or Low
Very strong or strong	Very strong	Very strong	Very strong	Strong	Strong	Adequate	Weak
Adequate with strong risk controls	Strong	Very strong	Strong	Strong	Adequate	Adequate	Weak
Adequate	Adequate	Very strong	Adequate	Strong	Less than adequate	Adequate	Weak
Weak	Weak	Less than adequate	Weak	Less than adequate	Weak	Less than adequate	Weak

**Table 14****ERM And Management Assessment (cont.)**

\*Importance of ERM is "high" or "low" according to paragraph 15 of "Enterprise Risk Management," published on May 7, 2013. For group entities with a group status of "strategically important," "moderately strategic," or "nonstrategically important," ERM importance is assessed at the entity level.

175. ERM is assessed using the methodology given in "Enterprise Risk Management," published on May 7, 2013.

**D2. Liquidity**

176. The liquidity analysis centers on an insurer's ability to cover its liquidity needs, both on an ongoing basis and in moderately stressful market and economic conditions. The analysis is absolute, rather than relative to peers.
177. The criteria assess an insurer's liquidity on a scale of '1' to '5', where '1' is the strongest, according to table 15. "Adequate" liquidity is rating-neutral at all rating levels; we consider that the insurer is able and prepared to cover its liquidity needs and so would survive under moderately stressful conditions for 12 months without any refinancing. "Strong" and "exceptional" liquidity suggest an ability to weather more-stressful scenarios. By contrast, "less than adequate" liquidity reflects our view that the insurer is vulnerable to a moderate stress scenario, and "weak" liquidity our view that it is vulnerable to the expected scenario.

**Table 15****Liquidity Assessment**

Score	Assessment	Guidance
1	Exceptional	The liquidity ratio is assessed as positive and the three other subfactors are either positive or two are and the third one is neutral.*
2	Strong	Two subfactors are positive and two are neutral.*
3	Adequate	All four subfactors are neutral or three are, and the fourth one is positive.*
4	Less than adequate	One or two subfactors are negative.*
5	Weak	Three or all four subfactors are negative or any one subfactor poses a severe risk to the insurer's liquidity.

\*And no subfactor poses a severe risk to the insurer. For the purpose of the liquidity test, "severe risk" designates an appreciable likelihood that, incorporating a significant, but not extreme, downside to the insurer's performance expectations under Standard & Poor's base case, one of the four factors renders the issuer unable to entirely service all its financial and policyholder obligations in a timely manner over the next 12 months. Examples include: debt maturities over the next 12 months that are difficult to refinance due to stressed market conditions; and substantial collateral posting requirements related to credit default swaps or other derivative contracts.

178. An insurer's liquidity assessment results from that of four subfactors:
- Coverage of the insurer's confidence-sensitive liabilities;
  - The possibility that the insurer would need to post collateral;
  - The implications of covenants and ratings triggers in the insurer's financial arrangements; and
  - The insurer's liquidity ratio.
179. When assessing the liquidity factor to assign a GCP, the analysis is based on a consolidated view including the holding company. (To assess the liquidity of a nonoperating holding company, see section VII.G in "Group Rating Methodology"). Where consolidated data are not available, the analysis includes aggregating operating companies. This analysis excludes insulated subsidiaries. When assessing the liquidity factor to assign an SACP to a specific

insurance company, the analysis is restricted to that company, including its subsidiaries, if any. Within a given insurance group, the liquidity assessments for the GCP and the various SACPs are limited at "adequate" when the holding company's liquidity is "less than adequate," and at "less than adequate" when it is "weak."

180. The liquidity subfactors consider regulatory or other provisions that may restrict the flow of cash and liquid assets among legal entities within the rated group. For example, U.S. regulations are more restrictive than those in most other domiciles, limiting increases in the level of stockholder dividends by U.S. insurance operating companies. We consider the effect such restrictions may have on a group's ability to meet its liquidity needs in the specific legal entities where they arise. Under the U.S. rules, cash and liquid assets in an insurance operating company may not be available to its holding company to pay maturing commercial paper or to meet the obligations of other insurance operating companies within the group. Where such limitations exist, the subfactors consider only the sources of liquidity available to the legal entities.

181. The analysis is based on the following liquidity assumptions and considerations:

- The ratio cutoffs reflect the historical experience of insurers' liquidity stresses, as well as the factors mentioned in Appendix D.
- An insurer experiences immediate and unforeseen stress from withdrawals and surrenders on lapsable life insurance policies over the next 12 months.
- Refinancing is unavailable for 12 months, i.e., the insurer is assumed not to have any access to market or bank debt, equity, or hybrid instrument refinancing over this period. "Short-term debt" is thus the sum of all debt and hybrid maturities over the next 12 months.
- The insurer's maturities beyond 12 months are assumed to be manageable; if they are not, the liquidity assessment is limited at "adequate."
- Assets and liabilities exclude segregated funds and separate (or unit-linked) accounts.
- Liquid assets are assets with an established market with enough participants to absorb sales without materially affecting the price of the assets. We consider liquid assets to include most publicly traded common stocks, corporate bonds, money market instruments, deposits, cash, and government bonds. Liquid assets exclude: investment in affiliates, private placement bonds, private equities, mortgages, and other assets that don't fit any of the above categories, unless the presence of a reliable market can be clearly demonstrated; as well as assets held in certain ownership situations, e.g., if the insurer holds a large share ownership in a particular insurer; and, finally, assets that we believe cannot be easily transferred, or would be transferred at a price significantly discounted (e.g., due to the large block nature of ownership). In all cases, liquid assets exclude posted collateral, or collateral that is otherwise encumbered or pledged.
- Backup facilities include only committed credit facilities for general financing or (up to the issued amount) for backing up debt obligations, in both cases with a maturity sufficient to cover liquidity needs (e.g., for liquidity requirements arising in the next 12 months, the credit facilities do not mature within 12 months) and only those provided by banks of a credit quality equivalent to 'BBB-' or higher. When analyzing requirements, including amounts drawn, the entire size of the facility is included as a resource. Alternatively, the analysis can ignore the amounts drawn, but then consider as a liquidity resource only the facility's undrawn amount.
- The analysis of an insurer's exposure to rating triggers, collateral posting, and ratio-driven covenants is restricted to instruments and facilities that are material; result in either the cancellation of the borrowing arrangement or its repricing with no stated and reasonably conservative cap; and represent borrowings to third parties, not group affiliates. If not material, instruments and facilities do not contribute meaningfully to liquidity resources. If drawn and accelerated, they can easily be repaid to avoid cross-defaults with larger instruments and facilities.

- "Covenant requirement" refers to the most-stringent level that, if breached, is defined as an event of default under the documentation. The level of ratio-based covenants is that calculated from the insurer's most recent financial statements.

### **1. Confidence-sensitive liability coverage**

182. The first liquidity subfactor assesses the risk of a sudden call on the insurer's cash in the event of a loss of confidence specific to the insurer or a general loss of market confidence.
183. The subfactor is assessed as "positive" when the insurer has no (or an insignificant number of) confidence-sensitive liabilities. It is also positive when the sum of liquid assets and of backup credit facilities not subject to termination in the event of a six-notch downgrade is at least 120% of confidence-sensitive liabilities.
184. The subfactor, when not assessed as positive, is "neutral" when the sum of liquid assets and backup credit facilities not subject to termination in the event of a three-notch downgrade is at least 120% of confidence-sensitive liabilities.
185. The subfactor is assessed as "negative" in all other cases.
186. Confidence-sensitive liabilities include commercial paper issuance; long-term financial obligations maturing within 12 months; hybrid instruments callable within 12 months with a step-up exceeding 100 basis points (bps), or 200 bps for issuers rated 'BB+' or lower; and institutional insurance products, including funding agreements and guaranteed investment contracts (GICs), containing put provisions of up to 365 days.

### **2. Collateral-posting risk**

187. The second liquidity subfactor assesses an insurer's exposure to collateral posting requirements in the event of rating downgrades or other triggers, relative to liquid assets.
188. The subfactor is assessed as "positive" when an insurer has no significant collateral-posting requirements or triggers additional to already-posted collateral. It is also positive when the value of the assets it would have to post as additional collateral in the event of a downgrade of up to six notches or equivalent triggers is less than 15% of liquid assets. The subfactor is assessed as "neutral" when it would have to post an additional 15%-30% of liquid assets, and "negative" if it would have to post an additional amount more than 30%. The assessment addresses only exposures not adequately captured in the liquidity ratio.

### **3. Covenants and ratings triggers**

189. The third liquidity subfactor assesses the risk to an insurer's liquidity of not complying with covenants and rating triggers on its third-party financial obligations, including insurance and reinsurance contracts. The impact of an ensuing termination of debt or credit facilities is a function of the likelihood that the creditor effectively terminates the facility and of the severity of the resulting impact on the insurer's liquidity needs and resources. Examples of such covenants include minimum levels of shareholder equity or statutory capital, or interest coverage by earnings.
190. For an insurer that has one or more numerical covenant or rating triggers, the subfactor is "neutral" if the insurer meets all of the following three conditions:
- The insurer's income statement measures are between 1.5x and 2.0x covenant requirements, and balance-sheet measures are between 1.2x and 2.0x covenant requirements.

- There are no particularly broadly or loosely worded material adverse change (MAC) clauses, or rating triggers within three notches of the current rating.
- The insurer is not at risk, over the next 12 months, of a breach of covenants because of a noneconomic deterioration in financial metrics primarily triggered by a change in accounting standards.

191. The subfactor is assessed as "positive" for insurers that have no numerical covenant and no rating trigger; or that meet the same requirements as in the previous paragraph, except that any balance-sheet and income statement numerical measures exceed covenant requirements by 2x, and any rating trigger is more than six notches away from the current rating.

192. The subfactor is assessed as "negative" if any of the following applies:

- One or more income statement measures is less than 1.5x covenant requirements;
- One or more balance-sheet measures is less than 1.2x covenant requirements;
- Particularly broadly or loosely worded MAC clauses exist, or one or more rating triggers exist within three notches of the current rating; or
- The insurer is at risk, within the next 12 months, of breaching one or more covenants because of a noneconomic deterioration in financial metrics primarily triggered by a change in accounting standards.

#### **4. An insurer's liquidity ratio**

193. The fourth and last liquidity subfactor assesses an insurer's ability, over a one-year period, to convert assets to cash, relative to the demand for its cash by policyholders and lenders. The criteria use liquidity ratios to measure that ability.

194. The subfactor is "positive" when the liquidity ratio exceeds 2.2x. For a life insurer, the subfactor is assessed as "neutral" when it is 1.4x-2.2x, and "negative" when it is less than 1.4x. For a P/C insurer, it is "neutral" when it is 1.0x-2.2x, and "negative" when it is less than 1.0x. For a multiline insurer, the cutoff points are blended according to the respective contributions of the life and P/C operations to stressed insurance liabilities. The coverage is calculated based on our forward-looking view over the next 12 months, factoring in the insurer's liquidity management, including drawing on existing backup facilities, and our cash flow expectations.

195. Given the differences in the characteristics of life versus P/C insurers and the different ways that insurance companies disclose data, the calculation of the liquidity ratio varies.

196. For U.S. and Canadian life insurance operating companies, the ratio is defined as the outcome of Standard & Poor's liquidity model (see "Criteria | Insurance | Life: Liquidity," published on April 22, 2004). The model measures the insurer's liquidity under two scenarios, immediate and ongoing stress, as the ratio of allowable assets divided by adjusted potential and maturing obligations. Under the criteria, the insurer's liquidity ratio is the lower of the two ratios.

197. For all other insurers, the liquidity ratio addresses the extent to which the company could cover its short-term debt and stressed insurance liabilities outflows, defined in the following two paragraphs, with backup facilities and stressed liquid assets. Liquid assets are net of risk charges. These charges are 50% for listed equities, 10% for bonds rated 'BBB-' or higher, 35% for bonds rated in the 'BB' and 'B' categories, 1% for deposits with banks rated at or above 'BBB-', and 5% for deposits with banks rated in the 'BB' and 'B' categories. Most other asset classes have a 100% charge including loans, private equity and hedge funds, property assets, and premium receivables. However, when material,



certain entity-specific assets may be included, provided that the insurer can demonstrate that it is possible to convert them promptly into cash. The applicable charge would be one of the above, based on a review of its specific liquidity characteristics.

For P/C insurers, stressed claims outflows factor in stressed claims reserves on claims reserve duration. The liquidity ratio is defined as:

$$\frac{\text{Stressed liquid assets + backup facilities}}{\{(\text{Net claims reserves + net reserve risk charge}) / \text{Duration}\} + \text{net catastrophe charge + net premium charge + short-term debt}}$$

- The claims reserves duration reflects the "tail" of the business underwritten. This assessment reflects the insurer's mean term of claim of liabilities.
- Stress claims outflows include the impact of the property catastrophe risk charge, trade credit insurers' liability risk charge, and the P/C reserve and premium risk charges from the capital adequacy model at the 'A' confidence level.
- The analysis also factors in our expectations of any significant delays in reinsurance claim recoveries or reinsurance reinstatement premiums.

198. For life insurers outside North America, stressed claims outflows factor in abnormally high lapse levels. The liquidity ratio is defined as:

$$\frac{\text{Backup facilities + stressed liquid assets}}{\text{Short-term debt + 35\% (lapsable + transferable life liabilities)}}$$

Linked business is excluded and assessed separately based on the liquidity of underlying assets. Based on global experience, under the criteria an abnormally high lapse level is considered to be 35% of lapsable and transferable life liabilities. Examples of such liabilities include all continental Europe participating business, annuity liabilities, and with-profit liabilities.

### D3. Rating An Insurer Above The Sovereign Rating

199. The criteria may result in application of sections A to D2 to an SACP or GCP--and potentially a rating--on a domestic unsupported insurer that is above the sovereign rating in the jurisdiction where the company has most of its business (see "Factoring Country Risk Into Insurer Financial Strength Ratings," published on Feb. 11, 2003). In these cases, the criteria typically subject the SACP or GCP that results from sections A through D2 to an assessment of sovereign risk. In rating an insurer above the sovereign, Standard & Poor's is expressing its view that the company's willingness and ability to service debt is superior to the sovereign's and that, ultimately, if the sovereign defaults, there is a measurable probability that the insurance company would not default. (Note: On April 12, 2013, Standard & Poor's published "Methodology And Assumptions: Request For Comment: Ratings Above The Sovereign--Corporate And Government

Ratings," which includes more formal capital and liquidity tests to rate an insurer above the sovereign).

200. Sovereign-related rating limits apply as follows:

- If the insurer is based in the European Economic and Monetary Union (EMU), the criteria in "Nonsovereign Ratings That Exceed EMU Sovereign Ratings: Methodology And Assumptions," published on June 14, 2011, continue to apply.
- For insurers that are not based in the EMU, the criteria in "Criteria Update: Factoring Country Risk Into Insurer Financial Strength Ratings," published on Feb. 11, 2003, continue to apply.
- As mentioned in the previous paragraph, these criteria are under review at present; Standard & Poor's published an article soliciting comments on its proposed approach, "Methodology And Assumptions: Request For Comment: Ratings Above The Sovereign--Corporate And Government Ratings," on April 12, 2013.
- If an insurer derives less than 10% of both its assets and policyholder liabilities from a jurisdiction, including that of its domicile (for example, certain Ireland-, Bermuda- or Cayman Island-based insurers), its ratings are neither capped nor directly linked to the sovereign rating on that jurisdiction.

201. We expect most insurers to be rated no higher than the sovereign because of the following risks and exposures common to the sector:

- Asset risk, given not only the typically very high proportion of government securities on insurers' balance sheets, but also the impact of sovereign, and often macroeconomic, stress on real estate and corporate equity and debt values;
- Regulatory risk, because in our historical experience, including in Argentina in 2001-2003 and in Cyprus in 2013, regulatory frameworks and surveillance may well become significantly credit-negative as a sovereign undergoes credit stress and most insurers, including members of nondomestically owned groups, are subject to local regulations; and
- Potential direct government intervention, mandated changes in the contractual terms of debt or insurance obligations, or by other means, for example, in response to an economic crisis associated with sovereign credit distress.

## **E. Assigning Issue Ratings To Instruments Other Than Equity Hybrids**

202. This section addresses how to assign ratings to long-term nonpolicyholder obligations that are not deferrable or mandatorily convertible and are issued or guaranteed by insurers that are members of insurance groups.

203. Obligations with a guarantee that meets our rating substitution criteria are rated at the guarantor's level (if severally guaranteed: at the highest of all guarantors' ratings).

204. Obligations that do not benefit from such guarantees are rated according to paragraphs 205 to 210. Even if the ICR is supported by a parent, affiliate, or government, these paragraphs apply, since the ICR is weak-linked to each of these obligations in the first place.

205. If the issuer is a holding company and no recovery rating is assigned (otherwise paragraph 209 applies), its senior unsecured debt is rated at the ICR level. If the ICR is 'BBB-' or higher, junior debt is rated one notch below the ICR; if the ICR is 'BB+' or lower, junior debt is rated two notches below the ICR.

206. If the issuer is an operating company and no recovery rating is assigned (otherwise paragraph 209 applies), senior debt notching reflects typical policyholder seniority over financial lenders. If the ICR on a company is 'BBB-' or higher, the company's junior and senior unsecured debts are rated one notch below the ICR. If the ICR is 'BB+' or lower, the company's junior and senior unsecured debts are rated two notches below the ICR. No notching applies in the rare jurisdictions (including the U.S.) where policyholders would not be senior to financial lenders. Similarly, no notching applies to very well-secured senior debt of insurers rated 'BB+' or lower.
207. Junior obligation notching could be one notch less in rare cases where recovery prospects would be unusually strong; for example, if capitalization is likely to remain stronger in a default scenario than we usually expect.
208. Senior secured debt is rated one notch higher than the ICR if holders benefit from asset securities that considerably enhance recovery. Such cases are expected to be rare when the ICR is 'B-' or higher.
209. If a recovery rating is assigned, the notching reflects the recovery rating according to "Recovery Ratings On The Debt Of Speculative-Grade Companies In The Insurance Sector," published on June 24, 2008.
210. In all cases, the ICR is determined by applying this framework and the "Group Rating Methodology." For example, if a U.K. insurance group's GCP is 'a', typically the ICR on the holding company is 'BBB+'. Unless one of the previous paragraphs applies, the holding company's senior debt is rated 'BBB+' and its junior debt 'BBB'. In such a group, a core operating company's ICR is 'A' and its senior and junior debts are rated 'A-'. If the GCP was 'bbb-', these ratings would be, respectively, 'BB', 'BB', 'B+', 'BBB-', and 'BB+'.

## APPENDIX A: Rating Newly Formed Insurers And Insurers In Run-Off

The rating methodology for global insurers also applies to newly formed insurers (hereafter referred to as start-ups) and those in run-off that are winding down operations. However, in the absence of policyholder guarantees, certain modifications apply to these insurers.

### Start-ups

While our analysis is generally forward-looking, past performance provides important context to inform that analysis. Start-ups generally lack a track record of past performance, which explains the specific criteria for them in this appendix.

An insurer is generally a start-up under these criteria for the first five full years of operation. The start-up period ends after the first five financial reporting years of full operations. For example, if an insurer commenced writing business on April 30, 2010, it would be a start-up until the publication of its year-end Dec. 31, 2015, financial statements. In rare cases, a new insurer may not be a start-up under these criteria, for example, if it was a "block of business" or subsidiary that was spun off, that is, if it is an insurer where the management team, competitive position, and track record are essentially the same as the company from which it came.

SACPs and GCPs assigned to start-ups are generally limited at 'bbb' in the most stable economic and industry environments, and generally lower than those of established players in the respective markets. While insurers with 'bbb' SACPs and GCPs are expected to settle their claims with a relatively high degree of certainty, the assignment of

higher SACPs and GCPs under these criteria depends on the insurer establishing a sustainable competitive advantage.

Competitive position:

- The competitive position assessment of a start-up is generally limited to "less than adequate."
- The operating performance subscore is rarely assessed higher than "neutral."
- The differentiation of brand or reputation is rarely assessed higher than "neutral," and frequently assessed "negative."

ERM and management:

- The strategic risk management subfactor of ERM is generally assessed no higher than "neutral" since there is usually a lack of track record to demonstrate the embedding of strategic risk management.
- The management and governance assessment is generally no higher than "fair."

Ratings on start-ups may benefit from group or government support, if applicable. However, the criteria rarely apply the stronger categories of "core" or "highly strategic" status in the case of group support or "almost certain" status in the case of GREs. One group support exception is for internal group captives.

### Run-offs

When an insurer transitions to run-off, its operating characteristics change and past performance normally only partly informs the analysis, which explains the specific criteria for them in this appendix.

An insurer may continue to receive premiums on existing contracts after it closes, and in the case of life insurance business, for many years. Under these criteria, an insurer's run-off period commences when it fully or substantially closes to new business, typically characterized by a fall in these premiums of more than 50% from one year to the next.

SACPs and GCPs assigned to insurers in run-off are generally limited at 'bbb+'. In rare cases, the SACP or GCP of an insurer in run-off could be one notch higher (i.e. 'a-'). This might be the case for an insurer with a financial risk profile that is in line with a higher rating as well as strong and compelling management incentives to maintain such financial strength.

The IICRA assessment is based on the distribution of reserves rather than premiums.

The competitive position assessment is generally the weaker of "adequate," given the absence of downside or upside risk from new business, and the previous assessment before the run-off period.

Ratings on insurers in run-off may benefit from group or government support, if applicable. However, the status rarely would be "core" or "highly strategic" in case of group support or "almost certain" in the case of GREs.

## APPENDIX B: Public Information ('pi') Ratings

The criteria apply to FSRs bearing a 'pi' (public information) subscript (see Appendix E for a definition of 'pi' FSRs). Because of the less comprehensive information typically available for 'pi' ratings, the subfactor assessments may draw more on historic information and the trends they suggest. We generally make conservative assumptions because these ratings are based on public information.

No outlooks are assigned to 'pi' FSRs. They bear plus or minus modifiers only where the rating on the parent--including if a sovereign--limits the 'pi' rating.

The one-notch adjustment to the SACP or GCP (see paragraph 17) does not apply to 'pi' FSRs.

To assess weighted-average industry and country risk (see Section B2), the insurer's known principal market(s) applies in the absence of detailed public information to precisely quantify the geographic or industry sector distribution of premiums.

In the analysis of the insurer's competitive position, operating performance, market position, and level of controlled distribution are rarely assessed as stronger than "neutral," and the other subfactors are rarely assessed as stronger than "negative." Compelling evidence in the public domain might support a higher assessment.

To assess total asset quality (see paragraph 96), the insurer's bond holdings are assumed to be bonds of the central government(s) where the insurer's liabilities arise. The score is the weighted-average credit quality of those bonds, minus one rating category, or lower if bond portfolios of lower credit quality are typical of the industry in the insurer's domicile. Bank deposits are assumed to be rated at the BICRA anchor level in the insurer's domicile. A lower rating is used if bank exposure of lower credit quality is typical of the industry in the insurer's domicile. These conditions hold in the absence of public information to the contrary.

The assessment of capital adequacy is limited at "strong." Also, we are likely to make a number of conservative assumptions when using public information in our capital model, for example regarding P/C premiums and loss reserves, P/C catastrophe risk exposure, and the credit risk profile of the bond portfolio and reinsurance counterparties. In addition, we rarely consider hybrid capital instruments other than U.S. surplus notes to have more than "minimal" equity content, and rarely consider stating P/C loss reserves at in excess of economic value. If capital adequacy is challenging to assess based on public information only, we use key ratios such as net P/C premiums written as a percentage of shareholders' equity, the degree of coverage of minimum regulatory capital requirements, and leverage metrics derived for investments, reinsurance, and P/C loss reserves.

Regarding risk position, the overall assessment is typically limited at "intermediate," and that of subfactors at "neutral," unless there is evidence to the contrary. Subfactors are assessed as "negative" if peers are, or if we believe that a negative assessment is typical of the insurer's market. Our assessment of investment leverage takes into account the financial risk profile that is implied by total asset quality (see paragraph 96).

Regarding financial flexibility, access to sources of external capital and liquidity is assessed as "neutral." Subfactors are assessed as "negative" if we believe that a negative assessment is typical of the insurer's market, for example, if the subfactors for peers are negative. The assessments of fixed-charge coverage and financial leverage are assessed as "neutral." These conditions hold in the absence of public information to the contrary.

We rarely assess management and governance as stronger than "fair," and the related subfactors as stronger than "neutral." A subfactor is assessed as "negative" in the face of clear direct evidence, or if for most peers it is assessed as "negative," or if we believe the associated behavior is typical of the insurer's market.

We rarely assess ERM higher than "adequate," absent compelling information to the contrary. The importance of ERM

to the rating is based on that of the typical insurer in the insurer's market.

Liquidity is limited at "adequate."

Group status is rarely assessed as stronger than "strategically important," absent compelling evidence in the public domain, unless the parent has an ICR or FSR that is not a 'pi' rating. In addition, given the absence of plus or minus modifiers, highly strategic and moderately strategic designations are not expected to be assigned. Assessment of a likelihood of government support that is "almost certain" or "extremely high" is very unlikely, absent compelling evidence in the public domain.

## APPENDIX C: Main Changes From The Request For Comment

On July 9, 2012, Standard & Poor's published "Request for Comment: Insurers: Rating Methodology." We received ample feedback from market participants (see "Summary Of Submissions On Request For Comments: Insurers: Rating Methodology," published on Oct. 18, 2012). Those comments contributed to the main changes in the paragraphs below between these criteria and the Request for Comment.

The scope has been broadened to public information (or 'pi') ratings and to insurers in start-up or run-off.

Certain limiting elements were either eliminated (like the fixed-charge cover test) or recalibrated (like insurer size or "weak" ERM and management) and refocused on the specific situations where in our view they directly impact credit quality. We retained the two levels where liquidity, as an essential component of credit quality across corporates and governments, limits ratings.

We refined a number of metrics, notably regarding the assessment of operating performance and return on equity, to factor in international differences in reporting among insurers.

We modified certain outcomes of tables 1 and 2, and clarified guidance to allow for greater distinction in analyzing the insurer and in assigning ratings, namely to allow for single- or multinotch transitions.

The potential final notch adjustment in what is now paragraph 17 was clarified and focuses less on comparative analysis.

### Business risk profile

We refined the analysis of industry and country risk through a more explicit and granular assessment of the institutional framework, and clear statement of the underlying country and industry risk weights (see paragraph 31). To avoid any unwarranted instability in outcomes, we clarified how analytical judgment informs the assessment when the blended assessment is close to a cut-off point (see paragraph 37). The assessment of barriers to entry was simplified to make it more transparent.

In assessing an insurer's competitive position, we reemphasized the importance of analytical judgment--as opposed to a mechanical roll-up--in assessing the six subfactors. The analysis of geographic diversification is now principles-based and the criteria illustrated by explicit examples.

## Financial risk profile

Key changes to the financial risk profile section include the following:

- Because the criteria now include a fifth score (very high risk), the assessment of the financial risk profile provides more room for risk position to influence the outcome beyond the capital and earnings analysis.
- The analysis now factors in earnings quality, foreign exchange risk, financial leverage, and financial flexibility overall, in a more straightforward and finer way.
- The assessment of regulatory capital adequacy was refocused on situations where insurers are closest to regulatory intervention, and now gives additional emphasis to analytical judgment in addressing the deep international differences in regulatory behavior.
- Certain limiting factors were clarified, changed, or introduced, like a fixed-charge coverage ratio lower than 1.5x (see table 8).

The impact of the combined ERM and management assessment has been modified for the strongest score and anchors, as well as for the weakest score.

## APPENDIX D: Calibration Of The Criteria

We calibrate our insurance ratings criteria based on our analysis of the history of defaults, the impact of various financial and economic crises on insurance company creditworthiness, the credit strength of the insurance sector compared with that in other sectors, and on Standard & Poor's framework for the behavior of our credit ratings over time through economic cycles. We develop our framework in three articles: "Understanding Standard & Poor's Rating Definitions," published on June 3, 2009; "Credit Stability Criteria," May 3, 2010; and "The Time Dimension Of Standard & Poor's Credit Ratings," Sept. 22, 2010.

Insurance companies are typically highly regulated, and in general the regulatory framework has been effective. To protect policyholders, insurance companies are normally required to hold levels of capital in excess of required "solvency margins" to offset potential losses.

Consequently, although Standard & Poor's insurance ratings span the entire rating scale, there are a greater proportion of ratings at the higher end than in most other sectors. Furthermore, the median rating of the universe of rated insurers is higher than in all sectors except governments.

The main sources that we have used to review the history of insurance company defaults are Standard & Poor's default studies (see "2011 Annual Global Corporate Default Study And Rating Transitions," March 21, 2012), which cover the performance of Standard & Poor's insurance ratings, both in terms of transition and default, over the period 1981 to 2011. We note that creditworthiness in this heavily regulated sector appears to be sustainable during periods of economic stress. Default rates have increased during periods of stress, such as economic downturns, or following major catastrophes, but have remained relatively low. We note that the rated average default rate over the study period is 0.41%, which is the lowest of any sector in the study.

Our criteria are informed by several periods of heightened stress that resulted in an increased number of significant insurance company failures. The periods of stress were more industry-specific than macroeconomic:

- 1984-1989: A number of predominantly casualty insurers, including Mission Insurance Co. and Transit Casualty Insurance Co., became insolvent as loss reserves proved deficient following a period of inadequate pricing industrywide (source: "Failed promises: Insurance company insolvencies: A report by the Subcommittee on Oversight and Investigation of the Committee on Energy and Commerce," U.S. Congress, 1990);
- 1992-1994: Several significant life insurers, including Executive Life Insurance Co., Mutual Benefit Life Insurance Co., and Confederation Life Insurance Co., failed due to a combination of illiquid asset concentrations and run-on-the-bank scenarios;
- 2000: Japanese insurers, including Chiyoda Mutual Life Insurance Co. and Kyoei Life Insurance Co., voluntarily entered rehabilitation, as guaranteed rates of interest on savings products were no longer sustainable given low interest rates in Japan (source: "Why Some Japanese Insurers Are Failing," Towers Perrin, 2001); and
- 2002-2005: Several P/C insurers and reinsurers failed, including Mutual Risk Management Ltd., Trenwick Group Ltd., Globale Rückversicherungs AG, and Converium Reinsurance (North America) Inc., predominantly due to deficient reserves for casualty lines following a period of inadequate pricing industrywide, and weak risk management.

The criteria globally address the issues that caused these failures, and specifically through (1) new liquidity metrics, (2) capital metrics that focus more on asset-liability risks, (3) IICRA metrics that take into account industrywide pricing adequacy, and (4) a larger role for ERM for insurers with complex risks.

The global financial crisis that began in 2007 did not trigger a wave of insurance life and P/C defaults. In fact, no significant insurer that Standard & Poor's rated at the time has defaulted due to the financial crisis. Insurers have defaulted because of problems largely outside of their insurance businesses, and bond and mortgage insurers have defaulted, but these two sectors are outside the scope of the criteria (see "Bond Insurance Rating Methodology And Assumptions," Aug. 25, 2011, and "U.S. Mortgage Insurer Sector Outlook Remains Negative--And The Clock's Ticking," March 1, 2012).

## APPENDIX E: Glossary

- Business risk profile or BRP.
- Capital model and capital model criteria. The capital model is a quantitative tool that is integral to Standard & Poor's analysis of the capital adequacy of life, P/C, health insurance, and reinsurance companies worldwide, as described in the criteria article "Refined Methodology And Assumptions For Analyzing Insurer Capital Adequacy Using The Risk-Based Insurance Capital Model," published on June 7, 2010, as supplemented by "A New Level Of Enterprise Risk Management Analysis: Methodology For Assessing Insurers' Economic Capital Models," published on Jan. 24, 2011. In this article, paragraphs 27-30 describe our use of U.S. generally accepted accounting principles (GAAP), statutory accounts, International Financial Reporting Standards (IFRS), and local GAAP on a consolidated, aggregated, or unconsolidated basis depending on whether we conduct the analysis on a group or subsidiary level. The capital model yields a risk-based capital (RBC) requirement amount at four confidence levels (see paragraphs 21-22).
- Coinsurance. Insurance (or reinsurance) business where insurers share the same terms and conditions as other insurers underwriting the same risk, other than the proportion of that risk. For example, insurer A may insure 40% of the risk, and insurers B and C may each insure 30% of the risk. In this example, the insurers would normally share premiums, commissions, and claims in the same proportions.
- Combined ratio: The ratio of the sum of loss expense, loss adjustment expense, and operating expenses divided by



premiums earned. All elements are net of ceded reinsurance. We may use net premiums written (NPW) in the denominator where net premiums earned is not available or where expenses are not deferred in the accounting system the insurer uses (e.g., U.S. statutory accounting).

- Consolidated in these criteria mean the group's insurance operations as a whole.
- Counterparty credit rating (CCR). This is the same as an issuer credit rating (ICR).
- EBIT. The sum of profit before tax and interest expense.
- EBITDA. The sum of EBIT and depreciation on tangible fixed assets plus amortization of intangible assets except for deferred acquisition costs and value of business acquired.
- Enterprise risk management (ERM): See "Enterprise Risk Management," published on May 7, 2013.
- Expense ratios. Net expense ratio: The ratio of net operating expenses over net premiums earned (or over NPW if net premiums earned is not available, or where expenses are not deferred in the accounting system the insurer uses, such as U.S. statutory accounting). Gross expense ratio: the ratio of gross operating expenses over gross premiums earned.
- Financial enhancement rating or FER. A FER addresses an insurer's ability and willingness to meet credit enhancement insurance claims on a full and timely basis (see "Standard & Poor's Ratings Definitions," published on June 22, 2012).
- Financial leverage ratio: Total financial obligations over the sum of ECA (Economic Capital Available, as defined in our capital model criteria), debt, and hybrids. ECA is as defined in the capital model criteria.
- Financial risk profile or FRP.
- Financial strength rating or FSR. A Standard & Poor's insurer financial strength rating is a forward-looking opinion about the financial security characteristics of an insurer with respect to its ability to pay under its insurance policies and contracts in accordance with their terms (see "Standard & Poor's Ratings Definitions," published June 22, 2012).
- General account assets include invested assets as reported (cash, cash equivalents, and investments) that are part of an insurer's general account. It does not include assets pertaining to unit-linked or separate accounts as these assets are not under the control of the insurer.
- Group credit profile or GCP. The GCP is Standard & Poor's opinion of a group's creditworthiness as if the group were a single legal entity, and is conceptually equivalent to an ICR. A GCP does not address any specific obligation (see "Group Rating Methodology," published on May 7, 2013).
- Hybrid instruments. These securities, which include preferred shares, combine features of debt and equity, but are not equivalent to common equity or senior debt.
- Issuer credit rating or ICR. Also called "counterparty credit rating." A Standard & Poor's issuer credit rating is a forward-looking opinion about an obligor's overall creditworthiness, focusing on its capacity and willingness to meet its financial obligations in full and as they come due (see "Standard & Poor's Ratings Definitions," published on June 22, 2012).
- Insurance or insurers. Entities that carry insurance risk, excluding for example, insurance brokers and companies servicing an insurance sector. In these criteria, unless otherwise stated, these terms include reinsurance and reinsurers.
- Insurance group. A group of companies that have insurance as their predominant activity.
- Local currency issuer credit rating. A nonsovereign entity's local currency ICR reflects Standard & Poor's opinion of that entity's willingness and ability to service its financial obligations, regardless of currency and in the absence of restrictions on its access to foreign exchange needed to service debt.
- Minority interests. Also referred to as noncontrolling interests.
- Operating return on embedded value: post-tax operating profit divided by the average of embedded value at period-end and a year before.
- Prebonus pretax earnings are the sum of EBITDA and policyholder dividends.

- Public information ('pi') FSRs. Ratings with a 'pi' suffix are based on an analysis of an issuer's published financial information, as well as additional information in the public domain (see paragraph 44 in "Standard & Poor's Ratings Definitions," published on June 22, 2012, for a full definition of a 'pi' qualifier). Therefore, for FSRs with a 'pi' suffix, specific criteria apply (see Appendix B). The less comprehensive information typically available for 'pi' ratings affects the assessment of many rating factors, and is frequently less forward-looking and more reliant on historic information--notably due to the absence of interaction with the insurer's management.
- Property/casualty or P/C.
- Premiums. For insurers reporting under U.S. generally accepted accounting principles, given that under Financial Accounting Standards Board Statement No. 97 most annuities and universal life receipts are accounted for as deposits and not as revenues or premiums, for the purpose of these criteria premiums are represented by sales. Gross premiums written (GPW) comprise all sources of premium receivables from policyholders for the financial period except ceded reinsurance premiums and premiums on contracts accounted for as deposits (these include universal life and deferred annuities). GPW includes all installment, adjustment, reinstatement, incremental, and accrued premium receivable, and includes all return and refund premium payable under insurance policies. GPW does not include ceded reinsurance premiums. It excludes premiums on contracts accounted for as deposits including universal life and deferred annuities. Even if contracts legally result in a premium, we only recognize a transaction as premiums in our ratios if it represents payment for risk-bearing activities retained by the insurer. Risk-bearing activities include underwriting, investment, and expense management. Accordingly, we may exclude amounts receivable for guaranteed investment contracts, funding agreements, and other forms of operational leverage from our premium metrics where the commercial substance of the contract is a financial instrument rather than insurance. NPW comprises GPW minus premiums ceded to reinsurers. Reinsurance premiums include installment, adjustment, reinstatement, incremental, and accrued reinsurance premium payable.
- Risk-based capital or RBC.
- ROE or return on equity: reported net income divided by the year-end average of reported stockholders' equity for the past two years.
- Return on assets is EBIT divided by the average of total assets adjusted at period-end and a year before. Total assets adjusted is total assets minus reinsurance assets.
- Return on revenue: Total revenue is used to capture net premiums from underwriting activities as well as investment income and fees generated as a result of those underwriting activities. Where total revenue is not reported, it is the sum of the net premiums earned, net investment income, and other income. We include net investment income as reported (but removing the effects of realized and unrealized gains or losses from investments and derivatives) to provide a more complete picture of an insurer's revenue-generating abilities.
- Reinsurance utilization ratio: For life, the ratio is defined as ceded reserves over gross reserves, excluding captives and other forms of nonrisk transfer reinsurance (e.g., financial, block divestitures, and acquisitions executed as reinsurance). For P/C insurers, the ratio is ceded premiums written over GPW.
- Sigma. This refers to a study of the world insurance market, the most recent of which at the time of publication was Sigma Study: No. 3/2012, "World insurance in 2011: non-life ready for take-off."
- Solvency margin. This is the amount by which an insurance company's assets exceed its projected liabilities, effectively a measure of its financial health.
- Total adjusted capital or TAC. TAC is Standard & Poor's measure of a company's capital available to meet capital requirements, as derived from our capital adequacy model (see "Refined Methodology And Assumptions For Analyzing Insurer Capital Adequacy Using the Risk-Based Insurance Capital Model," June 7, 2010, table 1.)
- Transfer and convertibility or T&C, as defined in "Criteria For Determining Transfer And Convertibility Assessments," published on May 18, 2009. A T&C assessment is the rating associated with the likelihood of the sovereign restricting access to foreign exchange needed for debt service.

- Tied (otherwise known as exclusive) agents and non-tied agents. Tied agents are those that are contractually bound to distribute the products of only one insurer. They may not be controlled by the insurer, but they are significantly influenced by the insurer because of the exclusivity of the relationship. For the purpose of these criteria, the agent may be tied to different insurers for different products but these products must not be substitutes for each other. For example, if the agent's customer requires home insurance or term life insurance, it may only offer the product of one insurer in each case. Non-tied agents are all other agents.

### Sector definitions

- Non-domestic government obligations: Aggregated by jurisdiction.
- Non-U.S. obligations of local and regional governments: Aggregated on a national basis.
- U.S. municipal bonds: Tax-backed and appropriation-backed government obligations, municipal water sewer obligations, and public university obligations are aggregated by state and each state is viewed as a sector. In addition, the following types of municipal bonds are viewed as individual sectors on a national basis: private education, health care, housing revenue, transportation, public power and other utilities, and other not-for-profit obligations.
- Structured finance securities for each country, each of the following is defined as a sector: residential mortgage-backed securities; commercial receivables; autos; credit cards; student loans; commercial real estate (CRE), including CRE CDOs (collateralized debt obligations); CDOs of asset-backed securities; all else, including corporate CDOs.
- Corporate securities, equity, and fixed-income obligations are aggregated per issuer, and issuers are allocated to the sectors defined under Standard & Poor's Global Industry Classification Standard (GICS): energy, materials, industrials, consumer discretionary, consumer staples, health care, financials, information technology, telecommunication services, and utilities.

## APPENDIX F: Fully And Partly Superseded Criteria

Criteria articles superseded and partly superseded by this criteria article.

### Superseded

- Ratings Bearing A "pi" Subscript: Methodology And Assumptions, Feb. 9, 2011
- Analysis Of North American Life Insurance Operating Performance, May 13, 2009
- Analysis Of NonLife Insurance Operating Performance, April 22, 2009
- Evaluating Insurers' Competitive Positions, April 22, 2009
- Financial Flexibility, April 22, 2009
- Interactive Ratings Methodology, April 22, 2009
- Investments, April 22, 2009
- Standard & Poor's Approach To Rating Takaful And Retakaful (Islamic Re/Insurance) Companies, March 30, 2009
- Evaluating Liquidity Triggers In Insurance Enterprises, Nov. 11, 2008
- Risk Return Analysis Using Embedded Value, Aug. 18, 2008
- Evaluation Of Life Insurers' Earnings, April 12, 2006
- The Dangers Of Dependence On Reinsurance, Dec. 8, 2005
- Distinctive Features Set German Private Health Insurance Sector Apart From Counterparts, Sept. 14, 2005
- Solvent Schemes Of Arrangement, March 7, 2005
- Financial Enhancement Ratings, Dec. 10, 2004
- Criteria | Insurance | Health: Liquidity, April 22, 2004

- Criteria | Insurance | Property/Casualty: Liquidity, April 20, 2004
- Counterparty Credit Ratings And The Credit Framework, April 14, 2004
- Criteria | Insurance | General: Rating Start-Ups, April 13, 2004
- Criteria | Insurance | Property/Casualty: Rating Start-Ups, April 13, 2004
- Assumptions For Quantitative Metrics Used In Rating Insurers Globally, April 14, 2011

### Partly Superseded

- Lloyd's Syndicate Assessment Methodology, March 28, 2013
- Refined Methodology And Assumptions For Analyzing Insurer Capital Adequacy Using The Risk-Based Insurance Capital Model, June 7, 2010
- Credit And Surety Insurance Criteria, Oct. 18, 2004
- Criteria | Insurance | Life: Liquidity, April 22, 2004
- Criteria Update: Factoring Country Risk Into Insurer Financial Strength Ratings, Feb. 11, 2003

## APPENDIX G: Related Criteria And Research

- Enterprise Risk Management, May 7, 2013
- Group Rating Methodology, May 7, 2013
- Methodology For Linking Short-Term And Long-Term Ratings For Corporate, Insurance, And Sovereign Issuers, May 7, 2013
- Methodology And Assumptions: Request For Comment: Ratings Above The Sovereign--Corporate And Government Ratings, April 12, 2013
- Methodology: Management And Governance Credit Factors For Corporate Entities And Insurers, Nov. 13, 2012
- Summary Of Submissions On Request For Comments: Insurers: Rating Methodology, Oct. 18, 2012
- Criteria For Assigning 'CCC+', 'CCC', 'CCC-', And 'CC' Ratings, Oct. 1, 2012
- Standard & Poor's Ratings Definitions, June 22, 2012
- 2011 Annual Global Corporate Default Study And Rating Transitions, March 21, 2012
- U.S. Mortgage Insurer Sector Outlook Remains Negative--And The Clock's Ticking, March 1, 2012
- Bond Insurance Rating Methodology And Assumptions, Aug. 25, 2011
- Nonsovereign Ratings That Exceed EMU Sovereign Ratings: Methodology And Assumptions, June 14, 2011
- Principles Of Credit Ratings, Feb. 16, 2011
- A New Level Of Enterprise Risk Management Analysis: Methodology For Assessing Insurers' Economic Capital Models, Jan. 24, 2011
- Rating Government-Related Entities: Methodology And Assumptions, Dec. 9, 2010
- Stand-Alone Credit Profiles: One Component Of A Rating, Oct. 1, 2010
- The Time Dimension Of Standard & Poor's Credit Ratings, Sept. 22, 2010
- Refined Methodology And Assumptions For Analyzing Insurer Capital Adequacy Using The Risk-Based Insurance Capital Model, June 7, 2010
- Credit Stability Criteria, May 3, 2010
- Understanding Standard & Poor's Rating Definitions, June 3, 2009
- Criteria For Determining Transfer And Convertibility Assessments, May 18, 2009
- Recovery Ratings On The Debt Of Speculative-Grade Companies In The Insurance Sector, June 24, 2008
- Criteria | Insurance | Life: Liquidity, April 22, 2004
- Factoring Country Risk Into Insurer Financial Strength Ratings, Feb. 11, 2003

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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