

Criteria | Financial Institutions | Banks:

Banks: Rating Methodology And Assumptions

November 9, 2011

(Editor's Note: We republished this article on July 27, 2018, to incorporate several nonmaterial clarifications. See the "Revisions And Updates" section for details.)

1. This article supersedes those articles listed in Appendix A.
2. The criteria constitute specific methodologies and assumptions under "Principles Of Credit Ratings," published Feb. 16, 2011.
3. The criteria represent a significant change and aim to enhance the comparability of ratings on financial institutions with ratings in other sectors (see "Understanding Standard & Poor's Rating Definitions," published June 3, 2009). The criteria are designed to improve transparency of bank ratings globally.
4. The criteria articulate the steps in developing the stand-alone credit profile (SACP) and issuer credit rating (ICR) for a bank, including a consideration of the potential for additional direct support from the bank's parent group or sovereign government. The criteria place heightened emphasis on economic risk and industry risk in setting the starting point or "anchor" in rating a financial institution. The anchor is then adjusted for bank-specific factors, such as capitalization, management, risk position, and others, to determine the SACP (see "Stand-Alone Credit Profiles: One Component Of A Rating," published Oct. 1, 2010). Lastly, the criteria apply analysis of an institution's support framework, including both potential government support and corporate group support (see chart 1).
5. The criteria place the SACP for an average bank in developed economies in the 'bbb' and 'a' categories; the lowercase letters intentionally differentiate these credit profiles from the issuer credit ratings. As a result, only banks with stronger business positions, and capitalization sufficient to withstand a scenario of severe or extreme stress without reliance on external support, may be assigned higher SACP. The potential for any extraordinary government or group support will be factored into the ICR after the SACP has been determined.
6. The criteria limit rating movements on banks as a result of cyclical changes. Bank ratings of 'AAA' will still be possible. But such a bank would have to possess credit characteristics, including capitalization levels, that are significantly stronger than those maintained by most banks pre-2007.

I. SCOPE OF THE CRITERIA

7. The criteria apply to ratings on retail, commercial, and corporate and investment banks. The definition of a bank is broad and includes the larger broker-dealers, mortgage lenders, trust banks, credit unions, building societies, and custody banks. The criteria do not apply to ratings on

ANALYTICAL CONTACTS

Matthew B Albrecht, CFA

New York
(1) 212-438-1867
matthew.albrecht
@spglobal.com

Gavin J Gunning

Melbourne
(61) 3-9631-2092
gavin.gunning
@spglobal.com

Emmanuel F Volland

Paris
(33) 1-4420-6696
emmanuel.volland
@spglobal.com

CRITERIA CONTACTS

Michelle M Brennan

London
(44) 20-7176-7205
michelle.brennan
@spglobal.com

Nik Khakee

New York
(1) 212-438-2473
nik.khakee
@spglobal.com

ADDITIONAL CONTACT

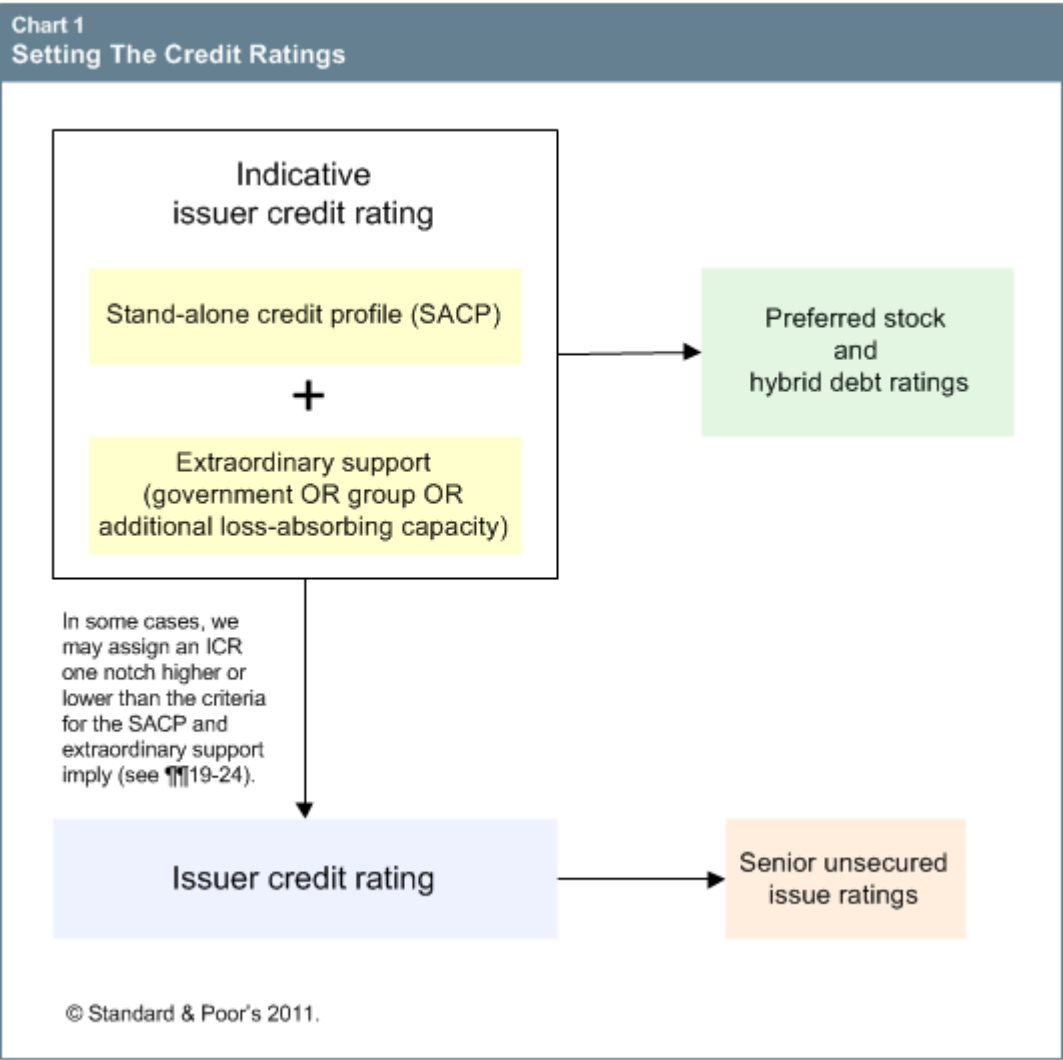
Financial Institutions Ratings Europe

FIG_Europe
@spglobal.com

finance companies, asset managers, exchanges, clearinghouses, and regional securities brokers.

II. SUMMARY OF THE CRITERIA

8. The methodology consists of two key steps: determining the SACP and assessing extraordinary government or group support. Once the likelihood of extraordinary support is established, then the criteria establish a bank's indicative ICR. The indicative ICR is a component of the ICR derived by combining the SACP and support conclusions (see ¶193). In most cases, the ICR is at the same level as the indicative ICR (see chart 1). In some cases, set out in ¶¶19-24, the criteria allow for the assignment of an ICR that is one notch higher or lower than the criteria for the SACP and extraordinary support imply.

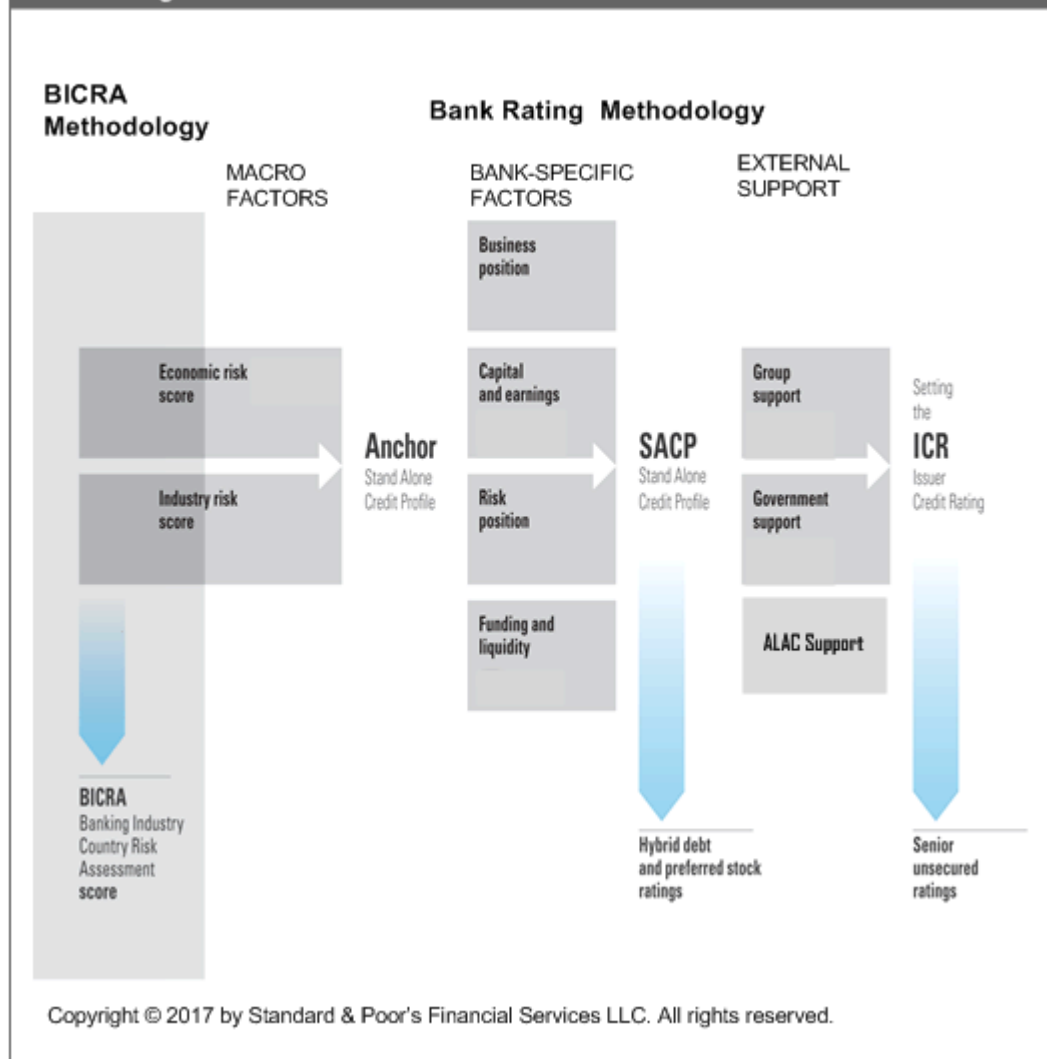


9. Issue ratings on hybrid instruments and preferred stock reference the SACP while issue ratings on senior unsecured instruments reference the ICR (see chart 1 and "Bank Hybrid Capital And Nondeferrable Subordinated Debt Methodology And Assumptions," published Jan. 29, 2015).
10. The assessment of the SACP rests on six factors (see chart 2). The first two factors, economic risk

and industry risk, draw on the Banking Industry Country Risk Assessment (BICRA) methodology (see "Banking Industry Country Risk Assessment Methodology And Assumptions," published Nov. 9, 2011). They represent the strengths and weaknesses of the broader operating environment that situate, or anchor, the SACP. The other four factors represent bank-specific strengths and weaknesses. Based on the analysis of these factors, the SACP is notched up or down relative to the anchor.

Chart 2

Bank Ratings Framework



11. The support framework considers both the relationship between a bank and its parent group or government and how this relationship alters a bank's overall creditworthiness. Conclusions about support (beyond the support included in the SACP, see ¶ 167) and the SACP combine in the assignment of the indicative ICR. The indicative ICR is the same as the SACP unless the bank is likely to receive additional capital, liquidity, or risk relief from the government or the parent group in a crisis. In practice, a bank normally receives help from either its parent group or government. Accordingly, a bank that is a subsidiary receives the higher indicative ICR resulting from application of either the group support framework or the government support framework (see

chart 6). Additional loss-absorbing capital (ALAC) is the third form of extraordinary support, alongside government or group support (see "Bank Rating Methodology And Assumptions: Additional Loss-Absorbing Capacity," April 27, 2015).

12. Paragraphs 12-16 have been deleted.
17. This paragraph has been deleted.
18. This paragraph has been deleted.

III. METHODOLOGY: SETTING THE ISSUER CREDIT RATING

19. The ICR is set at the same level as the indicative ICR (subject to the criteria shown in ¶¶206-212), or one notch higher or lower in some cases, according to the criteria in ¶¶19-24. Most of the time, there will be no need to adjust the indicative ICR up or down.
20. The indicative ICR may be adjusted by one notch in either direction based on a holistic view of creditworthiness informed by comparative analysis. This analysis assesses the bank's relative credit standing among all banks with a similar SACP (that is, the same or one notch higher or lower). For example, if a bank has a SACP of 'a-', it is compared with other banks with SACPs of 'a', 'a-', and 'bbb+'.
21. In the final peer review, the capital sustainability ratio (see table 10 and ¶¶90) and the earnings buffer ratio (see table 11 and ¶¶105-110) are the primary metrics for the comparison. The combination of these earnings measures means that stronger-than-average earnings are only recognized when a bank also maintains or grows capital.
22. This paragraph has been deleted.
23. A bank whose regulatory ratio is "at risk" (see table 8) or whose liquidity is "weak" (see table 16) would not qualify for a one-notch uplift.
24. Some examples that we typically expect could lead to a positive or negative adjustment based on comparable analysis include:
 - Banks in a positive or negative transition that improves or reduces creditworthiness that is not already fully captured in the indicative ICR; or
 - Banks subject to political, social, economic, or competitive trends that are strengthening or weakening creditworthiness; or
 - A sustained and projected outperformer or underperformer in its peer group with ratios more reflective of the higher or lower rating, unless already captured elsewhere in the methodology.

IV. METHODOLOGY: STAND-ALONE CREDIT PROFILE

25. Economic risk and industry risk represent macro analysis of the creditworthiness of a bank while business position, capital and earnings, risk position, and funding and liquidity represent microanalysis (see the BICRA methodology).
26. These bank criteria use the BICRA's economic risk and industry risk scores to determine a bank's anchor SACP (see table 2), the starting point in assigning an ICR. The anchor SACP is adjusted up or down the ratings scale after taking into account a bank's specific strengths and weaknesses in the following factors:
 - Business position,
 - Capital and earnings,

- Risk position, and
- Funding and liquidity.

27. The criteria call for an SACP for most of the banks Standard & Poor's rates. There are some circumstances when assigning an SACP is not meaningful because of a bank's high degree of operational or financial integration with a parent or in a group. In these cases, the bank is economically a cost center or division, even though it may legally be a separate company (see "Group Rating Methodology," published on Nov. 19, 2013).
28. The result of the analysis described in ¶26 is a bank's SACP, an interim step in assessing a bank's overall creditworthiness. This SACP includes government support as described in ¶167 but does not include extraordinary support.

A. Economic Risk

29. Economic risk is the first factor in determining the SACP. A change in an economic risk score of a country might result in a change in the anchor SACP, SACP, or ratings on a bank with business in that country.
30. The BICRA economic risk score of the country (or countries) where a bank operates captures the economic risk of the bank. The BICRA economic risk scores range from group 1 (very low risk) to group 10 (extremely high risk).
31. Economic risk takes into account the stability and structure of a country's economy, its economic policy flexibility, actual or potential imbalances, and the credit risk of economic participants--mainly households and enterprises. The BICRA methodology seeks to identify the potential for adverse economic developments and the banking system's capacity to adjust to them (see the BICRA methodology).
32. When a bank is active in more than one country, the economic risk score is calculated as a weighted average of the economic risk scores--called weighted-average economic risk (see table 1). The proportion of a bank's business in each country that represents its main economic risks is used to weight the economic risk scores. The economic risk score should reflect the bank's underlying economic risks. The calculation only includes countries where a bank conducts more than 5% of its business. All weightings are rounded to the nearest 5% before averaging.

Table 1

Hypothetical Example Of Weighted-Average Economic Risk For A Bank

Country	Weighting (% of business)	Economic risk*	Weighted economic risk
France	45	2	0.9
U.S.	20	4	0.8
Switzerland	15	1	0.15
India	10	5	0.5
Japan	10	2	0.2
Weighted-average economic risk	--	--	2.55

*On a scale from 1-10, lowest to highest risk.

33. For a lending institution, the weighted average is calculated according to the proportion of loans in each country. When lending activities are minor, other measures of underlying economic risks

determine the weights. The analysis is based on a geographic breakdown of a bank's loan book or the adjusted exposure used in risk-adjusted capital analysis (see "Risk-Adjusted Capital Framework Methodology," published July 20, 2017). Adjustments are made for likely changes in the bank's risk footprint--for example, as a result of acquisitions in new countries.

34. For stand-alone investment banks, the country where a bank has its headquarters determines its economic risk score. Investment banking activities are defined as debt and equity underwriting, mergers and acquisitions (M&A) advisory, sales and trading, principal investment, and proprietary trading.
35. In addition, the capital charges in the risk-adjusted capital framework (RACF), Standard & Poor's criteria for assessing a bank's capital, are scaled using a country's economic risk score. Higher risk weights are applied to the same exposures in countries with a higher economic risk assessment (§ 74).

B. Industry Risk

36. Industry risk is the second factor in determining a bank's SACP, and a change in a country's industry risk score might result in a change in the anchor SACP, SACP, or rating on the bank.
37. A bank's industry risk is determined by the BICRA industry risk score for the country where it is domiciled and primarily regulated. The BICRA industry risk scores range from group 1 (very low risk) to group 10 (extremely high risk).
38. Industry risk assesses three structural features of a country's banking industry: (1) the institutional framework or the quality and effectiveness of bank regulation and the track record of authorities in managing financial sector turmoil; (2) competitive dynamics or the competitive landscape and performance, financial products and practices, and the role of nonbank financial institutions; and (3) funding through the debt markets or government, including the role of the central bank and government.
39. As part of the analysis of industry risk, competitive dynamics determines the degree of use of complex products, including financial derivatives. Aggressive use of complex products and derivatives contributes to higher industry risk; the absence of complex products and derivatives supports a lower industry risk assessment.
40. Because industry risk addresses the range and strength of funding options available to banks in a country, including the role of the central bank and government, the SACP includes elements of ongoing government support (see § 167).
41. Unlike economic risk, industry risk is not calculated as a weighted average when a bank operates in more than one country. The main reason for this is the importance of the bank's home regulatory framework.

C. The Anchor SACP: Combining Economic Risk And Industry Risk

42. Economic risk and industry risk anchor the creditworthiness of a bank in its operating environment. Specifically, the bank's economic risk and industry risk scores are associated with a particular anchor SACP (see table 2). The anchor SACP is a globally consistent, relative ranking of creditworthiness across national banking markets and ranges from 'a', the least risky, down to 'b-', the riskiest.

Table 2

Determining The Anchor SACP From Economic Risk And Industry Risk

Industry risk*	Economic risk*									
	1	2	3	4	5	6	7	8	9	10
1	a	a	a-	bbb+	bbb+	bbb				
2	a	a-	a-	bbb+	bbb	bbb	bbb-			
3	a-	a-	bbb+	bbb+	bbb	bbb-	bbb-	bb+		
4	bbb+	bbb+	bbb+	bbb	bbb	bbb-	bb+	bb	bb	
5	bbb+	bbb	bbb	bbb	bbb-	bbb-	bb+	bb	bb-	b+
6	bbb	bbb	bbb-	bbb-	bbb-	bb+	bb	bb	bb-	b+
7		bbb-	bbb-	bb+	bb+	bb	bb	bb-	b+	b+
8			bb+	bb	bb	bb	bb-	bb-	b+	b
9				bb	bb-	bb-	b+	b+	b+	b
10					b+	b+	b+	b	b	b-

*On a scale from 1-10, lowest to highest risk where economic risk and industry risk scores are rounded to the nearest whole number prior to the application of the table. SACP--Stand-alone credit profile.

43. The 'a' level, the strongest anchor SACP, reflects the volatility of banking even in the strongest markets. By embedding this notion of volatility into the anchor SACP, the criteria aim to ensure that lessons of the post-2007 economic downturn will not be forgotten as national economies recover and another period of favorable conditions gives rise to growth and attractive headline banking profits. Banks will likely continue to respond more severely to otherwise moderate economic shocks because they are confidence-sensitive and many carry high leverage.[1] In recognition of credit stability as a key issue in ratings, Standard & Poor's does not assign a long-term ICR of 'AA' where it would likely fall below 'A' within one year under moderate stress conditions. Similarly, Standard & Poor's would not assign an 'A' rating where it will likely fall below 'BB' within one year under the same stress (see "Credit Stability Criteria," published May 3, 2010). Significantly, observations of banking crises throughout history show that the SACP's of many important banks in developed markets would have fallen below 'a' under this bank criteria. Therefore, even in countries that offer the most favorable environment, the criteria set the anchor SACP no higher than 'a'.
44. Serial banking crises throughout history demonstrate that depositors and investors can lose confidence quickly--leading to bank failures, government bailouts, and dampened economic growth, as Reinhart and Rogoff describe in their book, "This Time is Different: Eight Centuries of Financial Folly." Confidence sensitivity and leverage in a banking system can turn a moderate stress into a more severe and protracted downturn.
45. Reinhart and Rogoff's empirical study of banking crises in 66 countries between 1800 and 2008 shows that they are commonplace in both advanced and emerging economies. For example, since 1800, there have been 13 banking crises in the U.S., 12 in the U.K., and 15 in France. This pattern of banking sector boom and bust and government support will likely repeat itself in some fashion, regardless of governments' recent and emerging policy response. New laws put in place following previous crises, such as deposit insurance, have not always prevented subsequent downturns. Banking crises will likely happen again.
46. In addition, in response to the recent financial crisis, various supervisory authorities concluded that banks were undercapitalized leading up to 2007. Many studies, including those by the U.S.

Financial Crisis Inquiry Commission, the Swiss Commission of Experts, and the U.K.'s Independent Commission on Banking, suggest that capital standards need to be raised materially to address the leveraged and interconnected nature of banks around the world. Standard & Poor's analysis shows that despite banks' efforts to improve capital levels, their leverage continues to be high in 2011. For example, the final report of the Swiss Commission of Experts for limiting the economic risks posed by large companies concluded that the appropriate level of capital for institutions that are "too big to fail" is 19%, consisting of 10% common equity and 9% contingent convertible bonds.[2] Likewise, the U.K.'s Independent Commission on Banking recently recommended that large U.K. banking groups should have "primary loss-absorbing capacity of at least 17%-20%." [3]

47. The anchor SACP integrates the reality that capital is generally not a ratings strength and that banking is an essential yet volatile business. Banks play an important role in national economies through their conversion of shorter-term deposits into longer-term loans. Providing interest to depositors protects the value of their savings from inflation, and providing loans to governments and the private sector stimulates investment and growth. By operating with increasingly high leverage--borrowing more from savers and the debt capital markets--banks can lend more, which means greater economic growth. For their high-leverage business position to work, banks rely on the continuing confidence of depositors and investors in their creditworthiness to roll over maturing deposits and refinance maturing debt. And governments aim to boost this confidence through regulation and supervision to protect economic growth.

D. Bank-Specific Analysis: Building On The Anchor SACP

48. After the determination of the anchor SACP, the criteria consider each bank-specific SACP rating factor--in other words, an analysis of a bank's individual characteristics. The assessment of each factor can raise or lower the anchor SACP by one or more notches--or have no effect in some cases (see table 3). These conclusions are expressed using specific rankings and descriptors. These rankings and descriptors, in turn, determine the number of notches to apply to the anchor SACP to determine the level of a specific bank's SACP.

Table 3 Using Bank-Specific Analysis To Determine The SACP			
Rating factor/Ranking	Anchor SACP Adjustment		
Business position (Section E.)			
Very strong	+2 notches		
Strong	+1 notch		
Adequate	0 notches		
Moderate	-1 notch		
Weak	-2 to -3 notches		
Very weak	-5 notches		
Capital and earnings* (Section F.)			
Anchor	'bbb-' or better	'bb+' to 'bb-'	Below 'bb-'
Very strong	+2 notches	+2 notches	+2 notches
Strong	+1 notch	+1 notch	+2 notches
Adequate	0 notches	0 notches	+1 notch
Moderate	-1 notch	0 notches	0 notches
Weak	-2 to -3 notches	-1 notch	0 notches
Very weak	-5 notches	-2 notches	-1 to -2 notches
Risk position (Section G.)			
Very strong	+2 notches		
Strong	+1 notch		
Adequate	0 notches		
Moderate	-1 notch		
Weak	-2 notches		
Very weak	-5 notches		
Funding and liquidity (section H.): See funding and liquidity matrix (table 17)			
*The cap on the SACP is 'bb+' when regulatory capital is "at risk," at 'ccc+' when it is "subject to regulatory forbearance," and 'cc' when "insolvent." SACP--Stand-alone credit profile.			

1. Comparative analysis and peer review

49. The main purpose of comparative analysis and the peer review is to provide context for assessing the bank-specific rating factors and to set the ICR.
50. Comparative analysis, which takes on slightly different forms for each SACP rating factor (see table 4), helps develop the bank-specific analysis. In some cases the analysis is relative, and in others it is absolute. Specifically, the analyses for business position, risk position, and funding are all relative while the analyses for capital and earnings and liquidity are absolute.
51. A bank is generally compared with all banks in its home country.
52. Once the indicative ICR is determined, the criteria also use a final peer review to set the ICR (see ¶¶ 19-24). Here, the peer group is banks with a similar SACP, i.e., the same or one notch higher or lower (see ¶ 20).

Table 4

The Focus Of Comparative Analysis For Each SACP Rating Factor

SACP rating factor	Comparative group	Guidance
Business position	Banks with similar industry risk*	The comparative analysis for business position comprises all banks with a similar industry risk score. A bank is generally compared with all banks in its home country.
Capital and earnings	All banks globally	The comparative analysis for capital and earnings comprises all banks. Globally consistent metrics are used as absolute measures to benchmark performance for the capital and earnings assessment.
Risk position	Banks with similar economic risk and product mix*	Comparative analysis supports the more qualitative conclusions about risk position with the more quantitative risk assumptions in capital and earnings analysis, to determine whether those assumptions are appropriate for a bank. A bank's loss experience and Standard & Poor's loss expectations that are lower than average imply lower risk. Conversely, larger comparative losses imply higher risk. The comparative analysis for risk position comprises all banks with a similar economic risk score and product mix.
Funding and liquidity	Funding: all banks in a country / Liquidity: all banks globally	The comparative analysis for funding comprises all banks in a country. Specifically, banks are compared with the domestic industry average so that this assessment of funding remains consistent with the BICRA funding assessment. The liquidity subfactor uses a bank's liquidity ratios and dependence on central bank funding to make a comparison with national and international banks. Accordingly, the comparative analysis for liquidity comprises all banks.

*When there are not enough domestic banks or when many similarities exist among national banking industries, the comparison can include international banks. The relative creditworthiness between banking industry and economic risk is determined by the BICRA (Banking Industry Country Risk Assessment) criteria. A bank is compared with banks within a category of the BICRA industry and economic risk scores. SACP--Stand-alone credit profile.

E. Business Position

53. The third SACP rating factor, business position, measures the strength of a bank's business operations. Business position is the combination of specific features of the bank's business operations that add to or mitigate its industry risk score. The criteria group these features into three subfactors: business stability, concentration or diversity, and management and corporate strategy. Relative strength is assessed through a number of indicators (see table 5). Where they are relevant and available, quantitative metrics are used; however, much of the assessment is qualitative.

Table 5

Business Position Subfactors And Indicators

Subfactors	Explanation	Indicators
Business stability (¶¶57-61)	The stability or fragility of a bank's franchise	Revenue stability, market shares, and the customer base
Concentration or diversity (¶¶62-67)	The concentration or diversification of business activities	Contributions of different business lines and geographies to overall revenue
Management and corporate strategy (¶¶68-72)	The quality of management, strategy, and corporate governance	Strategic positioning, operational effectiveness, financial management, and governance and financial policies

To adjust the anchor for business position, see table 3, Using Bank-Specific Analysis To Determine The SACP.

54. For each bank, the strength of its business position is scored using one of six standard descriptors

(see table 6), based on conclusions about its strength relative to the comparative analysis described in table 4.

55. Though the three subfactors are assessed independently, it is important to understand how they may reinforce or weaken each other. The assessment is not a simple addition of metrics for the three subfactors. For example, if the concentration of revenues from a single region or a single line of business results in an even more negative view of a weak business stability assessment, it will lead to a very weak score. In addition, stronger areas do not automatically offset or "average out" weaker areas. Instead, the focus is on identifying risks and determining whether they combine to further increase or reduce overall risk.

Table 6 Business Position Assessment		
Qualifier	What it means	Guidance
Very Strong	A bank's business operations make it better placed to withstand adverse operating conditions than the industry risk score indicates.	A combination of strengths in the three business position subfactors—business stability, concentration or diversity, management and corporate strategy—outweigh any weakness; and On balance, the business is much stronger than for other strong banks with a similar industry risk score; and The bank did not require direct government support in the latest financial downturn when other banks did.
Strong	A bank's business operations make it somewhat less vulnerable to adverse operating conditions than the industry risk score indicates.	Strengths clearly outweigh any weakness; and On balance, the business is stronger than for other banks with a similar industry risk score; and If the bank received direct government support in the latest financial downturn, new management has executed most substantial elements of the associated restructuring plan successfully.
Adequate	A bank's business operations are representative of the industry risk score.	Neither strengths nor weaknesses outweigh each other; A single weakness in one category, which does not dominate the assessment, may be offset by strengths; and On balance the business is representative of the average for other banks with a similar industry risk score.
Moderate	A bank's business operations make it more vulnerable to adverse operating conditions than the industry risk score indicates.	Weaknesses clearly outweigh any strengths; or On balance, the business is less favorable than for other banks with a similar industry risk score.
Weak*	A bank's business operations make it significantly more vulnerable to adverse operating conditions than the industry risk score indicates.	A combination of weaknesses among the three subfactors outweighs any strengths; or There is a single, dominating weakness in one of the three subfactors; and On balance, the business is weaker than for other banks with a similar industry risk score.
Very weak	The industry risk score is not representative of a bank's vulnerability to adverse operating conditions. (This category applies only in exceptional circumstances.)	The degree of bank-specific weakness overrides any potential benefit from its industry; or The bank's business operations are materially more risky than for other banks with a similar industry risk score.
*The impact on the SACP is a deduction of two or three notches. We deduct two or three notches according to our relative assessment of the extent to which the bank's business operations make it significantly more vulnerable to adverse operating conditions than the industry risk score indicates. This assessment is informed by the three business position subfactors. If we identify a single, dominating weakness in any subfactor, we decide the appropriate deduction according to our view of the extent to which this weakness increases the bank's vulnerability to adverse operating conditions.		

56. An "adequate" business position means that the industry risk score appropriately captures the risk of a bank's business activities. In other words, when compared against banks with a similar industry risk score, a bank's business activities represent average risk. An assessment of "very strong" or "strong" means that a bank's business activities are less risky than average. An assessment of "moderate," "weak," or "very weak" means that a bank's business activities are riskier than average. Each descriptor determines the adjustment, in notches, to the anchor SACP (see table 3).

1. Business stability

57. Business stability is the first subfactor in the business position assessment. Business stability is the predictability of continuing business volumes in the face of economic and market fluctuations. This is important because the erosion of confidence that a bank may suffer during times of market turbulence exposes it to the possibility of sudden default risk. Customers and counterparties can walk away, and access to liquidity in the capital market can dry up. A business position that contains this sudden default risk is inconsistent with an SACP in the 'a' category.
58. A key lesson of the banking crisis that started in 2007 was that differences in franchise stability and confidence sensitivity significantly affect creditworthiness. Financial institutions with large trading operations--particularly in derivatives--are sensitive to an erosion of confidence. A bank whose revenues are highly impervious to an economic downturn or a period of market turbulence is associated with stronger business stability. On the other hand, a bank whose revenues are susceptible to significant volatility during moderately adverse conditions is associated with weaker business stability.
59. The criteria use measures of revenue stability, market share, and the customer base to compare a bank's business stability with that of domestic banks and banks with a similar industry risk score in other countries. The comparative analysis focuses on the underlying contribution of business lines to total revenues and earnings and on Standard & Poor's estimates for their future contribution. Business lines with recurring fee income and net interest income that have a strong annuity characteristic are more stable. In contrast, the following income sources are less stable:
- Trading income, including interest income from trading activities;
 - Net interest income coming from above-average asset-liability mismatches;
 - Other market sensitive income; and
 - Fee income from off-balance-sheet financing.
60. Business stability supports an adequate or stronger business position when a bank has two or more of the following characteristics:
- The customer base is demonstrably "sticky," that is, there are long-standing customer relationships and they generate a high proportion of revenues. There is strong evidence that customers are likely to stay with the bank during a financial stress;
 - Revenues are less sensitive to market perceptions of creditworthiness;
 - Favorable contractual terms, such as credit-related termination events or triggers, exist in many contracts with customers and counterparties; and
 - A bank is less reliant than the industry on pricing to retain customers.
61. Potential instability of business lines exists and can lead to a moderate or weaker business position when a bank has two or more of the following characteristics:

- Customers can easily switch their business to other providers. There is no evidence that customers are likely to stay with a bank during a financial stress. The relationship between customers and a bank is based on a series of one-off transactions open to market tender;
- There are few or no direct relationships between the end customer and the bank. A bank relies on third parties to supply business volumes;
- Recurring fee or interest income from long-standing customer relationships represent a lower proportion of revenues than average in the industry;
- Revenues are more sensitive to market perceptions of creditworthiness than for the industry;
- A bank relies more heavily on pricing to attract and retain customers than for the industry; and
- Unfavorable contractual terms such as financial covenants, credit triggers, and collateral requirements that are more demanding than for banks with a similar industry risk score carrying out the same types of trades.

2. Concentration and diversity of business activities

62. Concentration and diversity is the second subfactor of the business position assessment. Concentration and diversity of business activities are measured by the contributions of different business lines and geographies to a bank's revenues, compared with banks with a similar industry risk. Entities with a broader mix of business activity are lower risk, and entities with a narrower mix are higher risk. Concentration in business activities can partly offset many of the strengths in the business position assessment.
63. The concentration of business volumes or revenues can lead to less stable and predictable revenues, which weakens the business position. On the other hand, successful diversification can lead to more stable and predictable revenues. Successful diversification means that a bank's earnings were stronger than the industry during the last domestic downturn and since then, management has not increased the bank's exposure or risk appetite materially.
64. The criteria treat a bank as more concentrated than average for the industry when it has a more limited product range or geographic breadth, particularly for a bank with significant regional, product, or customer concentrations. Even if concentration is in an attractive region, product, or customer segment, it may be a weakness. Regional presence must be considered in the context of the size of the local or regional economy. For example, a focus on the U.S. State of Texas is very different from, and far less concentrated than, a focus on a Swiss canton.
65. Business diversification can either be a strength or a weakness in a bank's business position. Successful and continuing diversification supports a stronger business position. Such business diversification is often international and is supported with evidence that the bank is overall less susceptible to volatility in domestic business and economic conditions than is average for banks in the home industry. Poor diversification weakens the overall business position. For example, a bank will weaken its overall business position if it enters new products and countries where it has limited expertise and lacks critical mass to be a real competitor to the incumbent market leaders. The weakness is greater when the new products or markets are riskier than the traditional core business.
66. Acquisitions can increase concentration risk if the acquired assets are similar to those in a bank's existing book and particularly when the bank does not increase risk-adjusted capital in line with assets and risks.
67. Other areas of the methodology also look at concentration, but in different ways. For example, risk correlations among risk exposures are analyzed in the assessment of risk position (see tables

12-14 and ¶¶118-121), and concentrations in funding sources are addressed in the funding and liquidity section (see ¶¶144-145).

3. Management and strategy

68. The final subfactor in the business position assessment, management and strategy, considers management's ability to execute operational plans in a consistent manner, a bank's strategic direction, management's risk appetite, and a bank's ownership and governance. Management's strategic competence, risk management, and operational effectiveness shape a bank's competitiveness in the marketplace and its financial condition (see the "Methodology: Enterprise Risk Management" section for further details on assessing risk governance).
69. This assessment is qualitative, but past performance and forward-looking targets provide some objective standards. It is also relative. A bank's business position is compared with that of banks with similar industry risk. If management plays a positive role in determining a bank's operational success, it is more likely to be able to manage important strategic and operating risks in the future. Alternatively, a weak management with an ineffective operating strategy or inability to execute its business plan effectively increases risk.
70. Management and strategy support an adequate or stronger business position when:
- The bank's risk appetite is more prudent and conservative than average in the industry. Management has proven execution capabilities and is a stable team. There is a track record of avoiding the strategic mistakes of other banks;
 - Returns have been, and are likely to be, less volatile than average in the industry. Both compensation and financial targets are focused on long-term value for all stakeholders (including bondholders); and
 - Independent directors have strong influence, and a robust system of checks and balances exists in decision-making.
71. The assessment of management and strategy can lead to a moderate or weaker business position if:
- Management's risk appetite, strategies, financial targets--such as return on equity (ROE) and growth in earnings per share (EPS)--and acquisition strategies are more aggressive than average for the industry;
 - The bank consistently outperforms the sector- or country-average ROE, particularly during a period of expansion;
 - Governance standards compare negatively with the industry average (see ¶¶42-52 of ""Methodology: Management And Governance Credit Factors For Corporate Entities And Insurers," Nov. 13, 2012);
 - The entity depends on continuing service from key individuals or small teams;
 - The organization operates with more complex corporate, legal, or tax structures;
 - Compensation schemes encourage short-term profit-taking;
 - There is unplanned management turnover in critical senior positions; and
 - The bank has made acquisitions at prices that reflect premiums to tangible book value, projected earnings, or acquired core deposits, compared with prices paid for recent transactions of comparable size and nature.

72. Although this assessment is largely qualitative, it is informed by historical data on past performance and forward-looking indicators of the attitude of management and owners toward risk, including financial targets such as target ROE and EPS growth, as well as compensation schemes, management incentive schemes, and statements of risk appetite. A study of reported ROE relative to average ROE for the sector or country can be a crude indicator of risk appetite. Consistent outperformance of sector- or country-average ROE, particularly during a period of expansion, can indicate higher management and strategy risk.

F. Capital And Earnings

73. Capital and earnings, the fourth SACP rating factor, measures a bank's ability to absorb losses. This ability provides protection to senior creditors while the bank remains a going concern. The analysis of capital and earnings comprises four steps: assessment of regulatory requirements, future risk-adjusted capital levels, quality of capital and earnings, and earnings capacity. The projected risk-adjusted capital (RAC) ratio is the most important metric even though there may be other measures of capital.
74. The RAC ratio compares a bank's capital to its risk-weighted assets (RWAs). Specifically, the criteria use a globally consistent measure of capital, total adjusted capital (TAC) and Standard & Poor's RWAs (see "Risk-Adjusted Capital Framework Methodology," published July 20, 2017, for a full explanation). To arrive at the RWAs of a bank, specified risk weights are applied to the bank's various exposures.
75. The criteria for this factor measure the degree to which a bank's capital and earnings would cover estimated losses that would arise following a substantial economic stress for developed countries. By incorporating earnings based on their capacity to absorb losses and build capital, the criteria make earnings a component of the capital analysis rather than a separate rating factor. In theory, a bank's product pricing includes a margin sufficient to cover the expected losses on its assets, which leaves capital to protect against unexpected losses.
76. The first step in analyzing capital and earnings is establishing how a bank performs against its regulatory requirements. Meeting these requirements is a prerequisite for operating as a going concern. Any weakness here would be an overriding factor limiting the SACP (see section F.1).
77. The second step is using the projected RAC ratio to form an opinion of a bank's future capital, as long as performance against regulatory measures is adequate or better. The criteria introduce standards for how to interpret the projected RAC ratio. Because earnings retention is the primary way that a bank builds or maintains capital, the projected RAC ratio is aligned with the capital sustainability ratio (see ¶90 and table 10). That ratio looks at the balance a bank is striking between growth, which weakens capital, and the buildup of capital through retained earnings (see section F.2).
78. Third, the criteria assess the quality of capital and earnings by looking at the composition of, and trend, in TAC, and the stability and predictability of earnings. When the projected RAC ratio is at the upper end of a scoring range, high-quality capital can push the capital and earnings assessment into a stronger category. Conversely, when the projected RAC ratio is at the lower end of a range, weaker quality of capital or earnings can push the assessment into a weaker category (see section F.3).
79. Finally, the criteria assess earnings capacity, the first line of defense against losses and the primary way that a bank builds or maintains capital. The earnings buffer (see ¶¶105-110 and table 11) is a metric that measures the capacity of earnings to absorb "normalized losses" through the credit cycle. A bank's earnings buffer can be positive or negative. When the bank's earnings buffer is negative, earnings are not sufficient to cover normalized losses. The earnings buffer

helps identify consistent out- and underperformers when setting the final ICR (see ¶¶ 19-24 and section F.4).

80. The relevant metrics are combined in scoring capital and earnings on a six-point scale (see table 7).

Table 7 Capital And Earnings Assessment		
Descriptor	What it means	Guidance‡§
Very Strong	Capital and earnings are able to withstand an extreme stress as defined by the risk assumptions used in RACF.	The projected RAC ratio is and will remain more than 15%, and the earnings buffer is positive.* Low-quality capital or earnings can push a borderline very strong assessment down to strong.†
Strong	Capital and earnings are able to withstand a severe stress as defined by the risk assumptions used in RACF.	The projected RAC ratio is and will remain more than 10% and less than 15%.* High-quality capital can push a borderline strong assessment up to very strong, and low-quality capital or earnings can pull it down to adequate.†
Adequate	Capital and earnings are able to withstand a substantial stress as defined by the risk assumptions used in RACF.	The projected RAC ratio is and will remain more than 7% and less than 10%.* High-quality capital can push a borderline adequate assessment up to strong, and low-quality capital or earnings can pull it down to moderate.†
Moderate	Capital and earnings are able to withstand a moderate stress as defined by the risk assumptions used in RACF.	The projected RAC ratio is and will remain more than 5% and less than 7%.* High-quality capital can push a borderline moderate assessment up to adequate, and low-quality capital or earnings can pull it down to weak.†
Weak§	Capital and earnings are able to withstand a modest stress as defined by the risk assumptions used in RACF.	The projected RAC ratio is and will remain more than 3% and less than 5%.* High-quality capital can push a borderline weak assessment up to moderate. Low-quality capital or earnings can pull the assessment down to very weak.†
Very weak	Capital and earnings are not able to withstand a modest stress as defined by the risk assumptions used in RACF.	The projected RAC ratio is and will remain less than 3%.* High-quality capital or earnings capacity can push a borderline very weak assessment up to weak, unless the earnings buffer is negative.†
*If the earnings buffer (see table 11) is negative, the projected RAC ratio needs to be stronger by a corresponding amount to compensate for the normalized losses not covered by earnings. †Borderline means within 25 basis points of RAC ratio limit in table 9. ‡The impact on the SACP is a deduction of two or three notches. If the projected RAC ratio is between 4% and 5%, it is two notches; and between 3% and 4%, three notches. §The impact of the RAC ranges is modified for banks with anchor SACP in the 'bb' and 'b' categories. See ¶¶88-89.		

1. Regulatory requirements

81. As a first step in the capital and earnings analysis, the criteria determine whether a bank is meeting minimum regulatory requirements. A bank operating with capital close to or in breach of the minimum requirements of the local regulator receives one of the following scores: "at risk," "subject to regulatory forbearance," or "insolvent." The caps on the SACP associated with these scores are 'bb+', 'ccc+', and 'cc', respectively (see table 8). Banks operating with capital somewhat greater than the local regulatory minimum requirements may have an SACP of 'bbb-' or higher. (But they may have a lower SACP because of other weaknesses.)

Table 8 Regulatory Requirement Assessment And The SACP	
Descriptor	Guidance
At risk	The cap on the SACP is 'bb+' when a bank meets regulatory capital requirements for its license--but by a narrow margin, usually less than 100 basis points. At this level, the criteria regard a bank as "at risk" of breaching its regulatory requirements in case of plausible adverse developments. To be clear, this means that a bank's capital ratios are above the legal minimum for its license but close to breaching levels that would trigger a regulatory intervention. When the descriptor is "at risk," the descriptor for the capital and earnings is "weak" at best.
Subject to regulatory forbearance	The cap on the SACP is 'ccc+' when the regulator allows a bank to continue operating even though it is in breach of regulatory capital requirements for its license. This might occur if regulators give a bank a temporary waiver or a ruling that calculates regulatory capital requirements more generously than usual. The category also includes banks that would be in breach of regulatory minimum requirements if they had reported losses in accordance with accepted accounting principles but did not. When the descriptor is "subject to regulatory forbearance," the descriptor for capital and earnings is "very weak."
Insolvent	The SACP is 'cc' when a bank is in breach of legal regulatory minimum requirements and there are no prospects for reaching them or for regulatory forbearance. The criteria do not rule out that regulators can eventually intervene before actual insolvency or to foster a recapitalization. When the descriptor is "insolvent," the assessment of capital and earnings is "very weak."
SACP--Stand-Alone Credit Profile.	

2. Capital

82. The second step, assessing capital with the RAC ratio, is the cornerstone of the capital and earnings criteria (see "Risk-Adjusted Capital Framework Methodology," published July 20, 2017).

RAC ratio = TAC ÷ RWAs

RAC--Risk-adjusted capital.

TAC--Total adjusted capital, Standard & Poor's definition of capital.

RWAs--Risk-weighted assets, Standard & Poor's calculation of RWAs.

83. The assessment ranks a bank's level of capital using the projected RAC ratio before adjustments for concentration or diversification (see table 9).

Table 9 Capital Assessment	
Qualifier	Projected RAC ratio before concentration or diversification adjustments (%)
Very strong	More than 15%
Strong	More than 10% and up to 15%
Adequate	More than 7% and up to 10%
Moderate	More than 5% and up to 7%
Weak	3% up to 5%
Very weak	Less than 3%
*The impact of the ranges is modified for banks with anchor SACP in the 'bb' and 'b' categories (¶¶88-89). RAC--Risk-adjusted capital.	

84. The criteria consider capital prospectively by focusing on a bank's projected RAC ratio. This might be much lower than at the last reporting date during a period of growth, or higher than at the last reporting date during a recovery or risk reduction, or a period of restructuring. Because a bank's major source of capital is its earnings, the projected RAC ratios should be consistent with the bank's ability to grow or rebuild capital through internally generated retained earnings. Capital projections also include external capital raising.
85. The risk-adjusted capital framework (RACF) applies Standard & Poor's risk weights to a bank's on- and off-balance-sheet exposures to produce Standard & Poor's RWAs. The risk weights applied to each risk type and asset class reflect their relative degree of risk.
86. In addition, the risk weights are calibrated according to Standard & Poor's stress scenarios that in turn are used to maximize ratings comparability across sectors and over time. Specifically, the RWAs are calibrated to an 'A' or substantial stress scenario (see Appendix IV of "Understanding Standard & Poor's Rating Definitions," published June 3, 2009). An 8% RAC ratio, for example, implies that a bank in a developed country has sufficient capital to withstand the 'A' or substantial stress scenario. By comparison, a 12% RAC ratio implies that a bank has sufficient capital to withstand the criteria's 'AA' or severe stress in a developed country. These calibrations are based on our observations that banking losses following 'AA' or severe stress are typically about 1.5x greater than following substantial stress and about 2x more than after 'AAA' or extreme stress. Note that Standard & Poor's stress scenarios generally hold for issuers or obligations in developed countries such as the U.S., Japan, Western Europe, and Australia, and drive risk assumptions for banking losses in those economies (see "Risk-Adjusted Capital Framework Methodology," published July 20, 2017).
87. To adjust the risk assumptions for structural differences--for example in credit culture, banking and bankruptcy laws, and observed lower loss experience for some asset classes--the criteria incorporate the BICRA methodology to assesses industry risk and economic risk, which set the anchor SACP. The BICRA methodology is also used to modify the risk assumptions for the higher-risk characteristics of developing economies and the specific kinds of exposures of banks operating in these countries.
88. When a bank's anchor SACP, derived from the BICRA methodology, is in the 'bb' category and its common equity regulatory Tier 1 ratio is greater than the local regulatory requirements--or a minimum of 7% if this is higher than local regulations--a moderate or adequate RAC ratio is neutral for the SACP. The anchor SACP is lowered by one notch if the ratio is weak and by two notches if the ratio is very weak. If the RAC ratio is strong, the anchor SACP is raised by one notch, and if the RAC ratio is very strong, it is raised by two notches (see table 3 and footnote in table 9).

89. When a bank's anchor SACP, derived from the BICRA methodology, is in the 'b' category and its common equity regulatory Tier 1 ratio is greater than the local regulatory requirements--or a minimum of 7% if this is higher than local regulations---a weak or moderate RAC ratio is neutral for the SACP. The anchor SACP is lowered by one notch if the ratio is very weak (or by two notches if the RAC ratio is less than 2%). If the bank RAC ratio is adequate, the anchor SACP is raised by one notch, and if the RAC ratio is strong or very strong, the anchor SACP is raised by two notches (see table 3 and footnote in table 9).
90. The criteria evaluate whether the projected RAC ratio is consistent with the capital sustainability ratio. This represents a forward-looking estimate of a bank's ability to grow or rebuild capital through retained earnings, and is the difference between the buildup of capital and capital requirements (see table 10 for details on how this ratio is calculated). The ratio is most relevant when a bank is growing and reporting profits. The ratio reflects estimates about growth and earnings retention. There is usually a relationship between the capital sustainability ratio and the projected RAC ratio, and one is a check for the other:
- When capital sustainability is between -30 basis points (bps) and +30 bps, the projected RAC ratio is likely to show little to no growth, unless the bank has announced plans to raise external capital or to achieve some other means of capital growth and it is expected to be successful.
 - When capital sustainability is lower than -30 bps, the projected RAC ratios will show a decline unless the bank has announced credible plans to raise external capital or to achieve some other means of capital growth.
 - When capital sustainability is greater than 30 bps, the projected RAC ratios will show an increase based on internal capital generation.
 - When the bank is generating losses, these rules do not apply. The projected RAC ratio decline is reflected in the capital assessment.
91. During periods of expansion, the assessment of capital relies on how much a bank uses retained earnings to both fund growth and maintain capital ratios. To illustrate, if risk-weighted assets grow by 10%, capital needs to grow by close to 10% to maintain capital ratios. Failure to grow capital via retained earnings at the same pace as growth in the business indicates that capital will deteriorate--unless a bank has access to external sources to make up for the deficiency. When a bank is taking on more risk and reporting greater returns, the calculation for capital sustainability adjusts for this by increasing Standard & Poor's RWAs accordingly. The analysis focuses on earnings growth and the pace of the bank's expansion. Growth beyond the capacity of management, infrastructure, and capital is a leading indicator of increasing risk.
92. The credit loss estimates and projections in the second row of table 10 reflect the most likely scenario, complemented by Standard & Poor's economic forecasts. They are point in time and country-specific, adjusted for the economic and credit cycle. These country-level loss estimates for a specific bank can be modified for more severe loss expectations based on bank-specific risks, including the need to strengthen loss reserves or increase impairments if a bank's loan loss coverage is materially deficient.

Table 10
Computation Of Capital Sustainability For A Hypothetical Bank

(Mil. €)	Next year (projected)	This year (estimated)	Last year (actual)
Preprovision operating income	2,094	1,672	1,553
Credit losses	-295	-450	-700
Other losses	0	-56	-125
Tax	-452	-343	-231
Dividends	-156	-128	-105
Share buybacks	-650	-350	0
Capital buildup (CB)	541	345	392
S&P risk-weighted assets (RWAs)	42,000	36,500	28,500
CB/S&P RWAs (bps)	129	95	138
3-year average CB/S&P RWAs	--	120	--
S&P RWAs	42,000	36,500	28,500
Growth (%)	15.07	28.07	3.00
Risk-adjusted capital (last reported) (%)	8.49	8.49	8.49
Total adjusted capital	3,566	3,099	2,420
Additional capital requirement (ACR)	467	679	226
ACR/S&P RWAs	111	186	79
3-year average ACR/S&P RWAs	--	126	--
CB less ACR (bps)	18	(92)	58
Capital sustainability (bps)	--	(5)	--
Bps-basis points.			

93. In contrast to the capital sustainability buffer, the earnings buffer calculation (¶¶ 105-110 and table 11) uses "normalized losses" to adjust earnings based on a set of credit risk assumptions that do not move during the economic or credit cycle.
94. Although the RAC ratio provides a globally consistent measure of capital, because of the limitations of all models, the risk assumptions in the RACF are tested as part of the assessment of the risk position. The risk position analysis essentially determines the degree to which the capital and earnings analysis understates or overstates bank-specific risk (see tables 12-14). The capital and earnings analysis also includes qualitative judgments about the quality of TAC and the quality of earnings.

3. Quality of capital and earnings

95. The quality of capital and earnings assessment is the third step in the capital and earnings analysis. This helps determine whether the projected TAC has failed to capture additional strengths or weaknesses in earnings or the capital base. Several characteristics help drive the assessment of the quality of capital as "high" or "low." The contribution of the quality of earnings has a negative bias as the strengths are already incorporated into projected TAC.
96. A bank's relative quality of capital and earnings is compared with other banks of a similar economic risk score to determine whether it commands additional financial flexibility or demonstrates weaker earnings. When the projected RAC ratio is borderline (within 25 basis points of the upper or lower end of the ranges in table 9 above), high quality of capital can push the assessment of capital and earnings into the next strongest category while low-quality capital or

earnings can push the assessment into the next weakest category (see table 7).

97. The criteria associate high-quality capital or earnings with a combination of the following:

- The bank's core capital, as measured by adjusted common equity (ACE), comprises more than 85% of the bank's total adjusted capital (TAC).
- The investor base is more supportive of strong capital relative to other banks; investors have lower expectations for dividend yields and share buybacks are consistent with the projected RAC levels applied in table 9.
- The bank is able and willing to sell attractive assets, equivalent in value to about 10% or more of TAC, to raise funds that would not require restructuring or damage its competitive position. Several buyers are interested in such assets--even in a period of economic and market turbulence.
- The bank has substantial economic capital in reserves of at least 10% of TAC that do not form part of the capital assessment in section F.2. These typically arise from tax optimization.
- The bank has issued hybrid instruments or preferred stock (which its regulator treats as capital) of at least 10% of TAC in the markets or with the government, which do not form part of the capital assessment in section F.2.

98. The criteria associate low-quality capital or earnings with a combination of the following:

- The bank's core capital, as measured by adjusted common equity (ACE), comprises less than 70% of the bank's total adjusted capital (TAC).
- Significant legal, tax, or regulatory constraints or characteristics of the group structure (for example, minority interests) constrain the flow of capital among group members to absorb losses.
- Dividend payouts or planned share buybacks may prevent the maintenance of strong capital.
- An aggressive financial shareholder may be increasing its ownership and can pressure management to maintain weaker capital in the future.
- The government may have contributed to TAC but expects repayment when possible.
- The absolute size of the capital base is less than \$100 million, bringing into question the bank's ability to withstand significant shocks or events that other, larger players can more readily absorb.
- A bank holding company has high double leverage (see ¶¶99).
- Revenues rely on one-off items, such as realized capital gains on securities holdings or fixed assets, producing a lower level of risk-adjusted core earnings or more volatility in the earnings performance.
- More than 75% of revenues come from a relatively narrow business line especially when net interest income and fees and commissions account for less than 60% of revenues.
- Credit provisions (loan loss reserves) are materially deficient.
- Unconsolidated subsidiaries are materially undercapitalized.
- The bank has other substantial economic losses that the financial statements have not yet recognized.

99. The criteria introduce no changes to the treatment of double leverage (see "Group Rating Methodology," published Nov. 19, 2013). Double leverage (DL) is defined as holding company

investments in subsidiaries divided by holding company (unconsolidated) shareholders' equity. DL renders the nonoperating holding company (NOHC) dependent in part on dividends to meet interest payments on external debt. DL is only relevant when TAC is not calculated on fully consolidated accounting data that combine holding company financials with those of its operating banks.

100. High DL--of 120% or more--is a sign of aggressive liquidity and capital management and may increase the possibility of liquidity stress, unless offset by liquidity at the parent. Similarly, if the absolute amount of DL of a financial group with a NOHC exceeds two years' net income of the consolidated group, the NOHC parent would need offsetting liquidity. Without this offsetting liquidity, the quality of a bank's capital is low.
101. When traditional earnings ratios are weaker than for other direct competitor banks, earnings quality is low. A bank that demonstrates strong or very strong earnings on an absolute basis but is underperforming direct competitors on a risk-adjusted basis is more vulnerable to any deterioration in the operating environment. Lower earnings based on lower risk are generally positive for creditworthiness, and higher returns based on higher risk are generally negative for creditworthiness.
102. The objective in carrying out the earnings peer analysis is to identify outliers through a variety of different measures. A bank's overall relative positioning influences the assessment of earnings quality. However, under some circumstances, a single feature may determine the conclusion about earnings quality. The earnings peer analysis draws on the ratios enumerated below to help determine the bank's relative quality of earnings.
103. For the following metrics, the quality of earnings improves as the ratio increases:
- Net interest income/total revenue,
 - Fees and commissions/total revenues,
 - Core earnings/Standard & Poor's RWAs,
 - Core earnings/assets, and
 - Net operating income before loan loss provisions/assets.
104. For the following metrics, the quality of earnings deteriorates as these ratios increase:
- Trading gains/total revenues,
 - Other market-sensitive income/total revenues,
 - Other revenues/total revenues, and
 - Cost-income ratio.

4. Earnings capacity

105. An assessment of earnings capacity is the final step in the capital and earnings analysis. When earnings fail to cover a bank's estimated normalized credit losses (see ¶¶ 106-108), the criteria add the deficit to the risk requirements that capital needs to cover. A new metric, the earnings buffer, measures the capacity for earnings to cover normalized losses (see table 11). When this ratio is negative, the criteria compensate for the deficiency by subtracting the amount from TAC in calculating the RAC ratio (see the footnote in table 7).

Table 11

Computation Of The Earnings Buffer For A Hypothetical Bank

(Mil. €)	Next year	This year	Last year
Preprovision operating income	1,180	1,105	905
One-off items	0	0	320
Normalized credit losses	-579	-540	-521
Normalized operating income (A)	601	565	704
Standard & Poor's RWAs (B)	30,000	28,000	27,500
Earnings buffer (%) (A/B)	2.00	2.02	2.56
3-year average earnings buffer (%)	--	2.19	--

RWAs--Risk-weighted assets.

106. This paragraph was superseded by "Risk-Adjusted Capital Framework Methodology," published July 20, 2017.

107. The criteria estimate normalized credit losses to assess earnings through the cycle, or normalized operating income (see "Risk-Adjusted Capital Framework Methodology," published July 20, 2017). The assessment of earnings reflects an adjustment to determine underlying profitability. Starting with preprovision operating income, the adjustment removes the impact of one-off items, including significant mark-to-market write-downs of securities, and normalized losses. The next step is to compare the residual earnings to Standard & Poor's RWAs. This ratio is then averaged over three years (last year, current year, and next year). (See earnings buffer calculation in table 11.)

108. The calculation of normalized loss for an asset class consists of:

- Looking back at the available data on historical loss experience in each market.
- Adjusting the normalized loss rate upward or downward to factor in any changes or potential changes in underwriting standards or risks in the economy.
- Extrapolating the loss rates from the BICRA economic risk score. The extrapolation starts with the same loss rates for assets in economies with the same economic risk score, but scales them across the 10 economic risk groups by applying reduced rates in lower-risk countries and increased rates in higher-risk countries. This scaling is in line with the RACF's risk weights.

109. Other market or operational losses are generally unexpected and therefore intended to be covered by capital. Consequently, when earnings are most sensitive to market and operational risks, the criteria call for interpreting the earnings buffer with caution. For banks with significant market risk, the earnings buffer may look relatively strong, but the measure does not take into account the volatility associated with market risk. This volatility is assessed more qualitatively in quality of earnings (see ¶¶95-104).

5. Example of standard risk assumptions

110. The risk assumptions used in the capital and earnings analysis are the combination of the RACF's capital charges and the normalized loss rates used in the earnings buffer. For an illustration of these risk assumptions for a hypothetical bank based in a country in BICRA group 3 and with an economic risk score of 3 (see "Risk-Adjusted Capital Framework Methodology," published July 20, 2017).

G. Risk Position

- ¹¹¹. Risk position is the fifth of six SACP rating factors and serves to refine the view of a bank's actual and specific risks beyond the conclusion arising from the standard assumptions in the capital and earnings analysis. Those assumptions do not always reflect or adequately capture the specific risk characteristics of a particular bank. The analysis described in risk position is similar to that traditionally applied to assess the asset quality of a bank.
- ¹¹². To differentiate a bank's unique risk position, five areas are analyzed:
- How the bank manages growth and changes in its risk positions (see the "Methodology: Enterprise Risk Management" section for further details);
 - The impact of risk concentrations or risk diversification;
 - How increased complexity adds additional risk;
 - Whether material risks are not adequately captured by RACF; and
 - Evidence of an adequate, strong, or very strong risk position, by comparing past and expected losses on the current mix of business with those of peers and by comparing a bank's loss experience during past economic downturns with Standard & Poor's standard risk assumptions. Greater-than-average losses may indicate a weaker risk position.
- ¹¹³. The combination of the first five steps captures the degree to which the standard risk assumptions under- or overstate a bank's specific risks. For guidance on how these five steps are combined to form a single opinion on risk position, see tables 12-13. The descriptive characteristics are applied on a "best-fit" basis.

Table 12
Risk Position Assessment: Very Strong, Strong, Adequate (Sections G.1-G.5)

Descriptor	What it means	Guidance
Very Strong*	Bank-specific risks mean a bank is better able to withstand economic stress than the descriptor in capital and earnings indicates.	<p>Management has the capacity to manage risks arising from growth or changes in exposure, and Risk diversification has and is set to dampen the negative impact of economic downturns on bank performance better than peers. This is the factor that most supports a very strong risk position, and</p> <p>Management has the capacity to manage risks arising from complexity, and</p> <p>The RACF does not miss any material risk exposures or the diversification benefit outweighs any risk that the capital framework misses.</p> <p>A very strong risk position is supported by evidence that the bank's recent loss experience and the prospective loss trend are much stronger relative to peers', and the bank's loss experience during past economic downturns was much better than average.</p>
Strong	Bank-specific risks mean that a bank is somewhat more able to withstand economic stress than the descriptor in capital and earnings indicates.	<p>Management has the capacity to manage risks arising from growth or changes in exposure; and</p> <p>Either there are no risk concentrations, or if they exist, all risk concentrations are more than compensated by other lower-risk characteristics; and</p> <p>Management has the capacity to manage risks arising from complexity; and</p> <p>The RACF does not miss material risk exposures or the diversification benefit outweighs any risk that the capital framework misses.</p> <p>A strong risk position is supported by evidence that the bank's recent loss experience and the prospective loss trend are stronger relative to peers', and the bank's loss experience during past economic downturns was better than average.</p>
Adequate	Bank-specific risks mean the bank is able to withstand economic stress that the descriptor in capital and earnings indicates.	<p>Management has the capacity to manage risks arising from growth and changes in exposure; and</p> <p>Either there are no material risk concentrations or any potential diversification benefit is offset by other higher-risk characteristics; and</p> <p>Either the RACF does not miss material risk exposures or if it does, other lower-risk characteristics more than offset them; and</p> <p>Management has the capacity to manage risks arising from complexity; and</p> <p>An adequate risk position is supported by evidence that the bank's recent loss experience and the prospective loss trend are at least average relative to peers', and the bank's loss experience during past economic downturns was close to average.</p>
*It is unlikely that more than 10% of banks will demonstrate a very strong risk position.		

Table 13 Risk Position Assessment: Moderate, Weak, Very Weak (Sections G.1-G.5)		
Descriptor	What it means	Guidance
Moderate†	Bank-specific risks mean that a bank is somewhat less able to withstand economic stress than the descriptor in capital and earnings indicates.	Management may not have the capacity to manage risks arising from growth or changes in exposure; or Either there are material risk concentrations, or any risk diversification is more than offset by other higher-risk characteristics; or Management may not have the capacity to manage risks arising from complexity; or The RACF misses material risk exposures; or The bank's recent or prospective losses or are greater than peers', or the bank's loss experience during past economic downturns was worse than average and risk appetite, controls, and management have not noticeably improved.
Weak‡	Bank-specific risks mean that a bank is far less able to withstand economic stress than the descriptor in capital and earnings indicates.	Management does not have the capacity to manage risks arising from growth or changes in exposure; or There are material risk concentrations; or Management does not have the capacity to manage risks arising from complexity; or The RACF does not adequately capture material risk exposures; or The bank's recent or prospective losses are much greater than peers', or the bank's loss experience during past economic downturns was greater than the criteria's risk assumptions implied and risk appetite, controls, and management have not noticeably improved.
Very weak§	Bank-specific risks are so high relative to the risk assumptions in the capital and earnings analysis that the capital and earnings descriptor is misleading.	The RACF does not adequately capture additional material risk exposures that override any positives from risk management or diversification, or The bank's loss experience and the prospective loss trends are unrelated to the loss rate assumptions in the capital and earnings assessment.
†Risk position is moderate at best when trading activities are material (see ¶125). ‡The criteria do not necessarily seek a balance between banks that have a weak risk position and very strong risk position. §Applied only in exceptional circumstances.		

114. The following example shows how the risk position assessment can combine with the capital and earnings assessment to move the SACP. Both Bank A and Bank B have a healthy earnings buffer and adequate quality of capital, and both maintain regulatory capital ratios comfortably above the regulatory requirement. However, Bank A has an 11% projected RAC ratio and Bank B a 6% projected RAC ratio. Therefore, the capital and earnings criteria view Bank A as "strong" and Bank B as "moderate." Following fundamental risk analysis, it becomes evident that Bank A's loss experience is more volatile than peers'. While its risk management looks good, many products are complex: There are large derivative exposures, a large and risky private equity portfolio, and a narrow focus on advisory services, structured credit, and proprietary trading. Bank A, therefore, has a "moderate" risk position. Alternatively, Bank B has a global retail and commercial franchise with market-leading positions in all of its business units. The products are simple. Off-balance-sheet activity is low, and all derivatives hedge customer-driven business. The bank has grown steadily through time, and often at a slower pace than aggressive competitors. Volatility is lower, and losses are consistently less than average. Notably, Bank B continued reporting profits during the previous two downturns. Bank B has a "very strong" risk position. The "moderate" and "very strong" conclusions about risk position modify the "strong" and "moderate"

capital and earnings conclusions about Bank A and Bank B, respectively. All other things being equal, the effect of these two factors on Bank A is no change to the anchor SACP and, for Bank B, the addition of one notch to the anchor SACP (see table 14).

Table 14

Impact On The SACP Of Combining Capital And Earnings And Risk Position Assessments

	Bank A		Bank B	
	Assessment	Impact on SACP	Assessment	Impact on SACP
Capital and earnings	Strong	+1 notch	Moderate	-1 notch
Risk position	Moderate	-1 notch	Very strong	+2 notches
Combined impact	No change		+1 notch	

1. Growth and changes in exposure

115. Since rapid expansion tends to presage outsized losses in both the banking and trading book, it is important to monitor a bank's portfolio of risks and its movement and direction on the risk spectrum. A change in a bank's risk means that the traditional expertise that has helped it to survive previous economic downturns may not help during the next one.

116. Management has the capacity to manage risks associated with growth and changes in exposure when a bank is displaying one or more of the trends below. This strength can compound other strengths to offset a weakness in the bank's risk position:

- Showing lower recent organic or acquisitive growth and modest prospects for future growth than in the past and compared with peers with a similar economic risk score, when the lower growth is based on avoiding risk and declining riskier growth opportunities that other banks are willing to take;
- Maintaining underwriting standards despite competitive pressures;
- Reducing its risk exposure, for example by exiting risky activities or tightening underwriting standards;
- Remaining focused on serving its core customer base with traditional expertise and limiting opportunistic proprietary activities; or
- Keeping a similar portfolio of risks that limited losses experienced in previous economic downturns.

117. Management may not have the capacity to manage additional risk presented by growth or other changes in exposure when a bank is displaying one or more of the following trends:

- Showing more aggressive recent organic or acquisitive growth and more significant prospects for future growth than in the past and compared with those of peers with a similar economic risk score;
- Moving materially into new product, customer, or market activities outside of its traditional area of expertise; or
- Displaying weakening underwriting standards relative to peers with a similar economic risk score. Examples of this include a prime mortgage lender materially weakening its standards on a loan applicant's capacity to pay, borrower credit standing, or collateral coverage (e.g., as

measured by a loan-to-value ratio, a senior secured commercial real estate lender increasingly underwriting mezzanine or corporate development loans, or a commercial bank increasingly underwriting larger or riskier transactions).

2. Risk concentrations and risk diversification

118. Risk concentrations of any type are a primary reason for bank failures. In contrast, some banks can demonstrate that diversity of risks has led to lower overall losses than for less diverse peers. The criteria consider the impact of risk concentration or diversification here because the capital and earnings analysis does not include it. The RACF produces an adjustment for concentration or diversification that the risk position analysis uses as an input (see "Risk-Adjusted Capital Framework Methodology," published July 20, 2017). The business position rating factor captures concentrations or diversification in revenue contribution by business line (§§62-67) and uses concentrated earnings sources as an indicator of low-quality earnings (§98). The risk position factor focuses on the concentration of exposures to individual debtors, counterparties, and industries or sectors, or aggregations of risk across asset classes and risk types.
119. There is a risk diversification benefit when a bank has the following:
- The RACF adjustment for concentration and diversification indicates a reduction in Standard & Poor's RWAs;
 - Geographic diversification arises from exposures that are clearly connected with a client franchise abroad and not from opportunistic product, tax, regulatory, or currency arbitrage; and
 - Sector or risk-type diversification arises from operations in activities that are no more risky than the bank's traditional core business.
120. Material risk concentrations for a bank arise from one or more of the following:
- Risk exposures by sector, country, or single name in the loan portfolio, investment portfolio, and the trading book that are more concentrated than for peers with a similar economic risk score. The RACF adjustment for diversification and concentration supports this comparison (see "Risk-Adjusted Capital Framework Methodology," published July 20, 2017);
 - Underlying risk that affects several risk types as in the commercial real estate example below (§121). The RACF adjustment does not capture this aggregation of risk;
 - A limited number but material amount of counterparties for derivatives and other trades as a share of total RWAs; and
 - A capital base of less than \$100 million in developed markets, which makes the bank more sensitive to concentration and event risk than larger peers in these markets.
121. The RACF's adjustment for concentration or diversification is a useful input to the analysis because it is a quantitative measure, based on standard correlation matrices (see "Risk-Adjusted Capital Framework Methodology," published July 20, 2017). This adjustment may not capture all concentration issues relevant for a specific bank. Take the example of a bank that provides a loan to a corporate customer so it can purchase premises or develop commercial property and that at the same time holds commercial mortgage-backed securities (CMBS) on its balance sheet. The RACF risk weights for the corporate loan exposure and the CMBS portfolio are not fine enough to recognize the resulting concentration risk to commercial real estate. Similarly, the bank's reported segmentation of exposure by industry, which is the data input for the RACF, may not capture certain concentrations within a sector. For example, a bank's exposures to the broader

transportation sector may hide a subsector concentration in shipping finance.

3. Complexity

122. Greater scale may bring diversification benefits to a bank but also increase complexity. The ever-increasing level of complexity in products, business lines, regions, and organizational structure has often outstripped the capacity of a bank's management to manage risk. In recent years, much of the added complexity has stemmed from the growing use of derivatives, off-balance-sheet activities, securitizations, and other exotic products. There is a danger in giving too much credit for diversification to those highly complex institutions that are most difficult to manage. Conversely, there is a danger in overpenalizing smaller, less complex institutions for concentration risk. The opposite of complexity is the presentation of transparent and straightforward risks that are well-understood and well-managed compared with those of peers with a similar economic risk score and product mix. However, the absence of complexity in and of itself is rarely sufficient to improve a bank's overall risk position.
123. Management is exposed to additional risks associated with complexity when a bank has one or more of the following:
- Business lines with complex products such as derivatives, securitizations, and structured credit such as collateralized debt obligations (CDOs) that are important to the overall group;
 - Limited transparency into underlying risk positions, risk management, or earnings generation;
 - A siloed approach to risk management, which may hinder a consistent measurement and management of risk exposure;
 - Material dependence on mathematical models and their underlying, often complex assumptions to measure and manage risk and to value assets and liabilities;
 - A portfolio that contains risks with a low probability of occurrence but high loss severity, otherwise known as tail risk;
 - Balance sheet strategies that are driven by regulatory arbitrage; and
 - Operations in many jurisdictions or with an organizational structure with many legal entities, which may grow beyond management's capacity to control.
124. A high and increasing ratio of total managed assets to ACE that is not mirrored in a low and declining RAC ratio can indicate additional risk from complexity. The ratio of total managed assets to ACE is a crude measure of leverage, insensitive to risk and susceptible to definitional accounting inconsistencies. Nevertheless, trends in the ratio or high multiples may uncover risk exposures that other metrics do not capture. In such cases, the risks, which hurt creditworthiness, likely are the result of off-balance-sheet activities or large derivative positions, implying complexity and opaque risks.
125. A bank's risk position will be moderate, at best, if it has material investment banking activities or makes more-than-modest use of strategies with regulatory arbitrage as its main purpose. Investment banking activities are material, according to the criteria, if they are likely to contribute more than 50% to revenues over the long term. Regulatory arbitrage strategies are significant, for example, if a bank has a particularly high multiple of total managed assets to ACE (see ¶124).
126. When investment banking activities are less than 50%, there is no automatic cap to risk position. Instead, the criteria assess whether senior management has the expertise and tools to fully understand and manage these risks and the degree of clarity about how and where the bank makes its profits. The criteria recognize the limitations in the way that capital and earnings

analysis quantifies market risk.

127. Further analysis of market risk for banks with significant trading operations may result in a weak score for risk position. When trading is a significant activity, relying solely on Value-at-Risk (VaR) is incomplete. Deeper analysis can include reviews of the results from a banks' stress and scenario testing; policies, risk limits, practices, and organizational structure in trading risk management; and policies, practices, and supplemental VaR data. "Lifting The Lid On Traded Market Risk," published Oct. 31, 2006, explains how supplemental VaR data offers insights and opportunities for making comparisons.
128. In the RACF, the standard charge for trading activities is a multiple of a bank's VaR, as used by regulators. Despite the known limitations of VaR (summarized in "Chasing Their Tails: Banks Look Beyond Value-At-Risk," published July 12, 2005), it has the value of being widely available for financial institutions.

4. Risks the RACF does not cover

129. The most common risks that the RACF does not cover are interest rate and currency risk in the banking book and the volatility of pension funding. There also may be other, less common, bank-specific risks relevant to an individual bank or segment of the market that the capital framework does not capture. Such risks are material when they are more significant for a bank than for peers with a similar economic risk score. A bank's scenario and stress testing forms part of its risk management of these and other material contingent liabilities.
130. In addition, since the RACF equity charges are primarily based on the observed volatility in equity indices in each country, they will not apply to a bank's equity portfolio if it is more or less risky than these indices.

a) Interest rate and currency risk in the banking book

131. The assessment of interest rate risk includes structural interest rate risk, which arises naturally from business lines such as mortgage lending, and strategic interest rate risk, which the asset-liability management (ALM) function strategically maintains and manages.
132. An analysis of interest rate risk includes a review of some or all of the following:
- The sensitivity of a bank's projected earnings to changes in interest rates or the shape of the yield curve based on its own stress testing;
 - Senior management's engagement and awareness for setting and managing the amount of interest rate risk;
 - The degree of maturity gap between repricing assets and liabilities; and
 - The adequacy of a bank's risk management based on a review of its scenario and stress testing, optionality characteristics of assets or liabilities with prepayment or extension options, or other behavioral characteristics that differ from contractual ones.
133. For further guidance on the assessment of interest rate risk management, see the "Methodology: Enterprise Risk Management" section.
134. The assessment of currency risk includes an examination of projected earnings to changes in currency exchange rates based on a bank's own stress testing. Currency risk arises when assets in the loan portfolio and the bank's funding are held in different currencies that are not hedged. The risk position of a bank is weaker when currency risk is larger than for peers with a similar

economic risk score.

b) Volatility of pension funding

135. The criteria deduct unfunded benefit scheme liabilities, including pension deficits, from TAC where a bank's financial statements have not fully recognized them. However, the bank faces additional risk from potential movements in the values of the scheme's assets and liabilities, particularly for defined benefit pensions, and the RACF does not otherwise capture this risk.
136. This additional risk depends on the size of the scheme's liabilities; key actuarial assumptions including the discount factor, life expectancy, or future salary increases; and other variables such as the investment policy and amount of reinsurance used. When the size of the scheme's liabilities is large, a minor change in one of these variables can have a material impact on a bank's financial strength. The pension scheme's valuation report identifies the impact on scheme liabilities from changes in some of the assumptions and variables. An example of such a sensitivity test is the impact on liabilities by increasing participant life expectancy by one year.
137. The ratio of the sensitivity tests to TAC is important. The risk position is relatively weaker when the impact on scheme liabilities from any of the sensitivity tests identified in the valuation report relative to TAC is larger than for peers with a similar economic risk score.

5. Evidence of stronger or weaker loss experience

138. Evidence of a stronger risk position is reflected in relatively lower recent and projected losses than for peers with a similar economic score and similar product mix, and a better-than-average track record of losses during periods of similar economic stress. Conversely, weaker risk positions are associated with losses that are greater than average for peers with a similar economic risk score and similar product mix, or a worse-than-average track record of losses during recent periods of similar economic stress.
139. Deviations from the average peer performance are explained by highlighting the root causes as any combination of growth, concentration, and complexity, or by considering how bank-specific risk is materially different from the standard risk assumptions in the RACF or Standard & Poor's calculation of normalized losses.
140. Examples of such material differences may be any of the following:
- Credit provisioning and loss recognition for a bank that may be more or less aggressive than for peers,
 - Volatility in the bank's equity portfolio that may be lower or higher than the RACF charges for equity in the banking book,
 - Legal or regulatory costs or fines that can be higher or lower than for peers in the same lines of business, or
 - Material insurance business (more than 10% of earnings) that can be undercapitalized compared with that for the rest of the group.

H. Funding And Liquidity

141. Funding and liquidity, combined, are the sixth and final SACP rating factor. How a bank funds its business and the confidence-sensitive nature of its liabilities directly affects its ability to maintain business volumes and to meet obligations in adverse circumstances. The criteria continue the

prior practice of combining an analysis of funding and liquidity to assess financial risk (see the "Methodology: Enterprise Risk Management" section for further details on assessing how funding and liquidity risk are managed).

- 142. The analysis of funding compares the strength and stability of a bank's funding mix, according to several metrics, with the domestic industry average (see table 15). The criteria use that average to remain consistent with the BICRA funding assessment.
- 143. The liquidity analysis centers on a bank's ability to manage its liquidity needs in adverse market and economic conditions and its likelihood of survival over an extended period in such conditions. The analysis is both absolute and relative to peers (see table 16).

1. Funding

- 144. The relative strength and potential volatility of funding are assessed by reviewing a bank's liabilities--or mixture of retail and wholesale deposits, interbank loans, and secured and unsecured borrowing in capital markets. A bank develops a mix of funding resulting from its strategic choices about what products and services to offer, and risk management decisions about what funding options to use, given the availability of stable core deposit or term funding and riskier short-term wholesale funding.
- 145. If a bank does not have access to a central bank's funding mechanism, the funding assessment is limited to below average at best. That's because the criteria consider this mechanism to be an important source of contingent liquidity, but not for funding ordinary business operations on an ongoing basis. A bank's dependence on central bank funding is assessed as part of the liquidity analysis.
- 146. The criteria begin the assessment of a bank's funding profile using its loan-to-deposit ratio, long-term funding ratio, reliance on short-term wholesale funding, the net stable funding ratio, and overall funding mix. When no specific bank-reported figures are available, the analysis uses estimates.
- 147. The next step is ranking banks within a country's banking industry according to these metrics and comparing them against the industry average, weighted by assets. These ratios set the relative position of players within an industry before application of the more qualitative metrics (see table 15).

Table 15 Funding Assessment		
Descriptor	What it means	Guidance
Above Average	A bank exhibits stronger funding metrics than the average for all banks in the same country.	<p>A bank with above-average funding exhibits all the characteristics below:</p> <p>An established, stable, and diversified source of retail (versus wholesale) funding, for example a deposit franchise with a high proportion of insured balances;</p> <p>Funding sources that are diversified by tenor and appropriate for the asset profile;</p> <p>Funding that is less confidence-sensitive. For example, the bank does not overly rely on potentially more sensitive nonresident deposits or market-leading pricing to attract and retain balances ("hot money");</p> <p>Less short-term funding in domestic or cross-border capital markets than the industry average; and</p> <p>Funding that is consistently more diversified across stable sources than it is among peers.</p>
Average	A bank exhibits similar funding metrics than the average for all banks in the same country.	<p>A bank with an average funding profile has metrics that are around the average of the banks in the country and with a similar industry risk. Most banks in a banking system (more than 60%) will have funding profiles that are average. Moreover, this will be the default classification for banks that do not meet the descriptions of above- or below-average funding.</p>
Below Average	A bank exhibits weaker funding metrics than the average for all banks in the same country.	<p>A bank with below-average funding exhibits three or more of the characteristics below:</p> <p>Significant reliance on wholesale funding, including short-term wholesale funding;</p> <p>Funding sources are not diversified by tenor and, more importantly, not appropriate for the asset profile;</p> <p>Funding that is confidence-sensitive (i.e., the bank relies on potentially more sensitive nonresident deposits or market-leading pricing to attract and retain balances ("hot money")); and</p> <p>More short-term funding in domestic or cross-border capital markets than the industry average; and</p> <p>Funding is less diversified across stable sources than it is among peers.</p>

Box 1

Examples Of Banks With Above-Average Funding

- Some Asian banks with a ratio of loans to customer deposits of between 60%-70% (compared with 80%-90% for the system) and negligible short-term wholesale borrowings;
- Some savings banks in Europe with retail deposits that are 100% insured (if not included in the BICRA funding assessment); and
- Small U.S. regional banks with mainly insured transactional deposits, which maintain a ratio of loans to deposits of between 60%-70% (versus 80%-90% for larger regional banks), negligible short-term wholesale borrowings, and funding flexibility through participation in FHLB collateralized borrowing programs.

BICRA—Banking Industry Country Risk Assessment, FHLB—Federal Home Loan Banks.

© Standard & Poor's 2011.

2. Liquidity

- ¹⁴⁸. The main differentiators for liquidity are a bank's relative dependence on central bank funding and its ability to access other liquidity sources (see table 16). Liquidity becomes progressively weaker as an institution increasingly relies on funding support from the monetary authorities. This may be the case because funding from other sources is unavailable or prohibitively expensive, particularly if other banks are not using the facilities to the same extent.
- ¹⁴⁹. Public liquidity disclosure varies greatly between banks in different countries. We calculate the standard liquidity ratios where we are able to do so based on public information. We calculate the following ratios for most banks: liquid assets to wholesale funding, net broad liquid assets to short-term customer deposits, broad liquid assets to short-term wholesale funding, and short-term wholesale funding to total wholesale funding.

Table 16
Liquidity Assessment: Strong, Adequate, Moderate

Qualifier	What it means	Guidance (see paragraphs 148-161)
Strong	The bank is able and prepared to successfully manage its liquidity, and can survive under stressful conditions for 12 months without significant--generally less than 10%--dependence on central bank funding.	<p>Liquidity ratios and market indicators are stronger than for the overwhelming majority of other banks in the same country (see ¶148). Short-term sources of liquidity cover short-term uses by at least 1.2x.</p> <p>In particular, the bank can survive with no access to market funding in the next 12 months. Contingency plans for adverse conditions include pledging collateral with the central bank to raise liquidity, if market access remains constrained for more than 12 months, but not as a significant source of liquidity. There are no unusual or large liquidity needs in the next 12-24 months.</p> <p>The bank applies comprehensive stress scenarios to identify the full range and size of contingent liabilities (see ¶129 within risk exposure). Contingent liabilities are not material and easily identified (see ¶129 within risk exposure).</p>
Adequate	The bank is able and prepared to successfully manage its liquidity, and can likely survive under stressful conditions for more than six months, but with a possibility that dependence on central bank funding can become significant--generally less than 25%--after the first six months.	<p>Liquidity ratios and market indicators do not identify the bank as an outlier relative to banks in the same country (see ¶148). Short-term sources of liquidity appear to cover short-term uses.</p> <p>In particular, the bank can survive with no access to market funding in the next six months. Contingency plans for adverse conditions include pledging collateral with the central bank to raise liquidity if market access remains constrained for more than six months, and can become an important, but not significant, source of liquidity. There are no unusual or large liquidity needs in the next 12-24 months.</p> <p>The bank applies comprehensive stress scenarios to identify the full range and size of contingent liabilities (see ¶129 within risk exposure). Contingent liabilities are identified and captured (see ¶129 within risk exposure).</p>
Moderate	The bank is less able and prepared to manage its liquidity. It is less likely that the bank can survive under adverse conditions for more than six months without heavy dependence--up to 25%-50%--on the central bank.	<p>Liquidity ratios or market indicators may suggest that the bank has weaker liquidity than other banks in the same country (see ¶148). Short-term sources of liquidity may not cover short-term uses if adverse market and economic conditions arise.</p> <p>In particular, the bank may not be able to survive with no access to market funding in the next six months without significant dependence on central bank funding. Contingency plans for adverse conditions include pledging collateral with the central bank to raise liquidity if market access remains constrained for more than six months, and can become a very important source of liquidity. No large or unusual liquidity needs in benign conditions in the next 12-24 months but they can become large in adverse conditions.</p> <p>A bank with moderate liquidity may have an SACP in the 'bb' or even 'bbb' category if it has a credible plan in place to address the lack of liquidity that would likely result in weak, or very weak liquidity in the short to medium term.</p>

Table 16 (continued)
Liquidity Assessment: Weak, Very Weak

Qualifier	What it means	Guidance (see paragraphs 148-161)
Weak	The bank is unable or unprepared to manage without extraordinary central bank support, which is greater than 50% and is likely to be available for as long as needed to correct imbalances.	<p>Liquidity ratios or market indicators may suggest that the bank has noticeably weaker liquidity than peers (see ¶148). There are signs that the bank has restricted but less access to nonsecured funding from counterparties than other banks with a similar industry risk score.</p> <p>Central bank funding is a very important source of liquidity. While the bank temporarily relies on government or central bank liquidity facilities, reliance is likely to decline in the next six months.</p> <p>There are large or unusual liquidity needs in the next 12-24 months but that the bank or external support can address with corrective action.</p> <p>A bank with weak liquidity may have an SACP in the 'b' or even 'bb' category if it has a credible plan in place to address the lack of liquidity that the criteria find would likely result in moderate liquidity in the short to medium term.</p> <p>Liquidity management appears aggressive and contingency planning inadequate.</p> <p>Risk management is slow in responding to growth in more sensitive funding sources.</p> <p>The bank's contingency plans are too general or lack detail, or do not extend to the appropriate levels across the group, for example, by subsidiary or country.</p>
Very Weak	The bank is unable or unprepared to manage its liquidity in adverse economic and market conditions without extraordinary central bank support, which is available and more than 50% but may be finite.	<p>Liquidity ratios or market indicators may suggest that the bank has noticeably weaker liquidity than other banks in the same country (see ¶148). The bank cannot access nonsecured funding from counterparties.</p> <p>For refinancing, the bank relies on government or central bank liquidity facilities and it is not clear that the bank can fund independently in the market in the next six months.</p> <p>The reliance on central bank funding is greater than for other banks in the country.</p> <p>Extraordinary liquidity support from central banks or governments is currently available but support may be finite.</p> <p>There are large or unusual liquidity needs in the next 12-24 months.</p> <p>A bank with very weak liquidity may have an SACP in the 'cc' or even 'ccc' category if it has a credible plan in place to address the lack of liquidity that the criteria find would likely result in weak liquidity in the short to medium term.</p> <p>The bank is underprepared for a liquidity crunch or has inadequate or questionable emergency liquidity sources.</p>

¹⁵⁰ The assessments of funding and liquidity are combined to determine the impact on the SACP (see table 17). Even if a bank has above-average funding, its SACP may be capped if its liquidity profile is judged to be moderate or weaker.

Table 17
Impact On The SACP Of Combining The Liquidity And Funding Assessments

Descriptor		LIQUIDITY				
		Strong	Adequate	Moderate	Weak	Very weak
FUNDING	Above average	+1	0	-1 Capped at 'bbb'	-2 Capped at 'bb'	-5 Capped at 'cc'
	Average	0	0	-1 Capped at 'bbb'	-2 Capped at 'bb'	-5 Capped at 'cc'
	Below average	-1	-1	-1 Capped at 'bb'	-2 Capped at 'b'	-5 Capped at 'cc'

© Standard & Poor's 2011.

151. When comparing uses and sources of liquidity, the analysis considers different survivability periods--e.g., 30 days, three to six months, and 12 months--because there is no telling how long a market disruption or economic downturn may persist. Where relevant, the analysis includes the potential for local or foreign currency mismatches. In addition, noncontractual or reputational contingencies arising from management's perceived need to preserve franchise value are important. Examples include:

- The repurchase of commercial paper in advance of maturities;
- Calling long-term debt at the first call date, despite having no contractual obligation to do so;
- The provision of support to money market funds, securitizations, tender option bonds, and auction rate securities;
- Support of secondary markets in assets as a market-maker; or
- Protecting investors from losses on asset-backed securitizations that a bank originates.

152. The criteria rarely treat liquidity for a bank as strong, even when liquidity is well-managed, because a key source of contingent liquidity is based on support from the central bank or monetary authorities. In other words, banks are not entirely self-supporting. High leverage and mismatched maturities of assets and liabilities--due to the fundamental role of maturity transformation that most banks play--make them confidence-sensitive. This means a bank relies heavily on depositor confidence to avoid having to repay all deposit liabilities on contractual maturity (otherwise known as a run on the bank). As a central part of contingency planning for such an event, many banks rely on support from third parties, notably the central bank or monetary authorities. In all but the most exceptional cases, the criteria consider this reliance on third parties to cover the contingent liquidity requirements acceptable for an adequate assessment, at best, for investment-grade banks.

153. Strong liquidity, however, is more likely to make a real difference in default risk for a weaker bank. If it is very liquid, a bank generally can avoid default for a longer period of time than speculative-grade banks with liquidity that is adequate or weak.

154. Financial institutions without formal access to central bank funding restrict their exposure to short-term calls on their liquidity or rely on excess asset liquidity and committed bank facilities to cover liquidity requirements. As such a nonbank financial institution that does not have access to central bank liquidity may have stronger liquidity than a regulated bank.

a) Comparing the uses and sources of liquidity

155. The analysis seeks to find the balance between a bank's expected and contingent uses for liquidity and its sources of reliable liquidity during adverse market and economic conditions. The following two subsections explain the criteria's assessment of the uses of liquidity and the sources of liquidity.
156. Given the contingent nature of a bank's liquidity requirements, the liquidity analysis focuses more on understanding how a bank would size and manage liabilities under different stresses, and less on specific accounting-based measures and ratios. Sizing the uses of liquidity is complicated by the choices that banks normally grant customers and counterparties. For example, depositors are often able to withdraw their funds on demand or at relatively short notice, wholesale investors are free to decide whether or not to roll over their funding, and customers may draw down from committed loan facilities at any time. Meanwhile, under derivative contracts, changes in market prices or credit perception can increase margin calls and collateral requirements.
157. If sources of liquidity are reliable, it is possible to determine how much unencumbered asset liquidity is on a bank's balance sheet and to assess the strength of liquidity commitments made to it from other counterparties, even during adverse conditions. An implicit part of this assessment is the strength of a bank's liquidity risk management framework and controls, taking into account the type of business it undertakes and the markets where it operates.

b) Uses for liquidity

158. The analysis assesses the following potential uses of cash to determine a bank's contractual and contingent short-term obligations:
- Deposit run-off and withdrawal. Deposit stability takes into account deposit composition: insured versus uninsured, international versus domestic, corporate versus retail, relationship-based versus rate-based. In each case, the first is more stable than the second;
 - Run-off of other customer funds, e.g., prime broker free credit balances.
 - Drawdown of credit commitments. The ability of the bank to reduce limits and the extent of undrawn commitments to customers;
 - The maturity profile of wholesale liabilities. Inability to roll over short-term unsecured borrowings (e.g., commercial paper, certificates of deposit, promissory notes) or to refinance maturing long-term unsecured debt;
 - Market-driven inability to roll over maturing short-term secured debt or repurchase agreements. That is, the market can dry up altogether for lower-quality securities or, short of that, seek increased margins, collateral requirements, or credit spreads;
 - Company-specific, credit-driven increases in margin and collateral requirements, for example resulting from a breach of rating triggers;
 - Settlement frictions as counterparties increasingly dispute marked-to-market valuations and delay payments;
 - Inability to refinance maturing securitizations backed by revolving assets;
 - Calls under guarantees to unrelated third parties such as standby letters of credit, performance guarantees, securities lending indemnifications, and custody guarantees;
 - Support payments to affiliates, including those that regulations require; guarantees; and

keepwell or support agreements;

- Capital commitments under joint ventures;
- Penalties resulting from regulatory sanctions; and
- Judgments or settlements relating to litigation.

c) Sources of liquidity

159. The review of a bank's sources of liquidity is focused on reliability, ranked according to dependability.

160. For purposes of table 16, the criteria include the following sources:

- Drawdown of unrestricted cash and short-term deposits;
- Systemwide liquidity facilities at central banks or other government sources, both routine and extraordinary, determined by unencumbered assets that the central bank would qualify as collateral and liquidity available in exchange for these assets after central bank haircuts;
- Drawdown of committed credit facilities, subject to financial covenants and headline considerations;
- The sale or repo of unencumbered high-quality liquid securities in the open market. Because banks make different assumptions about what qualifies as liquid, these criteria aim to understand and compare them to those in the market value criteria for rating transactions backed by securities;
- Within corporate groups, the ability to access funds from affiliates in the form of advances or capital, subject to regulatory and covenant restrictions;
- Liquidation of short-term advances to other financial institutions sold and reverse repos;
- Cash available from maturing advances to customers;
- Accessing the debt and stock markets to the extent still possible;
- Accessing securitization or covered bond markets through established facilities or asset sales programs; and
- Whole loan sales.

161. Where regulatory or accounting data exist, the aim of the criteria is to quantify the balance between the uses and sources of liquidity.

V. METHODOLOGY: GOVERNMENT SUPPORT FRAMEWORK

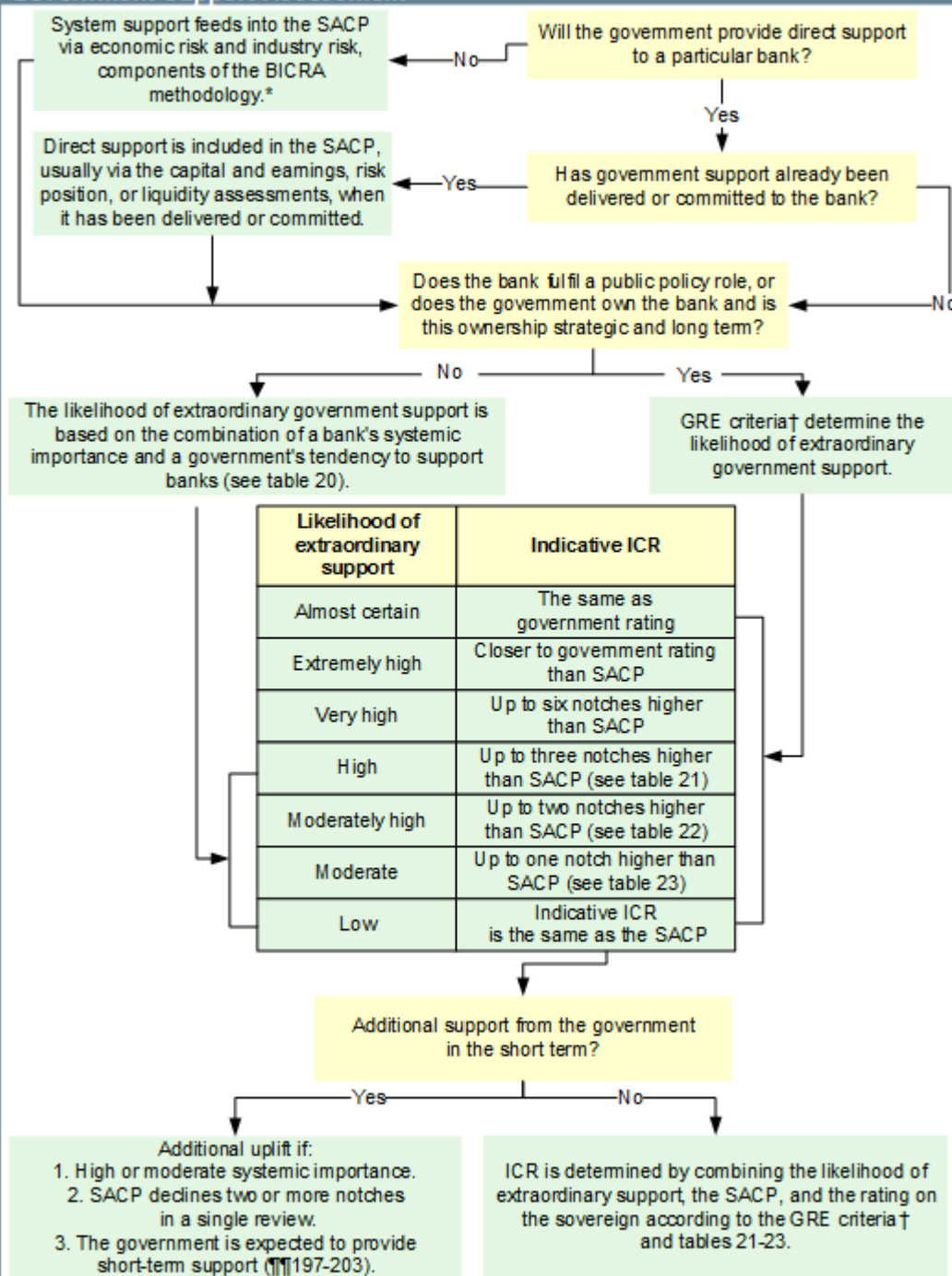
162. The support framework criteria factors in the likelihood of support from a government or parent group into the ratings on a bank by assessing the relationship between the parties. This part (part VIII) of this article and "Rating Government-Related Entities: Methodology And Assumptions," published March 25, 2015, address government support while "Group Rating Methodology," published Nov. 19, 2013, addresses group support. (See "Bank Rating Methodology And Assumptions: Additional Loss-Absorbing Capacity," April 27, 2015, for details of ALAC as an additional source of external support.) The likelihood of government support is factored both into the SACP and ICR (see chart 4).

163. Government influence on banks is usually positive for sovereign creditworthiness but on occasion

is negative. A government may elect to support bank even if it erodes sovereign creditworthiness. This was the case in Ireland in 2010. (See "Republic of Ireland Long-Term Rating Lowered To 'AA-' On Higher Banking Sector Fiscal Costs," published Aug. 24, 2010.)

164. For a government-related financial institution that fulfills a public policy role or where the government ownership is strategic and long-term, the likelihood of support is assessed using the methodology for rating GREs (see "Rating Government-Related Entities: Methodology And Assumptions," published March 25, 2015). The importance of the bank to the government and the strength of the link between the government and the bank determine the likelihood of government support.
165. For a private-sector commercial bank (which does not qualify to be characterized as a GRE), the criteria assess the likelihood of government support by drawing on assessments of both the bank's "systemic importance," that is, in maintaining overall confidence in the financial system, and the government's tendency to support private-sector commercial banks. The motivation for governments to support private-sector commercial banks is not as clear as that for GREs. Governments act to support their national economies and financial systems. This often results in added protection for senior creditors of systemically important commercial banks, but the link is by no means certain.
166. The extraordinary government support a private-sector commercial bank is likely to receive is by no means certain. This uncertainty means that the support uplift will never result in equal ratings on a non-GRE bank and on the sovereign because of other variables. For example, the government may:
- Be less able to support a range of banks in a countrywide financial crisis because of its own balance sheet constraints or because an individual bank may be large relative to the domestic economy;
 - Be less willing to provide financial support if the specific crisis affects a particular bank rather than all the banks in the national financial system and will have limited knock-on implications for the whole system;
 - Change its attitude toward supporting the banking sector over time; or
 - Not provide support in time to prevent a default or may provide support that does not fully cover all senior creditors.

Chart 4
Government Support Assessment



*See "Banking Industry Country Risk Assessments Methodology And Assumptions," published Nov. 9, 2011.

†"Rating Government-Related Entities: Methodology And Assumptions," March 25, 2015.

A. Factoring Government Support Into The SACP

167. The SACP includes four types of government support or negative interference:

- System support is the support which a government provides to all banks in a financial system. This type of support is assessed as part of economic risk and industry risk analysis in the BICRA methodology.
- Direct support is the targeted support which a government provides to a specific bank in crisis. Such support may manifest, and therefore be assessed, in the business position, capital and earnings, risk position, or funding and liquidity SACP factors.
- Government interference may take the form of directed lending and actions that create market distortions. These are captured by industry risk in the BICRA methodology and business position and risk position in the SACP.
- Additional short-term support for banks with high or moderate systemic importance.

1. System support

168. The criteria include system support in the SACP. Governments support their financial systems to limit the long-term damage of a banking crisis on the economy. Governments provide system support to financial institutions through the legal infrastructure, banking regulatory frameworks, and their role in funding banks and maintaining confidence in the financial system. System support is aimed at preserving confidence in the country's financial system, especially during periods of economic stress.

169. The criteria consider any support available to the wider system as system support, whether it is ongoing or extraordinary. In recent years, there have been many cases of system support that is extraordinary in nature and not ongoing. Examples are increased depositor insurance, government-guaranteed liquidity and debt programs, and the eligibility of lower-quality assets as central bank collateral.

170. The BICRA methodology assesses system support, which feeds directly into the SACP via economic risk and industry risk rating factors. Therefore, under the BICRA methodology, changes in a government's support for the country's financial system may result in SACP changes for banks with exposure to that country.

2. Direct support

171. The criteria include direct support in the SACP. Governments may provide direct support to an individual bank by providing liquidity or capital injections, or by buying or insuring risky assets. These actions may lead to a strengthening in the bank's stand-alone credit characteristics. The criteria aim to quantify this direct support and factor it into the relevant rating factor: capital and earnings, risk position, or funding and liquidity.

172. Direct support is included in the SACP once the government has made a commitment to providing it. The criteria treat government support as committed when it has received the appropriate political approvals, such as from Congress or parliament. In some countries, laws exist to give the administration the authority to act without further approvals.

173. However, it is unlikely that the direct support would raise the bank's SACP to the level it was before the difficulties began. The bank's business position will likely be weaker than before the

stress. The franchise will have been damaged, and execution risk will remain for the bank in managing through the crisis and back to independence.

Chart 5 Example Of System And Direct Support

The criteria may conclude that government support includes elements of system and direct support. This, for example, may be the case for systemwide programs where banks must apply to participate. If that is the case, the participating bank may benefit from system support and direct support under the criteria. System support may bring stability to the industry risk score in the SACP assessment and may offset some other weakness, such as funding or in the institutional framework. Direct support can contribute to an uplift of the bank's SACP. The Asset Protection Scheme in the U.K. and the Term Asset Liquidity Funding (TALF) in the U.S. are examples of systemwide programs. In both these cases, the sovereign governments offered capital relief to all banks in their financial systems by offering to insure them against losses on specific pools of assets.

Under the criteria, systemwide funding programs such as those mentioned above would positively affect the government role in the BICRA's industry risk assessment. In addition, the use of these facilities will affect the SACP of a bank if it improves, for example, a bank's capital ratios. Finally, the criteria assess the likelihood of extraordinary support in the future, which will contribute to the calculation of support uplift.

© Standard & Poor's 2011.

3. Government interference

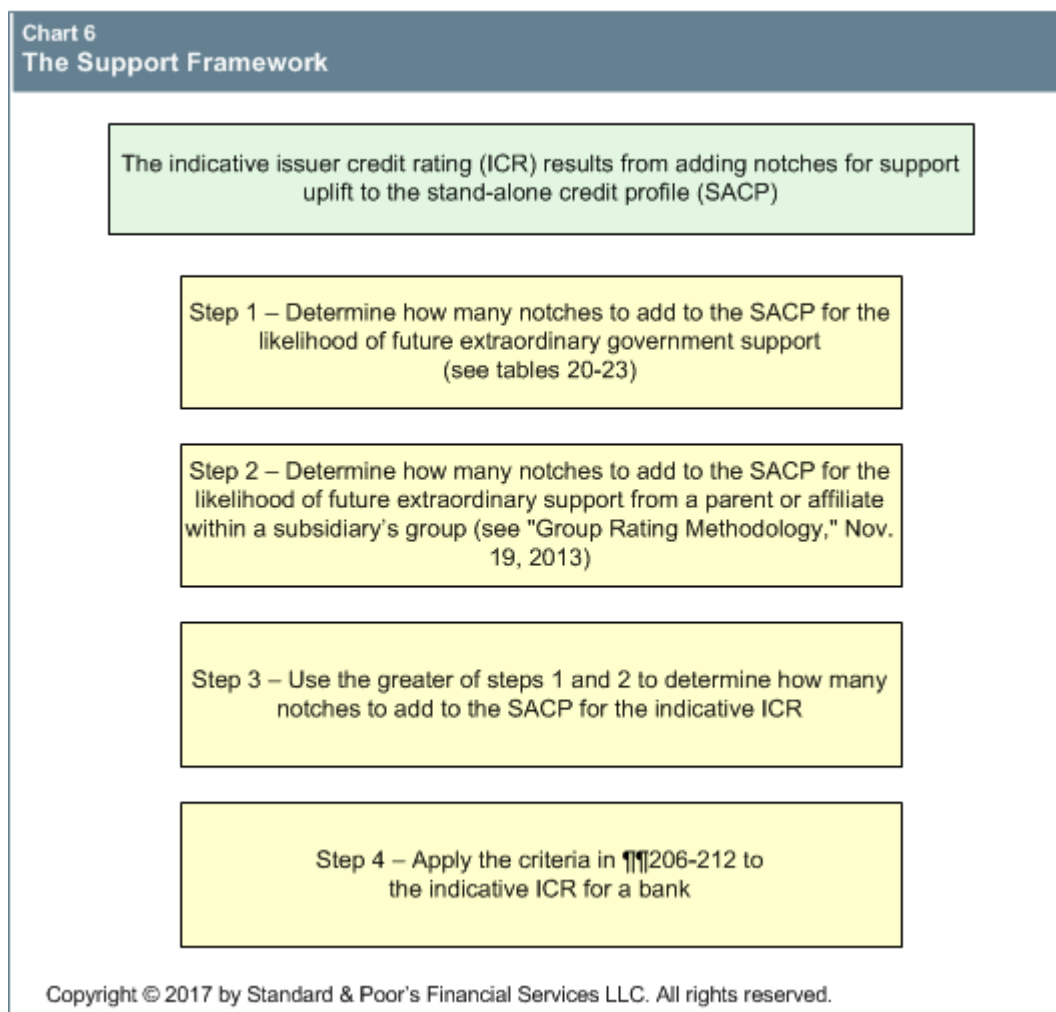
174. Various government actions can weaken a bank's creditworthiness by creating distortions or inefficiencies. These can take various forms, including government actions that influence a bank's business decisions. Two specific examples are directed lending and the creation of market distortions.
175. **Directed lending.** Governments can intervene via ownership or regulation and direct banks to lend to particular borrowers or sectors for political purposes. This type of intervention, called directed lending, is a negative rating factor for the SACP and is reflected under the business position rating factor (see table 6). Lending based on the bank's assessment of the borrowers' ability to repay will generally lead to fewer credit losses than lending based on a government's directions. Consequently, credit losses on directed lending will be greater than the industry average for specific asset classes, which the risk position rating factor assesses (see tables 12-13).
176. **Market distortions.** A government can also influence the nature of competition in a banking market. Government-owned or -controlled banks can compete on uneconomic terms, forcing a structurally low-margin environment across the sector. BICRA addresses market distortions in industry risk as part of the consideration of competitive dynamics. Therefore, it is reflected in a bank's anchor SACP.

4. Additional short-term support

177. If the SACP of a bank with high or moderate systemic importance declines rapidly (by more than two notches at a single review) and Standard & Poor's expects the government to provide additional short-term support, the criteria allow for additional temporary uplift of the SACP (see ¶¶197-203).

B. Factoring Government Support Into The Indicative ICR

178. In the case of a positive assessment of the likelihood that a bank would receive "future extraordinary support" in a crisis from a sovereign government, the criteria may allow the addition of one or more notches to the SACP for "support uplift" to determine the indicative ICR. On the other hand, the government may not offer such support. Consequently, the indicative ICR will be the same as the SACP.
179. The indicative ICR results from adding notches for support uplift to the stand-alone credit profile (SACP). The methodology for factoring in extraordinary government and group support consists of four steps (see chart 6) (See "Bank Rating Methodology And Assumptions: Additional Loss-Absorbing Capacity," April 27, 2015, for details of ALAC as an additional source of external support.):
- First, assess the likelihood for future extraordinary government support.
 - Second, assess the likelihood for future extraordinary group support (see "Group Rating Methodology," Nov. 19, 2013).
 - Third, take the higher of the result from the first and second steps.
 - Fourth, apply the criteria shown in ¶¶206-212 to the indicative ICR for a bank.



¹⁸⁰. Faced with a financial crisis, a government will often, but not always, provide additional support to protect confidence in its economy, with the expectation that the cost of this additional support is less damaging to the overall economy than allowing banks to fail. Financial institutions, in particular banks, fulfill the crucial functions of safeguarding national savings, allocating savings and deposits to companies and individuals in the form of loans and investments, and serving as intermediaries and agents in financial transactions. Governments implement monetary policy via the banking industry. They also maintain lending arrangements for banks to balance their books on a daily basis and meet short-term liquidity needs. Many governments closely regulate banks and most other financial institutions to ensure that the industry as a whole can perform these crucial roles in a manner that maintains the confidence on which the modern financial system depends.

¹⁸¹. A bank usually receives help from either its parent group or government--not both. Consequently, if a bank is a subsidiary, its creditworthiness is determined using criteria for both government support and group support. The indicative ICR is the strongest indicative ICR resulting from either the first approach or the second. The ICR can be higher than the foreign currency rating on the sovereign where the bank is domiciled, only if the bank can meet the conditions listed in ¶209. It is possible that the SACP can be stronger or the indicative ICR based on group support can be stronger than the foreign currency rating of the sovereign where the bank is domiciled.

182. The criteria for determining rating notch uplift from the expectation of extraordinary government support comprise five steps:

- First, determine the degree of a bank's systemic importance (section 1);
- Second, determine a government's tendency to support private-sector banks (section 2);
- Third, establish the likelihood that the government will provide support to a particular bank (section 3);
- Fourth, determine whether additional short-term support is available (section 4); and
- Fifth, link government-supported bank ratings to sovereign ratings (section 5).

183. A private-sector commercial bank is classified as having "high," "moderate," or "low" systemic importance as defined below. A government's tendency to support such a bank falls into three categories: "highly supportive," "supportive," and "uncertain." The criteria then combine the two classifications to determine the likelihood of direct government support in the future (see table 20).

1. Systemic importance

184. Systemic importance is the degree to which a bank's failure impacts all or parts of the financial system and the real economy of the country where the bank operates. A bank has high, moderate, or low systemic importance. It is possible that a bank classified as having high or moderate systemic importance might not receive support in a time of stress because no one can predict with certainty whether a sovereign will provide it. On the other hand, in the event of a crisis, the government may decide to support a bank even though it may have low systemic importance. A bank is not automatically classified as having high, moderate, or low systemic importance if the government or local market participants refer to it that way. Standard & Poor's classification will be determined in line with the criteria (see table 18 and ¶¶185-190).

185. **High systemic importance.** The failure of a bank classified as having high systemic importance is likely to have a high adverse impact on the financial system and the real economy. In particular, a bank has high systemic importance if a default of its senior unsecured obligations is likely to weaken the country's financial system, limit the availability of credit for the private sector, and trigger a significant financial stress at several other financial institutions.

186. Although size is not the only determining factor, a bank with high systemic importance will usually be one that maintains a substantial market share--typically more than 10%, particularly in retail banking--with a leading position and brand recognition in the country. High systemic importance is also a factor of the level of interconnectedness, or linkages of a financial institution with other parts of the financial system. For example, the bank may be a significant counterparty within the country and international financial system or play a critical role in the national payments system, such that its failure will lead to a loss of confidence in the financial system and significant losses among other counterparties in the market. In addition to these factors, a bank may have high systemic importance because no other institution can step into its key role in the economy if it fails.

187. **Moderate systemic importance.** The failure of a bank classified as having moderate systemic importance is likely to have a material, but manageable, adverse impact on the financial system and the real economy. In particular, a bank has moderate systemic importance if a default on its senior unsecured obligations is likely to lead to disruption in the provision of financial services to a specific region or sector of the economy.

188. A bank with moderate systemic importance is likely to maintain a significant market share in retail banking at the national level, or be a leading provider of banking services to a particular region or sector that plays a significant role in the economy. The systemic implications of a default of such a bank will be more manageable at a national level than a default of a bank with high systemic importance, but the effect in specific parts of the economy can be considerable. Banks with moderate systemic importance may also be leading providers of politically sensitive products, such as residential mortgages. A classification of moderate systemic importance for a bank means that if it fails, other counterparties are likely to take on the failed bank's market role.
189. **Low systemic importance.** A bank has low systemic importance when it does not fit the criteria for high or moderate systemic importance. The majority of banks in a banking industry are likely to be in this category. However, if the market is particularly concentrated, fewer banks are likely to have low systemic importance.
190. The criteria recognize the difficulty in predicting sovereign support. In the event of a crisis, the sovereign may decide to support a bank even though it may have low systemic importance. The classification of low systemic importance reflects the lack of an obvious incentive for a sovereign government to prevent the failure of this type of bank.

Table 18

Systemic Importance

Descriptor	Observations
High systemic importance	A loss of confidence in a bank is likely to lead to a loss of confidence in the entire national banking system. In particular, a default of a bank's senior unsecured obligations is likely to weaken the country's financial system, limit the availability of credit for the private sector, and trigger a significant financial stress at several other financial institutions.
Moderate systemic importance	A loss of confidence in a bank may lead to a loss of confidence in the entire banking system. In particular, a default on a bank's senior unsecured obligations can weaken the financial system and limit the supply of credit for the private sector.
Low systemic importance	A bank has low systemic importance when it does not fit the criteria for high or moderate systemic importance. The majority of banks in a banking industry are likely to be in this category. However, if the market is particularly concentrated, fewer banks are likely to have low systemic importance.

2. Government tendency to support private-sector banks

191. The tendency of governments to support financial institutions varies among countries and can change over time, particularly as legislators respond to the effects of a banking crisis. The criteria assess the capacity and willingness of sovereigns to support failing banks during a crisis and classify sovereigns into three groups, "highly supportive," "supportive," and "uncertain" (see table 19).

Table 19 Tendency Of A Government To Bail Out Financial Institutions	
Descriptor	Observations
Highly supportive	<p>The government tends to be explicit about its willingness to continually support financial institutions with high and moderate systemic importance, even in the case of bank-specific crises.</p> <p>There is a track record of frequent interventions that protect senior creditors from loss.</p> <p>The interventionist policy is likely to continue.</p> <p>The sovereign has sufficient financial resources to support banks and a reasonable framework in place for monitoring its risk to the financial system.</p> <p>Interventions are typically direct capital or liquidity injections, guarantees, or risk-protection schemes.</p> <p>Government interventions are typically not subject to authorization or restrictions by supranational agencies (such as the EU or IMF).</p>
Supportive	<p>The government has no explicit policy of support for the financial sector.</p> <p>There is a track record of sovereign actions to support financial institutions with high and moderate systemic importance, particularly during a systemic crisis, which protect senior creditors from loss. Rather than providing support directly, the sovereign tends to encourage or organize a market-led solution where possible. The sovereign is likely to act in the future to provide similar support.</p> <p>The government has authorization to provide support, but has to comply with particular conditions or is subject to authorization from parliament, legislatures, or supranationals.</p> <p>The sovereign has sufficient financial resources to support banks.</p> <p>The government will typically have a range of policy alternatives for reacting to banking sector stress, which may include legislation that requires creditors to share the burden of providing support to a distressed bank (such as by discounting creditors' obligations).</p> <p>The type of crisis typically shapes the form of support.</p>
Uncertain	<p>The government has no explicit policy of support, or there is an unambiguous policy or legislation preventing direct support for financial institutions.</p> <p>Senior creditors are required and expected to share in the losses resulting from the failure of the financial institution.</p> <p>There is no reliable track record of sovereign support actions during past financial crises or evidence that support does not extended to unsecured senior creditors. There are doubts about the sovereign's capacity to support systemically important financial institutions.</p>

3. Likelihood of extraordinary government support in the future

¹⁹² The criteria classify the likelihood that a bank would receive extraordinary government support in the future as high, moderately high, moderate, or low. That is determined by combining the assessments of a bank's systemic importance and a government's tendency to support banks (see table 20).

Table 20

Likelihood Of Extraordinary Government Support In The Future

Systemic importance	Government's tendency to support private-sector commercial banks		
	Highly supportive	Supportive	Uncertain
High	High (table 21)	Moderately high (table 22)	Low
Moderate	Moderately high (table 22)	Moderate (table 23)	Low

Table 20

Likelihood Of Extraordinary Government Support In The Future (cont.)

Systemic importance	Government's tendency to support private-sector commercial banks		
	Highly supportive	Supportive	Uncertain
Low	Low	Low	Low

193. The indicative ICR for banks with high, moderately high, or moderate likelihood of extraordinary support is established by combining the SACP on the bank and the rating on the sovereign according to tables 21-23, respectively.

Table 21

High Likelihood Of Extraordinary Government Support

SACP	Government's local currency rating															
	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-
aaa	AAA															
aa+	AA+	AA+														
aa	AA+	AA	AA													
aa-	AA	AA	AA-	AA-												
a+	AA-	AA-	AA-	A+	A+											
a	AA-	A+	A+	A+	A	A										
a-	AA-	A+	A+	A	A	A-	A-									
bbb+	A+	A+	A	A	A	A-	BBB+	BBB+								
bbb	A	A	A	A-	A-	A-	BBB+	BBB	BBB							
bbb-	A-	A-	A-	A-	BBB+	BBB+	BBB+	BBB	BBB-	BBB-						
bb+	BBB+	BBB+	BBB+	BBB+	BBB+	BBB	BBB	BBB	BBB-	BBB-	BB+	BB+				
bb	BBB	BBB	BBB	BBB	BBB	BBB	BBB-	BBB-	BBB-	BBB-	BB+	BB	BB			
bb-	BBB-	BBB-	BBB-	BBB-	BBB-	BBB-	BBB-	BBB-	BBB-	BBB-	BB+	BB	BB-	BB-		
b+	BB+	BB+	BB+	BB+	BB+	BB+	BB+	BB+	BB	BB	BB-	BB-	BB-	B+	B+	
b	BB	BB	BB	BB	BB	BB	BB	BB	BB	BB-	BB-	BB-	BB-	B+	B	B
b-	BB-	BB-	BB-	BB-	BB-	BB-	BB-	BB-	BB-	BB-	B+	B+	B	B-	B-	B-
ccc+	B+	B+	B+	B+	B+	B+	B+	B+	B+	B+	B	B	B-	B-	B-	CCC+
ccc	B	B	B	B	B	B	B	B	B	B	B-	B-	B-	CCC+	CCC+	CCC+
ccc-	B-	B-	B-	B-	B-	B-	B-	B-	B-	B-	CCC+	CCC+	CCC+	CCC	CCC	CCC
cc	B-	B-	B-	B-	CCC+	CCC+	CCC+	CCC+	CCC+	CCC+	CCC	CCC	CCC	CCC-	CCC-	CC

SACP--Stand-alone credit profile. *All conclusions in the CCC category must conform to the "Criteria For Assigning 'CCC+', 'CCC', 'CCC-', And 'CC' Ratings," otherwise a 'B-' rating is appropriate.

Table 22

Moderately High Likelihood Of Extraordinary Government Support

SACP	Government's local currency rating															
	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-
aaa	AAA															
aa+	AA+	AA+														
aa	AA	AA	AA													
aa-	AA	AA-	AA-	AA-												
a+	AA-	AA-	A+	A+	A+											
a	A+	A+	A+	A	A	A										
a-	A+	A	A	A	A-	A-	A-									
bbb+	A	A	A-	A-	A-	BBB+	BBB+	BBB+								
bbb	A-	A-	A-	BBB+	BBB+	BBB+	BBB	BBB	BBB							
bbb-	BBB+	BBB+	BBB+	BBB+	BBB	BBB	BBB	BBB-	BBB-	BBB-						
bb+	BBB	BBB	BBB	BBB	BBB	BBB-	BBB-	BBB-	BB+	BB+	BB+					
bb	BBB-	BBB-	BBB-	BBB-	BBB-	BBB-	BB+	BB+	BB+	BB	BB	BB				
bb-	BB+	BB+	BB+	BB+	BB+	BB+	BB+	BB	BB	BB	BB-	BB-	BB-			
b+	BB	BB	BB	BB	BB	BB	BB	BB	BB-	BB-	BB-	B+	B+	B+		
b	BB-	BB-	BB-	BB-	BB-	BB-	BB-	BB-	BB-	B+	B+	B+	B	B	B	
b-	B+	B+	B+	B+	B+	B+	B+	B+	B+	B+	B	B	B	B-	B-	B-
ccc+	B	B	B	B	B	B	B	B	B	B	B-	B-	B-	CCC+	CCC+	CCC+
ccc	B-	B-	B-	B-	B-	B-	B-	B-	B-	B-	CCC+	CCC+	CCC+	CCC	CCC	CCC
ccc-	CCC+	CCC+	CCC+	CCC+	CCC+	CCC+	CCC+	CCC+	CCC+	CCC+	CCC	CCC	CCC	CCC-	CCC-	CCC-
cc	CCC	CCC	CCC	CCC	CCC	CCC	CCC	CCC	CCC	CCC	CCC-	CCC-	CCC-	CC	CC	CC

SACP--Stand-alone credit profile. *All conclusions in the CCC category must conform to the "Criteria For Assigning 'CCC+', 'CCC', 'CCC-', And 'CC' Ratings," otherwise a 'B-' rating is appropriate.

Table 23

Moderate Likelihood Of Extraordinary Government Support

SACP	Government's local currency rating															
	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-
aaa	AAA															
aa+	AA+	AA+														
aa	AA	AA	AA													
aa-	AA-	AA-	AA-	AA-												
a+	AA-	A+	A+	A+	A+											
a	A+	A+	A	A	A	A										
a-	A	A	A	A-	A-	A-	A-									
bbb+	A-	A-	A-	A-	BBB+	BBB+	BBB+	BBB+								
bbb	BBB+	BBB+	BBB+	BBB+	BBB+	BBB	BBB	BBB	BBB							
bbb-	BBB	BBB	BBB	BBB	BBB	BBB	BBB-	BBB-	BBB-	BBB-						
bb+	BBB-	BBB-	BBB-	BBB-	BBB-	BBB-	BBB-	BB+	BB+	BB+	BB+					
bb	BB+	BB+	BB+	BB+	BB+	BB+	BB+	BB+	BB	BB	BB	BB				
bb-	BB	BB	BB	BB	BB	BB	BB	BB	BB	BB-	BB-	BB-	BB-			
b+	BB-	BB-	BB-	BB-	BB-	BB-	BB-	BB-	BB-	BB-	B+	B+	B+	B+		
b	B+	B+	B+	B+	B+	B+	B+	B+	B+	B+	B+	B	B	B	B	
b-	B	B	B	B	B	B	B	B	B	B	B	B	B-	B-	B-	B-
ccc+	B-	B-	B-	B-	B-	B-	B-	B-	B-	B-	B-	B-	B-	CCC+	CCC+	CCC+
ccc	CCC+	CCC+	CCC+	CCC+	CCC+	CCC+	CCC+	CCC+	CCC+	CCC+	CCC+	CCC+	CCC+	CCC	CCC	CCC
ccc-	CCC	CCC	CCC	CCC	CCC	CCC	CCC	CCC	CCC	CCC	CCC	CCC	CCC	CCC-	CCC-	CCC-
cc	CCC-	CCC-	CCC-	CCC-	CCC-	CCC-	CCC-	CCC-	CCC-	CCC-	CC	CC	CC	CC	CC	CC

SACP--Stand-alone credit profile. *All conclusions in the CCC category must conform to the "Criteria For Assigning 'CCC+', 'CCC', 'CCC-', And 'CC' Ratings," otherwise a 'B-' rating is appropriate.

194. For a bank with a low likelihood of support, the indicative ICR is the same as the SACP. But the ICR may be different from the indicative ICR after applications of the criteria for group support (see "Group Rating Methodology," Nov. 19, 2013) or when the ICR is set (see ¶¶19-24).

195. Even if the likelihood of government support is "high" and the sovereign long-term local currency rating is 'AAA', a bank with an SACP of 'aa+' will not receive an ICR of 'AAA'. This is in line with Standard & Poor's view that government support for non-GRE banks cannot be predicted with certainty.

196. The indicative ICRs for banks shown in tables 21-23 are subject to the criteria shown in ¶¶206-212 below.

4. Additional short-term support for banks with high or moderate systemic importance

197. (This section has been partially superseded by "Bank Rating Methodology And Assumptions: Additional Loss-Absorbing Capacity," published on April 27, 2015, which should be read in

conjunction with this section as it describes an additional source of short-term support.) These criteria provide for additional short-term uplift of a bank's SACP (beyond the uplift shown in tables 21-23) if all the following conditions are satisfied:

- If the bank is classified as having high or moderate systemic importance,
- If the bank's SACP has declined rapidly by two or more notches in a single review, and
- If the government is expected to provide additional short-term support.

198. In practice, it can take some time for a government to make a specific commitment to provide additional short-term support after a financial problem at a systemically important bank surfaces. In such cases, the criteria estimate the amount or range of support.

199. For example, if a bank's SACP declines rapidly as described above, the ICR will likely be lowered by at least one notch and likely placed on CreditWatch with negative implications. In conjunction with the CreditWatch action, the criteria will likely require:

- A confirmation by the government of the importance of the bank through a public statement of support that covers the bank's obligations to its senior creditors,
- An estimate of the amount or range of support required to restore the bank's capital or liquidity to the regulatory minimum (see ¶202), and
- An assessment of whether the sovereign has sufficient capacity to provide this level of support.

200. If the government makes no public statement of support in the CreditWatch period, the assessment of systemic importance is changed to low, uplift for government support is removed, and the ICR is lowered to the level of the SACP.

201. If there are doubts about the sovereign's ability to support the institution, the ICR is lowered to the same level as the SACP. In addition, uplift for all other banks with high or moderate systemic importance in that country is reassessed.

202. If the government makes a clear statement of the intent to support the bank, the criteria allow for an estimate of the monetary amount of support that will be made available. This estimate is based either on details provided by the government or by a Standard & Poor's calculation of the amount of fresh capital or liquidity required to restore capital or liquidity to the regulatory minimum--that is, the amount that will keep the bank a going concern according to the regulators. The calculation is geared to the minimum regulatory requirement, unless there is guidance that the regulator expects the bank to comply with a different requirement.

203. To establish the number of notches of temporary uplift for additional short-term support, this estimate is included in the evaluation of capital, risk, or liquidity. As long as the government has not committed the support, total uplift to the SACP comprises temporary uplift for additional short-term government support and the likelihood of extraordinary government support in the future (see table 20). After the government commits the support, it is factored into the SACP and the indicative ICR is set according to the relevant support table (see tables 21-23).

5. Linking government-supported bank ratings to sovereign ratings

204. The criteria for rating banks have a direct link with the criteria for rating sovereigns. Specifically, the sovereign criteria assess the impact on a sovereign's rating of the contingent liabilities related to the financial sector (see "Sovereign Rating Methodology," published Dec. 23, 2014). This assessment is done by estimating the potential recapitalization needs of the entire banking sector in case of a systemic banking crisis associated with a stress level defined in the RACF (see

"Risk-Adjusted Capital Framework Methodology," published July 20, 2017).

205. After determining the contingent liabilities related to the financial sector, the criteria evaluate the impact of the overall level of contingent liabilities on the sovereign's fiscal profile, which affects its rating. The local currency sovereign rating is combined with the SACP on a bank to determine its indicative ICR according to tables 21-23.

C. Rating Banks Above The Sovereign

206. The criteria may result in an SACP or an ICR on a bank above the foreign currency rating on the sovereign where the bank is domiciled.
207. Such cases are rare because the criteria acknowledge that banks are leveraged institutions that are dependent on the sovereign government for liquidity and other forms of system support. In addition, the sovereign's regulatory and supervisory powers may restrict a bank's or financial system's flexibility.
208. Banks are affected by many of the same economic factors that cause sovereign stress. This sovereign stress can cause, among other things, a sharp deterioration in a bank's asset values, more expensive foreign currency liquidity, shortages in local currency liquidity, a harsher regulatory environment, mandated changes in credit terms, higher taxes, and declining public services. These developments can exacerbate domestic economic conditions and increase bad debts for banks.
209. This paragraph has been deleted because it has been superseded by the article titled, "Ratings Above The Sovereign--Corporate And Government Ratings: Methodology And Assumptions," published on Nov. 19, 2013.
210. This paragraph has been deleted because it has been superseded by the article titled, "Ratings Above The Sovereign--Corporate And Government Ratings: Methodology And Assumptions," published on Nov. 19, 2013.
211. For a bank that is a subsidiary, the parent will need to meet those same preconditions for the subsidiary to have an indicative ICR that is higher than the sovereign's foreign currency rating resulting from group support from a foreign parent or affiliate. If the parent has not demonstrated its capacity and willingness to provide a subsidiary with sufficient support to withstand the stress associated with a sovereign default, the ICR is capped by the foreign currency rating on the sovereign where the subsidiary is domiciled.
212. This paragraph has been superseded by "Assessing Bank Branch Creditworthiness," published Oct. 14, 2013.
- [1] "Causes of the Recent Financial and Economic Crisis," Ben S. Bernanke, Before the Financial Crisis Inquiry Commission, Washington, D.C., Sept. 2, 2010 (U.S. Congress).
- [2] "Final report of the Commission of Experts for limiting the economic risks posed by large companies," Sept. 30, 2010 (Swiss Confederation).
- [3] "Final Report Recommendations," Independent Commission on Banking, Sept. 12, 2011 (U.K.).

VI. METHODOLOGY: ENTERPRISE RISK MANAGEMENT

213. This section covers key risk factors Standard & Poor's Ratings Services considers when assessing financial institutions' risk management.
214. As part of our ratings analysis, we consider how well an institution's risk policies, procedures, and

tools fit its risk profile and contribute to its strategic and commercial development. When they are atypically strong or weak relative to its peers, a bank's risk management can affect our assessment of the bank's management and strategy, risk position, and funding and liquidity. We do not score enterprise risk management (ERM) specifically (i.e., we do not assign an overall ERM assessment of weak, adequate, strong, etc.), but these risk-management considerations inform our analysis in several areas of the SACP, including the business position, risk position, and funding and liquidity assessments.

215. We list below examples of the types of questions we consider to assess an institution's practices in risk governance (which is considered under business position); operational risk, market risk, and credit risk (which are considered under risk position); and funding and liquidity. Embedded in the analysis of these broader risk areas are assessments of an institution's management of business, legal, and reputational risks. In most cases, risk governance is the most critical area of our evaluation because it typically drives the quality and strength of an institution's risk-management framework. Where the organization exhibits all strong attributes relevant for a particular risk area, and is an acknowledged leader in its industry related to a particular facet of risk management, we consider it to be an example of an excellent attribute. The examples provided are not a complete set of the issues we typically address, but rather, they're some of the relevant issues.

A. Risk Governance

216. Risk governance covers assessments of risk culture, strategy, appetite, and awareness level.

Does the risk-management function have sufficient stature within the firm?

217. Examples of weaker attributes: Risk management is regarded as a control function, or a cost center that adds little value. Staffing and resources are insufficient.
218. Examples of adequate attributes: The risk-management department is independent of business units and is regarded as a valued partner. It enjoys access to senior management and is staffed by quality employees. There is a demonstrated organizationwide commitment to risk management.
219. Examples of strong attributes: The track record shows that the formal risk-management department acts as a valued partner to the business units by advising them on both "local" and enterprisewide risks. Risk management is closely involved in planning and budgeting, and risk professionals rank highly in the firm. Indicators of a strong framework can include the existence of a chief risk officer who reports directly to the CEO, as well as the existence of a risk-management board with nonexecutive director representation that reports to the board. There is clear evidence of board involvement in risk-management issues.

How well does the firm establish and articulate its risk appetite? Is it consistent with the articulated business strategy, and what is the role of risk management in this process?

220. Examples of weaker attributes: The company is unable to express aggregate risk tolerance. Risk management is minimally involved in evaluating the organization's risks and developing the business strategy.
221. Examples of adequate attributes: Some kind of aggregate risk tolerance measure is available, but it is either based on insufficient data or defined relatively vaguely. Tolerance may not be defined

well in both qualitative and quantitative terms.

222. Examples of strong attributes: The bank has established its risk appetite following a rigorous review of risk-reward trade-offs. The tolerance is well defined both qualitatively and quantitatively. Staff members are able to express the firm's risk appetite well.

Is the reach of the risk-management function sufficiently wide across the group? Are the established policies of the business lines consistent with the group's stated risk appetite and business strategy?

223. Examples of weaker attributes: Risk is monitored by silo. The entity has little ability to acquire a consolidated view of risks across the institution.
224. Examples of adequate attributes: The firm monitors risk primarily by silo, but it can monitor and aggregate some risks across the organization. Business lines' risk policies parallel group policies.
225. Examples of strong attributes: The institution has a demonstrated track record of success in monitoring and aggregating risks across the organization, including smaller or remote subsidiaries. Risk-management initiatives are well coordinated across the entity. Business line risk policies parallel group policies, and strategies and commercial policies are consistent with group risk appetite and objectives. Economic capital, a balanced business scorecard, or a similar approach is actively used in the day-to-day management of the business.

How well informed is senior management on risk issues? Is there effective internal reporting of risk issues? How good is external disclosure?

226. Examples of weaker attributes: Meetings between senior management and risk staff are infrequent. Risk reporting is poor, and risk reports serve only a compliance role and are rarely perceived to have a wider business role.
227. Examples of adequate attributes: Risk committee structures are in place, with improving metrics and report formats. Risk issues are discussed at a strategic forum. There are regularly scheduled internal audits of the risk-management function, but risk reporting may be more reactive than proactive.
228. Examples of strong attributes: The institution employs high-quality internal and external risk-management reporting, with regular discussions in risk committees. The reporting framework is strong and well supported by the business units, showing visible improvements over time. The evaluation of risk issues is embedded in strategic decision-making, budgeting, and planning. We expect risk reports to contain tangible strategic applications, with a demonstrated link between risk reporting and commercial decisions. Risk issues that emerge are brought to the attention of senior executives quickly, responses are timely, and there is a track record of effective action being taken. The bank strikes a good balance between the measuring and modelling of risk, and the management of business risks.

B. Operational Risk

229. Here we assess the operational risk-management practices an institution employs, the level of awareness of the operational risk-management processes, and the degree to which the institution uses its operational risk-management analysis in its decision-making.

Does the firm have a usable definition of operational risk?

230. Examples of weaker attributes: A lack of understanding of the firm's operational risks pervades the staff.
231. Examples of adequate attributes: Business lines are developing or have improved their definitions of operational risk.
232. Examples of strong attributes: A clear and consistent firmwide definition avoids overlaps with credit risk and market risk, for example.

Is an effective framework in place to capture operational risk exposures and loss data?

233. Examples of weaker attributes: No comprehensive data-gathering framework exists. Operational losses are sometimes disguised as credit risk or market risk losses.
234. Examples of adequate attributes: The bank has developed a consistent structure for capturing loss data (this may have been slowed by acquisitions). It assesses potential exposure through key risk indicators and control self-assessments, for example.
235. Examples of strong attributes: The firm coordinates its efforts across business lines to capture and track "trigger" events and risk indicator data. It maintains a consistent structure for capturing loss data, which is not undermined by recent acquisitions. It has developed a transparent methodology for classifying key risk indicators.

Does the operational risk analysis affect decision-making and controls?

236. Examples of weaker attributes: The feedback mechanism linking loss data to operational controls is inadequate. We consider regulatory compliance the main factor driving operational risk initiatives.
237. Examples of adequate attributes: The firm has shown clear responses to operational risk issues, but control improvements are mainly reactive. It is developing a process to allocate capital to the businesses for operational losses.
238. Examples of strong attributes: A clear management focus and operational risk analysis via the use of operational risk dashboard reports drive control improvements. The firm has taken a proactive stance on operational risk issues, and it has a proven track record of effective responses. In the case of operational losses, it has clearly articulated a process for allocating capital to the businesses.

Which Basel approach is the firm adopting?

239. The advanced measurement approach may be an indicator of good operational risk-management practices.

Are sufficient resources devoted to operational risk issues?

240. Examples of weaker attributes: Back-office structures are not always independent of the businesses. Remote locations of the company have weaker structures.
- 241.

Examples of adequate attributes: The bank has established a clear organizational structure for the back office, independent of the business. Several risk-related training opportunities are available to staff. The company is developing disaster recovery plans and business continuity plans. It has demonstrated an ability to cope with emerging operational risk issues.

242. Examples of strong attributes: High-quality personnel and strong training and development structures are evident. Data-recovery processes and business continuity plans are in place and continue to show enhancements. The firm maintains well-documented and frequently (and preferably randomly) tested business continuity plans.

Is there a well-defined approval process for new products? How are illiquid products valued?

243. Examples of weaker attributes: The definition of a new product is unclear and final sign-off is vested with the business.
244. Examples of adequate attributes: A new product approval process is in place but can occasionally be circumvented.
245. Examples of strong attributes: The risk function, in conjunction with the other support functions, vets new products and can provide final sign-off. Risk management also vets pricing models, including data inputs.

C. Credit Risk

246. In assessing credit risk, we look at how an institution's underwriting practices are linked to its credit risk appetite, as well as the robustness of the techniques used in monitoring and managing its credit portfolio.

Can the firm ensure that its underwriting criteria are consistent with its risk appetite?

247. Examples of weaker attributes: The bank has ineffective risk criteria. There is an apparent willingness to compromise underwriting standards to achieve short-term profit or growth targets.
248. Examples of adequate attributes: The bank has policies in place, but they may not be sufficiently clear or subject to regular reviews. The number of exceptions to official policies may be sufficiently high that we could question their effectiveness.
249. Examples of strong attributes: Clear risk and pricing policies have been established and are reviewed regularly. There is evidence of effective credit scoring and delegated authorities. Experienced and well-qualified personnel implement policies in a consistent manner.

Does the firm have appropriate structures in place to monitor its credit portfolio for potential problems?

250. Examples of weaker attributes: The institution lacks the necessary metrics and data to monitor the evolution of its portfolio. The entity has limited ability to extract segment data quickly.
251. Examples of adequate attributes: The institution is improving its risk metrics, but its ability to track performance may be limited for some products/segments. Data may be stuck in silos or insufficiently flexible to respond to changing needs. Staffing may be adequate, but some concerns

exist about individuals' depth of experience and the overall availability of resources for collections/recoveries.

252. Examples of strong attributes: Effective portfolio analytics have been developed to monitor performance by product and vintage, track watch-list credits, and transfer underperforming exposures to collections/recoveries. Staffing of collections or recoveries units, with experienced personnel in charge, is more than adequate. The institution has conducted extensive analysis into the adoption of a specific credit modelling approach, and it has clearly documented assumptions and limitations. It has a solid track record of reserves/provisions versus actual losses.

Does the institution have access to sufficient portfolio-management techniques, including credit risk-mitigation tools?

253. Examples of weaker attributes: Only reactive techniques for managing exposure to particular entities or sectors are available. Few conscious decisions about the appropriate levels of risk for the company are made, and the management of risk concentrations is haphazard or insufficiently comprehensive.
254. Examples of adequate attributes: The bank has made efforts to manage its portfolio more proactively, as well as make conscious decisions about the level of risk it retains, but it has limited tools or techniques available. Risk concentrations are monitored and managed at a group level.
255. Examples of strong attributes: The entity has taken a highly proactive view of the credit risks in the portfolio and methodically controls exposure to particular segments through a variety of potential tools. It has made clear policies regarding hold levels and arrangements for sale of assets, and it closely monitors teams' actions. Reviews of particular portfolios are conducted using stress tests.

Does the credit risk-management framework feed into decision-making?

256. Examples of weaker attributes: The feedback mechanism from credit risk metrics to commercial and strategic decisions is inadequate. The use of some credit risk metrics and models seems to be driven mainly by regulatory compliance.
257. Examples of adequate attributes: The bank has clear responses to credit risk issues, with a process to allocate capital to the businesses for credit risk.
258. Examples of strong attributes: Management understands credit metrics and processes well. It demonstrates a proactive approach and has a solid track record of effective responses to credit risk issues. Use of more advanced Basel II approaches typically indicate that the firm has more sophisticated data and risk-management techniques, if backed by demonstrated understanding by management, and clear business usage of the information.

D. Market Risk

259. The market risk assessment considers the quality of the processes that an institution has established for managing trading risk and structural interest rate risk.

Does the market risk function have sufficiently broad reach?

260. Examples of weaker attributes: The market risk function has a narrow remit, limited controls, and loose or inconsistent coverage. It relies on overly simplistic measurement techniques. Management has a limited understanding of the market risk reports.

261. Examples of adequate attributes: Expanding coverage of market risk across the group is evident. Some areas may still be excluded. Management generally has an acceptable understanding of the market risk reports.
262. Examples of strong attributes: The market risk framework captures risks borne by subsidiaries, including nonbanking subsidiaries. Market risks associated with pensions and other employee benefits are also captured, if relevant. Regular usable reports are issued at a group level to assess the groupwide position.

Can the firm express and manage its tolerance for structural interest rate risk? What about structural foreign-exchange risk and equity risk?

263. Examples of weaker attributes: The bank does not measure or manage these risks effectively. It has no defined remit. Limits or controls are loose, and there are overly simplistic measurement techniques.
264. Examples of adequate attributes: The firm has improved its measurement of structural interest rate risk (or foreign exchange or equity risk, as relevant), but it may still be only partial. Risk reports may give less effective guidance to management, and the firm's tools are not sophisticated enough compared with evolving industry standards. Metrics are appropriate for the risk type.
265. Examples of strong attributes: The institution has designed a risk-adjusted approach to produce profits within risk parameters that the board and senior management have agreed to. Structural interest rate risk is measured comprehensively, with regular reporting and value-added metrics (typically with scenario analysis that the business considers usable).

Is the firm's asset-liability management framework sufficiently robust, given the assumptions it has made on relevant factors such as duration and prepayments?

266. Examples of weaker attributes: The firm uses unrealistic assumptions that heavily influence the reported exposures.
267. Examples of adequate attributes: The bank makes clear assumptions, but its back-testing or use of stress testing is limited.
268. Examples of strong attributes: The firm uses assumptions that are back tested, stressed, and clearly articulated. It evaluates multiple scenarios and takes into account behavioral characteristics rather than contractual characteristics only.

What is the company's robust approach to limits and the use of stress tests?

269. Examples of weaker attributes: The business units have excessive authority. The usefulness of stress testing is limited by a view that stress tests are for regulatory compliance, not for adding value. Senior management neither understands nor appreciates stress tests.
270. Examples of adequate attributes: There is a clear process for assigning limits and unambiguous (but restricted) procedures for the granting of exceptions. All excesses and breaches of limits are reported quickly to the appropriate executive level. Stress tests are used, but may have insufficient granularity and only a small role in decision-making.
271. Examples of strong attributes: The business units and risk functions have established close

cooperation. Only risk management can approve excesses over key limits. Dual limit structures may be used. The bank conducts regular stress testing of macro, historical, and hypothetical scenarios. It uses a variety of stress tests and considers all as relevant. Stress tests and scenario analyses are run and revised at an appropriate level of granularity for the business profile.

E. Funding And Liquidity

272. Here we evaluate the strength of an institution's processes for managing funding and liquidity risks.

Does the firm have a well-established funding policy? Does it place an appropriate emphasis on funding concentration and mix (by product, maturity, and investor, for example)?

273. Examples of weaker attributes: The institution is overly focused on minimizing the cost of funds and possesses a limited understanding of liquidity risks. It also demonstrates difficulty or unwillingness to diversify the funding profile.
274. Examples of adequate attributes: The institution has diversified its funding mix, but with a more reactive--rather than proactive--policy. Its views on the appropriate levels of funding concentration may not be rigorously formed.
275. Examples of strong attributes: The institution maintains a diverse funding profile, without overreliance on any single source. The firm has a proactive view toward its funding mix. It has clearly defined views about the optimal funding mix, with appropriate limits and guidelines.

Does the firm have appropriate contingency plans for a liquidity crunch?

276. Examples of weaker attributes: Underprepared for a liquidity crunch, the company uses insufficiently severe stress tests that do not prompt follow-up actions. Risk-management techniques are slow to respond to growth in more sensitive funding sources.
277. Examples of adequate attributes: Contingency plans are used, but are either not very detailed or are not rolled out at the appropriate levels across the group (for example, by subsidiary or country). Exposure to a potential downgrade may only be monitored in times of stress. Risk-management techniques may still be adjusting to recent growth in the use of some more sensitive funding sources.
278. Examples of strong attributes: The firm undertakes detailed stress tests and liquidity continuity scenario planning. There are demonstrated links between these tests and management actions. With a clear-eyed view of the potential effects of a downgrade, the entity has developed a plan to manage this exposure. The group's risk-management framework takes into account its reliance on sensitive funds.

Does the firm have sufficient liquidity capacity to raise emergency funds without damaging its franchise?

279. Examples of weaker attributes: Inadequate emergency liquidity sources mean that the firm is overly reliant on committed bank lines and/or questionable liquidity sources.
280. Examples of adequate attributes: Sufficient emergency liquidity sources have been earmarked,

but they may be relatively concentrated.

281. Examples of strong attributes: The firm holds sufficient unencumbered liquid assets, as well as central bank lines and/or other sources of emergency liquidity to meet stress outflows.

APPENDIX A

The bank criteria supersede or partially supersede the articles below. All articles listed below are available on RatingsDirect on the Global Credit Portal, unless otherwise stated.

Superseded

- Assumptions For Base-Case Credit Losses For Italian Banks, April 23, 2010
- The Ratings Approach To Australian Government-Guaranteed Debt (Updated), June 10, 2009
- The Ratings Approach To U.S. Financial Institutions' FDIC-Guaranteed Commercial Paper, April 6, 2009
- Franchise Stability, Confidence Sensitivity, And The Treatment Of Hybrid Securities In A Downturn, Dec. 1, 2008
- Assumptions: Analytical Adjustments For Captive Finance Operations, June 27, 2008
- Recovery Ratings For U.S. Finance Companies, June 19, 2008
- Applying Group Methodology To Independent U.S. Investment Banks, June 2, 2008
- How Systemic Importance Plays A Significant Role In Bank Ratings, July 3, 2007
- A Roadmap For Evaluating Financial Institutions' ERM Practices, May 3, 2007
- External Support Key In Rating Private Sector Banks Worldwide, Feb. 27, 2007
- Equity Credit for Hybrid Securities Issued by Asset Managers, Nov. 13, 2006
- Standard & Poor's Updated Methodology For Rating Exchanges And Clearinghouses, July 10, 2006
- Assessing Trading Risk Management Practices Of Financial Institutions, Oct. 17, 2005
- Financial Institutions Bank Fundamental Strength Ratings, July 10, 2005
- Bank Spreadsheet Data Definitions, May 2, 2005
- Rating Securities Companies, June 9, 2004
- Securities Company Ratings Analysis Methodology Profile, April 29, 2004
- Bank Survivability Criteria, March 24, 2004
- FI Criteria: Bank Rating Analysis Methodology Profile, March 18, 2004
- U.S. Mortgage Bank Rating Analysis Methodology Profile, March 18, 2004
- Rating Asset Management Companies, March 18, 2004
- Sovereign Risk for Financial Institutions, Feb. 16, 2004

Partially superseded

- Finance Company Ratios, March 18, 2004

REVISIONS AND UPDATES

This article was originally published on Nov. 9, 2011. These criteria became effective on Nov. 9, 2011.

The article titled "Criteria For Assigning 'CCC+', 'CCC', 'CCC-', And 'CC' Ratings," published Oct. 1, 2012, partially supersedes the bank criteria. All conclusions in the 'CCC' category must conform to the above criteria; otherwise a 'B-' rating is appropriate.

Changes introduced after original publication:

- On Sept. 30, 2014, we updated our author contact information.
- Following our periodic review completed on Feb. 9, 2016, we updated related criteria references and our author contact information and improved readability.
- Following our periodic review completed on Feb. 7, 2017, we updated criteria references, deleted outdated text related to the initial publication of the criteria, and included references to Additional Loss Absorbing Capital (ALAC) in paragraph 11, charts 1 and 2, and in the section "Methodology: Government Support Framework." We also corrected a typographical error in paragraph 133, replacing a reference to Appendix A with a reference to the relevant article cited in the appendix to this article.
- On May 11, 2017, we included the section "Methodology: Enterprise Risk Management," which details how we assess bank risk management. The contents of this section were previously in "A Roadmap For Evaluating Financial Institutions' ERM Practices," published May 3, 2007, which is now superseded by this criteria article. This consolidation has been done to make the criteria more transparent.
- Following our periodic review completed on Jan. 31, 2018, we updated the contact information and criteria references. We also improved the transparency of the article by more explicitly highlighting that paragraph 106 was superseded.
- On July 27, 2018, we republished the criteria to incorporate several nonmaterial clarifications. Paragraphs 19-24 were updated to clarify the situations in which we adjust the indicative ICR to arrive at the ICR, and to remove commentary regarding the potential ratio of observed adjustments. We updated the footnote to table 6 to provide more clarity on the situations where a business position assessment of "weak" would result in a two-notch deduction or a deduction of three notches. We also updated paragraph 149 to align the wording with "Quantitative Metrics For Rating Banks Globally: Methodology And Assumptions," published July 17, 2013.

RELATED CRITERIA AND RESEARCH

Related Criteria

- Sovereign Rating Methodology, Dec. 18, 2017

- Risk-Adjusted Capital Framework Methodology, July 20, 2017
- Methodology For Linking Long-Term And Short-Term Ratings, April 7, 2017
- Guarantee Criteria, Oct. 21, 2016
- Methodology: The Impact Of Captive Finance Operations On Nonfinancial Corporate Issuers, Dec. 14, 2015
- Bank Rating Methodology And Assumptions: Additional Loss-Absorbing Capacity, April 27, 2015
- Rating Government-Related Entities: Methodology And Assumptions, March 25, 2015
- Bank Hybrid Capital And Nondeferrable Subordinated Debt Methodology And Assumptions, Jan. 29, 2015
- Issue Credit Rating Methodology For Nonbank Financial Institutions And Nonbank Financial Services Companies, Dec. 9, 2014
- Key Credit Factors For Financial Market Infrastructure Companies, Dec. 9, 2014
- Nonbank Financial Institutions Rating Methodology, Dec. 9, 2014
- Group Rating Methodology, Nov. 19, 2013
- Assessing Bank Branch Creditworthiness, Oct. 14, 2013
- Quantitative Metrics For Rating Banks Globally: Methodology And Assumptions, July 17, 2013
- Criteria For Assigning 'CCC+', 'CCC', 'CCC-', And 'CC' Ratings, Oct. 1, 2012
- Banking Industry Country Risk Assessment Methodology And Assumptions, Nov. 9, 2011
- Principles Of Credit Ratings, Feb. 16, 2011
- Stand-Alone Credit Profiles: One Component Of A Rating, Oct. 1, 2010
- Methodology For Analyzing Funding And Liquidity Positions Of Bank-Licensed Investment Companies, July 2, 2010
- Credit Stability Criteria, May 3, 2010
- Methodology: Hybrid Capital Issue Features: Update On Dividend Stoppers, Look-Backs, And Pushers, Feb. 10, 2010
- Understanding Standard & Poor's Rating Definitions, June 3, 2009
- Criteria For Determining Transfer And Convertibility Assessments, May 18, 2009
- Rating Private Equity Companies' Debt And Counterparty Obligations, March 11, 2008
- Issues Of Subordination for Hedge Fund Debt, Sept. 13, 2007
- Counterparty And Debt Rating Methodology For Alternative Investment Organizations: Hedge Funds, Sept. 12, 2006
- Commercial Paper I: Banks, March 23, 2004
- Commercial Paper II: Finance Companies, March 22, 2004

Related Research

- How Standard & Poor's Intends To Finalize Its Bank Criteria And Apply Them To Ratings In The Fourth Quarter Of 2011, Nov. 1, 2011
- The Evolving Landscape For Banks Requires A Robust Analytical Framework, Nov. 1, 2011
- For Universal Banks, The Recent Dominance Of Investment Banking Is Giving Way To More Balanced Earnings, June 30, 2011
- Bank Resolution Regimes: Potential Rating Implications As Sovereign Support Frameworks Evolve, March 16, 2011

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.

Copyright © 2018 by Standard & Poor's Financial Services LLC. All rights reserved.

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

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

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

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

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

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