Minneapolis Fed Symposium



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What A Credit Rating Is And What It Is Not

What it is:

Forward-looking opinions about relative credit risk, i.e., the <u>creditworthiness</u> of an entity or its securities that ...

... strive to be globally comparable across sectors

Incorporate views on relative likelihood of default that ...

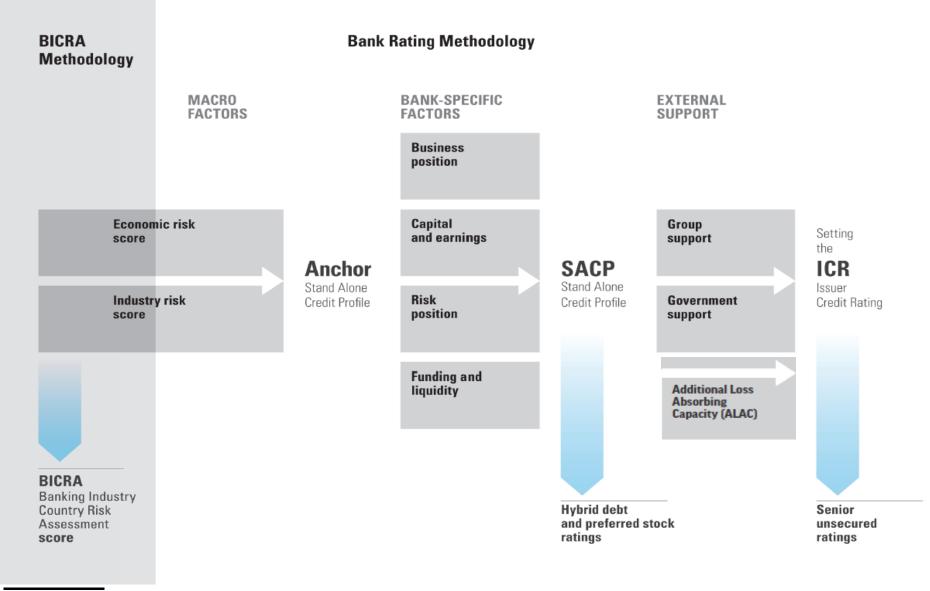
refer to the timely payment of interest and principal and ...

... are applied to entities and securities

What it's not:

- Investment advice, a recommendation to purchase, sell or hold securities, or a comment as to market price or suitability for an investor
- a measure of liquidity or market value
- a way of defining "good" or "bad" companies, or a direct assessment of corporate governance
- an audit of the company or its auditors
- a guarantee of credit quality or of future credit risk

BANK RATINGS FRAMEWORK



S&P Global Ratings

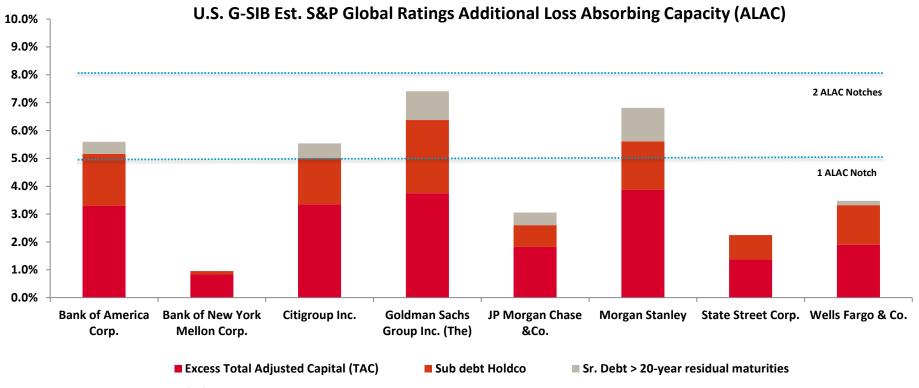
Moderately High Likelihood of Extraordinary Government Support

Government's local currency rating

		· /mm														
SACP	AAA	AA+	AA	AA-	A+	Α	A -	BBB+	BBB	BBB-	BB+	ВВ	BB-	B+	В	B-
aaa	AAA															
aa+	AA+	AA+														
aa	AA	AA	AA													
aa-	AA	AA-	AA-	AA-												
a+	AA-	AA-	A+	A+	A+											
а	A+	Α+	A+	Α	Α	Α										
a-	A+	Α	Α	Α	A-	A-	A-									
bbb+	Α	Α	A-	A-	A-	BBB+	BBB+	BBB+								
bbb	Α-	Α-	Α-	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+	В	В	В	
b-	B+	B+	B+	B+	B+	B+	B+	B+	B+	B+	В	В	В	B-	B-	B-
ccc+	В	В	В	В	В	В	В	В	В	В	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.

Estimated ALAC - U.S. banks



Source: Company Filings; Data as of 12/31/2015; Calculations based on Est Q415 S&P RWA; Excludes all senior long-term debt instruments with less than 20-year residual maturities and trust preferred securities

- ➤ We have adjusted our initial thresholds for ALAC by +25 bps for all US GSIBs (except WFC, BK and STT) based on the operating banks' ability to maintain flexibility within the group
- We may continue to adjust these thresholds based on possible issues like large maturities of ALAC within five years, or an increasing amount of ALAC needed to be prepositioned in material subsidiaries



Outlook Revisions On U.S. Global Systemically Important Bank Ratings

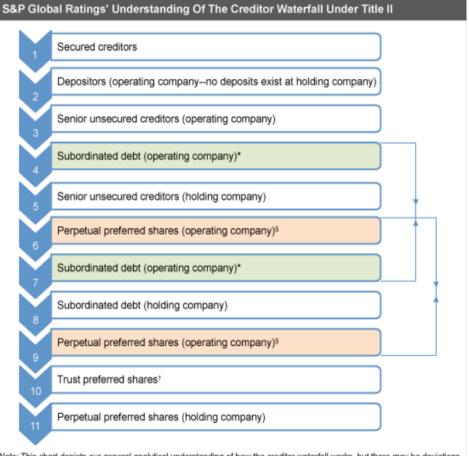
- On December 2, 2015, we lowered the holdco ratings on all eight U.S. GSIBs.
- The above actions reflect a revision in our expectation of the likelihood of extraordinary government support to U.S. banks, as "uncertain" from "supportive"; which is based on our opinion that the U.S. regulators have in place an effective resolution framework.
- Issuer and senior unsecured debt ratings on the core and highly strategic operating subsidiaries of BAC, C, MS and GS remain on CreditWatch positive, reflecting a possible additional one-notch upgrade from ALAC.
- Ratings on the core and highly strategic operating subsidiaries of BK, JPM, WFC and STT unchanged with a stable outlook.

Current U.S. Global Systemically Important Bank Ratings									
Company	SACP/unsupported GCP	ALAC Notches (#)	OpCo Ratings	Long-term rating (HoldCo)					
Bank of America Corp.	a-	1*	A/Watch Pos/A-1	BBB+/Stable/A-2					
' '	-	1*	A/Watch Pos/A-1						
Citigroup Inc.	a-	1.		BBB+/Stable/A-2					
Wells Fargo & Co.	a+	1	AA-/Stable/A-1+	A/Stable/A-1					
JPMorgan Chase & Co.	а	1	A+/Stable/A-1	A-/Stable/A-2					
Morgan Stanley	bbb+	1*	A/Watch Pos/A-1	BBB+/Stable/A-2					
The Goldman Sachs Group Inc.	bbb+	1*	A/Watch Pos/A-1	BBB+/Stable/A-2					
Bank of New York Mellon Corp.	a+	1	AA-/Stable/A-1+	A/Stable/A-1					
State Street Corp.	a+	1	AA-/Stable/A-1+	A/Stable/A-1					

SACP--Stand-alone credit profile. GCP--group credit profile. Opco--Operating company. holdco--Holding company. The GCP is Standard & Poor's opinion of a groups' creditworthiness as if it were a single legal entity. Unsupported GCP designates our opinion of a group's creditworthiness excluding the likelihood of extraordinary government support, ALAC or negative intervention from a government or wider group. ALAC- Additional loss absorbing capacity as defined by our criteria. N.A.: Not Applicable

^{*}Credit Watch Positive reflecting possible additional ALAC notch. Source: Standard & Poor's Financial Institutions Ratings.

Issuer credit ratings on the GSIFIs are in line with our analytical understanding of the creditor waterfall

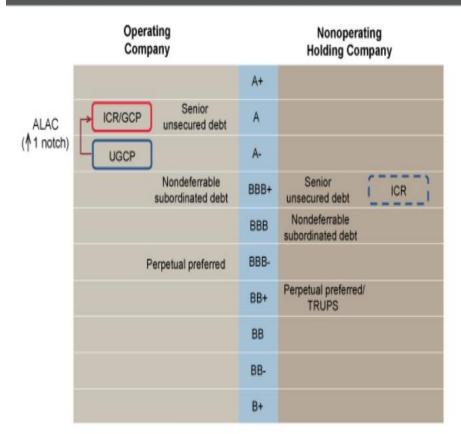


Note: This chart depicts our general analytical understanding of how the creditor waterfall works, but there may be deviations.

- * We believe it is possible subordinated debtholders at the operating entity could experience losses pre-receivership, which makes it difficult to ascertain a priori where this instrument ranks vis-a-vis holding company senior unsecured debt.
- § Dividends are deferrable, and we believe dividend payments could be ceased by regulators, resulting in an S&P Global Ratings default; principal payment though may be recovered under OLA.
- † TRUPS have largely been phased out, but the remainder count as Tier 2 capital; still we believe interest may be deferred pre-receivership.
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S&P Global Ratings

U.S. GSIFI Instrument Ratings For A Bank With An Unsupported Group Credit Profile Of 'a-'



ICR-Issuer credit rating. GCP-Group credit profile.

UGCP--Unsupported group credit profile. ALAC--Additional loss-absorbing capacity.

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Estimating Potential TLAC Requirements For Systemically Important Banks

Estimates of TLAC Shortfalls (\$mil)	BAC	С	JPM	WFC	GS	MS	вк	STT	Total	
Based on December 2015 Data	DAC		31 101	••••	33	1013				
TLAC Requirement Without Considering LTD Constraint										
Min TLAC by RWA	18%	18%	18%	18%	18%	18%	18%	18%		
Min TLAC by Leverage	9.5%	9.5%	9.5%	9.5%	9.5%	9.5%	9.5%	9.5%		
Min total TLAC/RWA	22.0%	22.5%	23%	21.5%	22%	26.3%	21.6%	23.6%		
TLAC Required	29,739	5,973	21,706	21,081	-	-	529	-	79,028	
Binding Constraint at 2022	RWA	RWA	RWA	RWA	Leverage	Leverage	Leverage	Leverage		
Minimum Long term Debt Calculat	on									
Min LTD by RWA	9.00%	9.00%	9.50%	8.00%	8.50%	9.00%	7.00%	7.50%		
Min LTD by Leverage	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%		
Implied Long-Term Debt Shortfall	9,744	14,062	27,157	11,851	-	-	-	2,221	65,03	
Total Additional LTD and Tier 1 Capital Needed	29,739	14,062	27,157	21,081	-	-	529	2,221	94,78	
Constraining Factor	TLAC	LTD	LTD	TLAC	None	None	TLAC	LTD		

Notes:

- 1. Consider new reduced GSIB surcharges for Citi, JPM and GS of 3%, 3.5%, and 2.5%, respectively.
- 2. Does not incorporate any assumption that the companies could reduce total leverage exposure.
- 3. Does not exclude non-US jurisdictional debt
- 4. Excludes structured debt wherever disclosure is available





S&P's Views On U.S. TLAC Requirements

- Although the level of capital that needs to be maintained under the total lossabsorbing capacity (TLAC) proposal should suffice to recapitalize a failed GSIB, regulators and bank management teams need to be cautious and vigilant so that the very issuance of the TLAC to prepare for a failure does not generate incremental vulnerability related to refinancing risk and a higher risk appetite.
- The amount of TLAC that U.S. GSIBs will need to issue seems manageable from a market supply perspective, as long as long-term debt with acceleration clauses (outside of nonpayment) counts as TLAC.
- We think GSIBs would benefit from being able to maintain a degree of flexibility in terms of distribution of regulatory TLAC across their subsidiaries globally in order to allocate buffers, if needed, as risks emerge within particular entities of a group.
- **TLAC disclosure** is important for investors to better assess their risk positioning in the payments waterfall and to enhance the credibility of the resolution plan.

S&P Global's Views On Living Wills

Progress Has Been Made But Deficiencies Still Exist

- Liquidity
- Governance
- Operational
- Legal entity
- Derivatives

S&P GlobalRatings

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