BEFORE THE
STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

In the Matter of

CENTRAL HUDSON GAS & ELECTRIC CORPORATION

Cases 14-E-0318 & 14-G-0319

NOVEMBER 2014

Prepared Exhibits of:

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Summary of Exhibits **Cases 14-E-0318 & 14-G-0319**

Exhibit_(KXD-#)	# of Pages	Description
Exhibit_(KXD-1)	16	Interrogatory Responses of Central Hudson Supporting Staff Testimony
Exhibit_(KXD-2)	1	Summary of Staff's Cost of Capital
Exhibit_(KXD-3)	1	Fortis Inc. Corporate Structure
Exhibit_(KXD-4)	63	Moody's December 23, 2013 Credit Rating Methodology
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Exhibit_(KXD-9)	1	Actual Coupon Rates on "A/A-" Rated Utility Debt Issuances for the period 30 days ending October 15,2014
Exhibit_(KXD-10)	2	Summary of Staff's Cost of Equity
Exhibit_(KXD-11)	2	Universe of Value Line Electric Holding Companies
Exhibit_(KXD-12)	2	Staff Proxy Group
Exhibit_(KXD-13)	1	Three- Month Average Stock Prices for Staff Proxy Group
Exhibit_(KXD-14)	2	Discounted Cash Flow Calculation For Staff Proxy Group
Exhibit_(KXD-15)	6	Merrill Lynch Quantitative Profiles (Relevant Pages)
Exhibit_(KXD-16)	1	Capital Asset Pricing Model Results
Exhibit_(KXD-17)	3	Ambika Prasad Dash's Article: "Security Analysis And Portfolio Management"
Exhibit_(KXD-18)	6	Central Hudson Panel's Cost of Equity Update

Central Hudson Gas & Electric Corporation
Case Nos. 14-E-0318 & 14-G-0319
Response to Interrogatory / Document Request

Request No:	DPS-2, IR-326
From:	DPS
Date of Request:	8/19/2014
Witness:	
Subject:	Cost of Capital

Question:

Page 43, lines 13 through page 44 of the Finance Panel direct testimony indicates the Finance Panel calculated a cost of equity of 8.75% and then added 25 basis points to arrive at 9.0% recommended return on common equity (ROE).
a. Please provide the calculations and work papers supporting the derivation of the 25 basis points adder.
b. Is it your understanding that the cost of equity forms the basis for the return on equity and that the parties in this case are estimating the cost of equity for Central Hudson Gas & Electric Corporation?

Response:

A. On Page 37, lines 18 through page 38 of the Finance Panel direct testimony, the company requested the calculation of the cost of common equity be updated at the time of the Recommended Decision prepared by the Administrative Law Judge and at the time of the Commission's Order. The update request is due to the time sensitive nature of the inputs utilized within the DCF analysis and the CAPM. As stated on Page 44, lines 11 through 18 the Company expects future interest rates to be higher than current rates resulting in higher estimates of the cost of equity in the future. Additionally, as stated on Page 8, lines 8 through 21 of the direct testimony of Michael L. Mosher, the ongoing REV case may impact the risk borne by shareholders of Central Hudson and affect the continued applicability of the Generic Finance methodology. A 25 basis point placeholder was used to represent the impact that updated determinants of ROE would have when updated later in the case. No supporting calculations and work papers were developed.
B. The cost of equity is the return required by equity investors to assume the risk of ownership and is a market based concept. The cost of equity is not observable and must be estimated based on market data. Central Hudson has no way of knowing if other parties, including Staff, currently view the cost of equity as the equivalent of the allowed return on equity, however, any disruption in the historic relationship between the cost of equity and the allowed rate of return has the potential to create additional risks for NYS utilities. The ultimate impact of such risks could be an increase in the cost of equity and a deterioration of credit quality, both of which increase costs to customers.

Response by: Joseph Hally
Title: Manager Finance & Planning
Date of Response: 8/29/2014

Central Hudson Gas & Electric Corporation
Case Nos. 14-E-0318 & 14-G-0319
Response to Interrogatory / Document Request

Request No:	DR-4, IR-407
From:	DPS
Date of Request:	8/28/2014
Witness:	
Subject:	Cost of Capital

Question:

A. Please reference page 38, line 10 to 15 of your direct testimony in which you stated "The five criteria are that each company: (i) currently pays dividends ;(iv) has regulated revenue greater than or equal to 70% of its total revenues."

Please provide, in Excel spreadsheet format with formulas intact, the derivation of the regulated revenue criterion for your universe of electric and gas companies. Provide also the source data/worksheet supporting the derivation of this criterion.

B. Reference your Exhibit_(FP-7), Schedules B-1&2.
i. Given that Central Hudson is not a pure-play gas company (approximately 76% electric and 24% Gas operation), please explain the rationale for including three pure-play gas companies in your proxy group. These three pure-play gas companies are AGL Resources Inc., Northwest Natural Gas, and Piedmont Natural Gas.
ii. Did the company witness include pure-play gas companies in his proxy group for the last rate case (Cases 09-E-0588 and 09-G-0589)?
iii. For the past decade, provide a listing of the Commission's rate case decisions that have accepted the inclusion of pure-play gas companies in a proxy group for Central Hudson or similar integrated companies regulated by the Commission.

Response:

A. The information requested is provided in the attached excel spreadsheet marked at IR-407 Attachment 1 and titled "CHGE Response to DPS 407 Attachment WP_Regulated Revenues."

B. i. Central Hudson has both gas and electric operations. Therefore, we have included all electric and gas companies covered by Value Line for consideration in the universe of potential proxy companies. The Value Line Electric universe also includes several companies that do not have natural gas operations and therefore, the same question could be asked about those companies. In practice, the New York Staff has traditionally relied on a broad group of regulated energy companies to establish its ROE for the subject company. The group we have relied on is a

Central Hudson Gas & Electric Corporation
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Response to Interrogatory / Document Request

reasonable proxy for Central Hudson, given its electric and natural gas operations.
ii. The company witness did not include pure-play gas companies within the proxy group for the last rate case (Cases 09-E-0588 and 09-G-0589).
iii. The Finance Panel did not gather or research this information in conjunction with Central Hudson's current rate filing.

Response by: Joseph Hally
Title: Manager Finance & Planning
Date of Response: September 22, 2014

SCREENING CRITERIA - REGULATED REVENUE

Company	Ticker	REGULATED REVENUE / TOTAL REVENUE 2013
Value Line Natural Gas Utilities:		
AGL Resources Inc.	GAS	74.88%
Atmos Energy Corporation	ATO	68.66%
Laclede Group, Inc. (The)	LG	84.34%
New Jersey Resources Corporation	NJR	24.64%
NiSource Inc.	NI	102.50%
Northwest Natural Gas Company	NWN	99.97%
Piedmont Natural Gas Company, Inc.	PNY	100.00%
South Jersey Industries, Inc.	SJI	61.04%
Southwest Gas Corporation	SWX	66.65%
UGI Corporation	UGI	11.66%
WGL Holdings, Inc.	WGL	48.67%
Value Line Electric Utilities:		
ALLETE, Inc.	ALE	90.88%
Alliant Energy Corporation	LNT	98.42%
Ameren Corporation	AEE	99.74%
American Electric Power Company, Inc.	AEP	94.73%
Avista Corporation	AVA	86.75%
Black Hills Corporation	BKH	94.45%
CenterPoint Energy, Inc.	CNP	69.32%
Cleco Corporation	CNL	99.93%
CMS Energy Corporation	CMS	96.27%
Consolidated Edison, Inc.	ED	91.17%
Dominion Resources, Inc.	D	89.60%
DTE Energy Company	DTE	70.44%
Duke Energy Corporation	DUK	85.01%
Edison International	EIX	99.85%
El Paso Electric Company	EE	100.00%
Empire District Electric Company	EDE	98.67%
Entergy Corporation	ETR	79.90%
Exelon Corporation	EXC	42.71%
FirstEnergy Corporation	FE	63.54%
Great Plains Energy Inc.	GXP	100.00%
Hawaiian Electric Industries, Inc.	HE	92.02%
IDACORP, Inc.	IDA	99.75%
Integrys Energy Group, Inc.	TEG	61.00%
ITC Holdings Corporation	ITC	100.03%
MGE Energy, Inc.	MGEE	101.30%
NextEra Energy, Inc.	NEE	69.01%
Northeast Utilities	NU	98.57%
NorthWestern Corporation	NWE	99.85%
OGE Energy Corporation	OGE	100.87%
Otter Tail Corporation	OTTR	41.82%
Pepco Holdings, Inc.	POM	95.84%
PG&E Corporation	PCG	100.00%
Pinnacle West Capital Corporation	PNW	100.00%
PNM Resources, Inc.	PNM	100.00%
Portland General Electric Company	POR	100.00%
PPL Corporation	PPL	40.83%
Public Service Enterprise Group Inc.	PEG	66.76%
SCANA Corporation	SCG	75.02%
Sempra Energy	SRE	73.90%
Southern Company	SO	94.43%
TECO Energy, Inc.	TE	82.21%
UIL Holdings Corporation	UIL	99.99%
UNS Energy Corporation	UNS	101.48%
Vectren Corporation	VVC	57.39%
Westar Energy, Inc.	WR	100.00%
Wisconsin Energy Corporation	WEC	98.74%
Xcel Energy Inc.	XEL	99.34%

Notes:
[1] Source: 2013 Company 10-K Reports

Workpaper prepared by Concentric Energy Advisors

VALUE LINE NATURAL GAS UTILITIES

AGL Resources Inc. (GAS) Revenue							
Year	Total	Distribution Operations	Retail Operations	Wholesale Services	Midstream Operations	Cargo Shipping	Other and Intercompany Eliminations
2013	4,617	3,457	858	58	74	365	(195)
Source:	2013 10-K, pages 98-99						

Atmos Energy Corporation (ATO) Revenue					
	Total	Natural Gas Distribution	Regulated Transmission and Storage	Nonregulated	Eliminations
2013	3,886,257	2,399,493	268,900	1,598,711	(380,847)
Source:	2013 10-K, year ended September 30, 2013, pages 48-49, 96-98				

Laclede Group, Inc. (The) (LG) Revenue					
	Total	Gas Utility	Gas Marketing	Other	Unallocated and Eliminations
2013	1,017,019	857,762	189,331	6,274	(36,348)
Source:	2013 10-K, page 87				

New Jersey Resources Corporation (NJR) Revenue						
	Total	Natural Gas Distribution	Energy Services	Clean Energy Ventures	Retail and Other	Eliminations
2013	3,198,068	787,987	2,356,578	11,988	47,954	(6,439)
Source:	2013 10-K, year ended September 30, 2013, pages 107-109, 68, 43					

NiSource Inc. (NI) Revenue						
	Total	Gas Distribution Operations	Columbia Pipeline Group Operations	Electric Operations	Corporate and Other	Eliminations
2013	5,657.3	3,053.8	1,179.8	1,564.9	497.0	(638.2)
Source:	2013 10-K, pages 124-125					

Northwest Natural Gas Company (NWN) Revenue				
	Total	Utility	Gas Storage	Other
2013	758,518	727,182	31,112	224
Source:	2013 10-K, page 66			

Piedmont Natural Gas Company, Inc. (PNY) Revenue			
	Total	Regulated Utility	Non-Utility Activities
2013	1,278,229	1,278,229	-
Source:	2013 10-K, page 132		

South Jersey Industries, Inc. (SJI) Revenue									
	Total	Gas Utility Operations	Wholesale Energy Operations	Retail Gas and Other Operations	Retail Electric Operations	On-Site Energy Production	Appliance Service Operations	Corporate Services	Intersegment Sales
2013	731,421	446,480	831	107,748	128,932	43,551	13,723	31,286	(41,130)
Source:	2013 10-K pages 65-67								

Southwest Gas Corporation (SWX) Revenue			
	Total	Gas Operations	Construction Services
2013	1,950,782	1,300,154	650,628
Source:	2013 10-K, pages 17, 23, 75-76		

UGI Corporation (UGI) Revenue									
				Midstream & Marketing		International Propane			
	Total	AmeriGas Propane	Gas Utility	Energy Services	Electric Generation	Antargaz	Flaga & Other	Corporate & Other	Eliminations
2013	7,194.7	3,168.8	839.0	969.4	71.4	1,322.6	856.6	190.7	(223.8)
Source:	2013 10-K, page F-67 - F-68								

WGL Holdings, Inc. (WGL) Revenue							
			Non-Utility Operations				
	Total	Regulated Utility	Retail Energy-Marketing	Commercial Energy Systems	Wholesale Energy Solutions	Other Activities	Eliminations
2013	2,466,138	1,200,357	1,279,364	35,217	(20,390)	-	(28,410)
Source:	2013 10-K, pages 130-132						

VALUE LINE ELECTRIC UTILITIES

ALLETE, Inc. (ALE) Revenue			
	Total	Regulated Operations	Investments and Other
2013	1,018.4	925.5	92.9
Source:	2013 10-K, pages 77-78		

Alliant Energy Corporation (LNT) Revenue						
		Utility			Non-Regulated	
	Total	Electric	Gas	Other	RMT	Other
2013	3,276.8	2,689.0	464.8	71.3		51.7
Source:	2013 10-K, pages 191-93					

Ameren Corporation (AEE) Revenue					
	Total	Ameren Missouri	Ameren Illinois	Other	Intersegment Eliminations
2013	5,838	3,516	2,307	15	0
Source:	2013 10K for year ending December 31, 2013, page 154				

American Electric Power Company, Inc. (AEP) Revenue								
	Total	Vertically Integrated Utilities	Transmission and Distribution Utilities	Generation and Marketing	AEP Transmission Holdco	AEP River Operations	Corporate and Other	Reconciling Adjustments
2013	15,357	9,992	4,478	3,665	78	563	89	(3,508)
Source:	2013 10-K, pages 111-112							

Avista Corporation (AVA) Revenue					
	Total	Avista Utilities	Ecova	Other	Intersegment Eliminations
2013	1,618,505	1,403,995	176,761	39,549	(1,800)
Source:	2013 10-K, page 249				

Black Hills Corporation (BKH) Revenue								
	Total	Electric Utility	Gas Utility	Oil and Gas	Power Generation	Coal Mining	Corporate	Intersegment Eliminations
2013	1,275,852	665,308	539,689	54,884	83,037	56,628	220,620	(344,314)
Source:	2013 10-K, pages 138-139							

CenterPoint Energy, Inc. (CNP) Revenue									
	Total	Electric Transmission and Distribution	Natural Gas Distribution	Energy Services	Interstate Pipelines	Field Services	Midstream Investments	Other	Reconciling Eliminations
2013	8,106	2,570	2,863	2,401	186	196	0	14	(124)
Source:	2013 10-K, page 115								

5,619 69.32%

Cleco Corporation (CNL) Revenue					
	Total	Cleco Power	Midstream	Other	Eliminations
2013	1,096,714	1,095,959	31,672	57,236	(88,153)
Source:	2013 10-K, page 102-103				

VALUE LINE ELECTRIC UTILITIES

CMS Energy Corporation (CMS) Revenue					
	Total	Electric Utility	Gas Utility	Enterprises	Other
2013	6,566	4,173	2,148	181	64
Source:	2013 10-K, pages 153-155				

Consolidated Edison, Inc. (ED) Revenue										
		CECONY				O&R				
	Total	Electric	Gas	Steam	Consolidation Adjustments	Electric	Gas	Other	Competitive Energy Businesses	Other
2013	12,354	8,147	1,621	765	(103)	628	205	0	1,096	(5)
Source:	2013 10-K, page 125									

Dominion Resources, Inc. (D) Revenue						
	Total	DVP	Dominion Generation	Dominion Energy	Corporate and Other	Adjustments & Eliminations
2013	13,120	1,834	8,513	2,846	612	(685)
Source:	2013 10-K, page 130					

7075.880872

Dominion Resources, Inc. (D) Generation	
Regulated Generation (MW)	19,606.00
Merchant Generation (MW)	3,982.00
Total	23,588.00
Source:	2013 10-K, pages 30-31

DTE Energy Company (DTE) Revenue								
				Non-utility Operations				
	Total	Electric Utility	Gas Utility	Gas Storage and Pipelines	Power and Industrial Projects	Energy Trading	Corporate & Other	Reconciliation and Eliminations
2013	9,661	5,199	1,474	132	1,950	1,771	3	(868)
Source:	2013 10-K, page 109							

Duke Energy Corporation (DUK) Revenue						
	Total	Regulated Utilities	Commercial Power	International Energy	Other	Eliminations
2013	24,598	20,910	2,145	1,546	163	(166)
Source:	2013 10-K, page 38-43, 124					

Edison International (EIX) Revenue			
	Total	Electric Utility	Other
2013	12,581	12,562	19
Source:	2013 10-K, pages 22, 31, 56, 63, 130		

El Paso Electric Company (EE) Revenue		
	Total	El Paso Electric Company
2013	890,362	890,362
Source:	2013 10-K, page 25	

0.831185348

7075.880872

7,076

11,756

0.896027505

VALUE LINE ELECTRIC UTILITIES

Empire District Electric Company (EDE) Revenue					
	Total	Electric	Gas	Other	Eliminations
2013	594,330	536,413	50,041	9,147	(1,271)
Source:	2013 10-K, pages 56, 110				

Entergy Corporation (ETR) Revenue					
	Total	Utility	Entergy Wholesale Commodities	All Other	Eliminations
2013	11,390,947	9,101,786	2,312,758	3,558	(27,155)
Source:	2013 10-K, page 184				

Exelon Corporation (EXC) Revenue							
	Total	Generation	ComEd	PECO	BGE	Other	Intersegment Eliminations
2013	24,888	15,630	4,464	3,100	3,065	1,241	(2,612)
Source:	2013 10-K, page 418						

FirstEnergy Corp. (FE) Revenue						
	Total	Regulated Distribution	Competitive Energy Services	Regulated Independent Transmission	Other	Reconciling Adjustments
2013	14,917	8,738	6,495	741	(121)	(936)
Source:	2013 10-K, page 208					

Great Plains Energy Inc. (GXP) Revenue				
	Total	Electric Utility	Other	Eliminations
2013	2,446.3	2,446.3	0.0	0.0
Source:	2013 10-K, page 115			

Hawaiian Electric Industries, Inc. (HE) Revenue				
	Total	Electric Utility	Bank	Other
2013	3,238,470	2,980,172	258,147	151
Source:	2013 10-K, page 99			

IDACORP, Inc. (IDA) Revenue				
	Total	Utility Operations	All Other	Eliminations
2013	1,246,214	1,243,098	3,116	0
Source:	2013 10-K, page 129			

Integrys Energy Group, Inc. (TEG) Revenue							
		Regulated Operations			Nonutility and Nonregulated Operations		
	Total	Natural Gas Utility	Electric Utility	Electric Transmission Investment	Integrys Energy Services	Holding Company and Other	Reconciling Eliminations
2013	5,634.6	2,105.0	1,332.1	0.0	2,167.5	44.2	(14.2)
Source:	2013 10-K, pages 102-103						

VALUE LINE ELECTRIC UTILITIES

ITC Holdings Corporation (ITC) Revenue				
	Total	Regulated Operating Subsidiaries	ITC Holdings and Other	Reconciliations/ Eliminations
2013	941,272	941,571	567	(866)
Source:	2013 10-K, pages 96-97			

	MGE Energy, Inc. (MGEE) Revenue							
	Total	Electric	Gas	Assets not Allocated	Non-Regulated Energy	Transmission Investment	All Others	Consolidation/ Eliminations Entries
2013	590,887	404,494	194,091	NA	48,059	0	0	(55,757)
Source:	2013 10-K, page 97							

NextEra Energy, Inc. (NEE) Revenue				
	Total	FPL	NextEra Energy Resources	Corporate and Other
2013	15,136	10,445	4,333	358
Source:	2013 10-K, page 120			

Northeast Utilities (NU) Revenue						
	Total	Electric	Gas	Transmission	Other	Eliminations
2013	7,301.2	5,362.3	855.8	978.7	777.5	(673.1)
Source:	2013 10-K, page 159					

NorthWestern Corporation (NWE) Revenue					
	Total	Electric	Gas	Other	Eliminations
2013	1,154,519	865,239	287,605	1,675	0
Source:	2013 10-K, pages F-46, F-47				

OGE Energy Corporation (OGE) Revenue					
	Total	Electric Utility	Natural Gas Midstream Operations	Other Operations	Eliminations
2013	2,867.7	2,262.2	630.4	0.0	(24.9)
Source:	2013 10-K, page 118				

Otter Tail Corporation (OTTR) Revenue						
	Total	Electric	Manufacturing	Construction	Plastics	Intersegment Eliminations
2013	893,313	373,540	204,997	149,910	164,957	(91)
Source:	2013 10-K, pages 86-87					

Pepco Holdings, Inc. (POM) Revenue				
	Total	Power Delivery	Pepco Energy Services	Corporate and Other
2013	4,666	4,472	203	(9)
Source:	2013 10-K, pages 152-156			

VALUE LINE ELECTRIC UTILITIES

PG&E Corporation (PCG) Revenue			
	Total	Electric Utility	Natural Gas Utility
2013	15,593	12,489	3,104
Source:	2013 10-K, pages 2, 7		

Pinnacle West Capital Corporation (PNW) Revenue			
	Total	Regulated Electricity	All Other
2013	3,451	3,451	0
Source:	2013 10-K, pages 156-158		

PNM Resources, Inc. (PNM) Revenue				
	Total	PNM	TNMP	Corporate and Other
2013	1,387,923	1,116,312	271,611	0
Source:	2013 10-K, page B-39			

Portland General Electric Company (POR) Revenue		
	Total	Portland General Electric Company
2013	1,810	1,810
Source:	2013 10-K, page 37	

PPL Corporation (PPL) Revenue						
	Total	Kentucky Regulated	U.K. Regulated	Pennsylvania Regulated	Supply	Corporate and Other
2013	11,860	2,976	2,403	1,866	4,602	13
Source:	2013 10-K, pages 168-169					

Public Service Enterprise Group Incorporated (PEG) Revenue					
	Total	Power	PSE&G	Other	Eliminations
2013	9,968	5,063	6,655	52	(1,802)
Source:	2013 10-K, pages 160-162				

SCANA Corporation (SCG) Revenue							
	Total	Electric Operations	Gas Distribution	Retail Gas Marketing	Energy Marketing	All Other	Adjustments/ Eliminations
2013	4,495	2,429	943	465	819	456	(617)
Source:	2013 10-K, pages 89-90						

Sempra Energy (SRE) Revenue										
		SDG&E								
	Total	Electric	Natural Gas	SoCalGas	Sempra South American Utilities	Sempra Mexico	Sempra Renewables	Sempra Natural Gas	Adjustments and Eliminations	Intersegment Revenues
2013	10,557	3,537	529	3,736	1,495	675	82	908	(2)	(403)
Source:	2013 10-K, pages 204, 394-396									

VALUE LINE ELECTRIC UTILITIES

Southern Company (SO) Revenue						
	Total	Traditional Operating Companies	Southern Power	Eliminations	Other	Eliminations
2013	17,087	16,136	1,275	(376)	139	(87)
Source:	2013 10-K, pages II-112 - II-113					

TECO Energy, Inc. (TE) Revenue						
	Total	Tampa Electric	PGS	TECO Coal	TECO Guatemala	Other & Eliminations
2013	2,851.3	1,950.5	393.5	496.2	0.0	11.1
Source:	2013 10-K, pages 110-111					

UIL Holdings Corporation (UIL) Revenue					
		Electric Distribution and Transmission			
	Total	Distribution	Transmission	Gas Distribution	Other
2013	1,618,716	560,877	242,681	815,023	135
Source:	2013 10-K, pages 99-100				

UNS Energy Corporation (UNS) Revenue						
	Total	TEP	UNS Gas	UNS Electric	Other	Reconciling Adjustments
2013	1,485	1,197	134	176	19	(41)
Source:	2013 10-K, pages K-12, k-60, K-101 - K-102					

Vectren Corporation (VVC) Revenue							
		Utility Group					
	Total	Gas Utility Services	Electric Utility Services	Other Operations	Eliminations	Non-Utility Group	Eliminations / Corporate & Other Net Loss
2013	2,491.2	810.0	619.3	38.1	(37.8)	1,167.6	(106.0)
Source:	2013 10-K, pages 107-110						

Westar Energy, Inc. (WR) Revenue		
	Total	Utility Sales
2013	2,370,654	2,370,654
Source:	2013 10-K, pages 27, 61	

Wisconsin Energy Corporation (WEC) Revenue							
	Total	Electric Utility	Gas Utility	Other Utility	Non-Utility	Corporate & Other	Eliminations & Reconciling Items
2013	4,519.0	3,308.7	1,113.7	39.6	446.7	1.3	(391.0)
Source:	2013 10-K, pages 42, 101-102						

Xcel Energy Inc. (XEL) Revenue					
	Total	Regulated Electric	Regulated Natural Gas	All Other	Reconciling Eliminations
2013	10,914,922	9,035,377	1,807,396	76,198	(4,049)
Source:	2013 10-K, pages 161-163				

Central Hudson Gas & Electric Corporation
Case Nos. 14-E-0318 & 14-G-0319
Response to Interrogatory / Document Request

Request No: DPS-4, IR-408
From: DPS
Date of Request: 8/28/2014
Witness:
Subject: Cost of Capital

Question: Reference your Exhibit (FP-6), Schedules A-1.

a. For each listed debt in Exhibit_(FP-6), Schedule A-1, please provide the amortization of debt discount and expense as of historic test year (March 31, 2013), and the rate year ending June 30,2016.
b. What is the average debt issuance expense expressed as a percentage of principal amount of long-term debt issued?

Response:

A. The information requested was provided by Central Hudson with the initial work papers request on August 6, 2014, Request No. 1. For your convenience we are re-submitting the Excel worksheet marked at IR-408 Attachment 1 and entitled “CHGE Response to DPS-408 WP_(FP - 6) Sch A Debt iss cost amort - wp” with full view of the data.
B. Central Hudson anticipates that average debt issuance expense will average approximately 1% of principal amount of long-term debt issued.

Response by: Joseph Hally
Title: Manager Finance & Planning
Date of Response: September 22, 2014

Central Hudson Gas & Electric Corporation
Case Nos. 14-E-0318 & 14-G-0319
Response to Interrogatory / Document Request

Request No.: DPS-4, IR-454
Requested by: DPS
Date of Request September 12, 2014
Witness:
Subject: Cost of Capital

Question:

(Updates on Interest Rates on Auction Rate Securities)
Reference your Exhibit_(FP-6), Schedules A-1. For every two weeks, please provide updates to the interest rates on the auction rate securities listed in the above-mentioned exhibit until further notice.

Response:

Auctions are conducted every 35 days. The most recent result, the "Winning Rate", is shown in percent. We will update this response as new auctions are completed.

Auction Date	Benchmark	Base Rate	Winning Rate	Percent Base Rate	Days in Period
09/18/2014	30INV	0.052	0.091	175%	35

Response by: Stacey Renner
Title(s): Treasurer
Date of Response: September 23, 2014

Central Hudson Gas & Electric Corporation
Case Nos. 14-E-0318 & 14-G-0319
Response to Interrogatory / Document Request

Request No.:	DPS-9, IR-704
Requested by:	DPS
Date of Request	October 2, 2014
Witness:	
Subject:	Cost of Capital

Question:

Reference your Exhibit_(FP-6), Schedule A-1. Please provide the latest actual interest rate on the 2014 Series E variable rate bond.

Response:

The interest rate resets at the end of each quarter and is determined by three-month LIBOR plus 100 basis points. Effective September 30, 2014, the rate was established at 1.24% (three-month LIBOR of 0.24% plus 1% credit spread).

Response by:	Stacey Renner
Title(s):	Treasurer
Date of Response:	October 13, 2014

Central Hudson Gas & Electric Corporation
Summary of Cost of Capital
For the Rate Year Ending June 30, 2016

Capital Structure	Capital	Percent	Cost Rate	Weighted Cost
Long-term debt	$604,367,000	51.41%	4.45%	2.29%
Customer Deposit	$7,000,000	0.60%	1.15%	0.01%
Common Equity	564,254,000	48.00%	8.70%	4.18%
Total	$1,175,621,000	100.00%		6.48%

Cases 14-E-0318 & 14-G-0319

Exhibit__(KXD-3)

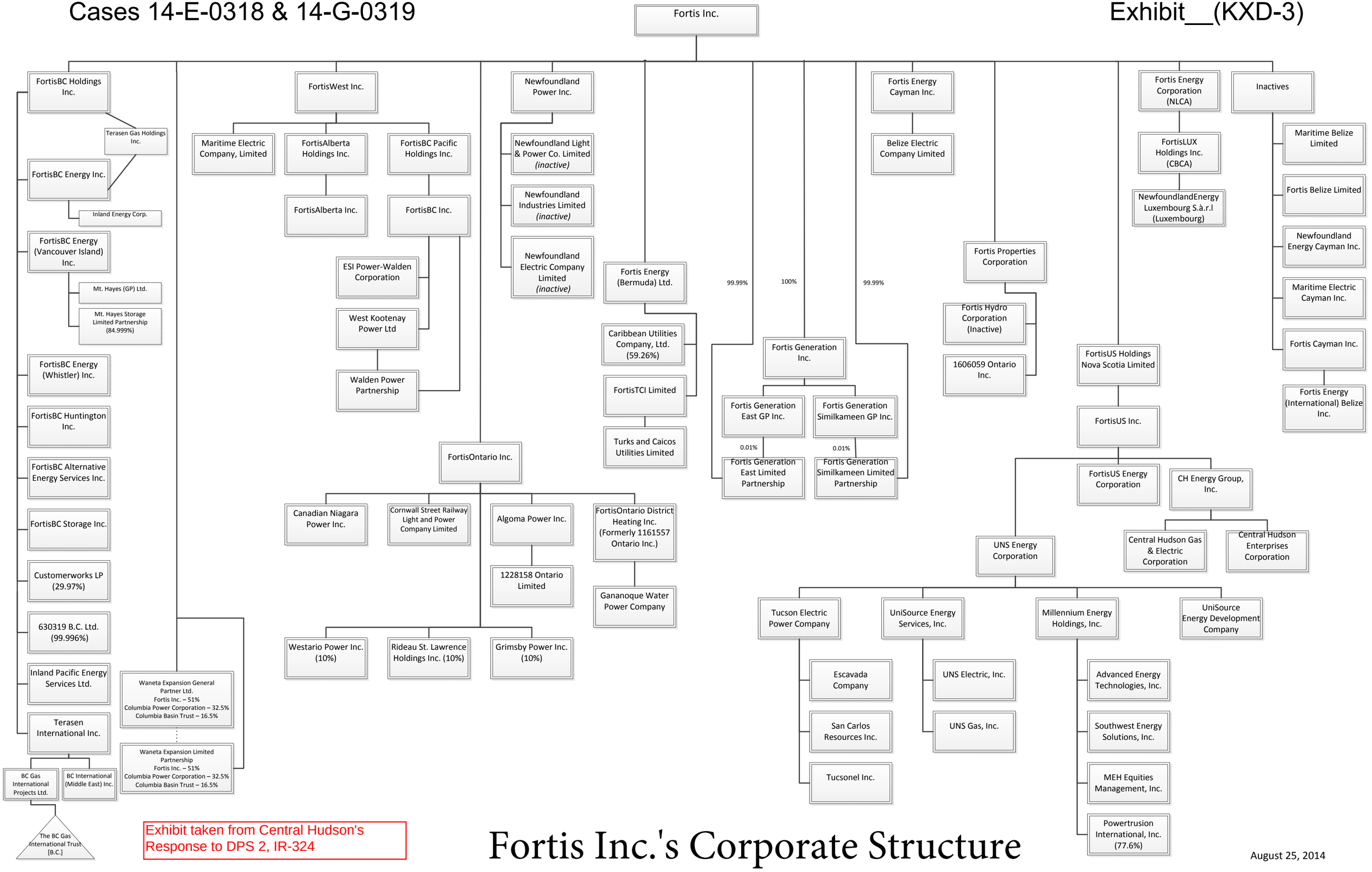


Exhibit taken from Central Hudson's Response to DPS 2, IR-324

Fortis Inc.'s Corporate Structure

August 25, 2014

Moody's December 23, 2013 Credit Rating Methodology

MOODY'S
INVESTORS SERVICE

Regulated Electric and Gas Utilities

Summary

This rating methodology explains Moody's approach to assessing credit risk for regulated electric and gas utilities globally and is intended to provide general guidance that helps companies, investors, and other interested market participants understand how qualitative and quantitative risk characteristics are likely to affect rating outcomes for companies in the regulated electric and gas utility industry. This document does not include an exhaustive treatment of all factors that are reflected in Moody's ratings but should enable the reader to understand the qualitative considerations and financial information and ratios that are usually most important for ratings in this sector.

This rating methodology replaces[1] the Rating Methodology for Regulated Electric and Gas Utilities published in August 2009. While reflecting many of the same core principles as the 2009 methodology, this updated document provides a more transparent presentation of the rating considerations that are usually most important for companies in this sector and incorporates refinements in our analysis that better reflect credit fundamentals of the industry. No rating changes will result from publication of this rating methodology.

This report includes a detailed rating grid and illustrative examples that compare the mapping of rated public companies against the factors in the grid. The grid is a reference tool that can be used to approximate credit profiles within the regulated electric and gas utility sector in most cases. The grid provides summarized guidance for the factors that are generally most important in assigning ratings to companies in the regulated electric and gas utility industry. However, the grid is a summary that does not include every rating consideration. The weights shown for each factor in the grid represent an approximation of their importance for rating decisions but actual importance may vary substantially. In addition, the illustrative mapping examples in this document use historical results while ratings are based on our forward-looking expectations. As a result, the grid-indicated rating is not expected to match the actual rating of each company.

[1] This update may not be effective in some jurisdictions until certain requirements are met.

The grid contains four key factors that are important in our assessment for ratings in the regulated electric and gas utility sector, and a notching factor for structural subordination at holding companies:

1. Regulatory Framework
2. Ability to Recover Costs and Earn Returns
3. Diversification
4. Financial Strength

Some of these factors also encompass a number of sub-factors. Since an issuer's scoring on a particular grid factor or sub-factor often will not match its overall rating, in Appendix C we include a discussion of some of the grid "outliers" – companies whose grid-indicated rating for a specific sub-factor differs significantly from the actual rating – in order to provide additional insights.

This rating methodology is not intended to be an exhaustive discussion of all factors that our analysts consider in assigning ratings in this sector. We note that our analysis for ratings in this sector covers factors that are common across all industries such as ownership, management, liquidity, corporate legal structure, governance and country related risks which are not explained in detail in this document, as well as factors that can be meaningful on a company-specific basis. Our ratings consider these and other qualitative considerations that do not lend themselves to a transparent presentation in a grid format. The grid used for this methodology reflects a decision to favor a relatively simple and transparent presentation rather than a more complex grid that would map grid-indicated ratings more closely to actual ratings.

Highlights of this report include:

» An overview of the rated universe

» A summary of the rating methodology

» A discussion of the key rating factors that drive ratings

» Comments on the rating methodology assumptions and limitations, including a discussion of rating considerations that are not included in the grid

The Appendices show the full grid (Appendix A), a list of the companies included in our illustrative sample universe of issuers with their ratings, grid-indicated ratings and country of domicile (Appendix B), tables that illustrate the application of the grid to the sample universe of issuers, with explanatory comments on some of the more significant differences between the grid-implied rating for each sub-factor and our actual rating (Appendix C)[2], our approach to ratings within a utility family (Appendix D), a description of the various types of companies rated under this methodology (Appendix E), key industry issues over the intermediate term (Appendix F), regional and other considerations (Appendix G), and treatment of power purchase agreements (Appendix H).

[2] In general, the rating (or other indicator of credit strength) utilized for comparison to the grid-implied rating is the senior unsecured rating for investment-grade issuers, the Corporate Family Rating (CFR) for speculative-grade issuers and the Baseline Credit Assessment (BCA) for Government Related Issuers (GRIs). Individual debt instrument ratings also factor in decisions on notching for seniority level and collateral. Related documents that provide additional insight in this area are the rating methodologies "Loss Given Default for Speculative Grade Non-Financial Companies in the US, Canada and EMEA", published June 2009, and "Updated Summary Guidance for Notching Bonds, Preferred Stocks and Hybrid Securities of Corporate Issuers", published February 2007.

What's Changed

While incorporating many of the core principles of the 2009 version, this methodology updates how the four key rating factors are defined, and how certain sub-factors are weighted in the grid.

More specifically, this methodology introduces four equally weighted sub-factors into the two rating factors that are related to regulation –the Regulatory Framework and the Ability to Recover Costs and Earn Returns – in order to provide more granularity and transparency on the overall regulatory environment, which is the most important consideration for this sector.

The weighting of the grid indicators for diversification are unchanged, but the proposed descriptive criteria have been refined to place greater emphasis on the economic and regulatory diversity of each utility's service area rather than the diversity of operations, because we think this emphasis better distinguishes credit risk. We have refined the definitions of the Generation and Fuel Diversity sub-factor to better incorporate the full range of challenges that can affect a particular fuel type.

While the overall weighting of the Financial Strength factor is unchanged, the weighting for two sub-factors that seek to measure debt in relation to cash flow has increased. The 15% weight for CFO Pre-WC/Debt reflects our view that this is the single most predictive financial measure, followed in importance by CFO Pre-WC - Dividends/Debt with a 10% grid weighting. The additional weighting of these ratios is balanced by the elimination of a separate liquidity sub-factor that had a 10% weighting in the prior grid.

Liquidity assessment remains a key focus of our analysis. However, we consider it as a qualitative assessment outside the grid because its credit importance varies greatly over time and by issuer and accordingly is not well represented by a fixed grid weight. See "Other Rating Considerations" for insights on liquidity analysis in this sector.

Lower financial metric thresholds have been introduced for certain utilities viewed as having lower business risk, for instance many US natural gas local distribution companies (LDCs) and certain US electric transmission and distribution companies (T&Ds, which lack generation but generally retain some procurement responsibilities for customers). The low end of the scale in the methodology grid has been extended from B to Caa to better capture our views of more challenging regulatory environments and weaker performance.

We have introduced minor changes to financial metric thresholds at the lower end of the scale, primarily to incorporate this extension of the grid.

We have incorporated scorecard notching for structural subordination at holding companies. Ratings already incorporated structural subordination, but including an adjustment in the scorecard will result in a closer alignment of grid-indicated outcomes and ratings for holding companies.

Treatment of first mortgage bonds (primarily in the US), which was the subject of a Request for Comment in 2009 and adopted subsequent to the 2009 methodology, is summarized in Appendix G.

This methodology describes the analytical framework used in determining credit ratings. In some instances our analysis is also guided by additional publications which describe our approach for analytical considerations that are not specific to any single sector. Examples of such considerations include but are not limited to: the assignment of short-term ratings, the relative ranking of different classes of debt and hybrid securities, how sovereign credit quality affects non-sovereign issuers, and the assessment of credit support from other entities. Documents that describe our approach to such cross-sector methodological considerations can be found here.

About the Rated Universe

The Regulated Electric and Gas Utilities rating methodology applies to rate-regulated[3] electric and gas utilities that are not Networks[4]. Regulated Electric and Gas Utilities are companies whose predominant[5] business is the sale of electricity and/or gas or related services under a rate-regulated framework, in most cases to retail customers. Also included under this methodology are rate-regulated utilities that own generating assets as any material part of their business, utilities whose charges or bills to customers include a meaningful component related to the electric or gas commodity, utilities whose rates are regulated at a sub-sovereign level (e.g. by provinces, states or municipalities), and companies providing an independent system operator function to an electric grid. Companies rated under this methodology are primarily rate-regulated monopolies or, in certain circumstances, companies that may not be outright monopolies but where government regulation effectively sets prices and limits competition.

This rating methodology covers regulated electric and gas utilities worldwide. These companies are engaged in the production, transmission, coordination, distribution and/or sale of electricity and/or natural gas, and they are either investor owned companies, commercially oriented government owned companies or, in the case of independent system operators, not-for-profit or similar entities. As detailed in Appendix E, this methodology covers a wide variety of companies active in the sector, including vertically integrated utilities, transmission and distribution utilities with retail customers and/or sub-sovereign regulation, local gas distribution utility companies (LDCs), independent system operators, and regulated generation companies. These companies may be operating companies or holding companies.

An over-arching consideration for regulated utilities is the regulatory environment in which they operate. While regulation is also a key consideration for networks, a utility's regulatory environment is in comparison often more dynamic and more subject to political intervention. The direct relationship that a regulated utility has with the retail customer, including billing for electric or gas supply that has substantial price volatility, can lead to a more politically charged rate-setting environment. Similarly, regulation at the sub-sovereign level is often more accessible for participation by interveners, including disaffected customers and the politicians who want their votes. Our views of regulatory environments evolve over time in accordance with our observations of regulatory, political, and judicial events that affect issuers in the sector.

This methodology pertains to regulated electric and gas utilities and excludes the following types of issuers, which are covered by separate rating methodologies: Regulated Networks, Unregulated Utilities and Power Companies, Public Power Utilities, Municipal Joint Action Agencies, Electric Cooperatives, Regulated Water Companies and Natural Gas Pipelines.

[3] Companies in many industries are regulated. We use the term rate-regulated to distinguish companies whose rates (by which we also mean tariffs or revenues in general) are set by regulators.

[4] Regulated Electric and Gas Networks are companies whose predominant business is purely the transmission and/or distribution of electricity and/or natural gas without involvement in the procurement or sale of electricity and/or gas; whose charges to customers thus do not include a meaningful commodity cost component; which sell mainly (or in many cases exclusively) to non-retail customers; and which are rate-regulated under a national framework.

[5] We generally consider a company to be predominantly a regulated electric and gas utility when a majority of its cash flows, prospectively and on a sustained basis, are derived from regulated electric and gas utility businesses. Since cash flows can be volatile (such that a company might have a majority of utility cash flows simply due to a cyclical downturn in its non-utility businesses), we may also consider the breakdown of assets and/or debt of a company to determine which business is predominant.

Other Related Methodologies

» Regulated Electric and Gas Networks

» Unregulated Utilities and Power Companies

» Natural Gas Pipelines

» US Public Power Electric Utilities with Generation Ownership Exposure

» US Electric Generation & Transmission Cooperatives

» US Municipal Joint Action Agencies

» Government Related Issuers: Methodology Update

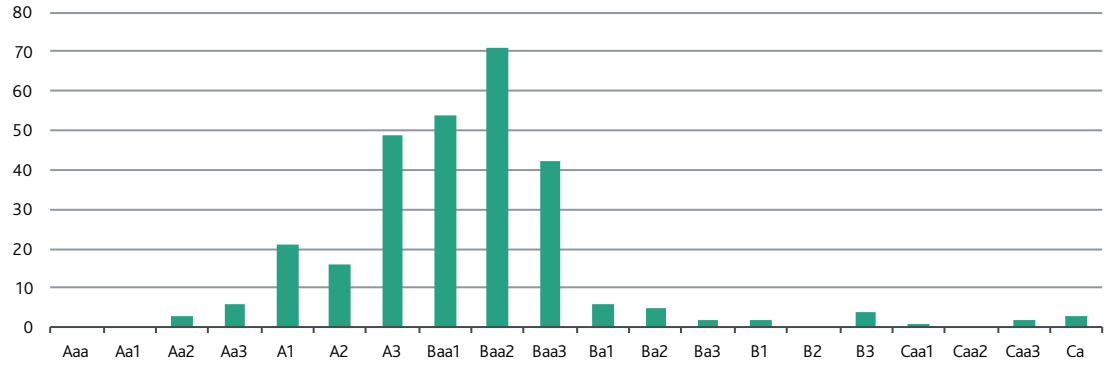
» Global Regulated Water Utilities

The rated universe includes approximately 315 entities that are either utility operating companies or a parent holding company with one or more utility company subsidiaries that operate predominantly in the electric and gas utility business. These companies account for about US$730 billion of total outstanding long-term debt instruments.

The Regulated Electric and Gas Utility sector is predominantly investment grade, reflecting the stability generally conferred by regulation that typically sets prices and also limits competition, such that defaults have been lower than in many other non-financial corporate sectors. However, the nature of regulation can vary significantly from jurisdiction to jurisdiction. Most issuers at the lower end of the ratings spectrum operate in challenging regulatory environments. Additional information about the ratings and default performance of the sector can be found in our publication "Infrastructure Default and Recovery Rates, 1983-2012H1". As shown on the following table, the ratings spectrum for issuers in the sector (both holding companies and operating companies) ranges from Aaa to Ca:

EXHIBIT 1

Regulated Electric and Gas Utilities' Senior Unsecured Ratings Distribution



Source: Moody's Investors Service, ratings as of December 2013

About this Rating Methodology

This report explains the rating methodology for regulated electric and gas utilities in seven sections, which are summarized as follows:

1. Identification and Discussion of the Rating Factors in the Grid

The grid in this rating methodology focuses on four rating factors. The four factors are comprised of sub-factors that provide further detail:

Factor / Sub-Factor Weighting - Regulated Utilities

Broad Rating Factors	Broad Rating Factor Weighting	Rating Sub-Factor	Sub-Factor Weighting
Regulatory Framework	25%	Legislative and Judicial Underpinnings of the Regulatory Framework	12.5%
		Consistency and Predictability of Regulation	12.5%
Ability to Recover Costs and Earn Returns	25%	Timeliness of Recovery of Operating and Capital Costs	12.5%
		Sufficiency of Rates and Returns	12.5%
Diversification	10%	Market Position	5%*
		Generation and Fuel Diversity	5%**
Financial Strength, Key Financial Metrics	40%		
		CFO pre-WC + Interest/ Interest	7.5%
		CFO pre-WC / Debt	15.0%
		CFO pre-WC – Dividends / Debt	10.0%
		Debt/Capitalization	7.5%
Total	**100%**		**100%**
Notching Adjustment			
		Holding Company Structural Subordination	0 to -3

*10% weight for issuers that lack generation; **0% weight for issuers that lack generation

2. Measurement or Estimation of Factors in the Grid

We explain our general approach for scoring each grid factor and show the weights used in the grid. We also provide a rationale for why each of these grid components is meaningful as a credit indicator. The information used in assessing the sub-factors is generally found in or calculated from information in company financial statements, derived from other observations or estimated by Moody's analysts.

Our ratings are forward-looking and reflect our expectations for future financial and operating performance. However, historical results are helpful in understanding patterns and trends of a company's performance as well as for peer comparisons. We utilize historical data (in most cases, an average of the last three years of reported results) in this document to illustrate the application of the rating grid. All of the quantitative credit metrics incorporate Moody's standard adjustments to income statement, cash flow statement and balance sheet amounts for restructuring, impairment, off-balance sheet accounts, receivable securitization programs, under-funded pension obligations, and recurring operating leases.

For definitions of Moody's most common ratio terms please see Moody's Basic Definitions for Credit Statistics, User's Guide (June 2011, document #78480). For a description of Moody's standard adjustments, please see Moody's Approach to Global Standard Adjustments in the Analysis of Financial Statements for Non-Financial Corporations December 2010 (128137). These documents can be found at www.moodys.com under the Research and Ratings directory.

In most cases, the illustrative examples in this document use historic financial data from a recent three year period. However, the factors in the grid can be assessed using various time periods. For example, rating committees may find it analytically useful to examine both historic and expected future performance for periods of several years or more, or for individual twelve month periods.

3. Mapping Factors to the Rating Categories

After estimating or calculating each sub-factor, the outcomes for each of the sub-factors are mapped to a broad Moody's rating category (Aaa, Aa, A, Baa, Ba, B, or Caa).

4. Mapping Issuers to the Grid and Discussion of Grid Outliers

In Appendix C, we provide a table showing how each company in the sample set of issuers maps to grid-indicated ratings for each rating sub-factor and factor. We highlight companies whose grid-indicated performance on a specific sub-factor is two or more broad rating categories higher or lower than its actual rating and discuss the general reasons for such positive and negative outliers for a particular sub-factor.

5. Assumptions, Limitations and Rating Considerations Not Included in the Grid

This section discusses limitations in the use of the grid to map against actual ratings, some of the additional factors that are not included in the grid but can be important in determining ratings, and limitations and assumptions that pertain to the overall rating methodology.

6. Determining the Overall Grid-Indicated Rating

To determine the overall grid-indicated rating, we convert each of the sub-factor ratings into a numeric value based upon the scale below.

Aaa	Aa	A	Baa	Ba	B	Caa	Ca
1	3	6	9	12	15	18	20

The numerical score for each sub-factor is multiplied by the weight for that sub-factor with the results then summed to produce a composite weighted-factor score. The composite weighted factor score is then mapped back to an alphanumeric rating based on the ranges in the table below.

Grid-Indicated Rating

Grid-Indicated Rating	Aggregate Weighted Total Factor Score
Aaa	x < 1.5
Aa1	1.5 ≤ x < 2.5
Aa2	2.5 ≤ x < 3.5
Aa3	3.5 ≤ x < 4.5
A1	4.5 ≤ x < 5.5
A2	5.5 ≤ x < 6.5
A3	6.5 ≤ x < 7.5
Baa1	7.5 ≤ x < 8.5
Baa2	8.5 ≤ x < 9.5
Baa3	9.5 ≤ x < 10.5
Ba1	10.5 ≤ x < 11.5
Ba2	11.5 ≤ x < 12.5
Ba3	12.5 ≤ x < 13.5
B1	13.5 ≤ x < 14.5
B2	14.5 ≤ x < 15.5
B3	15.5 ≤ x < 16.5
Caa1	16.5 ≤ x < 17.5
Caa2	17.5 ≤ x < 18.5
Caa3	18.5 ≤ x < 19.5
Ca	x ≥ 19.5

For example, an issuer with a composite weighted factor score of 11.7 would have a Ba2 grid-indicated rating. We used a similar procedure to derive the grid indicated ratings shown in the illustrative examples.

7. Appendices

The Appendices provide illustrative examples of grid-indicated ratings based on historical financial information and also provide additional commentary and insights on our view of credit risks in this industry.

Discussion of the Grid Factors

Moody's analysis of electric and gas utilities focuses on four broad factors:

» Regulatory Framework

» Ability to Recover Costs and Earn Returns

» Diversification

» Financial Strength

There is also a notching factor for holding company structural subordination.

Factor 1: Regulatory Framework (25%)

Why It Matters

For rate-regulated utilities, which typically operate as a monopoly, the regulatory environment and how the utility adapts to that environment are the most important credit considerations. The regulatory environment is comprised of two rating factors - the Regulatory Framework and its corollary factor, the Ability to Recover Costs and Earn Returns. Broadly speaking, the Regulatory Framework is the foundation for how all the decisions that affect utilities are made (including the setting of rates), as well as the predictability and consistency of decision-making provided by that foundation. The Ability to Recover Costs and Earn Returns relates more directly to the actual decisions, including their timeliness and the rate-setting outcomes.

Utility rates[6] are set in a political/regulatory process rather than a competitive or free-market process; thus, the Regulatory Framework is a key determinant of the success of utility. The Regulatory Framework has many components: the governing body and the utility legislation or decrees it enacts, the manner in which regulators are appointed or elected, the rules and procedures promulgated by those regulators, the judiciary that interprets the laws and rules and that arbitrates disagreements, and the manner in which the utility manages the political and regulatory process. In many cases, utilities have experienced credit stress or default primarily or at least secondarily because of a break-down or obstacle in the Regulatory Framework – for instance, laws that prohibited regulators from including investments in uncompleted power plants or plants not deemed "used and useful" in rates, or a disagreement about rate-making that could not be resolved until after the utility had defaulted on its debts.

How We Assess Legislative and Judicial Underpinnings of the Regulatory Framework for the Grid

For this sub-factor, we consider the scope, clarity, transparency, supportiveness and granularity of utility legislation, decrees, and rules as they apply to the issuer. We also consider the strength of the regulator's authority over rate-making and other regulatory issues affecting the utility, the effectiveness of the judiciary or other independent body in arbitrating disputes in a disinterested manner, and whether the utility's monopoly has meaningful or growing carve-outs. In addition, we look at how well developed the framework is – both how fully fleshed out the rules and regulations are and how well tested it is – the extent to which regulatory or judicial decisions have created a body of precedent that will help determine future rate-making. Since the focus of our scoring is on each issuer, we consider

[6] In jurisdictions where utility revenues include material government subsidy payments, we consider utility rates to be inclusive of these payments, and we thus evaluate sub-factors 1a, 1b, 2a and 2b in light of both rates and material subsidy payments. For example, we would consider the legal and judicial underpinnings and consistency and predictability of subsidies as well as rates.

how effective the utility is in navigating the regulatory framework – both the utility's ability to shape the framework and adapt to it.

A utility operating in a regulatory framework that is characterized by legislation that is credit supportive of utilities and eliminates doubt by prescribing many of the procedures that the regulators will use in determining fair rates (which legislation may show evidence of being responsive to the needs of the utility in general or specific ways), a long history of transparent rate-setting, and a judiciary that has provided ample precedent by impartially adjudicating disagreements in a manner that addresses ambiguities in the laws and rules will receive higher scores in the Legislative and Judicial Underpinnings sub-factor. A utility operating in a regulatory framework that, by statute or practice, allows the regulator to arbitrarily prevent the utility from recovering its costs or earning a reasonable return on prudently incurred investments, or where regulatory decisions may be reversed by politicians seeking to enhance their populist appeal will receive a much lower score.

In general, we view national utility regulation as being less liable to political intervention than regulation by state, provincial or municipal entities, so the very highest scoring in this sub-factor is reserved for this category. However, we acknowledge that states and provinces in some countries may be larger than small nations, such that their regulators may be equally "above-the-fray" in terms of impartial and technically-oriented rate setting, and very high scoring may be appropriate.

The relevant judicial system can be a major factor in the regulatory framework. This is particularly true in litigious societies like the United States, where disagreements between the utility and its state or municipal regulator may eventually be adjudicated in federal district courts or even by the US Supreme Court. In addition, bankruptcy proceedings in the US take place in federal courts, which have at times been able to impose rate settlement agreements on state or municipal regulators. As a result, the range of decisions available to state regulators may be effectively circumscribed by court precedent at the state or federal level, which we generally view as favorable for the credit-supportiveness of the regulatory framework.

Electric and gas utilities are generally presumed to have a strong monopoly that will continue into the foreseeable future, and this expectation has allowed these companies to have greater leverage than companies in other sectors with similar ratings. Thus, the existence of a monopoly in itself is unlikely to be a driver of strong scoring in this sub-factor. On the other hand, a strong challenge to the monopoly could cause lower scoring, because the utility can only recover its costs and investments and service its debt if customers purchase its services. There have some instances of incursions into utilities' monopoly, including municipalization, self-generation, distributed generation with net metering, or unauthorized use (beyond the level for which the utility receives compensation in rates). Incursions that are growing significantly or having a meaningful impact on rates for customers that remain with the utility could have a negative impact on scoring of this sub-factor and on factor 2 - Ability to Recover Costs and Earn Returns.

The scoring of this sub-factor may not be the same for every utility in a particular jurisdiction. We have observed that some utilities appear to have greater sway over the relevant utility legislation and promulgation of rules than other utilities – even those in the same jurisdiction. The content and tone of publicly filed documents and regulatory decisions sometimes indicates that the management team at one utility has better responsiveness to and credibility with its regulators or legislators than the management at another utility.

While the underpinnings to the regulatory framework tend to change relatively slowly, they do evolve, and our factor scoring will seek to reflect that evolution. For instance, a new framework will typically become tested over time as regulatory decisions are issued, or perhaps litigated, thereby setting a body of precedent. Utilities may seek changes to laws in order to permit them to securitize certain costs or collect interim rates, or a jurisdiction in which rates were previously recovered primarily in base rate proceedings may institute riders and trackers. These changes would likely impact scoring of sub-factor 2b - Timeliness of Recovery of Operating and Capital Costs, but they may also be sufficiently significant to indicate a change in the regulatory underpinnings. On the negative side, a judiciary that had formerly been independent may start to issue decisions that indicate it is conforming its decisions to the expectations of an executive branch that wants to mandate lower rates.

Factor 1a: Legislative and Judicial Underpinnings of the Regulatory Framework (12.5%)

Aaa	Aa	A	Baa
Utility regulation occurs under a fully developed framework that is national in scope based on legislation that provides the utility a nearly absolute monopoly (see note 1) within its service territory, an unquestioned assurance that rates will be set in a manner that will permit the utility to make and recover all necessary investments, an extremely high degree of clarity as to the manner in which utilities will be regulated and prescriptive methods and procedures for setting rates. Existing utility law is comprehensive and supportive such that changes in legislation are not expected to be necessary; or any changes that have occurred have been strongly supportive of utilities credit quality in general and sufficiently forward-looking so as to address problems before they occurred. There is an independent judiciary that can arbitrate disagreements between the regulator and the utility should they occur, including access to national courts, very strong judicial precedent in the interpretation of utility laws, and a strong rule of law. We expect these conditions to continue.	Utility regulation occurs under a fully developed national, state or provincial framework based on legislation that provides the utility an extremely strong monopoly (see note 1) within its service territory, a strong assurance, subject to limited review, that rates will be set in a manner that will permit the utility to make and recover all necessary investments, a very high degree of clarity as to the manner in which utilities will be regulated and reasonably prescriptive methods and procedures for setting rates. If there have been changes in utility legislation, they have been timely and clearly credit supportive of the issuer in a manner that shows the utility has had a strong voice in the process. There is an independent judiciary that can arbitrate disagreements between the regulator and the utility, should they occur including access to national courts, strong judicial precedent in the interpretation of utility laws, and a strong rule of law. We expect these conditions to continue.	Utility regulation occurs under a well developed national, state or provincial framework based on legislation that provides the utility a very strong monopoly (see note 1) within its service territory, an assurance, subject to reasonable prudency requirements, that rates will be set in a manner that will permit the utility to make and recover all necessary investments, a high degree of clarity as to the manner in which utilities will be regulated, and overall guidance for methods and procedures for setting rates. If there have been changes in utility legislation, they have been mostly timely and on the whole credit supportive for the issuer, and the utility has had a clear voice in the legislative process. There is an independent judiciary that can arbitrate disagreements between the regulator and the utility, should they occur, including access to national courts, clear judicial precedent in the interpretation of utility law, and a strong rule of law. We expect these conditions to continue.	Utility regulation occurs (i) under a national, state, provincial or municipal framework based on legislation that provides the utility a strong monopoly within its service territory that may have some exceptions such as greater self-generation (see note 1), a general assurance that, subject to prudency requirements that are mostly reasonable, rates will be set will be set in a manner that will permit the utility to make and recover all necessary investments, reasonable clarity as to the manner in which utilities will be regulated and overall guidance for methods and procedures for setting rates; or (ii) under a new framework where independent and transparent regulation exists in other sectors. If there have been changes in utility legislation, they have been credit supportive or at least balanced for the issuer but potentially less timely, and the utility had a voice in the legislative process. There is either (i) an independent judiciary that can arbitrate disagreements between the regulator and the utility, including access to courts at least at the state or provincial level, reasonably clear judicial precedent in the interpretation of utility laws, and a generally strong rule of law; or (ii) regulation has been applied (under a well developed framework) in a manner such that redress to an independent arbiter has not been required. We expect these conditions to continue.

Ba	B	Caa
Utility regulation occurs (i) under a national, state, provincial or municipal framework based on legislation or government decree that provides the utility a monopoly within its service territory that is generally strong but may have a greater level of exceptions (see note 1), and that, subject to prudency requirements which may be stringent, provides a general assurance (with somewhat less certainty) that rates will be set will be set in a manner that will permit the utility to make and recover necessary investments; or (ii) under a new framework where the jurisdiction has a history of less independent and transparent regulation in other sectors. Either: (i) the judiciary that can arbitrate disagreements between the regulator and the utility may not have clear authority or may not be fully independent of the regulator or other political pressure, but there is a reasonably strong rule of law; or (ii) where there is no independent arbiter, the regulation has mostly been applied in a manner such redress has not been required. We expect these conditions to continue.	Utility regulation occurs (i) under a national, state, provincial or municipal framework based on legislation or government decree that provides the utility monopoly within its service territory that is reasonably strong but may have important exceptions, and that, subject to prudency requirements which may be stringent or at times arbitrary, provides more limited or less certain assurance that rates will be set in a manner that will permit the utility to make and recover necessary investments; or (ii) under a new framework where we would expect less independent and transparent regulation, based either on the regulator's history in other sectors or other factors. The judiciary that can arbitrate disagreements between the regulator and the utility may not have clear authority or may not be fully independent of the regulator or other political pressure, but there is a reasonably strong rule of law. Alternately, where there is no independent arbiter, the regulation has been applied in a manner that often requires some redress adding more uncertainty to the regulatory framework. There may be a periodic risk of creditor-unfriendly government intervention in utility markets or rate-setting.	Utility regulation occurs (i) under a national, state, provincial or municipal framework based on legislation or government decree that provides the utility a monopoly within its service territory, but with little assurance that rates will be set in a manner that will permit the utility to make and recover necessary investments; or (ii) under a new framework where we would expect unpredictable or adverse regulation, based either on the jurisdiction's history of in other sectors or other factors. The judiciary that can arbitrate disagreements between the regulator and the utility may not have clear authority or is viewed as not being fully independent of the regulator or other political pressure. Alternately, there may be no redress to an effective independent arbiter. The ability of the utility to enforce its monopoly or prevent uncompensated usage of its system may be limited. There may be a risk of creditor-unfriendly nationalization or other significant intervention in utility markets or rate-setting.

Note 1: The strength of the monopoly refers to the legal, regulatory and practical obstacles for customers in the utility's territory to obtain service from another provider. Examples of a weakening of the monopoly would include the ability of a city or large user to leave the utility system to set up their own system, the extent to which self-generation is permitted (e.g. cogeneration) and/or encouraged (e.g., net metering, DSM generation). At the lower end of the ratings spectrum, the utility's monopoly may be challenged by pervasive theft and unauthorized use. Since utilities are generally presumed to be monopolies, a strong monopoly position in itself is not sufficient for a strong score in this sub-factor, but a weakening of the monopoly can lower the score.

How We Assess Consistency and Predictability of Regulation for the Grid

For the Consistency and Predictability sub-factor, we consider the track record of regulatory decisions in terms of consistency, predictability and supportiveness. We evaluate the utility's interactions in the regulatory process as well as the overall stance of the regulator toward the utility.

In most jurisdictions, the laws and rules seek to make rate-setting a primarily technical process that examines costs the utility incurs and the returns on investments the utility needs to earn so it can make investments that are required to build and maintain the utility infrastructure - power plants, electric transmission and distribution systems, and/or natural gas distribution systems. When the process remains technical and transparent such that regulators can support the financial health of the utility while balancing their public duty to assure that reliable service is provided at a reasonable cost, and when the utility is able to align itself with the policy initiatives of the governing jurisdiction, the utility will receive higher scores in this sub-factor. When the process includes substantial political intervention, which could take the form of legislators or other government officials publically second-guessing regulators, dismissing regulators who have approved unpopular rate increases, or preventing the implementation of rate increases, or when regulators ignore the laws/rules to deliver an outcome that appears more politically motivated, the utility will receive lower scores in this sub-factor.

As with the prior sub-factor, we may score different utilities in the same jurisdiction differently, based on outcomes that are more or less supportive of credit quality over a period of time. We have observed that some utilities are better able to meet the expectations of their customers and regulators, whether through better service, greater reliability, more stable rates or simply more effective regulatory outreach and communication. These utilities typically receive more consistent and credit supportive outcomes, so they will score higher in this sub-factor. Conversely, if a utility has multiple rapid rate increases, chooses to submit major rate increase requests during a sensitive election cycle or a severe economic downturn, has chronic customer service issues, is viewed as frequently providing incomplete information to regulators, or is tone deaf to the priorities of regulators and politicians, it may receive less consistent and supportive outcomes and thus score lower in this sub-factor.

In scoring this sub-factor, we will primarily evaluate the actions of regulators, politicians and jurists rather than their words. Nonetheless, words matter when they are an indication of future action. We seek to differentiate between political rhetoric that is perhaps oriented toward gaining attention for the viewpoint of the speaker and rhetoric that is indicative of future actions and trends in decision-making.

Factor 1b: Consistency and Predictability of Regulation (12.5%)			
Aaa	**Aa**	**A**	**Baa**
The issuer's interaction with the regulator has led to a strong, lengthy track record of predictable, consistent and favorable decisions. The regulator is highly credit supportive of the issuer and utilities in general. We expect these conditions to continue.	The issuer's interaction with the regulator has a led to a considerable track record of predominantly predictable and consistent decisions. The regulator is mostly credit supportive of utilities in general and in almost all instances has been highly credit supportive of the issuer. We expect these conditions to continue.	The issuer's interaction with the regulator has led to a track record of largely predictable and consistent decisions. The regulator may be somewhat less credit supportive of utilities in general, but has been quite credit supportive of the issuer in most circumstances. We expect these conditions to continue.	The issuer's interaction with the regulator has led to an adequate track record. The regulator is generally consistent and predictable, but there may some evidence of inconsistency or unpredictability from time to time, or decisions may at times be politically charged. However, instances of less credit supportive decisions are based on reasonable application of existing rules and statutes and are not overly punitive. We expect these conditions to continue.
Ba	**B**	**Caa**	
We expect that regulatory decisions will demonstrate considerable inconsistency or unpredictability or that decisions will be politically charged, based either on the issuer's track record of interaction with regulators or other governing bodies, or our view that decisions will move in this direction. The regulator may have a history of less credit supportive regulatory decisions with respect to the issuer, but we expect that the issuer will be able to obtain support when it encounters financial stress, with some potentially material delays. The regulator's authority may be eroded at times by legislative or political action. The regulator may not follow the framework for some material decisions.	We expect that regulatory decisions will be largely unpredictable or even somewhat arbitrary, based either on the issuer's track record of interaction with regulators or other governing bodies, or our view that decisions will move in this direction. However, we expect that the issuer will ultimately be able to obtain support when it encounters financial stress, albeit with material or more extended delays. Alternately, the regulator is untested, lacks a consistent track record, or is undergoing substantial change. The regulator's authority may be eroded on frequent occasions by legislative or political action. The regulator may more frequently ignore the framework in a manner detrimental to the issuer.	We expect that regulatory decisions will be highly unpredictable and frequently adverse, based either on the issuer's track record of interaction with regulators or other governing bodies, or our view that decisions will move in this direction. Alternately, decisions may have credit supportive aspects, but may often be unenforceable. The regulator's authority may have been seriously eroded by legislative or political action. The regulator may consistently ignore the framework to the detriment of the issuer.	

Factor 2: Ability to Recover Costs and Earn Returns (25%)

Why It Matters

This rating factor examines the ability of a utility to recover its costs and earn a return over a period of time, including during differing market and economic conditions. While the Regulatory Framework looks at the transparency and predictability of the rules that govern the decision-making process with respect to utilities, the Ability to Recover Costs and Earn Returns evaluates the regulatory elements that directly impact the ability of the utility to generate cash flow and service its debt over time. The ability to recover prudently incurred costs on a timely basis and to attract debt and equity capital are crucial credit considerations. The inability to recover costs, for instance if fuel or purchased power costs ballooned during a rate freeze period, has been one of the greatest drivers of financial stress in this sector, as well as the cause of some utility defaults. In a sector that is typically free cash flow negative (due to large capital expenditures and dividends) and that routinely needs to refinance very large maturities of long-term debt, investor concerns about a lack of timely cost recovery or the sufficiency of rates can, in an extreme scenario, strain access to capital markets and potentially lead to insolvency of the utility (as was the case when "used and useful" requirements threatened some utilities that experienced years of delay in completing nuclear power plants in the 1980s). While our scoring for the Ability to Recover Costs and Earn Returns may primarily be influenced by our assessment of the regulatory relationship, it can also be highly impacted by the management and business decisions of the utility.

How We Assess Ability to Recover Costs and Earn Returns

The timeliness and sufficiency of rates are scored as separate sub-factors; however, they are interrelated. Timeliness can have an impact on our view of what constitutes sufficient returns, because a strong assurance of timely cost recovery reduces risk. Conversely, utilities may have a strong assurance that they will earn a full return on certain deferred costs until they are able to collect them, or their generally strong returns may allow them to weather some rate lag on recovery of construction-related capital expenditures. The timeliness of cost recovery is particularly important in a period of rapidly rising costs. During the past five years, utilities have benefitted from low interest rates and generally decreasing fuel costs and purchased power costs, but these market conditions could easily reverse. For example, fuel is a large component of total costs for vertically integrated utilities and for natural gas utilities, and fuel prices are highly volatile, so the timeliness of fuel and purchased power cost recovery is especially important.

While Factors 1 and 2 are closely inter-related, scoring of these factors will not necessarily be the same. We have observed jurisdictions where the Regulatory Framework caused considerable credit concerns – perhaps it was untested or going through a transition to de-regulation, but where the track record of rate case outcomes was quite positive, leading to a higher score in the Ability to Recover Costs and Earn Returns. Conversely, there have been instances of strong Legislative and Judicial Underpinnings of the Regulatory Framework where the commission has ignored the framework (which would affect Consistency and Predictability of Regulation as well as Ability to Recover Costs and Earn Returns) or has used extraordinary measures to prevent or defer an increase that might have been justifiable from a cost perspective but would have caused rate shock.

One might surmise that Factors 2 and 4 should be strongly correlated, since a good Ability to Recover Costs and Earn Returns would normally lead to good financial metrics. However, the scoring for the Ability to Recover Costs and Earn Returns sub-factor places more emphasis on our expectation of timeliness and sufficiency of rates over time; whereas financial metrics may be impacted by one-time

events, market conditions or construction cycles - trends that we believe could normalize or even reverse.

How We Assess Timeliness of Recovery of Operating and Capital Costs for the Grid

The criteria we consider include provisions and cost recovery mechanisms for operating costs, mechanisms that allow actual operating and/or capital expenditures to be trued-up periodically into rates without having to file a rate case (this may include formula rates, rider and trackers, or the ability to periodically adjust rates for construction work in progress) as well as the process and timeframe of general tariff/base rate cases – those that are fully reviewed by the regulator, generally in a public format that includes testimony of the utility and other stakeholders and interest groups. We also look at the track record of the utility and regulator for timeliness. For instance, having a formula rate plan is positive, but if the actual process has included reviews that are delayed for long periods, it may dampen the benefit to the utility. In addition, we seek to estimate the lag between the time that a utility incurs a major construction expenditures and the time that the utility will start to recover and/or earn a return on that expenditure.

How We Assess Sufficiency of Rates and Returns for the Grid

The criteria we consider include statutory protections that assure full cost recovery and a reasonable return for the utility on its investments, the regulatory mechanisms used to determine what a reasonable return should be, and the track record of the utility in actually recovering costs and earning returns. We examine outcomes of rate cases/tariff reviews and compare them to the request submitted by the utility, to prior rate cases/tariff reviews for the same utility and to recent rate/tariff decisions for a peer group of comparable utilities. In this context, comparable utilities are typically utilities in the same or similar jurisdiction. In cases where the utility is unique or nearly unique in its jurisdiction, comparison will be made to other peers with an adjustment for local differences, including prevailing rates of interest and returns on capital, as well as the timeliness of rate-setting. We look at regulatory disallowances of costs or investments, with a focus on their financial severity and also on the reasons given by the regulator, in order to assess the likelihood that such disallowances will be repeated in the future.

Factor 2a: Timeliness of Recovery of Operating and Capital Costs (12.5%)

Aaa	Aa	A	Baa
Tariff formulas and automatic cost recovery mechanisms provide full and highly timely recovery of all operating costs and essentially contemporaneous return on all incremental capital investments, with statutory provisions in place to preclude the possibility of challenges to rate increases or cost recovery mechanisms. By statute and by practice, general rate cases are efficient, focused on an impartial review, quick, and permit inclusion of fully forward-looking costs.	Tariff formulas and automatic cost recovery mechanisms provide full and highly timely recovery of all operating costs and essentially contemporaneous or near-contemporaneous return on most incremental capital investments, with minimal challenges by regulators to companies' cost assumptions. By statute and by practice, general rate cases are efficient, focused on an impartial review, of a very reasonable duration before non-appealable interim rates can be collected, and primarily permit inclusion of forward-looking costs.	Automatic cost recovery mechanisms provide full and reasonably timely recovery of fuel, purchased power and all other highly variable operating expenses. Material capital investments may be made under tariff formulas or other rate-making permitting reasonably contemporaneous returns, or may be submitted under other types of filings that provide recovery of cost of capital with minimal delays. Instances of regulatory challenges that delay rate increases or cost recovery are generally related to large, unexpected increases in sizeable construction projects. By statute or by practice, general rate cases are reasonably efficient, primarily focused on an impartial review, of a reasonable duration before rates (either permanent or non-refundable interim rates) can be collected, and permit inclusion of important forward-looking costs.	Fuel, purchased power and all other highly variable expenses are generally recovered through mechanisms incorporating delays of less than one year, although some rapid increases in costs may be delayed longer where such deferrals do not place financial stress on the utility. Incremental capital investments may be recovered primarily through general rate cases with moderate lag, with some through tariff formulas. Alternately, there may be formula rates that are untested or unclear. Potentially greater tendency for delays due to regulatory intervention, although this will generally be limited to rates related to large capital projects or rapid increases in operating costs.

Ba	B	Caa
There is an expectation that fuel, purchased power or other highly variable expenses will eventually be recovered with delays that will not place material financial stress on the utility, but there may be some evidence of an unwillingness by regulators to make timely rate changes to address volatility in fuel, or purchased power, or other market-sensitive expenses. Recovery of costs related to capital investments may be subject to delays that are somewhat lengthy, but not so pervasive as to be expected to discourage important investments.	The expectation that fuel, purchased power or other highly variable expenses will be recovered may be subject to material delays due to second-guessing of spending decisions by regulators or due to political intervention. Recovery of costs related to capital investments may be subject to delays that are material to the issuer, or may be likely to discourage some important investment.	The expectation that fuel, purchased power or other highly variable expenses will be recovered may be subject to extensive delays due to second-guessing of spending decisions by regulators or due to political intervention. Recovery of costs related to capital investments may be uncertain, subject to delays that are extensive, or that may be likely to discourage even necessary investment.

Note: Tariff formulas include formula rate plans as well as trackers and riders related to capital investment.

Factor 2b: Sufficiency of Rates and Returns (12.5%)

Aaa	Aa	A	Baa
Sufficiency of rates to cover costs and attract capital is (and will continue to be) unquestioned.	Rates are (and we expect will continue to be) set at a level that permits full cost recovery and a fair return on all investments, with minimal challenges by regulators to companies' cost assumptions. This will translate to returns (measured in relation to equity, total assets, rate base or regulatory asset value, as applicable) that are strong relative to global peers.	Rates are (and we expect will continue to be) set at a level that generally provides full cost recovery and a fair return on investments, with limited instances of regulatory challenges and disallowances. In general, this will translate to returns (measured in relation to equity, total assets, rate base or regulatory asset value, as applicable) that are generally above average relative to global peers, but may at times be average.	Rates are (and we expect will continue to be) set at a level that generally provides full operating cost recovery and a mostly fair return on investments, but there may be somewhat more instances of regulatory challenges and disallowances, although ultimate rate outcomes are sufficient to attract capital without difficulty. In general, this will translate to returns (measured in relation to equity, total assets, rate base or regulatory asset value, as applicable) that are average relative to global peers, but may at times be somewhat below average.

Ba	B	Caa
Rates are (and we expect will continue to be) set at a level that generally provides recovery of most operating costs but return on investments may be less predictable, and there may be decidedly more instances of regulatory challenges and disallowances, but ultimate rate outcomes are generally sufficient to attract capital. In general, this will translate to returns (measured in relation to equity, total assets, rate base or regulatory asset value, as applicable) that are generally below average relative to global peers, or where allowed returns are average but difficult to earn. Alternately, the tariff formula may not take into account all cost components and/or remuneration of investments may be unclear or at times unfavorable.	We expect rates will be set at a level that at times fails to provide recovery of costs other than cash costs, and regulators may engage in somewhat arbitrary second-guessing of spending decisions or deny rate increases related to funding ongoing operations based much more on politics than on prudency reviews. Return on investments may be set at levels that discourage investment. We expect that rate outcomes may be difficult or uncertain, negatively affecting continued access to capital. Alternately, the tariff formula may fail to take into account significant cost components other than cash costs, and/or remuneration of investments may be generally unfavorable.	We expect rates will be set at a level that often fails to provide recovery of material costs, and recovery of cash costs may also be at risk. Regulators may engage in more arbitrary second-guessing of spending decisions or deny rate increases related to funding ongoing operations based primarily on politics. Return on investments may be set at levels that discourage necessary maintenance investment. We expect that rate outcomes may often be punitive or highly uncertain, with a markedly negative impact on access to capital. Alternately, the tariff formula may fail to take into account significant cash cost components, and/or remuneration of investments may be primarily unfavorable.

Factor 3: Diversification (10%)

Why It Matters

Diversification of overall business operations helps to mitigate the risk that economic cycles, material changes in a single regulatory regime or commodity price movements will have a severe impact on cash flow and credit quality of a utility. While utilities' sales volumes have lower exposure to economic recessions than many non-financial corporate issuers, some sales components, including industrial sales, are directly affected by economic trends that cause lower production and/or plant closures. In addition, economic activity plays a role in the rate of customer growth in the service territory and (absent energy efficiency and conservation) can often impact usage per customer. The economic strength or weakness of the service territory can affect the political and regulatory environment for rate increase requests by the utility. For utilities in areas prone to severe storms and other natural disasters, the utility's geographic diversity or concentration can be a key determinant for creditworthiness. Diversity among regulatory regimes can mitigate the impact of a single unfavorable decision affecting one part of the utility's footprint.

For utilities with electric generation, fuel source diversity can mitigate the impact (to the utility and to its rate-payers) of changes in commodity prices, hydrology and water flow, and environmental or other regulations affecting plant operations and economics. We have observed that utilities' regulatory environments are most likely to become unfavorable during periods of rapid rate increases (which are more important than absolute rate levels) and that fuel diversity leads to more stable rates over time. For that reason, fuel diversity can be important even if fuel and purchased power expenses are an automatic pass-through to the utility's ratepayers. Changes in environmental, safety and other regulations have caused vulnerabilities for certain technologies and fuel sources during the past five years. These vulnerabilities have varied widely in different countries and have changed over time.

How We Assess Market Position for the Grid

Market position is comprised primarily of the economic diversity of the utility's service territory and the diversity of its regulatory regimes. We also consider the diversity of utility operations (e.g., regulated electric, gas, water, steam) when there are material operations in more than one area. Economic diversity is a typically a function of the population, size and breadth of the territory and the businesses that drive its GDP and employment. For the size of the territory, we typically consider the number of customers and the volumes of generation and/or throughput. For breadth, we consider the number of sizeable metropolitan areas served, the economic diversity and vitality in those metropolitan areas, and any concentration in a particular area or industry. In our assessment, we may consider various information sources. For example, in the US, information sources on the diversity and vitality of economies of individual states and metropolitan areas may include Moody's Economy.com. We also look at the mix of the utility's sales volumes among customer types, as well as the track record of volume sales and any notable payment patterns during economic cycles. For diversity of regulatory regimes, we typically look at the number of regulators and the percentages of revenues and utility assets that are under the purview of each. While the highest scores in the Market Position sub-factor are reserved for issuers regulated in multiple jurisdictions, when there is only one regulator, we make a differentiation of regimes perceived as having lower or higher volatility.

Issuers with multiple supportive regulatory jurisdictions, a balanced sales mix among residential, commercial, industrial and governmental customers in a large service territory with a robust and diverse economy will generally score higher in this sub-factor. An issuer with a small service territory economy that has a high dependence on one or two sectors, especially highly cyclical industries, will

generally score lower in this sub-factor, as will issuers with meaningful exposure to economic dislocations caused by natural disasters.

For issuers that are vertically integrated utilities having a meaningful amount of generation, this sub-factor has a weighting of 5%. For electric transmission and distribution utilities without meaningful generation and for natural gas local distribution companies, this sub-factor has a weighting of 10%.

How We Assess Generation and Fuel Diversity for the Grid

Criteria include the fuel type of the issuer's generation and important power purchase agreements, the ability of the issuer to economically shift its generation and power purchases when there are changes in fuel prices, the degree to which the utility and its rate-payers are exposed to or insulated from changes in commodity prices, and exposure to Challenged Source and Threatened Sources (see the explanations for how we generally characterize these generation sources in the table below). A regulated utility's capacity mix may not in itself be an indication of fuel diversity or the ability to shift fuels, since utilities may keep old and inefficient plants (e.g., natural gas boilers) to serve peak load. For this reason, we do not incorporate set percentages reflecting an "ideal" or "sub-par" mix for capacity or even generation. In addition to looking at a utility's generation mix to evaluate fuel diversity, we consider the efficiency of the utility's plants, their placement on the regional dispatch curve, and the demonstrated ability/inability of the utility to shift its generation mix in accordance with changing commodity prices.

Issuers having a balanced mix of hydro, coal, natural gas, nuclear and renewable energy as well as low exposure to challenged and threatened sources of generation will score higher in this sub-factor. Issuers that have concentration in one or two sources of generation, especially if they are threatened or challenged sources, will score lower.

In evaluating an issuer's degree of exposure to challenged and threatened sources, we will consider not only the existence of those plants in the utility's portfolio, but also the relevant factors that will determine the impact on the utility and on its rate-payers. For instance, an issuer that has a fairly high percentage of its generation from challenged sources could be evaluated very differently if its peer utilities face the same magnitude of those issues than if its peers have no exposure to challenged or threatened sources. In evaluating threatened sources, we consider the utility's progress in its plan to replace those sources, its reserve margin, the availability of purchased power capacity in the region, and the overall impact of the replacement plan on the issuer's rates relative to its peer group. Especially if there are no peers in the same jurisdiction, we also examine the extent to which the utility's generation resources plan is aligned with the relevant government's fuel/energy policy.

Factor 3: Diversification (10%)

Weighting 10%	Sub-Factor Weighting	Aaa	Aa	A	Baa
Market Position	5% *	A very high degree of multinational and regional diversity in terms of regulatory regimes and/or service territory economies.	Material operations in three or more nations or substantial geographic regions providing very good diversity of regulatory regimes and/or service territory economies.	Material operations in two to three nations, states, provinces or regions that provide good diversity of regulatory regimes and service territory economies. Alternately, operates within a single regulatory regime with low volatility, and the service territory economy is robust, has a very high degree of diversity and has demonstrated resilience in economic cycles.	May operate under a single regulatory regime viewed as having low volatility, or where multiple regulatory regimes are not viewed as providing much diversity. The service territory economy may have some concentration and cyclicality, but is sufficiently resilient that it can absorb reasonably foreseeable increases in utility rates.
Generation and Fuel Diversity	5% **	A high degree of diversity in terms of generation and/or fuel sources such that the utility and rate-payers are well insulated from commodity price changes, no generation concentration, and very low exposures to Challenged or Threatened Sources (see definitions below).	Very good diversification in terms of generation and/or fuel sources such that the utility and rate-payers are affected only minimally by commodity price changes, little generation concentration, and low exposures to Challenged or Threatened Sources.	Good diversification in terms of generation and/or fuel sources such that the utility and rate-payers have only modest exposure to commodity price changes; however, may have some concentration in a source that is neither Challenged nor Threatened. Exposure to Threatened Sources is low. While there may be some exposure to Challenged Sources, it is not a cause for concern.	Adequate diversification in terms of generation and/or fuel sources such that the utility and rate-payers have moderate exposure to commodity price changes; however, may have some concentration in a source that is Challenged. Exposure to Threatened Sources is moderate, while exposure to Challenged Sources is manageable.

	Sub-Factor Weighting	Ba	B	Caa	Definitions
Market Position	5% *	Operates in a market area with somewhat greater concentration and cyclicality in the service territory economy and/or exposure to storms and other natural disasters, and thus less resilience to absorbing reasonably foreseeable increases in utility rates. May show somewhat greater volatility in the regulatory regime(s).	Operates in a limited market area with material concentration and more severe cyclicality in service territory economy such that cycles are of materially longer duration or reasonably foreseeable increases in utility rates could present a material challenge to the economy. Service territory may have geographic concentration that limits its resilience to storms and other natural disasters, or may be an emerging market. May show decided volatility in the regulatory regime(s).	Operates in a concentrated economic service territory with pronounced concentration, macroeconomic risk factors, and/or exposure to natural disasters.	"Challenged Sources" are generation plants that face higher but not insurmountable economic hurdles resulting from penalties or taxes on their operation, or from environmental upgrades that are required or likely to be required. Some examples are carbon-emitting plants that incur carbon taxes, plants that must buy emissions credits to operate, and plants that must install environmental equipment to continue to operate, in each where the taxes/credits/upgrades are sufficient to have a material impact on those plants' competitiveness relative to other generation types or on the utility's rates, but where the impact is not so severe as to be likely require plant closure.
Generation and Fuel Diversity	5% **	Modest diversification in generation and/or fuel sources such that the utility or rate-payers have greater exposure to commodity price changes. Exposure to Challenged and Threatened Sources may be more pronounced, but the utility will be able to access alternative sources without undue financial stress.	Operates with little diversification in generation and/or fuel sources such that the utility or rate-payers have high exposure to commodity price changes. Exposure to Challenged and Threatened Sources may be high, and accessing alternate sources may be challenging and cause more financial stress, but ultimately feasible.	Operates with high concentration in generation and/or fuel sources such that the utility or rate-payers have exposure to commodity price shocks. Exposure to Challenged and Threatened Sources may be very high, and accessing alternate sources may be highly uncertain.	"Threatened Sources" are generation plants that are not currently able to operate due to major unplanned outages or issues with licensing or other regulatory compliance, and plants that are highly likely to be required to de-activate, whether due to the effectiveness of currently existing or expected rules and regulations or due to economic challenges. Some recent examples would include coal fired plants in the US that are not economic to retro-fit to meet mercury and air toxics standards, plants that cannot meet the effective date of those standards, nuclear plants in Japan that have not been licensed to re-start after the Fukushima Dai-ichi accident, and nuclear plants that are required to be phased out within 10 years (as is the case in some European countries).

*10% weight for issuers that lack generation **0% weight for issuers that lack generation

Factor 4: Financial Strength (40%)

Why It Matters

Electric and gas utilities are regulated, asset-based businesses characterized by large investments in long-lived property, plant and equipment. Financial strength, including the ability to service debt and provide a return to shareholders, is necessary for a utility to attract capital at a reasonable cost in order to invest in its generation, transmission and distribution assets, so that the utility can fulfill its service obligations at a reasonable cost to rate-payers.

How We Assess It for the Grid

In comparison to companies in other non-financial corporate sectors, the financial statements of regulated electric and gas utilities have certain unique aspects that impact financial analysis, which is further complicated by disparate treatment of certain elements under US Generally Accepted Accounting Principles (GAAP) versus International Financial Reporting Standards (IFRS). Regulatory accounting may permit utilities to defer certain costs (thereby creating regulatory assets) that a non-utility corporate entity would have to expense. For instance, a regulated utility may be able to defer a substantial portion of costs related to recovery from a storm based on the general regulatory framework for those expenses, even if the utility does not have a specific order to collect the expenses from ratepayers over a set period of time. A regulated utility may be able to accrue and defer a return on equity (in addition to capitalizing interest) for construction-work-in-progress for an approved project based on the assumption that it will be able to collect that deferred equity return once the asset comes into service. For this reason, we focus more on a utility's cash flow than on its reported net income. Conversely, utilities may collect certain costs in rates well ahead of the time they must be paid (for instance, pension costs), thereby creating regulatory liabilities. Many of our metrics focus on Cash Flow from Operations Before Changes in Working Capital (CFO Pre-WC) because, unlike Funds from Operations (FFO), it captures the changes in long-term regulatory assets and liabilities. However, under IFRS the two measures are essentially the same. In general, we view changes in working capital as less important in utility financial analysis because they are often either seasonal (for example, power demand is generally greatest in the summer) or caused by changes in fuel prices that are typically a relatively automatic pass-through to the customer. We will nonetheless examine the impact of working capital changes in analyzing a utility's liquidity (see Other Rating Considerations – Liquidity).

Given the long-term nature of utility assets and the often lumpy nature of their capital expenditures, it is important to analyze both a utility's historical financial performance as well as its prospective future performance, which may be different from backward-looking measures. Scores under this factor may be higher or lower than what might be expected from historical results, depending on our view of expected future performance. In the illustrative mapping examples in this document, the scoring grid uses three year averages for the financial strength sub-factors. Multi-year periods are usually more representative of credit quality because utilities can experience swings in cash flows from one-time events, including such items as rate refunds, storm cost deferrals that create a regulatory asset, or securitization proceeds that reduce a regulatory asset. Nonetheless, we also look at trends in metrics for individual periods, which may influence our view of future performance and ratings.

For this scoring grid, we have identified four key ratios that we consider the most consistently useful in the analysis of regulated electric and gas utilities. However, no single financial ratio can adequately convey the relative credit strength of these highly diverse companies. Our ratings consider the overall financial strength of a company, and in individual cases other financial indicators may also play an important role.

CFO Pre-Working Capital Plus Interest/Interest or Cash Flow Interest Coverage

The cash flow interest coverage ratio is an indicator for a utility's ability to cover the cost of its borrowed capital. The numerator in the ratio calculation is the sum of CFO Pre-WC and interest expense, and the denominator is interest expense.

CFO Pre-Working Capital / Debt

This important metric is an indicator for the cash generating ability of a utility compared to its total debt. The numerator in the ratio calculation is CFO Pre-WC, and the denominator is total debt.

CFO Pre-Working Capital Minus Dividends / Debt

This ratio is an indicator for financial leverage as well as an indicator of the strength of a utility's cash flow after dividend payments are made. Dividend obligations of utilities are often substantial, quasi-permanent outflows that can affect the ability of a utility to cover its debt obligations, and this ratio can also provide insight into the financial policies of a utility or utility holding company. The higher the level of retained cash flow relative to a utility's debt, the more cash the utility has to support its capital expenditure program. The numerator of this ratio is CFO Pre-WC minus dividends, and the denominator is total debt.

Debt/Capitalization

This ratio is a traditional measure of balance sheet leverage. The numerator is total debt and the denominator is total capitalization. All of our ratios are calculated in accordance with Moody's standard adjustments[7], but we note that our definition of total capitalization includes deferred taxes in addition to total debt, preferred stock, other hybrid securities, and common equity. Since the presence or absence of deferred taxes is a function of national tax policy, comparing utilities using this ratio may be more meaningful among utilities in the same country or in countries with similar tax policies. High debt levels in comparison to capitalization can indicate higher interest obligations, can limit the ability of a utility to raise additional financing if needed, and can lead to leverage covenant violations in bank credit facilities or other financing agreements[8]. A high ratio may result from a regulatory framework that does not permit a robust cushion of equity in the capital structure, or from a material write-off of an asset, which may not have impacted current period cash flows but could affect future period cash flows relative to debt.

There are two sets of thresholds for three of these ratios based on the level of the issuer's business risk – the Standard Grid and the Lower Business Risk (LBR) Grid. In our view, the different types of utility entities covered under this methodology (as described in Appendix E) have different levels of business risk.

Generation utilities and vertically integrated utilities generally have a higher level of business risk because they are engaged in power generation, so we apply the Standard Grid. We view power generation as the highest-risk component of the electric utility business, as generation plants are typically the most expensive part of a utility's infrastructure (representing asset concentration risk) and are subject to the greatest risks in both construction and operation, including the risk that incurred costs will either not be recovered in rates or recovered with material delays.

[7] In certain circumstances, analysts may also apply specific adjustments.

[8] We also examine debt/capitalization ratios as defined in applicable covenants (which typically exclude deferred taxes from capitalization) relative to the covenant threshold level.

Other types of utilities may have lower business risk, such that we believe that they are most appropriately assessed using the LBR Grid, due to factors that could include a generally greater transfer of risk to customers, very strong insulation from exposure to commodity price movements, good protection from volumetric risks, fairly limited capex needs and low exposure to storms, major accidents and natural disasters. For instance, we tend to view many US natural gas local distribution companies (LDCs) and certain US electric transmission and distribution companies (T&Ds, which lack generation but generally retain some procurement responsibilities for customers), as typically having a lower business risk profile than their vertically integrated peers. In cases of T&Ds that we do not view as having materially lower risk than their vertically integrated peers, we will apply the Standard grid. This could result from a regulatory framework that exposes them to energy supply risk, large capital expenditures for required maintenance or upgrades, a heightened degree of exposure to catastrophic storm damage, or increased regulatory scrutiny due to poor reliability, or other considerations. The Standard Grid will also apply to LDCs that in our view do not have materially lower risk; for instance, due to their ownership of high pressure pipes or older systems requiring extensive gas main replacements, where gas commodity costs are not fully recovered in a reasonably contemporaneous manner, or where the LDC is not well insulated from declining volumes.

The four key ratios, their weighting in the grid, and the Standard and LBR scoring thresholds are detailed in the following table.

Factor 4: Financial Strength

Weighting 40%	Sub-Factor Weighting		Aaa	Aa	A	Baa	Ba	B	Caa
CFO pre-WC + Interest / Interest	7.5%		≥ 8x	6x - 8x	4.5x - 6x	3x - 4.5x	2x - 3x	1x - 2x	< 1x
CFO pre-WC / Debt	15%	Standard Grid	≥ 40%	30% - 40%	22% - 30%	13% - 22%	5% - 13%	1% - 5%	< 1%
		Low Business Risk Grid	≥ 38%	27% - 38%	19% - 27%	11% - 19%	5% - 11%	1% - 5%	< 1%
CFO pre-WC - Dividends / Debt	10%	Standard Grid	≥ 35%	25% - 35%	17% - 25%	9% - 17%	0% - 9%	(5%) - 0%	< (5%)
		Low Business Risk Grid	≥ 34%	23% - 34%	15% - 23%	7% - 15%	0% - 7%	(5%) - 0%	< (5%)
Debt / Capitalization	7.5%	Standard Grid	< 25%	25% - 35%	35% - 45%	45% - 55%	55% - 65%	65% - 75%	≥ 75%
		Low Business Risk Grid	< 29%	29% - 40%	40% - 50%	50% - 59%	59% - 67%	67% - 75%	≥ 75%

Notching for Structural Subordination of Holding Companies

Why It Matters

A typical utility company structure consists of a holding company ("HoldCo") that owns one or more operating subsidiaries (each an "OpCo"). OpCos may be regulated utilities or non-utility companies. A HoldCo typically has no operations – its assets are mostly limited to its equity interests in subsidiaries, and potentially other investments in subsidiaries that are structured as advances, debt, or even hybrid securities.

Most HoldCos present their financial statements on a consolidated basis that blurs legal considerations about priority of creditors based on the legal structure of the family, and grid scoring is thus based on

consolidated ratios. However, HoldCo creditors typically have a secondary claim on the group's cash flows and assets after OpCo creditors. We refer to this as structural subordination, because it is the corporate legal structure, rather than specific subordination provisions, that causes creditors at each of the utility and non-utility subsidiaries to have a more direct claim on the cash flows and assets of their respective OpCo obligors. By contrast, the debt of the HoldCo is typically serviced primarily by dividends that are up-streamed by the OpCos[9]. Under normal circumstances, these dividends are made from net income, after payment of the OpCo's interest and preferred dividends. In most non-financial corporate sectors where cash often moves freely between the entities in a single issuer family, this distinction may have less of an impact. However, in the regulated utility sector, barriers to movement of cash among companies in the corporate family can be much more restrictive, depending on the regulatory framework. These barriers can lead to significantly different probabilities of default for HoldCos and OpCos. Structural subordination also affects loss given default. Under most default[10] scenarios, an OpCo's creditors will be satisfied from the value residing at that OpCo before any of the OpCo's assets can be used to satisfy claims of the HoldCo's creditors. The prevalence of debt issuance at the OpCo level is another reason that structural subordination is usually a more serious concern in the utility sector than for investment grade issuers in other non-financial corporate sectors.

The grids for factors 1-4 are primarily oriented to OpCos (and to some degree for HoldCos with minimal current structural subordination; for example, there is no current structural subordination to debt at the operating company if all of the utility family's debt and preferred stock is issued at the HoldCo level, although there is structural subordination to other liabilities at the OpCo level). The additional risk from structural subordination is addressed via a notching adjustment to bring grid outcomes (on average) closer to the actual ratings of HoldCos.

How We Assess It

Grid-indicated ratings of holding companies may be notched down based on structural subordination. The risk factors and mitigants that impact structural subordination are varied and can be present in different combinations, such that a formulaic approach is not practical and case-by-case analyst judgment of the interaction of all pertinent factors that may increase or decrease its importance to the credit risk of an issuer are essential.

Some of the potentially pertinent factors that could increase the degree and/or impact of structural subordination include the following:

- Regulatory or other barriers to cash movement from OpCos to HoldCo
- Specific ring-fencing provisions
- Strict financial covenants at the OpCo level
- Higher leverage at the OpCo level
- Higher leverage at the HoldCo level[11]
- Significant dividend limitations or potential limitations at an important OpCo
- HoldCo exposure to subsidiaries with high business risk or volatile cash flows

[9] The HoldCo and OpCo may also have intercompany agreements, including tax sharing agreements, that can be another source of cash to the HoldCo.

[10] Actual priority in a default scenario will be determined by many factors, including the corporate and bankruptcy laws of the jurisdiction, the asset value of each OpCo, specific financing terms, inter-relationships among members of the family, etc.

[11] While higher leverage at the HoldCo does not increase structural subordination per se, it exacerbates the impact of any structural subordination that exists

» Strained liquidity at the HoldCo level

» The group's investment program is primarily in businesses that are higher risk or new to the group

Some of the potentially mitigating factors that could decrease the degree and/or impact of structural subordination include the following:

» Substantial diversity in cash flows from a variety of utility OpCos

» Meaningful dividends to HoldCo from unlevered utility OpCos

» Dependable, meaningful dividends to HoldCo from non-utility OpCos

» The group's investment program is primarily in strong utility businesses

» Inter-company guarantees - however, in many jurisdictions the value of an upstream guarantee may be limited by certain factors, including by the value that the OpCo received in exchange for granting the guarantee

Notching for structural subordination within the grid may range from 0 to negative 3 notches. Instances of extreme structural subordination are relatively rare, so the grid convention does not accommodate wider differences, although in the instances where we believe it is present, actual ratings do reflect the full impact of structural subordination.

A related issue is the relationship of ratings within a utility family with multiple operating companies, and sometimes intermediate holding companies. Some of the key issues are the same, such as the relative amounts of debt at the holding company level compared to the operating company level (or at one OpCo relative to another), and the degree to which operating companies have credit insulation due to regulation or other protective factors. Appendix D has additional insights on ratings within a utility family.

Rating Methodology Assumptions and Limitations, and Other Rating Considerations

The grid in this rating methodology represents a decision to favor simplicity that enhances transparency and to avoid greater complexity that would enable the grid to map more closely to actual ratings. Accordingly, the four rating factors and the notching factor in the grid do not constitute an exhaustive treatment of all of the considerations that are important for ratings of companies in the regulated electric and gas utility sector. In addition, our ratings incorporate expectations for future performance, while the financial information that is used to illustrate the mapping in the grid in this document is mainly historical. In some cases, our expectations for future performance may be informed by confidential information that we can't disclose. In other cases, we estimate future results based upon past performance, industry trends, competitor actions or other factors. In either case, predicting the future is subject to the risk of substantial inaccuracy.

Assumptions that may cause our forward-looking expectations to be incorrect include unanticipated changes in any of the following factors: the macroeconomic environment and general financial market conditions, industry competition, disruptive technology, regulatory and legal actions.

Key rating assumptions that apply in this sector include our view that sovereign credit risk is strongly correlated with that of other domestic issuers, that legal priority of claim affects average recovery on different classes of debt, sufficiently to generally warrant differences in ratings for different debt classes of the same issuer, and the assumption that access to liquidity is a strong driver of credit risk.

In choosing metrics for this rating methodology grid, we did not explicitly include certain important factors that are common to all companies in any industry such as the quality and experience of management, assessments of corporate governance and the quality of financial reporting and information disclosure. Therefore ranking these factors by rating category in a grid would in some cases suggest too much precision in the relative ranking of particular issuers against all other issuers that are rated in various industry sectors.

Ratings may include additional factors that are difficult to quantify or that have a meaningful effect in differentiating credit quality only in some cases, but not all. Such factors include financial controls, exposure to uncertain licensing regimes and possible government interference in some countries. Regulatory, litigation, liquidity, technology and reputational risk as well as changes to consumer and business spending patterns, competitor strategies and macroeconomic trends also affect ratings. While these are important considerations, it is not possible to precisely express these in the rating methodology grid without making the grid excessively complex and significantly less transparent. Ratings may also reflect circumstances in which the weighting of a particular factor will be substantially different from the weighting suggested by the grid.

This variation in weighting rating considerations can also apply to factors that we choose not to represent in the grid. For example, liquidity is a consideration frequently critical to ratings and which may not, in other circumstances, have a substantial impact in discriminating between two issuers with a similar credit profile. As an example of the limitations, ratings can be heavily affected by extremely weak liquidity that magnifies default risk. However, two identical companies might be rated the same if their only differentiating feature is that one has a good liquidity position while the other has an extremely good liquidity position.

Other Rating Considerations

Moody's considers other factors in addition to those discussed in this report, but in most cases understanding the considerations discussed herein should enable a good approximation of our view on the credit quality of companies in the regulated electric and gas utilities sector. Ratings consider our assessment of the quality of management, corporate governance, financial controls, liquidity management, event risk and seasonality. The analysis of these factors remains an integral part of our rating process.

Liquidity and Access to Capital Markets

Liquidity analysis is a key element in the financial analysis of electric and gas utilities, and it encompasses a company's ability to generate cash from internal sources as well as the availability of external sources of financing to supplement these internal sources. Liquidity and access to financing are of particular importance in this sector. Utility assets can often have a very long useful life- 30, 40 or even 60 years is not uncommon, as well as high price tags. Partly as a result of construction cycles, the utility sector has experienced prolonged periods of negative free cash flow – essentially, the sum of its dividends and its capital expenditures for maintenance and growth of its infrastructure frequently exceeds cash from operations, such that a portion of capital expenditures must routinely be debt financed. Utilities are among the largest debt issuers in the corporate universe and typically require consistent access to the capital markets to assure adequate sources of funding and to maintain financial flexibility. Substantial portions of capex are non-discretionary (for example, maintenance, adding customers to the network, or meeting environmental mandates); however, utilities were swift to cut or defer discretionary spending during the 2007-2009 recession. Dividends represent a quasi-permanent outlay, since utilities will typically only rarely cut their dividend. Liquidity is also important to meet

maturing obligations, which often occur in large chunks, and to meet collateral calls under any hedging agreements.

Due to the importance of liquidity, incorporating it as a factor with a fixed weighting in the grid would suggest an importance level that is often far different from the actual weight in the rating. In normal circumstances most companies in the sector have good access to liquidity. The industry generally requires, and for the most part has, large, syndicated, multi-year committed credit facilities. In addition, utilities have demonstrated strong access to capital markets, even under difficult conditions. As a result, liquidity has generally not been an issue for most utilities and a utility with very strong liquidity may not warrant a rating distinction compared to a utility with strong liquidity. However, when there is weakness in liquidity or liquidity management, it can be the dominant consideration for ratings.

Our assessment of liquidity for regulated utilities involves an analysis of total sources and uses of cash over the next 12 months or more, as is done for all corporates. Using our financial projections of the utility and our analysis of its available sources of liquidity (including an assessment of the quality and reliability of alternate liquidity such as committed credit facilities), we evaluate how its projected sources of cash (cash from operations, cash on hand and existing committed multi-year credit facilities) compare to its projected uses (including all or most capital expenditures, dividends, maturities of short and long-term debt, our projection of potential liquidity calls on financial hedges, and important issuer-specific items such as special tax payments). We assume no access to capital markets or additional liquidity sources, no renewal of existing credit facilities, and no cut to dividends. We examine a company's liquidity profile under this scenario, its ability to make adjustments to improve its liquidity position, and any dependence on liquidity sources with lower quality and reliability.

Management Quality and Financial Policy

The quality of management is an important factor supporting the credit strength of a regulated utility or utility holding company. Assessing the execution of business plans over time can be helpful in assessing management's business strategies, policies, and philosophies and in evaluating management performance relative to performance of competitors and our projections. A record of consistency provides Moody's with insight into management's likely future performance in stressed situations and can be an indicator of management's tendency to depart significantly from its stated plans and guidelines.

We also assess financial policy (including dividend policy and planned capital expenditures) and how management balances the potentially competing interests of shareholders, fixed income investors and other stakeholders. Dividends and discretionary capital expenditures are the two primary components over which management has the greatest control in the short term. For holding companies, we consider the extent to which management is willing stretch its payout ratio (through aggressive increases or delays in needed decreases) in order to satisfy common shareholders. For a utility that is a subsidiary of a parent company with several utility subsidiaries, dividends to the parent may be more volatile depending on the cash generation and cash needs of that utility, because parents typically want to assure that each utility maintains the regulatory debt/equity ratio on which its rates have been set. The effect we have observed is that utility subsidiaries often pay higher dividends when they have lower capital needs and lower dividends when they have higher capital expenditures or other cash needs. Any dividend policy that cuts into the regulatory debt/equity ratio is a material credit negative.

Size – Natural Disasters, Customer Concentration and Construction Risks

The size and scale of a regulated utility has generally not been a major determinant of its credit strength in the same way that it has been for most other industrial sectors. While size brings certain economies of scale that can somewhat affect the utility's cost structure and competitiveness, rates are more heavily impacted by costs related to fuel and fixed assets. Particularly in the US, we have not observed material differences in the success of utilities' regulatory outreach based on their size. Smaller utilities have sometimes been better able to focus their attention on meeting the expectations of a single regulator than their multi-state peers.

However, size can be a very important factor in our assessment of certain risks that impact ratings, including exposure to natural disasters, customer concentration (primarily to industrial customers in a single sector) and construction risks associated with large projects. While the grid attempts to incorporate the first two of these into Factor 3, for some issuers these considerations may be sufficiently important that the rating reflects a greater weight for these risks. While construction projects always carry the risk of cost over-runs and delays, these risks are materially heightened for projects that are very large relative to the size of the utility.

Interaction of Utility Ratings with Government Policies and Sovereign Ratings

Compared to most industrial sectors, regulated utilities are more likely to be impacted by government actions. Credit impacts can occur directly through rate regulation, and indirectly through energy, environmental and tax policies. Government actions affect fuel prices, the mix of generating plants, the certainty and timing of revenues and costs, and the likelihood that regulated utilities will experience financial stress. While our evolving view of the impact of such policies and the general economic and financial climate is reflected in ratings for each utility, some considerations do not lend themselves to incorporation in a simple ratings grid.[12]

Diversified Operations at the Utility

A small number of regulated utilities have diversified operations that are segments within the utility company, as opposed to the more common practice of housing such operations in one or more separate affiliates. In general, we will seek to evaluate the other businesses that are material in accordance with the appropriate methodology and the rating will reflect considerations from such methodologies. There may be analytical limitations in evaluating the utility and non-utility businesses when segment financial results are not fully broken out and these may be addressed through estimation based on available information. Since regulated utilities are a relatively low risk business compared to other corporate sectors, in most cases diversified non-utility operations increase the business risk profile of a utility. Reflecting this tendency, we note that assigned ratings are typically lower than grid-indicated ratings for such companies.

Event Risk

We also recognize the possibility that an unexpected event could cause a sudden and sharp decline in an issuer's fundamental creditworthiness. Typical special events include mergers and acquisitions, asset sales, spin-offs, capital restructuring programs, litigation and shareholder distributions.

[12] See also the cross-sector methodology How Sovereign Credit Quality May Affect Other Ratings, February 2012.

Corporate Governance

Among the areas of focus in corporate governance are audit committee financial expertise, the incentives created by executive compensation packages, related party transactions, interactions with outside auditors, and ownership structure.

Investment and Acquisition Strategy

In our credit assessment we take into consideration management's investment strategy. Investment strategy is benchmarked with that of the other companies in the rated universe to further verify its consistency. Acquisitions can strengthen a company's business. Our assessment of a company's tolerance for acquisitions at a given rating level takes into consideration (1) management's risk appetite, including the likelihood of further acquisitions over the medium term; (2) share buy-back activity; (3) the company's commitment to specific leverage targets; and (4) the volatility of the underlying businesses, as well as that of the business acquired. Ratings can often hold after acquisitions even if leverage temporarily climbs above normally acceptable ranges. However, this depends on (1) the strategic fit; (2) pro-forma capitalization/leverage following an acquisition; and (3) our confidence that credit metrics will be restored in a relatively short timeframe.

Financial Controls

We rely on the accuracy of audited financial statements to assign and monitor ratings in this sector. Such accuracy is only possible when companies have sufficient internal controls, including centralized operations, the proper tone at the top and consistency in accounting policies and procedures.

Weaknesses in the overall financial reporting processes, financial statement restatements or delays in regulatory filings can be indications of a potential breakdown in internal controls.

Conclusion: Summary of the Grid-Indicated Rating Outcomes

For the 45 representative utilities shown in the illustrative mapping examples, the grid-indicated ratings map to current assigned ratings as follows (see Appendix B for the details):

- 33% or 15 companies map to their assigned rating
- 49% or 22 companies have grid-indicated ratings that are within one alpha-numeric notch of their assigned rating
- 16% or 7 companies have grid-indicated ratings that are within two alpha-numeric notches of their assigned rating
- 2% or 1 company has a grid-indicated rating that is within three alpha-numeric notches of its assigned rating

Grid Indicated Rating Outcomes

Map to Assigned Rating	Map to Within One Notch
American Electric Power Company, Inc.	Appalachian Power Company
China Longyuan Power Group Corporation Ltd.	Arizona Public Service Company
Chubu Electric Power Company, Incorporated	China Resources Gas Group Limited
Entergy Corporation	Duke Energy Corporation
FortisBC Holdings Inc.	Florida Power & Light Company
Great Plains Energy Incorporated	Georgia Power Company
Hokuriku Electric Power Company	Hawaiian Electric Industries, Inc.
Madison Gas & Electric	Idaho Power Company
MidAmerican Energy Company	Kansai Electric Power Company, Incorporated
Mississippi Power Company	Korea Electric Power Corporation
Newfoundland Power Inc.	MidAmerican Energy Holdings Co.
Oklahoma Gas and Electric Company	Niagara Mohawk Power Corporation
Osaka Gas Co., Ltd.	Northern States Power Minnesota
Saudi Electricity	Okinawa Electric Power Company, Incorporated
Wisconsin Public Service Corporation	PacifiCorp
	Pennsylvania Electric Company
	PNG Companies
	Public Service Company of New Mexico
	SCANA
	Southwestern Public Service Company
	UGI Utilities, Inc.
	Virginia Electric Power Company

Map to Within Two Notches	Map to Within Three or More Notches
Ameren Illinois Company	Western Mass Electric Co.
Consumers Energy Company	
Distribuidora de Electricidad La Paz S.A.	
Empresa Electrica de Guatemala, S.A. (EEGSA)	
Gail (India) Ltd	
Gas Natural Ban, S.A.	
Ohio Power Company	

Appendix A: Regulated Electric and Gas Utilities Methodology Factor Grid

Factor 1a: Legislative and Judicial Underpinnings of the Regulatory Framework (12.5%)

Aaa	Aa	A	Baa
Utility regulation occurs under a fully developed framework that is national in scope based on legislation that provides the utility a nearly absolute monopoly (see note 1_ within its service territory, an unquestioned assurance that rates will be set in a manner that will permit the utility to make and recover all necessary investments, an extremely high degree of clarity as to the manner in which utilities will be regulated and prescriptive methods and procedures for setting rates. Existing utility law is comprehensive and supportive such that changes in legislation are not expected to be necessary; or any changes that have occurred have been strongly supportive of utilities credit quality in general and sufficiently forward-looking so as to address problems before they occurred. There is an independent judiciary that can arbitrate disagreements between the regulator and the utility should they occur, including access to national courts, very strong judicial precedent in the interpretation of utility laws, and a strong rule of law. We expect these conditions to continue.	Utility regulation occurs under a fully developed national, state or provincial framework based on legislation that provides the utility an extremely strong monopoly (see note 1) within its service territory, a strong assurance, subject to limited review, that rates will be set in a manner that will permit the utility to make and recover all necessary investments, a very high degree of clarity as to the manner in which utilities will be regulated and reasonably prescriptive methods and procedures for setting rates. If there have been changes in utility legislation, they have been timely and clearly credit supportive of the issuer in a manner that shows the utility has had a strong voice in the process. There is an independent judiciary that can arbitrate disagreements between the regulator and the utility, should they occur including access to national courts, strong judicial precedent in the interpretation of utility laws, and a strong rule of law. We expect these conditions to continue.	Utility regulation occurs under a well developed national, state or provincial framework based on legislation that provides the utility a very strong monopoly (see note 1) within its service territory, an assurance, subject to reasonable prudency requirements, that rates will be set in a manner that will permit the utility to make and recover all necessary investments, a high degree of clarity as to the manner in which utilities will be regulated, and overall guidance for methods and procedures for setting rates. If there have been changes in utility legislation, they have been mostly timely and on the whole credit supportive for the issuer, and the utility has had a clear voice in the legislative process. There is an independent judiciary that can arbitrate disagreements between the regulator and the utility, should they occur, including access to national courts, clear judicial precedent in the interpretation of utility law, and a strong rule of law. We expect these conditions to continue.	Utility regulation occurs (i) under a national, state, provincial or municipal framework based on legislation that provides the utility a strong monopoly within its service territory that may have some exceptions such as greater self-generation (see note 1), a general assurance that, subject to prudency requirements that are mostly reasonable, rates will be set will be set in a manner that will permit the utility to make and recover all necessary investments, reasonable clarity as to the manner in which utilities will be regulated and overall guidance for methods and procedures for setting rates; or (ii) under a new framework where independent and transparent regulation exists in other sectors. If there have been changes in utility legislation, they have been credit supportive or at least balanced for the issuer but potentially less timely, and the utility had a voice in the legislative process. There is either (i) an independent judiciary that can arbitrate disagreements between the regulator and the utility, including access to courts at least at the state or provincial level, reasonably clear judicial precedent in the interpretation of utility laws, and a generally strong rule of law; or (ii) regulation has been applied (under a well developed framework) in a manner such that redress to an independent arbiter has not been required. We expect these conditions to continue.

Ba	B	Caa
Utility regulation occurs (i) under a national, state, provincial or municipal framework based on legislation or government decree that provides the utility a monopoly within its service territory that is generally strong but may have a greater level of exceptions (see note 1), and that, subject to prudency requirements which may be stringent, provides a general assurance (with somewhat less certainty) that rates will be set will be set in a manner that will permit the utility to make and recover necessary investments; or (ii) under a new framework where the jurisdiction has a history of less independent and transparent regulation in other sectors. Either: (i) the judiciary that can arbitrate disagreements between the regulator and the utility may not have clear authority or may not be fully independent of the regulator or other political pressure, but there is a reasonably strong rule of law; or (ii) where there is no independent arbiter, the regulation has mostly been applied in a manner such redress has not been required. We expect these conditions to continue.	Utility regulation occurs (i) under a national, state, provincial or municipal framework based on legislation or government decree that provides the utility monopoly within its service territory that is reasonably strong but may have important exceptions, and that, subject to prudency requirements which may be stringent or at times arbitrary, provides more limited or less certain assurance that rates will be set in a manner that will permit the utility to make and recover necessary investments; or (ii) under a new framework where we would expect less independent and transparent regulation, based either on the regulator's history in other sectors or other factors. The judiciary that can arbitrate disagreements between the regulator and the utility may not have clear authority or may not be fully independent of the regulator or other political pressure, but there is a reasonably strong rule of law. Alternately, where there is no independent arbiter, the regulation has been applied in a manner that often requires some redress adding more uncertainty to the regulatory framework. There may be a periodic risk of creditor-unfriendly government intervention in utility markets or rate-setting.	Utility regulation occurs (i) under a national, state, provincial or municipal framework based on legislation or government decree that provides the utility a monopoly within its service territory, but with little assurance that rates will be set in a manner that will permit the utility to make and recover necessary investments; or (ii) under a new framework where we would expect unpredictable or adverse regulation, based either on the jurisdiction's history of in other sectors or other factors. The judiciary that can arbitrate disagreements between the regulator and the utility may not have clear authority or is viewed as not being fully independent of the regulator or other political pressure. Alternately, there may be no redress to an effective independent arbiter. The ability of the utility to enforce its monopoly or prevent uncompensated usage of its system may be limited. There may be a risk of creditor-unfriendly nationalization or other significant intervention in utility markets or rate-setting.

Note 1: The strength of the monopoly refers to the legal, regulatory and practical obstacles for customers in the utility's territory to obtain service from another provider. Examples of a weakening of the monopoly would include the ability of a city or large user to leave the utility system to set up their own system, the extent to which self-generation is permitted (e.g. cogeneration) and/or encouraged (e.g., net metering, DSM generation). At the lower end of the ratings spectrum, the utility's monopoly may be challenged by pervasive theft and unauthorized use. Since utilities are generally presumed to be monopolies, a strong monopoly position in itself is not sufficient for a strong score in this sub-factor, but a weakening of the monopoly can lower the score.

Factor 1b: Consistency and Predictability of Regulation (12.5%)

Aaa	Aa	A	Baa
The issuer's interaction with the regulator has led to a strong, lengthy track record of predictable, consistent and favorable decisions. The regulator is highly credit supportive of the issuer and utilities in general. We expect these conditions to continue.	The issuer's interaction with the regulator has a led to a considerable track record of predominantly predictable and consistent decisions. The regulator is mostly credit supportive of utilities in general and in almost all instances has been highly credit supportive of the issuer. We expect these conditions to continue.	The issuer's interaction with the regulator has led to a track record of largely predictable and consistent decisions. The regulator may be somewhat less credit supportive of utilities in general, but has been quite credit supportive of the issuer in most circumstances. We expect these conditions to continue.	The issuer's interaction with the regulator has led to an adequate track record. The regulator is generally consistent and predictable, but there may some evidence of inconsistency or unpredictability from time to time, or decisions may at times be politically charged. However, instances of less credit supportive decisions are based on reasonable application of existing rules and statutes and are not overly punitive. We expect these conditions to continue.

Ba	B	Caa
We expect that regulatory decisions will demonstrate considerable inconsistency or unpredictability or that decisions will be politically charged, based either on the issuer's track record of interaction with regulators or other governing bodies, or our view that decisions will move in this direction. The regulator may have a history of less credit supportive regulatory decisions with respect to the issuer, but we expect that the issuer will be able to obtain support when it encounters financial stress, with some potentially material delays. The regulator's authority may be eroded at times by legislative or political action. The regulator may not follow the framework for some material decisions.	We expect that regulatory decisions will be largely unpredictable or even somewhat arbitrary, based either on the issuer's track record of interaction with regulators or other governing bodies, or our view that decisions will move in this direction. However, we expect that the issuer will ultimately be able to obtain support when it encounters financial stress, albeit with material or more extended delays. Alternately, the regulator is untested, lacks a consistent track record, or is undergoing substantial change. The regulator's authority may be eroded on frequent occasions by legislative or political action. The regulator may more frequently ignore the framework in a manner detrimental to the issuer.	We expect that regulatory decisions will be highly unpredictable and frequently adverse, based either on the issuer's track record of interaction with regulators or other governing bodies, or our view that decisions will move in this direction. Alternately, decisions may have credit supportive aspects, but may often be unenforceable. The regulator's authority may have been seriously eroded by legislative or political action. The regulator may consistently ignore the framework to the detriment of the issuer.

Factor 2a: Timeliness of Recovery of Operating and Capital Costs (12.5%)

Aaa	Aa	A	Baa
Tariff formulas and automatic cost recovery mechanisms provide full and highly timely recovery of all operating costs and essentially contemporaneous return on all incremental capital investments, with statutory provisions in place to preclude the possibility of challenges to rate increases or cost recovery mechanisms. By statute and by practice, general rate cases are efficient, focused on an impartial review, quick, and permit inclusion of fully forward -looking costs.	Tariff formulas and automatic cost recovery mechanisms provide full and highly timely recovery of all operating costs and essentially contemporaneous or near-contemporaneous return on most incremental capital investments, with minimal challenges by regulators to companies' cost assumptions. By statute and by practice, general rate cases are efficient, focused on an impartial review, of a very reasonable duration before non-appealable interim rates can be collected, and primarily permit inclusion of forward-looking costs.	Automatic cost recovery mechanisms provide full and reasonably timely recovery of fuel, purchased power and all other highly variable operating expenses. Material capital investments may be made under tariff formulas or other rate-making permitting reasonably contemporaneous returns, or may be submitted under other types of filings that provide recovery of cost of capital with minimal delays. Instances of regulatory challenges that delay rate increases or cost recovery are generally related to large, unexpected increases in sizeable construction projects. By statute or by practice, general rate cases are reasonably efficient, primarily focused on an impartial review, of a reasonable duration before rates (either permanent or non-refundable interim rates) can be collected, and permit inclusion of important forward -looking costs.	Fuel, purchased power and all other highly variable expenses are generally recovered through mechanisms incorporating delays of less than one year, although some rapid increases in costs may be delayed longer where such deferrals do not place financial stress on the utility. Incremental capital investments may be recovered primarily through general rate cases with moderate lag, with some through tariff formulas. Alternately, there may be formula rates that are untested or unclear. Potentially greater tendency for delays due to regulatory intervention, although this will generally be limited to rates related to large capital projects or rapid increases in operating costs.

Ba	B	Caa
There is an expectation that fuel, purchased power or other highly variable expenses will eventually be recovered with delays that will not place material financial stress on the utility, but there may be some evidence of an unwillingness by regulators to make timely rate changes to address volatility in fuel, or purchased power, or other market-sensitive expenses. Recovery of costs related to capital investments may be subject to delays that are somewhat lengthy, but not so pervasive as to be expected to discourage important investments.	The expectation that fuel, purchased power or other highly variable expenses will be recovered may be subject to material delays due to second-guessing of spending decisions by regulators or due to political intervention. Recovery of costs related to capital investments may be subject to delays that are material to the issuer, or may be likely to discourage some important investment.	The expectation that fuel, purchased power or other highly variable expenses will be recovered may be subject to extensive delays due to second-guessing of spending decisions by regulators or due to political intervention. Recovery of costs related to capital investments may be uncertain, subject to delays that are extensive, or that may be likely to discourage even necessary investment.

Note: Tariff formulas include formula rate plans as well as trackers and riders related to capital investment.

Factor 2b: Sufficiency of Rates and Returns (12.5%)

Aaa	Aa	A	Baa
Sufficiency of rates to cover costs and attract capital is (and will continue to be) unquestioned.	Rates are (and we expect will continue to be) set at a level that permits full cost recovery and a fair return on all investments, with minimal challenges by regulators to companies' cost assumptions. This will translate to returns (measured in relation to equity, total assets, rate base or regulatory asset value, as applicable) that are strong relative to global peers.	Rates are (and we expect will continue to be) set at a level that generally provides full cost recovery and a fair return on investments, with limited instances of regulatory challenges and disallowances. In general, this will translate to returns (measured in relation to equity, total assets, rate base or regulatory asset value, as applicable) that are generally above average relative to global peers, but may at times be average.	Rates are (and we expect will continue to be) set at a level that generally provides full operating cost recovery and a mostly fair return on investments, but there may be somewhat more instances of regulatory challenges and disallowances, although ultimate rate outcomes are sufficient to attract capital without difficulty. In general, this will translate to returns (measured in relation to equity, total assets, rate base or regulatory asset value, as applicable) that are average relative to global peers, but may at times be somewhat below average.

Ba	B	Caa
Rates are (and we expect will continue to be) set at a level that generally provides recovery of most operating costs but return on investments may be less predictable, and there may be decidedly more instances of regulatory challenges and disallowances, but ultimate rate outcomes are generally sufficient to attract capital. In general, this will translate to returns (measured in relation to equity, total assets, rate base or regulatory asset value, as applicable) that are generally below average relative to global peers, or where allowed returns are average but difficult to earn. Alternately, the tariff formula may not take into account all cost components and/or remuneration of investments may be unclear or at times unfavorable.	We expect rates will be set at a level that at times fails to provide recovery of costs other than cash costs, and regulators may engage in somewhat arbitrary second-guessing of spending decisions or deny rate increases related to funding ongoing operations based much more on politics than on prudency reviews. Return on investments may be set at levels that discourage investment. We expect that rate outcomes may be difficult or uncertain, negatively affecting continued access to capital. Alternately, the tariff formula may fail to take into account significant cost components other than cash costs, and/or remuneration of investments may be generally unfavorable.	We expect rates will be set at a level that often fails to provide recovery of material costs, and recovery of cash costs may also be at risk. Regulators may engage in more arbitrary second-guessing of spending decisions or deny rate increases related to funding ongoing operations based primarily on politics. Return on investments may be set at levels that discourage necessary maintenance investment. We expect that rate outcomes may often be punitive or highly uncertain, with a markedly negative impact on access to capital. Alternately, the tariff formula may fail to take into account significant cash cost components, and/or remuneration of investments may be primarily unfavorable.

Factor 3: Diversification (10%)

Weighting 10%	Sub-Factor Weighting	Aaa	Aa	A	Baa
Market Position	5% *	A very high degree of multinational and regional diversity in terms of regulatory regimes and/or service territory economies.	Material operations in three or more nations or substantial geographic regions providing very good diversity of regulatory regimes and/or service territory economies.	Material operations in two to three nations, states, provinces or regions that provide good diversity of regulatory regimes and service territory economies. Alternately, operates within a single regulatory regime with low volatility, and the service territory economy is robust, has a very high degree of diversity and has demonstrated resilience in economic cycles.	May operate under a single regulatory regime viewed as having low volatility, or where multiple regulatory regimes are not viewed as providing much diversity. The service territory economy may have some concentration and cyclicality, but is sufficiently resilient that it can absorb reasonably foreseeable increases in utility rates.
Generation and Fuel Diversity	5% **	A high degree of diversity in terms of generation and/or fuel sources such that the utility and rate-payers are well insulated from commodity price changes, no generation concentration, and very low exposures to Challenged or Threatened Sources (see definitions below).	Very good diversification in terms of generation and/or fuel sources such that the utility and rate-payers are affected only minimally by commodity price changes, little generation concentration, and low exposures to Challenged or Threatened Sources.	Good diversification in terms of generation and/or fuel sources such that the utility and rate-payers have only modest exposure to commodity price changes; however, may have some concentration in a source that is neither Challenged nor Threatened. Exposure to Threatened Sources is low. While there may be some exposure to Challenged Sources, it is not a cause for concern.	Adequate diversification in terms of generation and/or fuel sources such that the utility and rate-payers have moderate exposure to commodity price changes; however, may have some concentration in a source that is Challenged. Exposure to Threatened Sources is moderate, while exposure to Challenged Sources is manageable.

	Sub-Factor Weighting	Ba	B	Caa	Definitions
Market Position	5% *	Operates in a market area with somewhat greater concentration and cyclicality in the service territory economy and/or exposure to storms and other natural disasters, and thus less resilience to absorbing reasonably foreseeable increases in utility rates. May show somewhat greater volatility in the regulatory regime(s).	Operates in a limited market area with material concentration and more severe cyclicality in service territory economy such that cycles are of materially longer duration or reasonably foreseeable increases in utility rates could present a material challenge to the economy. Service territory may have geographic concentration that limits its resilience to storms and other natural disasters, or may be an emerging market. May show decided volatility in the regulatory regime(s).	Operates in a concentrated economic service territory with pronounced concentration, macroeconomic risk factors, and/or exposure to natural disasters.	Challenged Sources are generation plants that face higher but not insurmountable economic hurdles resulting from penalties or taxes on their operation, or from environmental upgrades that are required or likely to be required. Some examples are carbon-emitting plants that incur carbon taxes, plants that must buy emissions credits to operate, and plants that must install environmental equipment to continue to operate, in each where the taxes/credits/upgrades are sufficient to have a material impact on those plants' competitiveness relative to other generation types or on the utility's rates, but where the impact is not so severe as to be likely require plant closure.
Generation and Fuel Diversity	5% **	Modest diversification in generation and/or fuel sources such that the utility or rate-payers have greater exposure to commodity price changes. Exposure to Challenged and Threatened Sources may be more pronounced, but the utility will be able to access alternative sources without undue financial stress.	Operates with little diversification in generation and/or fuel sources such that the utility or rate-payers have high exposure to commodity price changes. Exposure to Challenged and Threatened Sources may be high, and accessing alternate sources may be challenging and cause more financial stress, but ultimately feasible.	Operates with high concentration in generation and/or fuel sources such that the utility or rate-payers have exposure to commodity price shocks. Exposure to Challenged and Threatened Sources may be very high, and accessing alternate sources may be highly uncertain.	Threatened Sources are generation plants that are not currently able to operate due to major unplanned outages or issues with licensing or other regulatory compliance, and plants that are highly likely to be required to de-activate, whether due to the effectiveness of currently existing or expected rules and regulations or due to economic challenges. Some recent examples would include coal fired plants in the US that are not economic to retro-fit to meet mercury and air toxics standards, plants that cannot meet the effective date of those standards, nuclear plants in Japan that have not been licensed to re-start after the Fukushima Dai-ichi accident, and nuclear plants that are required to be phased out within 10 years (as is the case in some European countries).

* 10% weight for issuers that lack generation **0% weight for issuers that lack generation

Factor 4: Financial Strength

Weighting 40%	Sub-Factor Weighting		Aaa	Aa	A	Baa	Ba	B	Caa
CFO pre-WC + Interest / Interest	7.5%		≥ 8x	6x - 8x	4.5x - 6x	3x - 4.5x	2x - 3x	1x - 2x	< 1x
CFO pre-WC / Debt	15%	Standard Grid	≥ 40%	30% - 40%	22% - 30%	13% - 22%	5% - 13%	1% - 5%	< 1%
		Low Business Risk Grid	≥ 38%	27% - 38%	19% - 27%	11% - 19%	5% - 11%	1% - 5%	< 1%
CFO pre-WC - Dividends / Debt	10%	Standard Grid	≥ 35%	25% - 35%	17% - 25%	9% - 17%	0% - 9%	(5%) - 0%	< (5%)
		Low Business Risk Grid	≥ 34%	23% - 34%	15% - 23%	7% - 15%	0% - 7%	(5%) - 0%	< (5%)
Debt / Capitalization	7.5%	Standard Grid	< 25%	25% - 35%	35% - 45%	45% - 55%	55% - 65%	65% - 75%	≥ 75%
		Low Business Risk Grid	< 29%	29% - 40%	40% - 50%	50% - 59%	59% - 67%	67% - 75%	≥ 75%

Appendix B: Regulated Electric and Gas Utilities – Assigned Ratings and Grid-Indicated Ratings for a Selected Cross-Section of Issuers

	Issuer	Outlook	Actual Rating	*BCA / Rating Before Uplift* [13]	Grid Indicated Rating	Country
1	Ameren Illinois Company	RUR-Up	Baa2	-	A3	USA
2	American Electric Power Company, Inc.	RUR-Up	Baa2	-	Baa2	USA
3	Appalachian Power Company	RUR-Up	Baa2	-	Baa1	USA
4	Arizona Public Service Company	RUR-Up	Baa1	-	A3	USA
5	China Longyuan Power Group Corporation	Stable	Baa3	*Ba1*	Ba1	China
6	China Resources Gas Group Ltd.	Stable	Baa1	*Baa2*	Baa1	China
7	Chubu Electric Power Company, Inc.	Negative	A3	*Baa2*	Baa2	Japan
8	Consumers Energy Company	RUR-Up	(P)Baa1	-	A2	USA
9	Distribuidora de Electricidad La Paz S.A.	Stable	Ba3	-	Ba1	Bolivia
10	Duke Energy Corporation	RUR-Up	Baa1	-	Baa2	USA
11	Empresa Electrica de Guatemala, S.A.	Positive	Ba2	-	Baa3	Guatemala
12	Entergy Corporation	Stable	Baa3	-	Baa3	USA
13	Florida Power & Light Company	RUR-Up	A2	-	A1	USA
14	FortisBC Holdings Inc.	Negative	Baa2	-	Baa2	Canada
15	Gail (India) Ltd	Stable	Baa2	*Baa2*	A3	India
16	Gas Natural BAN, S.A.	Negative	B3	-	B1	Argentina
17	Georgia Power Company	Stable	A3	-	A2	USA
18	Great Plains Energy Incorporated	RUR-Up	Baa3	-	Baa3	USA
19	Hawaiian Electric Industries, Inc.	RUR-Up	Baa2	-	Baa1	USA
20	Hokuriku Electric Power Company	Negative	A3	*Baa2*	Baa2	Japan
21	Idaho Power Company	RUR-Up	Baa1	-	A3	USA
22	Kansai Electric Power Company, Inc.	Negative	A3	*Baa2*	Baa3	Japan
23	Korea Electric Power Corporation	Stable	A1	*Baa2*	Baa3	Korea
24	Madison Gas & Electric	RUR-Up	A1	-	A1	USA
25	MidAmerican Energy Company	RUR-Up	A2	-	A2	USA
26	MidAmerican Energy Holdings Co.	RUR-Up	Baa1	-	A3	USA
27	Mississippi Power Company	Stable	Baa1	-	Baa1	USA
28	Niagara Mohawk Power Corporation	RUR-Up	A3	-	A2	USA
29	Newfoundland Power Inc.	Stable	Baa1	-	Baa1	Canada
30	Northern States Power Minnesota	RUR-Up	A3	-	A2	USA
31	Ohio Power Company	Stable	Baa1	-	A2	USA
32	Okinawa Electric Power Company, Inc.	Stable	Aa3	*A2*	A3	Japan
33	Oklahoma Gas & Electric Company	RUR-Up	A2	-	A2	USA
34	Osaka Gas Co., Ltd.	Stable	Aa3	*A1*	A1	Japan

[13] BCA means a Baseline Credit Assessment for a government related issuer. Please see Government Related Issuers: Methodology Update, July 2010. In addition, certain companies in Japan receive a ratings uplift due to country-specific considerations. Please see "Support system for large corporate entities in Japan can provide ratings uplift, with limits" in Appendix G.

	Issuer	Outlook	Actual Rating	*BCA / Rating Before Uplift*[13]	Grid Indicated Rating	Country
35	PacifiCorp	RUR-Up	Baa1	-	A3	USA
36	Pennsylvania Electric Company	Stable	Baa2	-	Baa1	USA
37	PNG Companies LLC	RUR-Up	Baa3	-	Baa2	USA
38	Public Service Company of New Mexico	RUR-Up	Baa3	-	Baa2	USA
39	Saudi Electricity Company	Stable	A1	*Baa1*	Baa1	Saudi Arabia
40	SCANA Corporation	Stable	Baa3	-	Baa2	USA
41	Southwestern Public Service Company	RUR-Up	Baa2	-	Baa1	USA
42	UGI Utilities, Inc.	RUR-Up	A3	-	A2	USA
43	Virginia Electric and Power Company	RUR-Up	A3	-	A2	USA
44	Western Massachusetts Electric Company	RUR-Up	Baa2	-	A2	USA
45	Wisconsin Public Service Corporation	RUR-Up	A2	-	A2	USA

Appendix C: Regulated Electric and Gas Utility Grid Outcomes and Outlier Discussion

In the table below positive or negative "outliers" for a given sub-factor are defined as issuers whose grid sub-factor score is at least two broad rating categories higher or lower than a company's rating (e.g. a B-rated company whose rating on a specific sub-factor is in the Baa-rating category is flagged as a positive outlier for that sub-factor). Green is used to denote a positive outlier, whose grid-indicated performance for a sub-factor is two or more broad rating categories higher than Moody's rating. Red is used to denote a negative outlier, whose grid-indicated performance for a sub-factor is two or more broad rating categories lower than Moody's rating.

Grid-Indicated Ratings

					Factor 1a	Factor 1b		Factor 2a	Factor 2b		Factor 3a	Factor 3b		Factor 4a	Factor 4b	Factor 4c	Factor 4d	Hold-Co Notching for Structural Subor-dination
		Actual Rating / *BCA or Rating Before Uplift*	Indicated Rating	Indicated Factor 1 Rating	12.50 %	12.50 %	Indicated Factor 2 Rating	12.50 %	12.50 %	Indicated Factor 3 Rating	5.00 %	5.00 %	Indicated Factor 4 Rating	7.50 %	15.00 %	10.00 %	7.50 %	
1	Ameren Illinois Company	Baa2	A3	Baa	A	Baa	Baa	Aa	Ba	Baa	Baa	-	A	Baa	A	Baa	Aa	n/a
2	American Electric Power Company, Inc.	Baa2	Baa2	A	A	A	Baa	A	Baa	Baa	Baa	Baa	Baa	Baa	Baa	Baa	Baa	-1
3	Appalachian Power Company	Baa2	Baa1	A	A	A	Baa	Baa	Baa	Baa	Baa	Baa	Baa	Baa	Baa	Baa	Baa	n/a
4	Arizona Public Service Company	Baa1	A3	A	A	A	Baa	A	Baa	Baa	Baa	Baa	A	A	A	A	A	n/a
5	China Longyuan Power Group Corporation Ltd.	Baa3 / *Ba1*	Ba1	Ba	Ba	Baa	A	Baa	A	Baa	Baa	A	Ba	Ba	Ba	Baa	B	-1
6	China Resources Gas Group Limited	Baa1 / *Baa2*	Baa1	Ba	Ba	Baa	Ba	Ba	Baa	Baa	Baa	-	A	Aaa	A	A	A	n/a
7	Chubu Electric Power Company, Incorporated	A3 / *Baa2*	Baa2	A	Aa	Baa	Baa	Ba	A	Baa	A	Ba	Ba	Aa	Ba	Ba	B	n/a
8	Consumers Energy Company	Baa1	A2	A	A	Aa	A	Aa	A	Ba	Baa	Ba	A	A	A	A	Baa	n/a
9	Distribuidora de Electricidad La Paz S.A.	Ba3	Ba1	B	B	Ba	B	B	Ba	B	B	-	A	Baa	A	A	A	n/a
10	Duke Energy Corp.	Baa1	Baa2	A	A	Aa	Baa	A	Baa	A	A	A	Baa	A	Baa	Baa	A	-2
11	Empresa Electrica de Guatemala, S.A. (EEGSA)	Ba2	Baa3	Ba	Ba	Ba	Ba	Ba	Ba	Ba	Ba	-	Baa	A	Aa	B	A	n/a
12	Entergy Corp	Baa3	Baa3	Baa	A	Baa	Baa	Baa	Baa	A	A	Baa	A	A	A	A	Baa	-2
13	Florida Power & Light Company	A2	A1	A	A	Aa	A	Aa	Baa	A	A	A	Aa	Aaa	Aa	Aa	Aa	n/a
14	FortisBC Holdings Inc.	Baa2	Baa2	A	A	A	A	A	A	A	A	-	Ba	Ba	Ba	Ba	Ba	0
15	Gail (India) Ltd	Baa2 / *Baa2*	A3	Ba	Ba	Ba	Baa	Baa	Baa	Ba	Ba	-	Aa	Aaa	Aaa	Aaa	Aa	n/a
16	Gas Natural Ban, S.A.	B3	B1	Caa	Caa	Caa	Caa	Caa	Caa	B	B	-	A	Ba	A	Baa	Aaa	n/a

Grid-Indicated Ratings

		Actual Rating / *BCA or Rating Before Uplift*	Indicated Rating	Indicated Factor 1 Rating	Factor 1a 12.50 %	Factor 1b 12.50 %	Indicated Factor 2 Rating	Factor 2a 12.50 %	Factor 2b 12.50 %	Indicated Factor 3 Rating	Factor 3a 5.00 %	Factor 3b 5.00 %	Indicated Factor 4 Rating	Factor 4a 7.50 %	Factor 4b 15.00 %	Factor 4c 10.00 %	Factor 4d 7.50 %	Hold-Co Notching for Structural Subor-dination
17	Georgia Power Company	A3	A2	Aa	Aa	Aa	A	Aa	Baa	Baa	Baa	Baa	A	Aa	A	Baa	A	n/a
18	Great Plains Energy Incorporated	Baa3	Baa3	A	A	A	Ba	Baa	Ba	Ba	Baa	Ba	Baa	Baa	Baa	Baa	Baa	-1
19	Hawaiian Electric Industries, Inc.	Baa2	Baa1	A	A	A	A	Aa	A	Ba	Baa	Ba	Baa	A	Baa	Baa	Baa	-1
20	Hokuriku Electric Power Company	A3 / *Baa2*	Baa2	A	Aa	Baa	Baa	Ba	A	Ba	Baa	Ba	Ba	Aa	Ba	Ba	B	n/a
21	Idaho Power Company	Baa1	A3	A	A	A	A	Aa	Baa	Baa	Baa	A	Baa	Baa	Baa	Baa	A	n/a
22	Kansai Electric Power Company, Incorporated	A3 / *Baa2*	Baa3	A	Aa	Baa	Baa	Ba	A	Baa	A	Ba	B	Ba	B	Ba	Caa	n/a
23	Korea Electric Power Corporation	A1 / *Baa2*	Baa3	Baa	Baa	Baa	Ba	Ba	Ba	A	A	A	Ba	Ba	Ba	Ba	Baa	n/a
24	Madison Gas & Electric	A1	A1	A	A	Aa	A	Aa	Baa	Baa	Baa	Baa	Aa	Aa	Aa	Aa	A	n/a
25	MidAmerican Energy Company	A2	A2	A	A	Aa	Ba	Ba	Baa	Baa	Baa	A	A	Aa	A	Aa	A	n/a
26	MidAmerican Energy Holdings Co.	Baa1	A3	A	A	A	Baa	Baa	Baa	A	A	Baa	Baa	Baa	Baa	A	Baa	0
27	Mississippi Power Company	Baa1	Baa1	A	A	A	A	Aa	Baa	Ba	Baa	Ba	Baa	A	Baa	Baa	Baa	n/a
28	Niagara Mohawk Power Corporation	A3	A2	A	A	A	A	Aa	Baa	Baa	Baa	-	A	Aa	A	A	Aa	n/a
29	Newfoundland Power Inc.	Baa1	Baa1	A	A	A	A	A	A	Baa	Baa	Baa	Baa	Baa	Baa	Baa	Baa	n/a
30	Northern States Power Minnesota	A3	A2	A	A	A	A	Aa	Baa	Baa	Baa	Baa	A	A	A	A	A	n/a
31	Ohio Power Company	Baa1	A2	A	A	A	Baa	Baa	A	Ba	Baa	B	A	A	Aa	A	A	n/a
32	Okinawa Electric Power Company, Incorporated	Aa3 / *A2*	A3	Aa	Aa	Aa	A	A	A	Ba	Ba	Ba	Baa	Aaa	Ba	Baa	B	n/a
33	Oklahoma Gas and Electric Company	A2	A2	A	A	Aa	Baa	Baa	A	Baa	Baa	Baa	A	A	A	A	A	n/a
34	Osaka Gas Co., Ltd.	Aa3 / *A1*	A1	Aa	Aa	Aa	A	A	A	A	A	-	A	Aaa	A	A	A	n/a
35	PacifiCorp	Baa1	A3	A	A	A	Baa	Aa	Ba	Baa	A	Baa	A	A	A	Baa	A	n/a
36	Pennsylvania Electric Company	Baa2	Baa1	A	A	A	Baa	A	Baa	Baa	Baa	-	Baa	Baa	Baa	Ba	A	n/a

Grid-Indicated Ratings

		Actual Rating / *BCA or Rating Before Uplift*	Indicated Rating	Indicated Factor 1 Rating	Factor 1a 12.50 %	Factor 1b 12.50 %	Indicated Factor 2 Rating	Factor 2a 12.50 %	Factor 2b 12.50 %	Indicated Factor 3 Rating	Factor 3a 5.00 %	Factor 3b 5.00 %	Indicated Factor 4 Rating	Factor 4a 7.50 %	Factor 4b 15.00 %	Factor 4c 10.00 %	Factor 4d 7.50 %	Hold-Co Notching for Structural Subor-dination
37	PNG Companies	Baa3	Baa2	A	A	A	Ba	Baa	Ba	Baa	Baa	-	Ba	Ba	Ba	Ba	Baa	n/a
38	Public Service Company of New Mexico	Baa3	Baa2	Baa	A	Baa	Ba	Baa	Ba	Baa	Baa	Baa	Baa	A	Baa	A	Baa	n/a
39	Saudi Electricity	A1 / *Baa1*	Baa1	Baa	Baa	A	Ba	Baa	Ba	A	Baa	Aaa	A	Aaa	A	A	Baa	n/a
40	SCANA	Baa3	Baa2	Aa	Aa	Aa	Baa	Baa	Baa	Ba	Baa	Ba	Baa	Baa	Baa	Baa	Baa	-1
41	Southwestern Public Service Company	Baa2	Baa1	A	A	A	Baa	A	Baa	Ba	Ba	Baa	Baa	Baa	Baa	Baa	A	n/a
42	UGI Utilities, Inc.	A3	A2	A	A	A	A	A	A	Baa	Baa	-	A	A	A	A	A	n/a
43	Virginia Electric Power Company	A3	A2	Aa	Aa	Aa	A	Aa	Baa	Baa	Baa	Baa	A	A	A	A	A	n/a
44	Western Mass Electric Co.	Baa2	A2	A	A	Aa	A	A	A	Ba	Ba	-	A	Aa	A	A	A	n/a
45	Wisconsin Public Service Corporation	A2	A2	A	A	Aa	A	Aa	Baa	Baa	Baa	Baa	A	Aa	A	A	A	n/a

Outliers in Legislative and Judicial Underpinnings of the Regulatory Framework

For Chubu Electric Power Company, Hokuriku Electric Power Company, Kansai Electric Power Company, and Okinawa Electric Power Company, our ratings consider the credit-supportive underpinnings in the Electric Utility Industries Law that have been balanced against higher leverage and lower returns than global peers.

For SCANA Corporation, the South Carolina Base Load Review Act provides strong credit support for companies engaging in nuclear new-build, which also affects the scoring for consistency and predictability of regulation. However, SCANA's rating also considers the size and complexity of the nuclear construction project, which is out of scale to the size of the company, as well as structural subordination.

Outliers in Consistency and Predictability of Regulation

Consumers Energy Company has benefitted from increasingly predictable regulatory decisions in Michigan, as well as improved timeliness due to forward test years and the ability to implement interim rates. However, the substantial debt at its parent, CMS Energy Corporation (Baa3, RUR-up), has weighed on the ratings.

Duke Energy Corporation has received generally consistent and predictable rate treatment at it subsidiary operating companies, but parent debt has impacted financial metrics

The shift in business mix at Western Massachusetts Electric Company will place a greater percentage of its rate base under the jurisdiction of the FERC, generally viewed as having greater consistency and predictability, which is somewhat tempered by its financial metrics.

Outliers in Timeliness of Recovery of Operating and Capital Costs

Ameren Illinois Company has a formula rate plan that has a positive impact on timeliness, balanced against rate decisions that have been somewhat below average.

Hawaiian Electric Industries, Inc.'s timeliness has improved considerably due to the introduction in rate-making of a de-coupling mechanism, forward test year and an investment tracker at its utility subsidiary.

For Mississippi Power Company, a fully forward test year and the ability to recover some construction-work-in-progress in rates lead to strong scoring for timeliness. Ratings also consider risks associated with construction of a power plant that will utilize lignite and integrated gasification combined cycle technology, that has experienced material costs overruns and that represents a high degree of asset concentration for the utility.

For MidAmerican Energy Company, the absence of a fuel cost pass-through mechanism at the time of this writing results in its relatively low scoring on timeliness. However, the company has proposed a fuel clause in its current rate case, and the regulatory framework has generally been quite credit supportive, which has helped the utility generate good financial metrics.

The primary utility divisions of PacifiCorp have forward test years that have a positive impact on timeliness, balanced against rate decisions that have been somewhat below average.

Outliers in Sufficiency of Rates and Returns

China Longyuan Power Group Corporation Ltd. has benefitted from a higher benchmark tariff for its wind power generation, balanced against a less well developed regulatory framework.

Outliers in Market Position

Okinawa Electric Power Company, Incorporated's service territory is a group of small islands with limited economic diversity, which negatively impacts its market position. Generation is highly dependent on coal and oil. These factors are balanced against a strong regulatory framework.

Outliers in Generation and Fuel Diversity

Ohio Power Company has been highly dependent on coal-fired generation but will be divesting generation assets in accordance with regulatory initiatives.

Outliers in Financial Strength

Distribuidora de Electricidad La Paz S.A. has strong historical financial metrics that are balanced against the somewhat unpredictable regulatory framework and the risk of government intervention in its business.

Gail (India) Limited has strong historical financial metrics that are balanced against higher business risk in its diversified, non-rate-regulated operations, including in oil and gas exploration and production. Financial metrics are expected to weaken somewhat relative to historical levels due to debt funded capex and are thus expected to be more in line with its rating going forward.

Gas Natural BAN S.A. has strong historical financial metrics that are expected to deteriorate due to frozen tariff positions, reflected in weak scores for the regulatory environment. Its ratings are also impacted by debt maturities that are concentrated in the short term and the Government of Argentina's B3 negative rating.

Appendix D: Approach to Ratings within a Utility Family

Typical Composition of a Utility Family

A typical utility company structure consists of a holding company ("HoldCo") that owns one or more operating subsidiaries (each an "OpCo"). OpCos may be regulated utilities or non-utility companies. Financing of these entities varies by region, in part due to the regulatory framework. A HoldCo typically has no operations – its assets are mostly limited to its equity interests in subsidiaries, and potentially other investments in subsidiaries or minority interests in other companies. However, in certain cases there may be material operations at the HoldCo level. Financing can occur primarily at the OpCo level, primarily at the HoldCo level, or at both HoldCo and OpCos in varying proportions. When a HoldCo has multiple utility OpCos, they will often be located in different regulatory jurisdictions. A HoldCo may have both levered and unlevered OpCos.

General Approach to a Utility Family

In our analysis, we generally consider the stand-alone credit profile of an OpCo and the credit profile of its ultimate parent HoldCo (and any intermediate HoldCos), as well as the profile of the family as a whole, while acknowledging that these elements can have cross-family credit implications in varying degrees, principally based on the regulatory framework of the OpCos and the financing model (which has often developed in response to the regulatory framework).

In addition to considering individual OpCos under this (or another applicable) methodology, we typically[14] approach a HoldCo rating by assessing the qualitative and quantitative factors in this methodology for the consolidated entity and each of its utility subsidiaries. Ratings of individual entities in the issuer family may be pulled up or down based on the interrelationships among the companies in the family and their relative credit strength.

In considering how closely aligned or how differentiated ratings should be among members of a utility family, we assess a variety of factors, including:

- Regulatory or other barriers to cash movement among OpCos and from OpCos to HoldCo
- Differentiation of the regulatory frameworks of the various OpCos
- Specific ring-fencing provisions at particular OpCos
- Financing arrangements – for instance, each OpCo may have its own financing arrangements, or the sole liquidity facility may be at the parent; there may be a liquidity pool among certain but not all members of the family; certain members of the family may better be able to withstand a temporary hiatus of external liquidity or access to capital markets
- Financial covenants and the extent to which an Event of Default by one OpCo limits availability of liquidity to another member of the family
- The extent to which higher leverage at one entity increases default risk for other members of the family
- An entity's exposure to or insulation from an affiliate with high business risk

[14] See paragraph at the end of this section for approaches to Hybrid HoldCos.

» Structural features or other limitations in financing agreements that restrict movements of funds, investments, provision of guarantees or collateral, etc.

» The relative size and financial significance of any particular OpCo to the HoldCo and the family

See also those factors noted in Notching for Structural Subordination of Holding Companies.

Our approach to a Hybrid HoldCo (see definition in Appendix E) depends in part on the importance of its non-utility operations and the availability of information on individual businesses. If the businesses are material and their individual results are fully broken out in financial disclosures, we may be able to assess each material business individually by reference to the relevant Moody's methodologies to arrive at a composite assessment for the combined businesses. If non-utility operations are material but are not broken out in financial disclosures, we may look at the consolidated entity under more than one methodology. When non-utility operations are less material but could still impact the overall credit profile, the difference in business risks and our estimation of their impact on financial performance will be qualitatively incorporated in the rating.

Higher Barriers to Cash Movement with Financing Predominantly at the OpCos

Where higher barriers to cash movement exist on an OpCo or OpCos due the regulatory framework or debt structural features, ratings among family members are likely to be more differentiated. For instance, for utility families with OpCos in the US, where regulatory barriers to free cash movement are relatively high, greater importance is generally placed on the stand-alone credit profile of the OpCo.

Our observation of major defaults and bankruptcies in the US sector generally corroborates a view that regulation creates a degree of separateness of default probability. For instance, Portland General Electric (Baa1 RUR-up) did not default on its securities, even though its then-parent Enron Corp. entered bankruptcy proceedings. When Entergy New Orleans (Ba2 stable) entered into bankruptcy, the ratings of its affiliates and parent Entergy Corporation (Baa3 stable) were unaffected. PG&E Corporation (Baa1 stable) did not enter bankruptcy proceedings despite bankruptcies of two major subsidiaries - Pacific Gas & Electric Company (A3 stable) in 2001 and National Energy Group in 2003.

The degree of separateness may be greater or smaller and is assessed on a case by case basis, because situational considerations are important. One area we consider is financing arrangements. For instance, there will tend to be greater differentiation if each member of a family has its own bank credit facilities and difficulties experienced by one entity would not trigger events of default for other entities. While the existence of a money pool might appear to reduce separateness between the participants, there may be regulatory barriers within money pools that preserve separateness. For instance, non-utility entities may have access to the pool only as a borrower, only as a lender, and even the utility entities may have regulatory limits on their borrowings from the pool or their credit exposures to other pool members. If the only source of external liquidity for a money pool is borrowings by the HoldCo under its bank credit facilities, there would be less separateness, especially if the utilities were expected to depend on that liquidity source. However, the ability of an OpCo to finance itself by accessing capital markets must also be considered. Inter-company tax agreements can also have an impact on our view of how separate the risks of default are.

For a HoldCo, the greater the regulatory, economic, and geographic diversity of its OpCos, the greater its potential separation from the default probability of any individual subsidiary. Conversely, if a HoldCo's actions have made it clear that the HoldCo will provide support for an OpCo encountering

some financial stress (for instance, due to delays and/or cost over-runs on a major construction project), we would be likely to perceive less separateness.

Even where high barriers to cash movement exist, onerous leverage at a parent company may not only give rise to greater notching for structural subordination at the parent, it may also pressure an OpCo's rating, especially when there is a clear dependence on an OpCo's cash flow to service parent debt. While most of the regulatory barriers to cash movement are very real, they are not absolute. Furthermore, while it is not usually in the interest of an insolvent parent or its creditors to bring an operating utility into a bankruptcy proceeding, such an occurrence is not impossible.

The greatest separateness occurs where strong regulatory insulation is supplemented by effective ring-fencing provisions that fully separate the management and operations of the OpCo from the rest of the family and limit the parent's ability to cause the OpCo to commence bankruptcy proceedings as well as limiting dividends and cash transfers. Currently, most entities in US utility families (including HoldCos and OpCos) are rated within 3 notches of each other. However, Energy Future Holdings Corp. (Caa3 senior unsecured) and its T&D subsidiary Oncor Electric Delivery Company LLC (Baa3 senior secured) have much wider notching due to the combination of regulatory imperatives and strong ring-fencing that includes a significant minority shareholder who must agree to important corporate decisions, including a voluntary bankruptcy filing.

Lower Barriers to Cash Movement with Financing Predominantly at the OpCos

Our approach to rating issuers within a family where there are lower regulatory barriers to movement of cash from OpCos to HoldCos (e.g., many parts of Asia and Europe) places greater emphasis on the credit profile of the consolidated group. Individual OpCos are considered based on their individual characteristics and their importance to the family, and their assigned ratings are typically banded closely around the consolidated credit profile of the group due to the expectation that cash will transit relatively freely among family entities.

Some utilities may have OpCos in jurisdictions where cash movement among certain family members is more restricted by the regulatory framework, while cash movement from and/or among OpCos in other jurisdictions is less restricted. In these situations, OpCos with more restrictions may vary more widely from the consolidated credit profile while those with fewer restrictions may be more tightly banded around the other entities in the corporate family group.

Appendix E: Brief Descriptions of the Types of Companies Rated Under This Methodology

The following describes the principal categories of companies rated under this methodology:

Vertically Integrated Utility: Vertically integrated utilities are regulated electric or combination utilities (see below) that own generation, distribution and (in most cases) electric transmission assets. Vertically integrated utilities are generally engaged in all aspects of the electricity business. They build power plants, procure fuel, generate power, build and maintain the electric grid that delivers power from a group of power plants to end-users (including high and low voltage lines, transformers and substations), and generally meet all of the electric needs of the customers in a specific geographic area (also called a service territory). The rates or tariffs for all of these monopolistic activities are set by the relevant regulatory authority.

Transmission & Distribution Utility: Transmission & Distribution utilities (T&Ds) typically operate in deregulated markets where generation is provided under a competitive framework. T&Ds own and operate the electric grid that transmits and/or distributes electricity within a specific state or region. T&Ds provide electrical transportation and distribution services to carry electricity from power plants and transmission lines to retail, commercial, and industrial customers. T&Ds are typically responsible for billing customers for electric delivery and/or supply, and most have an obligation to provide a standard supply or provider-of-last-resort (POLR) service to customers that have not switched to a competitive supplier. These factors distinguish T&Ds from Networks, whose customers are retail electric suppliers and/or other electricity companies. In a smaller number of cases, T&Ds rated under this methodology may not have an obligation to provide POLR services, but are regulated in sub-sovereign jurisdictions. The rates or tariffs for these monopolistic T&D activities are set by the relevant regulatory authority.

Local Gas Distribution Company: Distribution is the final step in delivering natural gas to customers. While some large industrial, commercial, and electric generation customers receive natural gas directly from high capacity pipelines that carry gas from gas producing basins to areas where gas is consumed, most other users receive natural gas from their local gas utility, also called a local distribution company (LDC). LDCs are regulated utilities involved in the delivery of natural gas to consumers within a specific geographic area. Specifically, LDCs typically transport natural gas from delivery points located on large-diameter pipelines (that usually operate at fairly high pressure) to households and businesses through thousands of miles of small-diameter distribution pipe (that usually operate at fairly low pressure). LDCs are typically responsible for billing customers for gas delivery and/or supply, and most also have the responsibility to procure gas for at least some of their customers, although in some markets gas supply to all customers is on a competitive basis. These factors distinguish LDCs from gas networks, whose customers are retail gas suppliers and/or other natural gas companies. The rates or tariffs for these monopolistic activities are set by the relevant regulatory authority.

Integrated Gas Utility: Integrated gas regulated utilities are regulated utilities that deliver gas to all end users in a particular service territory by sourcing the commodity; operating transport infrastructure that often combines high pressure pipelines with low pressure distribution systems and, in some cases, gas storage, re-gasification or other related facilities; and performing other supply-related activities, such as customer billing and metering. The rates or tariffs for the totality of these activities are set by the relevant regulatory authority. Many integrated gas utilities are national in scope.

Combination Utility: Combination utilities are those that combine an LDC or Integrated Gas Utility with either a vertically integrated utility or a T&D utility. The rates or tariffs for these monopolistic activities are set by the relevant regulatory authority.

Regulated Generation Utility: Regulated generation utilities (Regulated Gencos) are utilities that almost exclusively have generation assets, but their activities are generally regulated like those of vertically integrated utilities. In the US, this means that the purchasers of their output (typically other investor-owned, municipal or cooperative utilities) pay a regulated rate based on the total allowed costs of the Regulated Genco, including a return on equity based on a capital structure designated by the regulator (primarily FERC). Companies that have been included in this group include certain generation companies (including in Korea and China) that are not rate regulated in the usual sense of recovering costs plus a regulated rate of return on either equity or asset value. Instead, we have looked at a combination of governmental action with respect to setting feed-in tariffs and directives on how much generation will be built (or not built) in combination with a generally high degree of government ownership, and we have concluded that these companies are currently best rated under this methodology. Future evolution in our view of the operating and/or regulatory environment of these companies could lead us to conclude that they may be more appropriately rated under a related methodology (for example, Unregulated Utilities and Power Companies).

Independent System Operator: An Independent System Operator (ISO) is an organization formed in certain regional electricity markets to act as the sole chief coordinator of an electric grid. In the areas where an ISO is established, it coordinates, controls and monitors the operation of the electrical power system to assure that electric supply and demand are balanced at all times, and, to the extent possible, that electric demand is met with the lowest-cost sources. ISOs seek to assure adequate transmission and generation resources, usually by identifying new transmission needs and planning for a generation reserve margin above expected peak demand. In regions where generation is competitive, they also seek to establish rules that foster a fair and open marketplace, and they may conduct price-setting auctions for energy and/or capacity. The generation resources that an ISO coordinates may belong to vertically integrated utilities or to independent power producers. ISOs may not be rate-regulated in the traditional sense, but fall under governmental oversight. All participants in the regional grid are required to pay a fee or tariff (often volumetric) to the ISO that is designed to recover its costs, including costs of investment in systems and equipment needed to fulfill their function. ISOs may be for profit or not-for-profit entities.

In the US, most ISOs were formed at the direction or recommendation of the Federal Energy Regulatory Commission (FERC), but the ISO that operates solely in Texas falls under state jurisdiction. Some US ISOs also perform certain additional functions such that they are designated as Regional Transmission Organizations (or RTOs).

Transmission-Only Utility: Transmission-only utilities are solely focused on owning and operating transmission assets. The transmission lines these utilities own are typically high-voltage and allow energy producers to transport electric power over long distances from where it is generated (or received) to the transmission or distribution system of a T&D or vertically integrated utility. Unlike most of the other utilities rated under this methodology, transmission-only utilities primarily provide services to other utilities and ISOs. Transmission-only utilities in most parts of the world other than the US have been rated under the Regulated Networks methodology, and we expect that FERC-regulated transmission-only utilities in the US will also transition to the Regulated Networks when that methodology is updated (expected in 2014).

Utility Holding Company (Utility HoldCo): As detailed in Appendix D, regulated electric and gas utilities are often part of corporate families under a parent holding company. The operating subsidiaries of Utility Holdcos are overwhelmingly regulated electric and gas utilities.

Hybrid Holding Company (Hybrid HoldCo): Some utility families contain a mix of regulated electric and gas utilities and other types of companies, but the regulated electric and gas utilities represent the majority of the consolidated cash flows, assets and debt. The parent company is thus a Hybrid HoldCo.

Appendix F: Key Industry Issues Over the Intermediate Term

Political and Regulatory Issues

As highly regulated monopolistic entities, regulated utilities continually face political and regulatory risk, and managing these risks through effective outreach to key customers as well as key political and regulatory decision-makers is, or at least should be, a core competency of companies in this sector. However, larger waves of change in the political, regulatory or economic environment have the potential to cause substantial changes in the level of risk experienced by utilities and their investors in somewhat unpredictable ways.

One of the more universal risks faced by utilities currently is the compression of allowed returns. A long period of globally low interest rates, held down by monetary stimulus policies, has generally benefitted utilities, since reductions in allowed returns have been slower than reductions in incurred capital costs. Essentially all regulated utilities face a ratcheting down of allowed and/or earned returns. More difficult to predict is how regulators will respond when monetary stimulus reverses, and how well utilities will fare when fixed income investors require higher interest rates and equity investors require higher total returns and growth prospects.

The following global snapshot highlights that regulatory frameworks evolve over time. On an overall basis in the US over the past several years, we have noted some incremental positive regulatory trends, including greater use of formula rates, trackers and riders, and (primarily for natural gas utilities) de-coupling of returns from volumetric sales. In Canada, the framework has historically been viewed as predictable and stable, which has helped offset somewhat lower levels of equity in the capital structure, but the compression of returns has been relatively steep in recent years. In Japan, the regulatory authorities are working through the challenges presented by the decision to shut down virtually all of the country's nuclear generation capacity, leading to uncertainty regarding the extent to which increased costs will be reflected in rate increases sufficient to permit returns on capital to return to prior levels. China's regulatory framework has continued to evolve, with fairly low transparency and some time-to-time shifts in favored versus less-favored generation sources balanced by an overall state policy of assuring sustainability of the sector, adequate supply of electricity and affordability to the general public. Singapore and Hong Kong have fairly well developed and supportive regulatory frameworks despite a trend towards lower returns, whereas Malaysia, Korea and Thailand have been moving towards a more transparent regulatory framework. The Philippines is in the process of deregulating its power market, while Indian power utilities continue to grapple with structural challenges. In Latin America, there is a wide dispersion among frameworks, ranging from the more stable, long established and predictable framework in Chile to the decidedly unpredictable framework in Argentina. Generally, as Latin American economies have evolved to more stable economic policies, regulatory frameworks for utilities have also shown greater stability and predictability.

All of the other issues discussed in this section have a regulatory/political component, either as the driver of change or in reaction to changes in economic environments and market factors.

Economic and Financial Market Conditions

As regulated monopolies, electric and gas utilities have generally been quite resistant to unsettled economic and financial market conditions for several reasons. Unlike many companies that face direct market-based competition, their rates do not decrease when demand decreases. The elasticity of demand for electricity and gas is much lower than for most products in the consumer economy. When financial markets are volatile, utilities often have greater capital market access than industrial companies in competitive sectors, as was the case in the 2007-2009 recession. However, regulated electric and gas utilities are by no means immune to a protracted or severe recession.

Severe economic malaise can negatively affect utility credit profiles in several ways. Falling demand for electricity or natural gas may negatively impact margins and debt service protection measures, especially when rates are designed such that a substantial portion of fixed costs is in theory recovered through volumetric charges. The decrease in demand in the 2007-2009 recession was notable in comparison to prior recessions, especially in the residential sector. Poor economic conditions can make it more difficult for regulators to approve needed rate increases or provide timely cost recovery for utilities, resulting in higher cost deferrals and longer regulatory lag. Finally, recessions can coincide with a lack of confidence in the utility sector that impacts access to capital markets for a period of time. For instance, in the Great Depression and (to a lesser extent) in the 2001 recession, access for some issuers was curtailed due to the sector's generally higher leverage than other corporate sectors, combined with a concerns over a lack of transparency in financial reporting.

Fuel Price Volatility and the Global Impact of Shale Gas

The ability of most utilities to pass through their fuel costs to end users may insulate a utility from exposure to price volatility of these fuels, but it does not insulate consumers. Consumers and regulators complained vociferously about utility rates during the run-up in hydro-carbon prices in 2005-2008 (oil, natural gas and, to a lesser extent, coal). The steep decline in US natural gas prices since 2009, caused in large part by the development of shale gas and shale oil resources, has been a material benefit to US utilities, because many have been able to pass through substantial base rate increases during a period when all-in rates were declining. Shale hydro-carbons have also had a positive impact, albeit one that is less immediate and direct, on non-US utilities. In much of the eastern hemisphere, natural gas prices under long-term contracts have generally been tied to oil prices, but utilities and other industrial users have started to have some success in negotiating to de-link natural gas from oil. In addition, increasing US production of oil has had a noticeable impact on world oil prices, generally benefitting oil and gas users.

Not all utilities will benefit equally. Utilities that have locked in natural gas under high-priced long-term contracts that they cannot re-negotiate are negatively impacted if they cannot pass through their full contracted cost of gas, or if the high costs cause customer dissatisfaction and regulatory backlash. Utilities with large coal fleets or utilities constructing nuclear power plants may also face negative impacts on their regulatory environment, since their customers will benefit less from lower natural gas prices.

Distributed Generation Versus the Central Station Paradigm

The regulation and the financing of electric utilities are based on the premise that the current model under which electricity is generated and distributed to customers will continue essentially unchanged for many decades to come. This model, called the central station paradigm (because electricity is generated in large, centrally located plants and distributed to a large number of customers, who may in fact be hundreds of miles away), has been in place since the early part of the 20th century. The model has worked because the economies of scale inherent to very large power plants has more than offset the cost and inefficiency (through power losses) inherent to maintaining a grid for transmitting and distributing electricity to end users.

Despite rate structures that only allow recovery of invested capital over many decades (up to 60 years), utilities can attract capital because investors assume that rates will continue to be collected for at least that long a period. Regulators and politicians assume that taxes and regulatory charges levied on electricity usage will be paid by a broad swath of residences and businesses and will not materially discourage usage of electricity in a way that would decrease the amount of taxes collected. A corollary

assumption is that the number of customers taking electricity from the system during that period will continue to be high enough such that rates will be reasonable and generally more attractive than other alternatives. In the event that consumers were to switch en masse to alternate sources of generating or receiving power (for instance distributed generation), rates for remaining customers would either not cover the utility's costs, or rates would need to be increased so much that more customers may be incentivized to leave the system. This scenario has been experienced in the regulated US copper wire telephone business, where rates have increased quite dramatically for users who have not switched to digital or wireless telephone service. While this scenario continues to be unlikely for the electricity sector, distributed generation, especially from solar panels, has made inroads in certain regions.

Distributed generation is any retail-scale generation, differentiated from self-generation, which generally describes a large industrial plant that builds its own reasonably large conventional power plant to meet its own needs. While some residential property owners that install distributed generation may choose to sever their connection to the local utility, most choose to remain connected, generating power into the grid when it is both feasible and economic to do so, and taking power from the grid at other times. Distributed generation is currently concentrated in roof-top photovoltaic solar panels, which have benefitted from varying levels of tax incentives in different jurisdictions. Regulatory treatment has also varied, but some rate structures that seek to incentivize distributed renewable energy are decidedly credit negative for utilities, in particular net metering.

Under net metering, a customer receives a credit from the utility for all of its generation at the full (or nearly full) retail rate and pays only for power taken, also at the retail rate, resulting in a materially reduced monthly bill relative to a customer with no distributed generation. The distributed generation customer has no obligation to generate any particular amount of power, so the utility must stand ready to generate and deliver that customer's full power needs at all times. Since most utility costs, including the fixed costs of financing and maintaining generation and delivery systems, are currently collected through volumetric rates, a customer owning distributed generation effectively transfers a portion of the utility's costs of serving that customer to other customers with higher net usage, notably to customers that do not own distributed generation. The higher costs may incentivize more customers to install solar panels, thereby shifting the utility's fixed costs to an even smaller group of rate-payers. California is an example of a state employing net solar metering in its rate structure, whereas in New Jersey, which has the second largest residential solar program in the US, utilities buy power at a price closer to their blended cost of generation, which is much lower than the retail rate.

To date, solar generation and net metering have not had a material credit impact on any utilities, but ratings could be negatively impacted if the programs were to grow and if rate structures were not amended so that each customer's monthly bill more closely approximated the cost of serving that customer.

In our current view, the possibility that there will be a widespread movement of electric utility customers to sever themselves from the grid is remote. However, we acknowledge that new technologies, such as the development of commercially viable fuel cells and/or distributed electric storage, could materially disrupt the central station paradigm and the credit quality of the utility sector.

Nuclear Issues

Utilities with nuclear generation face unique safety, regulatory, and operational issues. The nuclear disaster at Fukushima Daiichi had a severely negative credit impact on its owner, Tokyo Electric Power Company, Incorporated (Ba3, negative), as well as all the nuclear utilities in the country. Japan previously generated about 30% of its power from 50 reactors, but all are currently either idled or shut down, and utilities in the country face materially higher costs of replacement power, a credit negative. Japan also created a new Nuclear Regulation Authority (NRA), under the Ministry of the Environment to replace the Nuclear Safety Commission, which had been under the Ministry of Economy, Trade and Industry. The NRA has not yet set any schedule for completing safety checks at idled plants.

Fukushima Daiichi also had global consequences. Germany's response was to require that all nuclear power plants in the country be shut by 2022. Switzerland opted for a phase-out by 2031. (Most European nuclear plants are owned by companies rated under other the Unregulated Utilities and Power Companies methodology.) Even in countries where the regulatory response was more moderate, increased regulatory scrutiny has raised operating costs, a credit negative, especially in the US, where low natural gas prices have rendered certain primarily smaller nuclear plants uneconomic. Nuclear license renewal decisions in the US are currently on hold until the Nuclear Regulatory Commission comes to a determination on the safety of spent fuel storage in the absence of a permanent repository. Nonetheless, we view robust and independent nuclear safety regulation as a credit-positive for the industry.

Other general issues for nuclear operators include higher costs and lower reliability related to the increasing age of the fleet. In 2013, Duke Energy Florida, Inc. (Baa1, RUR-up) decided to permanently shut Crystal River Unit 3 after it determined that a de-lamination (or separation) in the concrete of the outer wall of the containment building was uneconomic to repair. San Onofre Nuclear Generating Station was permanently closed in 2013 after its owners, including Southern California Edison Company (A3, RUR-up) and San Diego Gas & Electric Company (A2, RUR-up), decided not to pursue a re-start in light of operating defects in two steam generators that had been replaced in 2010 and 2011.

Korea Hydro and Nuclear Power Company Limited (KHNP, A1 stable) and its parent Korea Electric Power Corporation (KEPCO, A1 stable), face a scandal related to alleged corruption and acceptance of falsified safety documents provided by its parts suppliers for nuclear plants. Korean prosecutors' widening probe into KHNP's use of substandard parts at many of its 23 nuclear power plants caused three plants to be temporarily shut down starting in May 2013 and raises the risk the Korean public will lose confidence in nuclear power. However, more than 80% of substandard parts in the idled plants have been replaced, and a restart is expected in late 2013 or early 2014.

Appendix G: Regional and Other Considerations

Notching Considerations for US First Mortgage Bonds

In most regions, our approach to notching between different debt classes of the same regulated utility issuer follows the guidance in the publication Updated Summary Guidance for Notching Bonds, Preferred Stocks and Hybrid Securities of Corporate Issuers, February 2007), including a one notch differential between senior secured and senior unsecured debt. However, in most cases we have two notches between the first mortgage bonds and senior unsecured debt of regulated electric and gas utilities in the US.

Wider notching differentials between debt classes may also be appropriate in speculative grade. Additional insights for speculative grade issuers are provided in the publication Loss Given Default for Speculative-Grade Non-Financial Companies in the US, Canada and EMEA, June 2009).

First mortgage bond holders in the US generally benefit from a first lien on most of the fixed assets used to provide utility service, including such assets as generating stations, transmission lines, distribution lines, switching stations and substations, and gas distribution facilities, as well as a lien on franchise agreements. In our view, the critical nature of these assets to the issuers and to the communities they serve has been a major factor that has led to very high recovery rates for this class of debt in situations of default, thereby justifying a two notch uplift. The combination of the breadth of assets pledged and the bankruptcy-tested recovery experience has been unique to the US.

In some cases, there is only a one notch differential between US first mortgage bonds and the senior unsecured rating. For instance, this is likely when the pledged property is not considered critical infrastructure for the region, or if the mortgage is materially weakened by carve-outs, lien releases or similar creditor-unfriendly terms.

Securitization

The use of securitization, a financing technique utilizing a discrete revenue stream (typically related to recovery of specifically defined expenses) that is dedicated to servicing specific securitization debt, has primarily been used in the US, where it has been quite pervasive in the past two decades. The first generation of securitization bonds were primarily related to recovery of the negative difference between the market value of utilities' generation assets and their book value when certain states switched to competitive electric supply markets and utilities sold their generation (so-called stranded costs). This technique was then used for significant storm costs (especially hurricanes) and was eventually broadened to include environmental related expenditures, deferred fuel costs, or even deferred miscellaneous expenses. States that have implemented securitization frameworks include Arkansas, California, Connecticut, Illinois, Louisiana, Maryland, Massachusetts, Mississippi, New Hampshire, New Jersey, Ohio, Pennsylvania, Texas and West Virginia. In its simplest form, a securitization isolates and dedicates a stream of cash flow into a separate special purpose entity (SPE). The SPE uses that stream of revenue and cash flow to provide annual debt service for the securitized debt instrument. Securitization is typically underpinned by specific legislation to segregate the securitization revenues from the utility's revenues to assure their continued collection, and the details of the enabling legislation may vary from state to state. The utility benefits from the securitization because it receives an immediate source of cash (although it gives up the opportunity to earn a return on the corresponding asset), and ratepayers benefit because the cost of the securitized debt is lower than the utility's cost of debt and much lower than its all-in cost of capital, which reduces the revenue requirement associated with the cost recovery.

In the presentation of US securitization debt in published financial ratios, Moody's makes its own assessment of the appropriate credit representation but in most cases follows the accounting in audited statements under US Generally Accepted Accounting Principles (GAAP), which is in turn considers the terms of enabling legislation. As a result, accounting treatment may vary. In most states utilities have been required to consolidate securitization debt under GAAP, even though it is technically non-recourse.

In general, we view securitization debt of utilities as being on-credit debt, in part because the rates associated with it reduce the utility's headroom to increase rates for other purposes while keeping all-in rates affordable to customers. Thus, where accounting treatment is off balance sheet, we seek to adjust the company's ratios by including the securitization debt and related revenues for our analysis. Where the securitized debt is on balance sheet, our credit analysis also considers the significance of ratios that exclude securitization debt and related revenues. Since securitization debt amortizes mortgage-style, including it makes ratios look worse in early years (when most of the revenue collected goes to pay interest) and better in later years (when most of the revenue collected goes to pay principal).

Strong levels of government ownership in Asia Pacific (ex-Japan) provide rating uplift

Strong levels of government ownership have dominated the credit profiles of utilities in Asia Pacific (excluding Japan), generally leading to ratings that are a number of notches above the Baseline Credit Assessment. Regulated electric and gas utilities with significant government ownership are rated using this methodology in conjunction with the Joint Default Analysis approach in our methodology for Government-Related Issuers.

Support system for large corporate entities in Japan can provide ratings uplift, with limits

Moody's ratings for large corporate entities in Japan reflect the unique nature of the country's support system, and they are higher than they would otherwise be if such support were disregarded. This is reflected in the tendency for ratings of Japanese utilities to be higher than their grid implied ratings (currently higher on average by about 2 notches), while utilities globally tend to be more evenly distributed above and below their actual ratings. However, even for large prominent companies, our ratings consider that support will not be endless and is less likely to be provided when a company has questionable viability rather than being in need of temporary liquidity assistance.

Appendix H: Treatment of Power Purchase Agreements ("PPAs")

Although many utilities own and operate power stations, some have entered into PPAs to source electricity from third parties to satisfy retail demand. The motivation for these PPAs may be one or more of the following: to outsource operating risks to parties more skilled in power station operation, to provide certainty of supply, to reduce balance sheet debt, to fix the cost of power, or to comply with regulatory mandates regarding power sourcing, including renewable portfolio standards. While Moody's regards PPAs that reduce operating or financial risk as a credit positive, some aspects of PPAs may negatively affect the credit of utilities. The most conservative treatment would be to treat a PPA as a debt obligation of the utility as, by paying the capacity charge, the utility is effectively providing the funds to service the debt associated with the power station. At the other end of the continuum, the financial obligations of the utility could also be regarded as an ongoing operating cost, with no long-term capital component recognized.

Under most PPAs, a utility is obliged to pay a capacity charge to the power station owner (which may be another utility or an Independent Power Producer – IPP); this charge typically covers a portion of the IPP's fixed costs in relation to the power available to the utility. These fixed payments usually help to cover the IPP's debt service and are made irrespective of whether the utility calls on the IPP to generate and deliver power. When the utility requires generation, a further energy charge, to cover the variable costs of the IPP, will also typically be paid by the utility. Some other similar arrangements are characterized as tolling agreements, or long-term supply contracts, but most have similar features to PPAs and are thus analyzed by Moody's as PPAs.

PPAs are recognized qualitatively to be a future use of cash whether or not they are treated as debt-like obligations in financial ratios

The starting point of our analysis is the issuer's audited financial statements – we consider whether the utility's accountants determine that the PPA should be treated as a debt equivalent, a capitalized lease, an operating lease, or in some other manner. PPAs have a wide variety of operational and financial terms, and it is our understanding that accountants are required to have a very granular view into the particular contractual arrangements in order to account for these PPAs in compliance with applicable accounting rules and standards. However, accounting treatment for PPAs may not be entirely consistent across US GAAP, IFRS or other accounting frameworks. In addition, we may consider that factors not incorporated into the accounting treatment may be relevant (which may include the scale of PPA payments, their regulatory treatment including cost recovery mechanisms, or other factors that create financial or operational risk for the utility that is greater, in our estimation, than the benefits received). When the accounting treatment of a PPA is a debt or lease equivalent (such that it is reported on the balance sheet, or disclosed as an operating lease and thus included in our adjusted debt calculation), we generally do not make adjustments to remove the PPA from the balance sheet. However, in relevant circumstances we consider making adjustments that impute a debt equivalent to PPAs that are off-balance sheet for accounting purposes.

Regardless of whether we consider that a PPA warrants or does not warrant treatment as a debt obligation, we assess the totality of the impact of the PPA on the issuer's probability of default. Costs of a PPA that cannot be recovered in retail rates creates material risk, especially if they also cannot be recovered through market sales of power.

Additional considerations for PPAs

PPAs have a wide variety of financial and regulatory characteristics, and each particular circumstance may be treated differently by Moody's. Factors which determine where on the continuum Moody's treats a particular PPA include the following:

» Risk management: An overarching principle is that PPAs have normally been used by utilities as a risk management tool and Moody's recognizes that this is the fundamental reason for their existence. Thus, Moody's will not automatically penalize utilities for entering into contracts for the purpose of reducing risk associated with power price and availability. Rather, we will look at the aggregate commercial position, evaluating the risk to a utility's purchase and supply obligations. In addition, PPAs are similar to other long-term supply contracts used by other industries and their treatment should not therefore be fundamentally different from that of other contracts of a similar nature.

» Pass-through capability: Some utilities have the ability to pass through the cost of purchasing power under PPAs to their customers. As a result, the utility takes no risk that the cost of power is greater than the retail price it will receive. Accordingly Moody's regards these PPA obligations as operating costs with no long-term debt-like attributes. PPAs with no pass-through ability have a greater risk profile for utilities. In some markets, the ability to pass through costs of a PPA is enshrined in the regulatory framework, and in others can be dictated by market dynamics. As a market becomes more competitive or if regulatory support for cost recovery deteriorates, the ability to pass through costs may decrease and, as circumstances change, Moody's treatment of PPA obligations will alter accordingly.

» Price considerations: The price of power paid by a utility under a PPA can be substantially above or below the market price of electricity. A below-market price will motivate the utility to purchase power from the IPP in excess of its retail requirements, and to sell excess electricity in the spot market. This can be a significant source of cash flow for some utilities. On the other hand, utilities that are compelled to pay capacity payments to IPPs when they have no demand for the power or at an above-market price may suffer a financial burden if they do not get full recovery in retail rates. Moody's will particularly focus on PPAs that have mark-to-market losses, which typically indicates that they have a material impact on the utility's cash flow.

» Excess Reserve Capacity: In some jurisdictions there is substantial reserve capacity and thus a significant probability that the electricity available to a utility under PPAs will not be required by the market. This increases the risk to the utility that capacity payments will need to be made when there is no demand for the power. We may determine that all of a utility's PPAs represent excess capacity, or that a portion of PPAs are needed for the utility's supply obligations plus a normal reserve margin, while the remaining portion represents excess capacity. In the latter case, we may impute debt to specific PPAs that are excess or we take a proportional approach to all of the utility's PPAs.

» Risk-sharing: Utilities that own power plants bear the associated operational, fuel procurement and other risks. These must be balanced against the financial and liquidity risk of contracting for the purchase of power under a PPA. Moody's will examine on a case-by case basis the relative credit risk associated with PPAs in comparison to plant ownership.

» Purchase requirements: Some PPAs are structured with either options or requirements to purchase the asset at the end of the PPA term. If the utility has an economically meaningful requirement to purchase, we would most likely consider it to be a debt obligation. In most such cases, the obligation would already receive on-balance sheet treatment under relevant accounting standards.

» Default provisions: In most cases, the remedies for default under a PPA do not include acceleration of amounts due, and in many cases PPAs would not be considered as debt in a bankruptcy scenario and could potentially be cancelled. Thus, PPAs may not materially increase Loss Given Default for the utility. In addition, PPAs are not typically considered debt for cross-default provisions under a utility's debt and liquidity arrangements. However, the existence of non-standard default provisions that are debt-like would have a large impact on our treatment of a PPA. In addition, payments due under PPAs are senior unsecured obligations, and any inability of the utility to make them materially increases default risk.

Each of these factors will be considered by Moody's analysts and a decision will be made as to the importance of the PPA to the risk analysis of the utility.

Methods for estimating a liability amount for PPAs

According to the weighting and importance of the PPA to each utility and the level of disclosure, Moody's may approximate a debt obligation equivalent for PPAs using one or more of the methods discussed below. In each case we look holistically at the PPA's credit impact on the utility, including the ability to pass through costs and curtail payments, the materiality of the PPA obligation to the overall business risk and cash flows of the utility, operational constraints that the PPA imposes, the maturity of the PPA obligation, the impact of purchased power on market-based power sales (if any) that the utility will engage in, and our view of future market conditions and volatility.

» Operating Cost: If a utility enters into a PPA for the purpose of providing an assured supply and there is reasonable assurance that regulators will allow the costs to be recovered in regulated rates, Moody's may view the PPA as being most akin to an operating cost. Provided that the accounting treatment for the PPA is, in this circumstance, off-balance sheet, we will most likely make no adjustment to bring the obligation onto the utility's balance sheet.

» Annual Obligation x 6: In some situations, the PPA obligation may be estimated by multiplying the annual payments by a factor of six (in most cases). This method is sometimes used in the capitalization of operating leases. This method may be used as an approximation where the analyst determines that the obligation is significant but cannot otherwise be quantified otherwise due to limited information.

» Net Present Value: Where the analyst has sufficient information, Moody's may add the NPV of the stream of PPA payments to the debt obligations of the utility. The discount rate used will be our estimate of the cost of capital of the utility.

» Debt Look-Through: In some circumstances, where the debt incurred by the IPP is directly related to the off-taking utility, there may be reason to allocate the entire debt (or a proportional part related to share of power dedicated to the utility) of the IPP to that of the utility.

» Mark-to-Market: In situations in which Moody's believes that the PPA prices exceed the market price and thus will create an ongoing liability for the utility, we may use a net mark-to-market method, in which the NPV of the utility's future out-of-the-money net payments will be added to its total debt obligations.

» Consolidation: In some instances where the IPP is wholly dedicated to the utility, it may be appropriate to consolidate the debt and cash flows of the IPP with that of the utility. If the utility purchases only a portion of the power from the IPP, then that proportion of debt might be consolidated with the utility.

If we have determined to impute debt to a PPA for which the accounting treatment is not on-balance sheet, we will in some circumstances use more than one method to estimate the debt equivalent obligations imposed by the PPA, and compare results. If circumstances (including regulatory treatment or market conditions) change over time, the approach that is used may also vary.

Moody's Related Research

Industry Outlooks:

» US Regulated Utilities: Regulation Provides Stability as Business Model Faces Challenges, July 2013 (156754)

» Asian Power Utilities (ex-Japan): Broad Stable Outlook; India an Outlier, March 2013 (149101)

Rating Methodologies:

» US Electric Generation & Transmission Cooperatives, April 2013, (151814)

» How Sovereign Credit Quality May Affect Other Ratings, February 2012 (139495)

» Unregulated Utilities and Power Companies, August 2009 (118508)

» Regulated Electric and Gas Networks, August 2009 (118786)

» Natural Gas Pipelines, November 2012 (146415)

» US Public Power Electric Utilities with Generation Ownership Exposure, November 2011 (135299)

» US Electric Generation & Transmission Cooperatives, April 2013 (151814)

» US Municipal Joint Action Agencies, October 2012 (145899)

» Government Related Issuers: Methodology Update, July 2010 (126031)

» Global Regulated Water Utilities, December 2009 (121311)

To access any of these reports, click on the entry above. Note that these references are current as of the date of publication of this report and that more recent reports may be available. All research may not be available to all clients.

The credit ratings assigned in this sector are primarily determined by this credit rating methodology. Certain broad methodological considerations (described in one or more secondary or cross-sector credit rating methodologies) may also be relevant to the determination of credit ratings of issuers and instruments in this sector. Potentially related secondary and cross-sector credit rating methodologies can be found here.

For data summarizing the historical robustness and predictive power of credit ratings assigned using this credit rating methodology, see link.

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Appendix D: A Specific Application Of The Interaction Between GRE And GRM Criteria

RELATED CRITERIA AND RESEARCH

General Criteria:

Group Rating Methodology

*(**Editor's Note:** On Dec. 13, 2013, we republished this article to clarify our description in the third bullet point under paragraph 167 of how we arrive at the rating of a subsidiary that's strategically important, moderately strategic, or nonstrategic to a group when considering rating corporate group entities above the sovereign.)*

1. Standard & Poor's Ratings Services is updating its methodology for rating members of corporate groups to align it with the criteria for members of financial institutions and insurance groups, and therefore is adding to this article section IX, titled "Methodology: Corporate Groups." This update follows our request for comment (RFC) titled "Request For Comment: Group Rating Methodology: Corporate Entities," published Aug. 12, 2013. We have also added section VIII to this article to clarify the application of these criteria to members of U.S. public finance (USPF) groups.

2. This criteria article supersedes "General Criteria: Group Rating Methodology," published May 7, 2013, and incorporates the contents of that article into this update. For issuers within the scope of these criteria, this article also supersedes "Corporate Criteria--Parent/Subsidiary Links; General Principles; Subsidiaries/Joint Ventures/Nonrecourse Projects; Finance Subsidiaries; Rating Link to Parent," published Oct. 28, 2004; "Criteria | Corporates | Utilities: Methodology: Differentiating The Issuer Credit Ratings Of A Regulated Utility Subsidiary And Its Parent," published March 11, 2010; "Criteria | Corporates | Utilities: U.K. Regulatory Ring-Fencing Risk For Utility Holding Companies: Standard & Poor's Approach," published July 8, 2003; and "Criteria | Insurance | Specialty: Property/Casualty Insurance Criteria: Rating Captive Insurers," published April, 13, 2004. (See Appendix C for the complete list of superseded articles.)

3. The changes aim to enhance the transparency of the rating methodology for members of corporate, USPF, and financial services groups, including how group support interacts with extraordinary government support for government-related entities and systemically important financial institutions.

4. The criteria articulate the steps in determining an issuer credit rating (ICR) or financial strength rating (FSR) on a member of a corporate or financial services group. This involves assessing the group's overall creditworthiness, the stand-alone credit profile of group members, and the status of an entity relative to other group members and the parent company.

5. One of the main rating considerations is the potential for support (or negative intervention) from the parent company or group.

6. These criteria therefore address a key area of "external support" as described in paragraphs 31 to 35 of "General Criteria: Principles Of Credit Ratings," published Feb. 16, 2011.

I. SCOPE OF THE CRITERIA

7. These criteria apply to all regulated and nonregulated members of a corporate or financial services group, including holding companies, and to U.S. public finance entities that utilize obligated group/credit group structures to secure

debt.

8. A corporate group for the purpose of these criteria includes industrial entities and utilities. Corporate groups excluded at this time from these criteria are: project finance entities, project developers, transportation equipment leasing, auto rentals, commodities trading, investment holding companies, companies that maximize their returns by buying and selling equity holdings over time, Japanese general trading companies, corporate securitizations, nonprofit and cooperative organizations, master limited partnerships, general partnerships of master limited partnerships, and other entities whose cash flows are primarily derived from partially owned equity holdings. A financial services group is predominantly (1) a financial institutions group or (2) an insurance group (see the Glossary in Appendix A for definitions of both).

9. The group rating methodology also sets out our approach for rating nonoperating and operating holding companies at the top of a group structure, as well as intermediate holding companies. It also applies to mutual or cooperative groups, even though group members may not be linked by ownership but by a variety of ties, including mutual-support mechanisms. The methodology also applies to U.S. public finance obligated groups and credit groups ("obligated groups"), which are a collection of an organization's subsidiaries that are cross-obligated to pay specific debt issues.

10. The criteria assess the group status of a group member to determine a potential long-term ICR or FSR on the entity. For criteria on incorporating government support, see "Rating Government-Related Entities: Methodology And Assumptions," published Dec. 9, 2010, and "Banks: Rating Methodology And Assumptions," published Nov. 9, 2011. For criteria on credit-substitution debt guarantees, see "Legal Criteria For U.S. Structured Finance Transactions: Select Issues Criteria," published Oct. 1, 2006, and "Guarantee Criteria--Structured Finance," published May 7, 2013. For constraints posed by the sovereign rating and/or transfer and convertibility risk assessments, see "Ratings Above The Sovereign--Corporate And Government Ratings: Methodology And Assumptions", published Nov. 19, 2013.

II. SUMMARY OF THE CRITERIA

11. The group rating methodology explains how our assessment of likely extraordinary group support (or conversely, negative group intervention) factors into the ICR on an entity that is a member of a group.

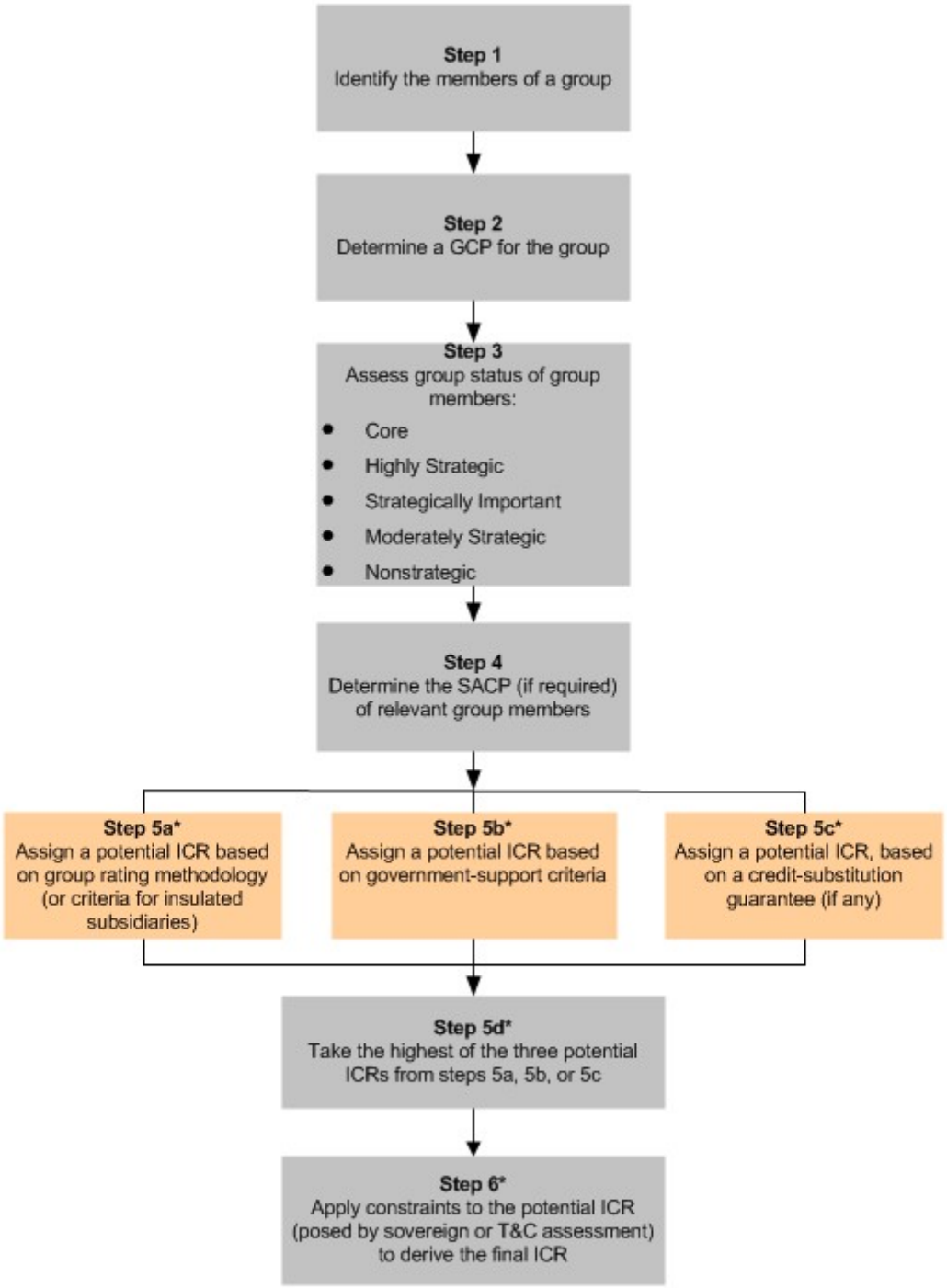
12. The methodology consists of six steps (see chart 1):

- Identifying the group's members;
- Determining a group credit profile (GCP);
- Assessing the status of an entity within the group and the resulting likelihood of group support;
- Assessing a stand-alone credit profile (SACP) for an entity if required;
- Combining the SACP and support conclusions to determine a potential ICR for a group entity, by notching up or down from the SACP or GCP; and
- Applying constraints if any to the potential ICR, depending on the relevant sovereign rating and/or transfer and convertibility (T&C) risk assessments.

13. The criteria define five categories of group status: "core," "highly strategic," "strategically important," "moderately strategic," and "nonstrategic." These categories indicate our view of the likelihood that an entity will receive support

from the group and determine the potential long-term ICR, with reference to the GCP and SACP (see table 1).
Chart 1

Building Blocks For Determining A Rating After Considering The Group Rating Methodology



*An insurance company can receive an ICR or an FSR. GCP--Group credit profile. ICR--Issuer credit rating. FSR--Financial strength rating. SACP--Stand-alone credit profile. T&C--Transfer & convertibility.

Table 1

Summary Of Associating An Entity's Group Status With A Potential Long-Term ICR

Group status	Brief definition	Potential long-term ICR*
Core	Integral to the group's current identity and future strategy. The rest of the group is likely to support these entities under any foreseeable circumstances. (see ¶¶54-55)	Generally at GCP (see ¶74)§
Highly strategic	Almost integral to the group's current identity and future strategy. The rest of the group is likely to support these subsidiaries under almost all foreseeable circumstances. (see ¶57)	Generally one notch below GCP (but see ¶74)§
Strategically important	Less integral to the group than highly strategic subsidiaries. The rest of the group is likely to provide additional liquidity, capital, or risk transfer in most foreseeable circumstances. However, some factors raise doubts about the extent of group support. (see ¶59)	Generally three notches above SACP (but see ¶74)§
Moderately strategic	Not important enough to warrant additional liquidity, capital, or risk transfer support from the rest of the group in some foreseeable circumstances. Nevertheless, there is potential for some support from the group. (see ¶60)	Generally one notch above SACP (but see ¶74)§
Nonstrategic	No strategic importance to the group. These subsidiaries could be sold in the near to medium term. (see ¶61)	Generally at SACP (but see ¶74)§

*Paragraph 28 prevails when the GCP is 'ccc+' or lower. §The potential issuer credit rating (ICR) is subject to sovereign rating constraints (see ¶77) and the government support criteria (see ¶27). An insurance company may receive an ICR and/or an FSR (financial strength rating). GCP--Group credit profile (see ¶33). SACP--Stand-alone credit profile (see also the Glossary in Appendix A).

14. A modified approach applies when a member is assessed as insulated from the rest of the group (see paragraphs 75 and 76), and when determining the interaction of group and government support.

15. For group members classified as government-related entities (GREs), the criteria for considering government support are found in "Rating Government-Related Entities: Methodology And Assumptions," published Dec. 9, 2010.

16. For banks not classified as GREs, the criteria for assessing government support are in "Banks: Rating Methodology And Assumptions," published Nov. 9, 2011.

III. CHANGES FROM THE CORPORATE RFC AND PREVIOUS METHODOLOGY

17. The main changes from the previous methodology for rating members of financial services groups include clarifications regarding:

- The treatment of subgroups within a larger group,
- The assessment of insulated subsidiaries and the interaction of group and government support for bank subsidiaries in foreign countries,
- The definition of the GCP and the unsupported GCP,
- Situations in which a rating on a group member can be higher than the sovereign rating on that entity's country of domicile,
- The impact that group membership has on the SACP on a group subsidiary, and
- The liquidity assessment of a nonoperating holding company (NOHC) at the head of an insurance group.

18. For members of corporate groups, the main changes from the RFC are:

- To remove the section on family-owned entities,
- To clarify the treatment of captive finance entities,

- To clarify situations in which a rating on a group member can be higher than the sovereign rating on that entity's country of domicile, and
- To clarify situations in which a rating on a group member can be higher than the T&C assessment on that entity's country of domicile.

IV. IMPACT ON OUTSTANDING RATINGS

19. We expect about 5% of corporate industrial companies and utilities ratings within the scope of these criteria and "Corporate Methodology," published Nov. 19, 2013, to change. Of that number, we expect approximately 90% to receive a one-notch change, with the majority of the remainder receiving a two-notch change. We expect the ratio of upgrades to downgrades to be around 3:1. Given that the criteria for members of financial services groups and U.S. public finance have been clarified rather than changed, we do not expect rating changes for such group members on the basis of this article.

V. EFFECTIVE DATE AND TRANSITION

20. The criteria are effective immediately. We expect to update our ratings over a period of six months.

VI. METHODOLOGY

21. The likelihood of financial support from a group to a group member, and vice versa, affects that group member's overall creditworthiness.

22. These criteria enable the ICR to reflect our view that a group member may receive or extend such support in the future, beyond what we already factor into its SACP. Ongoing support from the group forms part of the SACP assessment, as explained in "Stand-Alone Credit Profiles: One Component Of A Rating," published Oct. 1, 2010.

23. The potential for extraordinary support is factored into the ICR, even when the need for such support appears remote.

24. The criteria for the SACP assessment are in paragraph 71 and 72.

25. A situation where a group member's potential long-term ICR exceeds its SACP reflects the likelihood of that entity, in a credit-stress scenario, receiving timely and sufficient group support (beyond that already factored into the SACP), thereby lowering the likelihood of its default. For a bank, an indicative ICR is equivalent to a potential ICR.

26. A group member's potential long-term ICR that is lower than its SACP reflects the risk that, if the group were in a credit-stress scenario, the group would draw support from the group member.

27. The criteria set out a six-step process for assessing group members, including the likelihood of either group and government support or negative intervention in a stress scenario (see preceding chart). The steps are:

i. Identify which entities are group members.

ii. Assess the creditworthiness of the group as a whole and assign a GCP. The GCP assessment may factor in potential

support from a government if such support would extend to the entire group (see "Rating Government-Related Entities: Methodology And Assumptions," published Dec. 9, 2010, and "Banks: Rating Methodology And Assumptions," published Nov. 9, 2011).

iii. Assess the group status (that is, the strategic importance to the group) of each group member to be rated.

iv. Determine the SACP of group members to be rated, unless an entity is exempt in accordance with paragraph 51.

v. Assign a potential long-term ICR using, where applicable, criteria for GREs or other government support (see "Rating Government-Related Entities: Methodology And Assumptions," published Dec. 9, 2010, and "Banks: Rating Methodology And Assumptions," published Nov. 9, 2011) and credit-substitution criteria (see the guarantee criteria sections of "Guarantee Criteria--Structured Finance," published May 7, 2013, and "Legal Criteria For U.S. Structured Finance Transactions: Select Issues Criteria," published Oct. 1, 2006, dealing with debt guarantees; see also paragraph 47).

vi. Assign the final ICR after considering any constraints to the potential long-term ICR posed by the relevant sovereign rating and/or T&C risk assessments (see paragraph 77).

28. In all cases, when an ICR is 'CCC+' or lower, the criteria in "Criteria For Assigning 'CCC+', 'CCC', 'CCC-', And 'CC' Ratings," published Oct. 1, 2012, apply. If a GCP is 'ccc+' or lower, but a subsidiary has an SACP of 'b-' or higher (which incorporates the ongoing effect of being part of the group), the rating on the subsidiary could result from a downward adjustment to the SACP for the possibility of extraordinary negative intervention from the group.

29. The final ICR would be the highest of the three potential long-term ICRs resulting from the group support, government support, or credit-substitution guarantee methodologies. For financial services groups, the final ICR may be subject to the caps described in paragraphs 96-98, under section VII.C, titled "Rating Financial Services Group Entities Above The Sovereign." For corporate groups, the final ICR may be subject to the caps described in paragraphs 166 to 168 under section IX.C, titled "Rating Corporate Group Entities Above The Sovereign." The case of extraordinary government support flowing through the group to a subsidiary or subgroup is addressed in paragraph 48. For financial services groups, the case of a strong subsidiary of a relatively weaker parent group is addressed in paragraphs 99 to 103 ("Insulated Subsidiaries Of A Financial Services Group"). We do not view a foreign bank subsidiary that is highly or moderately systemically important in the country where it is domiciled as an insulated subsidiary, however, given that it still has links with its parent group even when the "host" authorities impose restrictions on intragroup flows. Governments can have strong incentives to maintain financial stability in the local market through a combination of local regulatory intervention and government support. This means that support from a "host" government can sometimes be more likely than the potential for extraordinary support from a parent group. For U.S. public finance issuers, these criteria will be used to determine the ICR. If an issue rating is requested, it may differ from the ICR if the legal pledge supporting the bonds includes other features that strengthen or weaken credit quality from that indicated by the ICR, such as a closed lien or subordination. Barring these considerations, the USPF rating will be at the level indicated by the ICR.

A. Identifying Group Members

30. For the purposes of these criteria, the terms "group" and "group members" refer to the parent or ultimate parent, and all the entities over which a parent or ultimate parent has direct or indirect control. Often, the scope of consolidation is the same as that in the parent's or ultimate parent's consolidated audited accounts, plus proportionate stakes in joint ventures (JVs) exclusively or jointly controlled, but not included in such accounts.

31. "Control" refers to the ability to dictate a group member's strategy and cash flow. Control may be present even if ownership is less than 50% plus one share/unit (for an example see paragraph 83).

B. The Group Credit Profile (GCP)

32. In assessing the overall credit profile of a group, the relevant methodologies for assessing corporates, financial institutions, insurance companies, or other entity types apply. For conglomerates (including their holding companies), the specific rating methodology is the one relevant for the operations that most strongly influence the group's profile. This could be based on the amount of capital (such as when financial services dominate the activities), or earnings and dividends to the holding company (for groups with substantial corporate activities). The GCP assessment does reflect the impact of these other operations on the creditworthiness of the group.

B.1 Defining the GCP

33. The GCP is not a rating, but a component of the ICR on a group member. Consequently, GCPs do not have outlooks. The GCP is Standard & Poor's opinion of a group's or subgroup's creditworthiness as if it were a single legal entity, subject to the potential restrictions discussed in paragraphs 38 and 39 below. A GCP is determined when there is more than one legal entity in a group. The term "unsupported GCP" designates our opinion of a group's or subgroup's creditworthiness excluding the likelihood of extraordinary support or negative intervention from a government or a wider group. Unless prefixed with the term "unsupported," a GCP incorporates the likelihood of such extraordinary support or negative intervention from a government or a wider group. A GCP does not indicate the credit quality of any specific obligation.

34. A complex group can have more than one GCP to reflect subgroups (see paragraphs 65 to 67 for the treatment of subgroups within a group).

35. GCPs range from 'aaa' (the highest level) to 'd', on a scale that parallels the ICR ('AAA' to 'D'). The lowercase letters for GCPs indicate their status as a component of a rating rather than as a rating. Like an ICR, a GCP can carry the modifier "+" or "-". Typically, a GCP is 'd' only in the case of a generalized group default. The ICR on a legal entity within a group is lowered to 'D' or 'SD' only in accordance with "Standard & Poor's Ratings Definitions," published Oct. 24, 2013.

36. The criteria assess the consolidated group as though it were a single legal entity (for an exception see paragraph 38).

a) Noncontrolling interests

37. In general, for the purpose of determining a GCP, equity minority interests (also called "noncontrolling interests") in fully consolidated group members count as shareholders' equity (correspondingly, common dividends to these minority interests are treated as part of common dividends for income-statement, cash-flow statement, and balance-sheet purposes).

b) Insulated subsidiaries

38. We would typically count an insulated subsidiary as an equity affiliate, rather than consolidate it with the group, if we assign it a potential ICR that is two or more notches higher than the GCP. If a higher-rated insulated entity's resources are unavailable to the rest of the group, the GCP could be lower, which may in turn further restrict the potential for a higher rating on a group member. Although such an insulated subsidiary is treated as an equity affiliate in the assessment of the GCP, the GCP takes account of projected income flows from the subsidiary.

39. If the potential ICR on an insulated subsidiary is one notch higher than the GCP, it is consolidated with the group for the purposes of determining the GCP. However, the GCP assessment will take account of potential restrictions on resource flows within the group, as is also the case when considering a foreign bank subsidiary that is rated above the GCP because it is highly or moderately systemically important in the country where it is domiciled. In this case, the subsidiary is not classified as insulated, but the GCP will take account of the impact of any local restrictions on the flow of capital, funding, and liquidity, and any implications for the business and risk positions of the parent (see Appendix B for more details).

c) Entities owned by a financial sponsor

40. If the owner of a group entity is a "financial sponsor" (a company with no long-term or strategic interest in the group entity), the GCP assessment excludes the financial sponsor. This means the potential ICR on that group entity does not factor in the likelihood of support from the financial sponsor, nor is it directly constrained by our view of the sponsor's creditworthiness.

41. However, an entity's ownership by a financial sponsor may lead us to view the entity's financial policy and/or overall management as affected by the financial sponsor's exit strategy, its need for cash, or its policy regarding the upstreaming of cash from its holdings. This different treatment, relative to that for strategic corporate owners, reflects our view that, regardless of the degree of control it exerts, a financial sponsor has a lower incentive to support the entity under stress. Also, financial sponsors typically have diverse interests and may not be willing or able to bail out individual entities. The investment time frame is usually short, and as such the direction and management of the investment will be a function of the financial sponsor's exit strategy.

42. The GCP relevant for an entity owned by a financial sponsor typically includes one or more intermediate holding companies of the group, but excludes the financial sponsor's other holdings (that is, other operating companies it controls, as well as its own intermediate holding companies). The group often uses its intermediate holding companies to control operating companies, even those fully or partly owned by a financial sponsor.

43. The relevance of this GCP reflects the view that the primary influence on an intermediate holding company's creditworthiness is the operating companies it owns. The intermediate holding company's purpose is to acquire, control, fund, or secure financing for its operating companies, and it generally depends on those companies' cash flow

to service its financial obligations.

d) Holding companies

44. For a holding company that heads a group, sections VII.F and VII.G apply for insurance groups and financial institutions groups, respectively. For a holding company of a corporate group that contains insurance or financial institution subsidiaries, section IX applies.

e) Multiple ownership and joint ventures

45. If a group entity is under the joint control of at least two parents--for example, a joint venture--the insolvency or financial difficulty of a particular parent may weigh less on the subsidiary's credit quality than if the subsidiary were fully owned by that particular parent. There are different analytical approaches for a group's affiliated business operations, such as joint ventures and their debt, depending on the perceived relationship between the parents and the affiliated operations:

- Investment holding. This is when the group has little or no control over the operating entity. In this case, the approach is to treat the entity as an equity affiliate, which is not consolidated into the GCP. The value, volatility, and liquidity of the investment in the entity, if material, are analyzed on a case-specific basis.
- Partly controlled subsidiary. This is when the group has partial control over a material operating entity. The GCP assessment would involve a partial consolidation--for example pro rata--of the operating entity and, where appropriate, any forecast additional investment in that entity.
- Integrated subsidiary. This is when the group has dominant control over an operating entity and has effectively integrated it into the group (for a full definition of a fully integrated subsidiary see the glossary in Appendix A). The GCP assessment therefore fully consolidates the operating entity.

f) Extraordinary government support in the GCP

46. In some instances, the potential for extraordinary government support (beyond that already factored into the SACP) is a component of the ICRs on certain group members or the GCPs (see "Rating Government-Related Entities: Methodology And Assumptions," published Dec. 9, 2010 [subsequently referred to as the "GRE criteria"], and "Banks: Rating Methodology And Assumptions," published Nov. 9, 2011), reflecting the GRE status of an entity or the systemic importance of a bank.

47. In this case, the criteria assess whether such government support, driven by GRE status or systemic importance, would likely accrue to all members of the group (for members of a group where the ultimate parent is a GRE see table 2).

48. To determine the ICR for a particular group subsidiary, where the assessment indicates that the government:

- Is likely to extend such extraordinary support directly to that subsidiary (bypassing the group), any rating uplift for such support is added to the SACP of that subsidiary in determining the ICR. If the subsidiary has core or highly strategic group status or "almost certain" GRE status, then the rating outcome is based on the group support or GRE support.
- Is likely to extend such extraordinary support indirectly, via the group, to the subsidiary, the supported GCP (which would include uplift, if any, for such support) is the reference point in determining the ICR for that subsidiary because the group is still responsible for the flow of support. The same approach applies if government support is likely for a subsidiary within a subgroup via the head entity of that subgroup; i.e. the supported GCP for the subgroup is the reference point for determining the ICR for the subsidiary.
- Is unlikely to extend such support, the criteria use the unsupported GCP in determining the ICR for that subsidiary.

Table 2

Rating Government-Related Entities--Likelihood Of Government Support Versus Group Support*

SACP or GCP levels	If the subsidiary is likely to benefit directly from extraordinary government support	If the subsidiary is likely to get extraordinary government support indirectly through the group	If the government is unlikely to support the subsidiary either directly or indirectly
SACP is lower than an unsupported GCP	ICR = Higher of the SACP + uplift for potential government support, or SACP + uplift for group status uplift (subject to a cap at the level of the GCP unless the subsidiary is insulated).	ICR = SACP + uplift for group status uplift. If the group status is "strategically important" or lower, the ICR is capped at one notch below the GCP.	ICR = SACP + uplift for group status (with reference to the unsupported GCP).
SACP is higher than or equal to an unsupported GCP	ICR = SACP + uplift for potential government support (subject to a cap at the level of the GCP unless the subsidiary is insulated).	ICR = SACP + uplift for group status (with reference to the GCP). If the group status is "strategically important" or lower, the ICR is capped at one notch below the GCP (unless the subsidiary's SACP>= the GCP). If the SACP>= the GCP, the ICR is capped at the level of the GCP (unless the subsidiary is insulated).	ICR = SACP, subject to a cap at the level of the GCP (unless the subsidiary is insulated).

*This table does not apply to a GRE with an “almost certain” or “extremely high” likelihood of government support. See section VI. E.1 for the definition of an insulated subsidiary. Subject to paragraph 77, the rating assigned to a subsidiary that does not have an SACP is at the level of the GCP if the subsidiary is "core," or one notch lower than the GCP if the subsidiary is classified as "highly strategic." SACP--Stand-alone credit profile. ICR--Issuer credit rating (also FSR--Financial strength rating for insurance companies). GRE--Government-related entity.

C. Group Status Of Individual Members

49. The assessment of the strategic importance (or "group status") of group members takes into account the group's organization and degree of cohesiveness.

C.1 Subsidiaries

50. A subsidiary's group status will often reflect the amount and timeliness of credit support it would receive under stress. This section describes the framework that classifies a subsidiary's group status into one of five categories (for insurance holding companies and financial services holding companies, see sections VII.F and VII.G, respectively):

- Core,
- Highly strategic,
- Strategically important,
- Moderately strategic, or
- Nonstrategic.

51. An SACP for a subsidiary categorized as core or highly strategic to a group is not necessary unless otherwise required under other Standard & Poor's criteria. An example of such criteria is listed in paragraph 85.

52. If a group fails to support a group member in financial distress or puts a group member up for sale and that entity was previously assessed as at least strategically important, our approach is to review the group status of all rated group members.

53. A subsidiary's group status indicates differing degrees of enhancement, or uplift, above its stand-alone creditworthiness that contribute to the potential long-term ICR (see subsections a) to e) below). The ICR on a subsidiary could be at the GCP level if its SACP reaches or exceeds the GCP level. For criteria on incorporating the likelihood of government support, see paragraphs 46 to 48; for a credit-substitution debt guarantee, see paragraph 69; and for treatment of

insulated subsidiaries, see paragraphs 75 and 76. As described in paragraph 77, the final ICR is determined after considering any constraints to the potential long-term ICR posed by the sovereign rating and, with respect to the foreign currency ICR and T&C assessments.

a) Core entities

54. A core entity meets all of the following characteristics (see table 1 for a summary) and at least one of those in paragraph 55:

- Is highly unlikely to be sold;
- Operates in lines of business or functions (which may include group risk management and financing) integral to the overall group strategy. The activities it undertakes or the products and services it sells are very closely aligned with the group's mainstream business and customer base. The entity also often operates in the same target market. Captive insurance operations can be an example of a core subsidiary engaged in group risk management activities for a corporate or financial services group. A financing subsidiary set up specifically to raise corporate debt on behalf of a group can be an example of a core subsidiary engaged in financing activities on behalf of a group. A financing subsidiary of an insurance group, by contrast, is typically not as integral to the group's activities and instead we assess such subsidiaries using section VII.F "Insurance Holding Companies";
- Has a strong, long-term commitment of support from senior group management in good times and under stressful conditions, or incentives exist to induce such support (for example, cross-default clauses in financing documents, or the subsidiary plays an integral role in group risk management or financing). A decision to integrate the operations of a subsidiary or affiliate fully into those of the group or, for an insurer, to reinsure at least 90% of the subsidiary's risks within the group, indicates such commitment;
- Is reasonably successful at what it does or does not have ongoing performance problems that could result in underperformance against the group management's specific targets and group earnings norms over the medium- to long-term. In addition, the subsidiary's business risk should not be substantially higher than the group's. A newly acquired subsidiary has heightened potential for unanticipated risks to emerge, particularly during the first two years after the acquisition, and may not yet be deemed reasonably successful;
- Either constitutes a significant proportion of the consolidated group or is fully integrated with the group (see the glossary in Appendix A);
- Is closely linked to the group's reputation, name, brand, or risk management;
- Has been operating for more than five years (unless it meets the conditions for a start-up operation in paragraph 64); and
- If it is a captive (re)insurer, shows all of the previous features, and at least 90% of the subsidiary's business comes from other group companies on behalf of the group. A captive insurer that does not represent a "significant proportion" of the group may still be assessed as core if its third-party business does not exceed 10% of net premium written, and as highly strategic if third-party business does not exceed 30% of net premium written. (This bullet point only applies to captive (re)insurers.)

55. A core entity must also have at least one of the following characteristics:

- Shares the same name or brand with the main group; or
- Is incorporated separately for legal, regulatory, or tax purposes, but operates more as a division or profit center within the group. Its business, customer, and regional orientations are usually similar to those of other principal operations of the group. A core subsidiary often uses the group's distribution networks and shares administrative functions with other major operating units; or
- Demonstrates capitalization or leverage commensurate with the GCP.

56. U.S. public finance obligated groups are core entities if the obligated group meets the conditions of paragraphs 54 and 55 or if it contains the majority of the organization's primary operating facilities, such as its hospitals or senior living facilities.

b) Highly strategic subsidiaries

57. A subsidiary is highly strategic (that is, nearly core) when it meets all of the characteristics listed below (see table 1 for a summary):

- The first three characteristics listed in paragraph 54;
- All but one of the remaining characteristics in paragraph 54 (excluding the last bullet if the entity is not a captive insurer); and
- At least one characteristic listed in paragraph 55.

58. If the subsidiary is a captive insurer that does not represent a "significant proportion" of the group, it may still be assessed as highly strategic if third-party business does not exceed 30% of net premiums written.

c) Strategically important subsidiaries

59. When a subsidiary does not meet the conditions for core or highly strategic, it is categorized as strategically important if it meets all of the following characteristics (see table 1 for a summary):

- Is unlikely to be sold;
- Is important to the group's long-term strategy;
- Has the long-term commitment of senior group management, or incentives exist to induce such commitment (for example, cross-default clauses in financing documents); and
- Is reasonably successful at what it does or has realistic medium-term prospects of success relative to group management's specific expectations or group earnings norms (except for a prudentially regulated group, in which case paragraph 90 applies).

d) Moderately strategic subsidiaries

60. When a subsidiary does not meet the conditions for core, highly strategic, or strategically important group status, it is categorized as moderately strategic if it meets all of the following characteristics (see table 1 for a summary):

- Is unlikely to be sold in the near term;
- Meets one of the remaining three characteristics for strategically important in paragraph 59; and
- Is likely to receive support from the group should it fall into financial difficulty.

e) Nonstrategic subsidiaries

61. When a subsidiary does not meet the conditions for core, highly strategic, strategically important, or moderately strategic, it is categorized as nonstrategic (see table 1 for a summary).

C.2 Branches

62. A branch is part of a legal entity that is typically at another location. A branch therefore has the same creditworthiness as the legal entity, unless the branch is in another country and the actions of that sovereign could affect the branch's ability to service its obligations (see paragraphs 97 and 98 for financial services). For more details on the criteria for bank branches, see "Assessing Bank Branch Creditworthiness," published Oct. 14, 2013.

C.3 Start-ups

63. A start-up operation may fit into any of the five group status categories, although it must show all the characteristics in paragraph 54 to be in the core category.

64. A start-up (see the glossary in Appendix A for a definition) subsidiary is generally not regarded as core (see paragraph 54) or highly strategic (see paragraph 57), however, because of the lack of an operating history. For a start-up, the potential for volatile earnings is likely to be higher than for long-standing operations. However, a start-up may be assessed as core to the group if it meets all the other characteristics listed in paragraph 54; or highly strategic to the group in line with paragraph 57. This means it meets all but one of the other characteristics listed in paragraph 54, apart from "has been operating for more than five years," and if it is set up to serve important existing customers, or has been created as a separate legal entity due to regulatory requirements or tax considerations, such that the group otherwise has the requisite operating history.

C.4 Subgroups

65. A subgroup can be headed by a nonoperating holding company or an operating entity of the wider group (for a definition of subgroup, see the glossary in Appendix A). USPF obligated groups may also be part of a subgroup.

66. A subgroup can have a GCP separate from that of the wider group.

67. In instances when the potential for extraordinary government support (beyond that already factored into the SACP) is a component of the ICRs on certain members of a subgroup or the subgroup's GCP, the criteria assess whether such government support would accrue to all members of the subgroup in accordance with paragraph 48.

C.5 Credit-substitution debt guarantee of group entities

68. When a group member's debt carries a credit-substitution guarantee, this means the guarantor will pay that group member's guaranteed obligations if it defaults. The evaluation of creditworthiness is therefore not on that group member (the primary obligor), but on the guarantor.

69. The criteria for credit-substitution guarantees are in the relevant sections of "Guarantee Criteria--Structured Finance," published May 7, 2013, "Approach To Evaluating Letter Of Credit Supported Debt," published July 6, 2009, and "Legal Criteria For U.S. Structured Finance Transactions: Select Issues Criteria," published Oct. 1, 2006.

70. For insurance group subsidiaries that are beneficiaries of policy guarantees and other support agreements, see paragraphs 104 to 109 below.

D. Determining The SACP Of Group Members

71. The criteria for assessing the SACP of group members are:

- For financial institutions entities, in "Banks: Rating Methodology And Assumptions," published Nov. 9, 2011; "Rating Securities Companies," published June 9, 2004; "Rating Finance Companies," published March 18, 2004; "Counterparty And Debt Rating Methodology For Alternative Investment Organizations: Hedge Funds," published Sept. 12, 2006; "Rating Private Equity Companies' Debt And Counterparty Obligations," published March 11, 2008; "Rating Asset Management Companies," published March 18, 2004; "Standard & Poor's Updated Methodology For

Rating Exchanges And Clearinghouses," published July 10, 2006; and "Rating Network Payment Providers," published June 1, 2005;
- For insurance entities, in "Insurers: Rating Methodology," published on May 7, 2013;
- For corporate entities, in "Corporate Methodology," published Nov. 19, 2013; and
- For USPF, in the relevant USPF sector criteria, most commonly "Not-For-Profit Health Care," published June 14, 2007, or "Senior Living," published June 18, 2007.

72. The SACP of a group member can be affected by its membership of that group. As discussed in "General Criteria: Stand-Alone Credit Profiles: One Component Of A Rating," published Oct. 1, 2010, the determination of an SACP includes ongoing interaction or influence, whether beneficial (positive), neutral, or burdensome (negative). Table 1 of that article lists examples of positive and negative influence that affect the SACP of a group member. These include implications for the financial profile and the business model of the group member. (See Appendix B for more details on subsidiaries of financial institutions [FI] groups.)

E. Assigning The Issuer Credit Rating (ICR)

73. The ICR on a member of a group reflects its SACP, group status, and the potential for external support (or negative intervention) from the government or parent group, in line with relevant criteria (see also chart 1 and table 1).

74. Subject to paragraphs 96 to 98, 166 to 168, and "Ratings Above The Sovereign--Corporate And Government Ratings: Methodology And Assumptions," published Nov. 19, 2013, and unless (a) the subsidiary is assigned a potential ICR higher than the GCP on the basis of the potential for extraordinary government support in accordance with bullet point five of paragraph 27, or (b) the subsidiary is classified as an insulated subsidiary with an ICR above the GCP, the potential long-term ICR for a:

- Core group entity is equal to the GCP.
- Highly strategic subsidiary is one notch lower than the GCP, unless the SACP on that subsidiary is equal to, or higher than, the GCP. In such a case, the potential long-term ICR is at the same level as the GCP.
- Strategically important subsidiary is three notches higher than its SACP. This is subject to a cap of one notch below the GCP, unless the SACP is at least equal to the GCP, in which case, the potential long-term ICR is at the GCP level.
- Moderately strategic subsidiary is one notch higher than that subsidiary's SACP. This is subject to a cap of one notch below the GCP, unless the SACP is at least equal to the GCP, in which case, the potential long-term ICR is at the GCP level.
- Nonstrategic subsidiary is at the level of the subsidiary's SACP, subject to a cap at the GCP level.

E.1 Insulated subsidiaries

75. Financial stress at the parent level will likely affect a subsidiary's SACP, particularly if there are close business or funding ties between the two. Excluding the conditions described in paragraph 29, a subsidiary with an SACP higher than the GCP does not generally receive an ICR that is higher than the GCP. This is notably because:

- The relatively weaker parent could potentially divert assets from the subsidiary or burden it with liabilities during financial stress, and the subsidiary could have much less debt- and capital-raising flexibility; and
- In some jurisdictions, a bankruptcy petition by the parent could include the subsidiary or cause the subsidiary to go

into administration or similar measures.

76. However, in some instances an entity may be partly insulated, segmented, or ring-fenced from its group, from a credit perspective. Such insulation may lead to a rating on a subsidiary being higher than the GCP. For members of a financial services group, this rating approach is explained in paragraphs 99 to 103. For members of a corporate group, the rating approach is explained in paragraphs 141 to 151. For U.S. public finance obligated groups, this approach is explained in "Senior Living," published June 18, 2007.

F.Rating Group Entities Above The Sovereign

77. The general criteria for assigning higher foreign currency ratings to nonsovereign entities than those on the sovereign are in "Ratings Above The Sovereign--Corporate And Government Ratings: Methodology And Assumptions," published Nov. 19, 2013. The specific criteria provisions, which describe how group support can support ratings above the sovereign, are discussed in paragraphs 96 to 98 of this article for members of financial services groups and in paragraphs 166 to 168 of this article for members of corporate groups.

VII. METHODOLOGY: FINANCIAL SERVICES GROUPS

78. The term financial services group covers bank groups, other financial institutions groups, and insurance groups. This part of the article explains factors specific to both types of groups.

79. For the purposes of these criteria, a member of a financial services group need not itself be a bank, financial institution, or insurance entity. For example, a bank or insurance company may have a subsidiary that does not offer financial services. These criteria would apply to such an entity.

80. The criteria for considering government support for banks not classified as GREs are in "Banks: Rating Methodology And Assumptions," published Nov. 9, 2011.

81. The following subparts supplement paragraph 44, which describes the approach for holding companies:

- Nonoperating and operating holding companies (see paragraphs 110 to 121 for insurance holding companies and paragraphs 122 to 129 for financial institution nonoperating holding companies).
- Financial institution operating holding companies. The approach is to treat such companies like any other operating entity.

A. Identifying Members Of A Financial Services Group

82. This section VII supplements the definitions in paragraphs 30 and 31 and the glossary in Appendix A.

83. An example of "control" is when a bank is a shareholder in a 50-50 joint venture financial institution, but the regulator of both the bank and joint venture holds the bank responsible for the joint venture. This indicates that the bank controls the joint venture.

84. Banking and insurance are regarded as prudentially regulated sectors.

B. Group Status Of Members Of A Financial Services Group

1. Subsidiaries

85. Supplementing paragraph 51, an example of criteria that require a core or highly strategic subsidiary to have an SACP assessment are those in "Bank Hybrid Capital Methodology And Assumptions," published Nov. 1, 2011.

86. Supplementing paragraph 55, for core and highly strategic insurance subsidiaries of insurance groups, "commensurate capitalization" refers to capitalization that is:

- In line with group policies and practices for subsidiaries with similar group status, and
- Significantly above the regulatory minima.

a) Core entities

87. In determining whether a member of a financial services group is core, a "significant proportion of the consolidated group" in paragraph 54 means that the entity represents, or shows the ability to reach, the following level of capital, on the basis of projections for the next two to three years:

- At least 5% of consolidated group capital; and
- For a subsidiary of an insurance group, a "significant proportion" of group earnings refers to at least 5% of consolidated operating earnings before internal retrocession. For this analysis, the assessment of "operating earnings" involves evaluating EBIT (see the glossary of "Insurers: Rating Methodology," published May 7, 2013).
- For a complex global group with 20 or more significant operating subsidiaries, an entity may still be core, although its capital and earnings are below those stated above, if it is a bank or insurance company among the leaders in that market.

88. An insurance group's subsidiary is not considered core, highly strategic, or strategically important if there is a significant possibility of it being placed into run-off. However, this does not apply to subsidiaries whose operations could be transferred to other core, highly strategic, or strategically important subsidiaries, as long as there is no measurable credit impact on policyholder and nonpolicyholder financial obligations. In addition, this does not apply to subsidiaries of groups that for reputation reasons will likely support a subsidiary even in run-off, or which continue to consider the subsidiary's line of business as strategic.

b) Highly strategically important subsidiaries

89. This subsection supplements paragraph 57. The following additional consideration applies in order for a regulated subsidiary of a financial services group to be assessed as highly strategically important:

- A subsidiary in another business sector, such as an insurance subsidiary of a bank or a bank subsidiary of an insurer is often assessed as highly strategic instead of core to reflect the different operational characteristics and prudential regulatory frameworks of these businesses, which can limit the degree of integration over time.

c) Strategically important subsidiaries

90. For prudentially regulated groups, subsidiaries may occasionally be regarded as strategically important if the regulator holds the group responsible for supporting the subsidiary, even though the subsidiary does not meet the characteristics

in paragraph 59. However, the following additional conditions apply in order for a regulated subsidiary of a financial services group to be assessed as strategically important:

- A divestment of the subsidiary is only possible with the regulator's prior approval; and
- In periods of distress, the group is likely to provide additional liquidity, capital, or risk transfers in most foreseeable circumstances. The group's track record in supporting such subsidiaries is an indicator.

d) Moderately strategic subsidiaries

91. For prudentially regulated groups, subsidiaries may occasionally be regarded as moderately strategic if the regulator holds the group responsible for supporting the subsidiary, even though the subsidiary does not meet the requirements in paragraph 60. For a regulated subsidiary of a financial services group to be assessed as moderately strategic, the following additional conditions apply:

- A divestment of the subsidiary is only possible with the regulator's prior approval; and
- In periods of distress, there is the potential for some limited support from the group, even if the subsidiary may not be important enough to warrant additional liquidity, capital, or risk transfer from the group in some foreseeable circumstances. The group's track record in supporting such subsidiaries is an indicator. Examples of when there is the potential for limited support are (1) when minority ownership of a subsidiary implies a dilution of the group's responsibility, or (2) when the fragile financial position of the parent or group constrains either's ability to provide support.

2. Subgroups

92. The group status of members of a subgroup can be associated with that subgroup. The approach depends on the subgroup's status within the wider group, subject to the sovereign-related constraints indicated in paragraph 77.

93. If a subgroup is core to the wider group, we use the following approach if the wider group is expected to take the same stance as the subgroup toward supporting the subgroup's members (if not, paragraph 94 applies):

- The ICR on a core subsidiary of the subgroup is at the level of the wider group's GCP.
- The ICR on a highly strategic subsidiary of the subgroup is one notch lower than the wider group's GCP (unless its SACP equals that GCP).
- The ICR on a strategically important subsidiary of the subgroup is three notches higher than its SACP (capped at one notch below the GCP of the wider group, unless its SACP equals that GCP).
- The ICR on a moderately strategic subsidiary of the subgroup is one notch above its SACP (capped at one notch below the GCP of the wider group).
- The ICR on a nonstrategic subsidiary of the subgroup is equal to that entity's SACP.

94. If a subgroup is highly strategic, strategically important, or moderately strategic to the wider group, the assessment of its members reflects the following five factors to the extent they are relevant:

- The subsidiary's importance to the subgroup;
- The subgroup's importance to the wider group;
- The subgroup's GCP, or its unsupported GCP if we do not expect the wider group to contribute to the subgroup's support to the subsidiary;
- The subsidiary's SACP; and
- Our view as to which members of the group would provide support in case of stress.

95. The ICR on a subsidiary of a nonstrategic subgroup is based on that subsidiary's status relative to the subgroup and on the subgroup's GCP. In the rare cases that a nonstrategic subgroup's subsidiary is core or highly strategic to the wider group, and we expect the wider group to support the subsidiary directly, rather than via the subgroup, the ICR on that subsidiary is based on the subsidiary's status relative to the wider group and the wider group's GCP.

C. Rating Financial Services Group Entities Above The Sovereign

96. Implicit group support can lift the ICR on a group member higher than the relevant sovereign rating if the sovereign is rated 'B-' or lower, or in the following situations.

1. Members of financial institutions groups

97. Supplementing paragraph 77, group support does not result in an ICR on a subsidiary being higher than the relevant foreign currency sovereign credit rating, if we do not consider the parent group able and willing to sufficiently support the subsidiary during stress associated with a sovereign default. If we do:

- And the subsidiary is core to the group, the ICR on that subsidiary is one notch above the sovereign rating applicable in the host jurisdiction (see also paragraph 62 for bank branches).
- Uplift for the potential for group support cannot lift the ICR on a subsidiary, that is not core, higher than the sovereign rating on the host country. This is unless the subsidiary's exposure to that jurisdiction is less than 10%, and risks associated with that jurisdiction (such as a deposit freeze or monetary-union exit) are considered immaterial.

2. Members of insurance groups

98. Supplementing paragraph 77, group support does not result in an ICR on a foreign subsidiary or branch of an insurance group being higher than the local currency sovereign credit rating on the country where the subsidiary is domiciled, if we do not consider the parent group able and willing to sufficiently support the subsidiary during stress associated with a sovereign default. If we do, and:

- The subsidiary is an insurer benefiting from a policyholder guarantee according to the criteria in paragraph 104, or is a foreign branch of an insurance company, the rating is the lower of: (1) the ICR on the guarantor, (2) the result from adding six notches to the local currency sovereign credit rating if it is 'BBB-' or higher, and (3) the result from adding four notches to a local currency sovereign credit rating that is 'BB+' or lower.
- The subsidiary has less than 10% exposure to the local jurisdiction and faces immaterial risk from a deposit freeze or the sovereign's exit from a monetary union, the sovereign's creditworthiness does not constrain the rating assigned to the subsidiary. For example, such a foreign subsidiary is rated 'A+' if it is a highly strategic member of a group with a GCP of 'aa-', even though the rating on the host sovereign is 'BBB'. The 'A+' rating is one notch lower than the GCP in line with the approach for highly strategic subsidiaries (see paragraph 74).
- The subsidiary is in neither of the two preceding situations, the rating is the lower of: (1) the local currency sovereign credit rating (plus three notches if a core subsidiary), and (2) the potential rating otherwise derived from these criteria. An example is a potential long-term ICR of 'A-' for a strategically important subsidiary of a group in a 'AAA' rated jurisdiction. The subsidiary has an SACP of 'bbb' and all its operations are in a country that has a sovereign local currency rating of 'A-'; the rating would be three notches above the SACP, based on the strategically important status, but limited to 'A-'.

D. Insulated Subsidiaries Of A Financial Services Group

99. Supplementing paragraph 76, a non-prudentially regulated entity of a financial services group is rated higher than the GCP if there is multiple ownership as described in paragraph 45 or, alternatively, two or more of the following restrictions are in place (see "Legal: Ring-Fencing A Subsidiary," published Oct. 19, 1999):

- Limited-purpose entity structure;
- Covenants; or
- Collateral.

100. Although prudentially regulated subsidiaries are generally not rated higher than the GCP, they may receive a rating one notch higher than the GCP as an insulated subsidiary if all of the following conditions are met:

- The subsidiary has an SACP that is at least one notch higher than the GCP, or the SACP plus the uplift for potential government support is one notch higher than the GCP.
- The subsidiary's prospects in terms of financial performance and funding are highly independent from those of the group, so that even if other core entities encounter severe setbacks, the relative strength of the subsidiary would remain nearly intact;
- Regulatory restrictions (such as regarding liquidity, capital, or funding) are of sufficient strength that they would prevent the subsidiary from supporting the group to an extent that would impair the subsidiary's stand-alone creditworthiness;
- It is unlikely that proceedings that could lead to a default at the group level, under our criteria, would directly lead to a default of the subsidiary; and
- The parent's strategy with respect to the subsidiary is clear and, in particular, the parent has a compelling economic incentive to preserve the subsidiary's credit strength.

101. The potential long-term ICR for an insulated subsidiary is two notches above the GCP if the entity fulfills the characteristics listed in paragraph 100, and its SACP (or its SACP plus the uplift for potential government support) stands at least two notches above the GCP, and one of the following situations applies:

- The holding company or group's weaker credit quality results from its ownership of smaller, nonregulated business activities that are largely unrelated to the business line of the regulated entity's operations, and management has taken affirmative steps to distance the rest of the group from such unrelated subsidiaries, as shown by actual behavior, beyond the usual verbal assurances that management will not imperil the creditworthiness of the rated subsidiary by supporting weaker operations; or
- The subsidiary is a clearinghouse, exchange, or central securities depository that would likely benefit from any necessary protective actions by the host authorities in the interest of financial stability, if the wider group came under stress; or
- The subsidiary is a regulated entity and we expect the host regulator to intervene in an effective manner to protect the position of the subsidiary.

102. The potential long-term ICR on an insulated subsidiary is three notches above the GCP if the entity meets the conditions for assigning ratings that are one and two notches above the SACP in paragraphs 100 and 101, and all the following characteristics apply:

- The subsidiary's SACP (or the SACP plus the uplift for potential government support) stands at least three notches

above the GCP;

- The subsidiary is assessed to be severable from the group and able to stand on its own or subcontract certain functions previously provided by the parent. This includes receiving immaterial funding, if any, from the group;
- Standard & Poor's concludes that it is unlikely that the assets and liabilities of the subsidiary would be substantively consolidated into those of the parent company in the event of the insolvency of the parent company;
- The group and subsidiary's public statements on dividend policy are consistent with the independent integrity of the subsidiary;
- There is an independent trustee or equivalent party with the ability to enforce the protection of the rights of third parties; or significant minority interests that have sufficient power to block dividend payments (this will typically correspond to ownership of at least 20%, and such minority shareholders would have independent directors on the board of the subsidiary that can influence decision-making effectively); or the government has the right to change ownership of the subsidiary via existing legislation for the resolution of a troubled entity or other legal powers enabling it to change the ownership of a subsidiary in order to separate it from a troubled parent, and we expect that it could use this right; and
- There is a strong economic basis for the parent, regulator, or government's commitment to maintain the capital to support the higher rating on the subsidiary.

103. The potential long-term ICR for an insulated entity is delinked from the GCP if all the following characteristics are met:

- The GCP relating to that insulated entity has declined precipitously within a short period, for example within approximately 12 months, by three notches or more, either into or passing through the 'b' category; and
- The regulator for that entity is expected to act (or has acted) to prevent the subsidiary from supporting the group to an extent that would impair the subsidiary's stand-alone creditworthiness.

E. Subsidiaries Of An Insurance Group As Beneficiaries Of Policy Guarantees And Other Support Agreements

104. Where a policy guarantee agreement meets the following conditions, the FSR on the beneficiary is that of the guarantor (unless the beneficiary's SACP is higher). These conditions mirror those for our rating-substitution criteria for debt guarantees (see "Guarantee Default: Assessing The Impact On The Guarantor's Issuer Credit Rating," published May 11, 2012). However, the last two conditions are specific to these criteria, as is the absence of a reference to timeliness (which FSRs do not address). Also, policyholders, not debtholders, are the beneficiaries of policy guarantees. The conditions are:

- The guarantee covers all policyholder obligations and explicitly ranks them as pari passu with the guarantor's own policyholder obligations. (A guarantee that does not cover all the guaranteed entity's policyholder obligations may not enhance the FSR on that entity at all.)
- The guarantee is of payment and not collection.
- The guarantee is unconditional, irrespective of value, genuineness, validity, or enforceability of the supported obligations. The guarantee provides that the guarantor waives any other circumstance or condition that would normally release a support provider from its obligations. The guarantor should also waive the right of set-off and counterclaim.
- The guarantor's right to terminate the agreement is appropriately restricted, that is, the support agreement does not terminate before the supported obligations are paid in full. In cases where the agreement can be terminated before all supported obligations are paid in full, all obligations incurred up to the termination date will remain supported. In

addition, the support agreement must be binding on successors of the support provider or, if it can be revoked, this only applies to policies written after the revocation date.

- The guarantee provides that it reinstates if any supported payment is recaptured as a result of the primary obligor's or the guarantor's bankruptcy or insolvency.
- Policyholders are third-party beneficiaries of the guarantee.
- To strengthen the guarantee's enforceability by policyholders, if the insurance policies do not contain a copy of the guarantee or disclose its existence and key features, the beneficiary insurer or guarantor provides what we view as sufficient public disclosure of its existence and key features.
- In the case of cross-border transactions, the guarantee appropriately addresses the risk of withholding tax with respect to payments by the guarantor, where such a potential tax is relevant.

105. Additionally, with respect to guarantees provided to Lloyd's corporate members:

- The guarantee explicitly specifies a method through which valid claims continue to be paid to policyholders should the central Lloyd's claims payment process be inoperable for any reason, including regulatory action affecting Lloyd's.
- The guarantee is triggered when the corporate member fails to make timely payment of any amount, once determined to be due and payable, from premium trust funds and funds at Lloyd's. There should be no reliance upon payments from the Lloyd's Central Fund.

106. For the purpose of these criteria, for a subsidiary of an insurance group, "support agreements" may include net-worth maintenance agreements or any other agreement intended to provide support to subsidiary policyholders. These can lead to an enhancement (or uplift) of the ICR or FSR assigned to an entity. When an indirect support agreement does not meet all of the conditions for ratings substitution with those of the guarantor, then to qualify for any rating enhancement, the support agreement must meet all of the following conditions. It:

- Gives policyholders, financial creditors, or other third-party interests, such as regulators, the ability to enforce the agreement against the support provider, if the provider fails to perform its obligations;
- Cannot be modified or terminated to the detriment of the existing beneficiary policyholders, or creditors at the time of termination without their agreement, unless the beneficiary subsidiary's creditworthiness becomes at least as strong as the supported rating; or the beneficiary can be sold only to an insurer with the same or higher creditworthiness as the support provider;
- Stipulates that the subsidiary will be prudently capitalized, for example, relative to the regulatory capital requirement; and
- Provides that the support provider will cause the beneficiary entity to have sufficient cash and liquid assets for the timely payment of all of its debt if the agreement is to provide corporate debt support, and policyholder obligations if the agreement is to provide policyholder support.

107. When, in addition to the conditions in the previous paragraph, the beneficiary subsidiary is at least strategically important to the group, and the support agreement meets all of the following four conditions, the rating on the beneficiary (unless it has an SACP at or above the GCP) is one notch below the rating on the support provider:

- The agreement states definitively that the provider will support the beneficiary, and sets no material cap on the support;
- The agreement is provided by a regulated bank or insurer that is a core group or subgroup member;
- The agreement is binding on successors and agents of the support provider; and

- The beneficiary subsidiary does not demonstrate adverse performance and is unlikely to be part of a corporate restructuring.

108. When the conditions in paragraph 106 apply, but a subsidiary is not core, highly strategic, or strategically important, and a net-worth maintenance agreement meets both of the following conditions, the rating on the beneficiary is three notches above its SACP, subject to a cap at one notch below the rating on the support provider:

- The agreement demonstrates an intention to support the beneficiary in the medium- to long-term; and
- The agreement is provided by an affiliated regulated bank or insurer.

109. For an insurance subsidiary with explicit support from a qualifying guarantee, the FSR on a subsidiary insurer would generally be six notches higher than the local currency sovereign credit rating in countries rated 'BBB-' or higher, and four notches higher than the local currency sovereign credit rating in countries rated 'BB+' or lower, limited by the rating on the guarantor.

F.Insurance Holding Companies

110. The criteria do not assign a group status to holding companies at the head of an insurance group. The ratings on holding companies reflect the difference in their creditworthiness relative to the operating entities.

111. Holding companies are NOHCs if they do not carry on insurance business, or operating holding companies (OHCs) if they do. (See the glossary in Appendix A for definitions.) A holding company that carries out an immaterial amount of insurance business is still classified as an NOHC, however. The criteria assign only ICRs to NOHCs, while OHCs may receive both ICRs and FSRs.

112. The ICR on a NOHC reflects (1) the GCP and (2) the number of notches that differentiate the NOHC from the operating entities. The rating differential takes account of the ongoing subordination of the creditors of the holding company to those of the operating insurance subsidiaries (typically their policyholders). A financing subsidiary of an insurance group that does not have core group status is assigned a rating as if it were an NOHC.

113. The difference (in notches) between the ICR on a NOHC and the GCP reflects the degree of structural subordination within insurance groups. Structural subordination is considered very high in jurisdictions such as the U.S., where even strong companies have to obtain prior regulatory approval before transferring significant amounts of solvency capital from an operating company to its holding company. Structural subordination is somewhat less onerous in regions other than the U.S. We define an NOHC as either a U.S. or non-U.S. NOHC, based on the geographic split of estimated dividends that the NOHC could receive, or in the absence of data on dividends, on the geographic split of earnings.

114. Usually, a NOHC receives an ICR that is two notches below that on the core operating companies (three notches below in the case of U.S. NOHCs whose classification is based on the geographic breakdown of the group's premiums). In rare instances, a different notching approach applies as follows; the ICR on an NOHC is:

- One notch lower than that on the core operating companies, if (1) banking operations are expected to contribute at least 25% of the group's operating income on a forward-looking basis based on projections over the next two to three years, and (2) the holding company is domiciled in a jurisdiction with a common regulator for banks and

insurers that is supportive of capital fungibility among the holding company and the banking and insurance subsidiaries. If there is an increased likelihood of regulatory intervention detrimental to the NOHC's creditors, however, the notching differential can in such circumstances exceed one notch.

- One notch lower, if a holding company of insurance and noninsurance businesses has nonregulated activities that consistently provide at least one-third of the group's operating income (for example, based on EBITDA as defined in "Corporate Methodology: Ratios And Adjustments," published Nov. 19, 2013), and the noninsurance business is not regulated, and their cash flows to the holding company are not subject to regulatory intervention. This also applies if nonregulated activities provide the majority of the group's operating income.
- The same as the GCP, that is, the notching is zero, if nonregulated businesses provide a clear majority of the group's operating income. This assumes that the nonregulated businesses are either (1) not owned by an insurance company or bank, or (2) owned by an insurance company or bank whose transfer of dividends to its owners is prudentially regulated, but any limits on the payment of dividends are unlikely to prevent the pass through of dividends from the noninsurance business to the holding company.
- Two notches below the GCP, for a holding company of a U.S.-based insurance group, instead of the usual three, based on our assessment of the unconsolidated liquidity position of the holding company and specifically: (1) the group's diversity among regulated subsidiaries in different domiciles, (2) the group's fixed-charge coverage, (3) the operating companies' aggregate ordinary dividend capacity relative to the sum of the holding company's ongoing cash requirements and principal maturities over the next 12 months, and (4) the holding company's unencumbered cash and liquid investments relative to the sum of its ongoing cash requirements and principal maturities over the next 12 months.
- One notch lower than the GCP, if an intermediate insurance holding company that (1) is part of a broader bank group, (2) contains at least one operating company that is strategically important, highly strategic, or core to the bank group, and (3) has sufficient access to funding or support from the parent bank group operations and to dividend flows from its insurance operations.
- Assigned in accordance with the situations described in "Criteria For Assigning 'CCC+', 'CCC', 'CCC-', And 'CC' Ratings," published Oct. 1, 2012, if the company is a holding company of an insurance group with a GCP of 'b-' or lower. The same approach applies for a holding company if the notching in this section would otherwise result in a rating of 'CCC+' or lower.

115. The notching from the GCP to derive the ICR on a NOHC is also increased in the following situations:

- If the holding company's liquidity is assessed as "less than adequate" or "weak," the ratings are capped at 'BB+' or 'B-', respectively; or
- When the holding company itself carries very significant asset or liability risks that are otherwise diluted within the overall GCP.

116. The liquidity assessment for a NOHC is a function of the first three subfactors defined in section D.2 of "Insurers: Rating Methodology," published May 7, 2013, and of the two ratios described in paragraph 119 below (which together create the "ratio subfactor"). All items are analyzed at the level of the unconsolidated holding company, which, in most cases, carries most of the group's financial obligations.

117. A NOHC's liquidity is assessed as "adequate," "less than adequate," or "weak." The criteria never assess an NOHC's liquidity as "exceptional" or "strong."

118. Liquidity is assessed as less than adequate when one or two of the following four subfactors are negative, and weak when three or more of the subfactors are negative (in all other cases, liquidity is assessed as adequate):

- The first three subfactors defined in section D2 of "Insurers: Rating Methodology," published May 7, 2013; and
- The ratio subfactor in paragraph 119.

119. The ratio subfactor is positive when both of the following ratios (calculated at the level of the unconsolidated holding company) exceed 1.5x, negative if the first one is less than 1.2x and the second one less than 1.0x, and neutral otherwise. The two ratios are:

- Liquid assets to noncontingent short-term financial liabilities, where the numerator excludes stakes in subsidiaries but includes undrawn committed backup facilities (see paragraph 181 of "Insurers: Rating Methodology," published May 7, 2013), and the denominator includes liabilities with structured settlements, with no optional features;
- The holding company's ability to pay its total liquidity requirements (excluding principal servicing) out of its cash inflows: [Dividends from operating entities + net investment revenues from holding assets] / [overhead expenses + interest charges + other ongoing financial charges + shareholder distributions, if any].

120. The FSR and ICR for an operating holding company result from notching down from the GCP by up to two notches (or by up to three notches in the case of U.S. OHCs, where the classification is based on the group's geographic breakdown of premiums) to reflect the ongoing cash flow subordination consistent with our approach for NOHCs. The number of notches from the GCP predominantly is a function of:

- The group's financial leverage and the holding company's role as a debt financing vehicle;
- The holding company's dependence on income streams from operating subsidiaries versus the diversity of such income streams and the holding company's ability to generate revenues from own activities to service its debt obligations; and
- The availability of excess capital held at the holding company.

121. The following are examples of how ratings on OHCs are derived with respect to the GCP:

- If the group's financial leverage is immaterial and an OHC's activities are integral to those of the group, the rating on the OHC is typically equal to the GCP.
- For OHCs that operate with financial leverage of less than 30%, the ICR is typically equal to the GCP if a combination of diverse income streams from operating subsidiaries, revenues from own activities, and/or sizable excess capital, in our view, enables the OHC to meet its ongoing payment obligations under essentially all foreseeable circumstances. Again, this applies if the OHC's activities are integral to those of the group.
- For OHCs that operate with financial leverage of less than 30%, the ICR is typically one notch lower than the GCP if a combination of offsetting factors (related to the factors in the second and third bullet points of paragraph 120), in our view, enables the OHC to meet its ongoing payment obligations under most foreseeable circumstances.
- For OHCs that operate with financial leverage of more than 30%, the ICR is typically two notches lower than the GCP. This differential typically also applies if an OHC operates with financial leverage lower than 30%, but is dependent on income streams from a few operating subsidiaries, has limited capacity to generate revenues from own activities, and/or does not hold sizable excess capital.

G. Financial Institution Nonoperating Holding Companies

122. For NOHCs at the head of financial institutions groups:

- The ICR is generally one notch lower than the GCP.

- The rating differential between a NOHC and the core operating entities is mainly due to the NOHC's reliance on dividends and other distributions from operating companies to meet obligations.
- Certain factors lead to higher relative credit risk at an NOHC and result in wider notching from the GCP (see paragraphs 126 and 127 for examples).
- In certain circumstances, a weak financial profile at the NOHC, as shown by high double leverage (see sidebar below) and/or weak liquidity, reflects poorly on the group's financial profile and the creditworthiness of the consolidated financial entity.

123. The creditworthiness of an NOHC is closely tied to that of the consolidated group, but is marginally weaker than the core operating entities'.

124. The ICR on a NOHC is usually one notch lower than those on the group's core operating entities. The differential reflects our perception of marginally greater credit risk at the NOHC relative to the group operating entities. This risk arises from the NOHC's reliance on distributions from the operating companies to meet its obligations, possible supervisory barriers to payments and potentially different treatment in a default situation, and the structural subordination of holding company obligations to those at the operating company level.

125. Factors that may widen the ratings gap between the NOHC and the core operating entities include increasing stress at the holding company or group level, the potential imposition of supervisory barriers to payments from operating companies to the NOHC, and the possibility that a government may rescue the operating company (in most cases, the bank), but not the NOHC, in a default situation. The greater the potential for these actions, the wider the differential between the rating on the NOHC and the core operating entities.

126. We reflect these factors by assigning a credit rating to the NOHC that is usually one notch lower than the credit ratings on the core operating entities of the group. The gap may be wider than one notch when:

- The group is under stress;
- The GCP includes an uplift for potential extraordinary government support, but the same degree of support is not expected to accrue to the NOHC (in certain cases, some support may be expected to accrue to the NOHC);
- The likelihood of regulatory intervention that would be detrimental to the NOHC's creditors increases;
- There are severe liquidity mismatches at the NOHC level, or a ratio of NOHC liquid assets--cash, money market funds, and marketable securities--to short-term debt (debts falling due within 12 months) that indicates the NOHC's weaker capacity to meet maturities of short-term obligations. The ratio indicates the amount of time the entity could survive without access to any debt financing; or
- Double leverage creates heightened sensitivity for an NOHC's creditors that is not offset by greater liquidity at the NOHC level (see sidebar below for more details).

Double Leverage For Financial Institutions Groups

- We define double leverage (DL) as holding company investment in subsidiaries divided by holding company (unconsolidated) shareholders' equity. DL renders the NOHC dependent in part on dividends to meet interest payments on external debt.
- The calculation of DL from public data is often unreliable and complicated by the existence of multiple holding companies in some organizational structures. If DL exists at each holding company level, a single group measure of DL is not meaningful.
- Holding company accounts are often only available annually, and detailed breakdowns of balance-sheet items are rare. In particular, NOHC-only disclosure frequently does not distinguish between equity investments in subsidiaries and advances to subsidiaries. Some groups employ different accounting standards for holding company and consolidated accounts. For all of these reasons, published measures of DL are often not comparable, but DL remains an important analytical tool to measure creditworthiness of financial institutions.
- Regulators often have the authority to prevent dividend payments by a subsidiary to its parent. If interest received from operating companies is insufficient to meet an NOHC's external interest and principal repayment obligations, the NOHC may suffer a strain on liquidity.
- We do not link specific thresholds for double leverage to the rating differential between the ICRs on the NOHC and core operating entities of a regulated financial group. Rather, we take DL into account in our analysis of the creditworthiness of the consolidated group. High DL may strain the liquidity needs of the NOHC and is a sign that the liquidity management of the group may be aggressive. We consider a high DL ratio as an indicator of potential for stress on the NOHC's liquidity and a signal that the group's liquidity could be strained if not offset by compensating factors.
- We would generally view the threshold of 120% double leverage as sufficiently high to expect offsetting liquidity at the NOHC parent to compensate. Similarly, if the absolute amount of double leverage of a financial group with a NOHC exceeds two years' net income of the consolidated group, we would look for offsetting liquidity at the NOHC parent to compensate.
- NOHCs often issue hybrid capital securities that build regulatory capital. They invest the proceeds in operating subsidiaries as equity or as similarly structured hybrid securities. We calculate DL in two ways: (1) with a common equity double-leverage measure that treats hybrid capital as debt, and (2) with a total equity double leverage measure that treats hybrid capital as equity. When a financial institutions group's common equity DL is higher than its total equity DL, the NOHC has issued hybrid capital securities and invested the proceeds as equity in an operating subsidiary.

127. When a regulated financial institutions group with a bank holding company has a GCP lower than 'bbb-', the gap between the ICR on a NOHC and its core operating company (typically a bank) is at least two notches.

128. For nonregulated nonbank financial institutions groups, the ICR assigned to a NOHC may be equalized with the GCP when the core operating entity or entities' activities display dependability or diversity (geographically or by business line) sufficient to support the NOHC's debt servicing. In such groups, we may equalize the rating on the NOHC with that on the nonregulated operating companies if there are no potential material restrictions (such as covenants) on the operating entities' ability to directly support the NOHC's creditworthiness.

129. For an intermediate nonoperating holding company within an FI group, the ICR is notched down from the core operating entity subsidiary of that holding company as if the intermediate holding company were the head of the group. This is unless we expect the wider group to provide support for the subsidiaries of the intermediate holding

company by injecting financial resources into the intermediate holding company. In that case, the ICR of the intermediate holding company is set at the level of its core operating subsidiary.

VIII. METHODOLOGY: U.S. PUBLIC FINANCE OBLIGATED GROUPS

130. U.S. public finance obligated groups typically consist of a group of subsidiaries, or a single subsidiary, that are cross obligated as security for specific debt. Obligated group structures are most commonly used by not-for-profit hospitals, health systems, and senior living organizations.

131. Obligated groups are created for purposes of securing debt, and do not have operating or governance independence from the larger group. While debt covenants may contain some restrictions, for example limitations on the transfer of assets out of the obligated group, covenants are generally not strong enough to insulate the obligated group from the strategic and operating influence of the group. Exceptions are described in paragraph 76.

132. Individual obligated group members may have separate legal incorporation and varying strategic value to the group. However, since the purpose of the obligated group is to secure debt on a joint and several basis, group status will be determined for the obligated group as a whole, not for its individual members. In applying the methodology in these criteria, obligated groups will be considered a single entity.

133. The group status of an obligated group will be core if it meets the conditions in paragraphs 54 and 55, or if it contains the majority of the operating assets of the organization, such as its hospitals or senior living facilities.

134. Most U.S. public finance ratings are issue ratings, although ICRs are assigned upon request. These criteria will be used to determine the ICR in accordance with paragraphs 21 to 29. The issue rating could differ from the ICR based on the specific security package for the bonds. We expect that barring subordination or structural enhancement, the issue rating will be at the level indicated by the ICR.

135. Following is an example of the application of this methodology to a health system that has three obligated groups, all of which have requested ICRs.

Chart 2-Example of Group Rating Methodology Application to U.S. Public Finance-Organization Structure

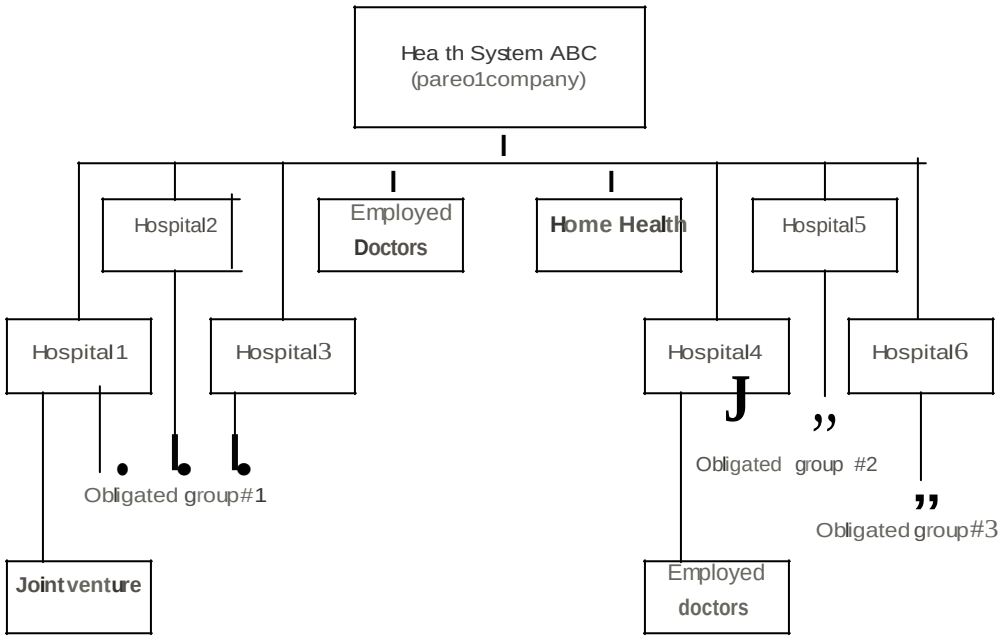
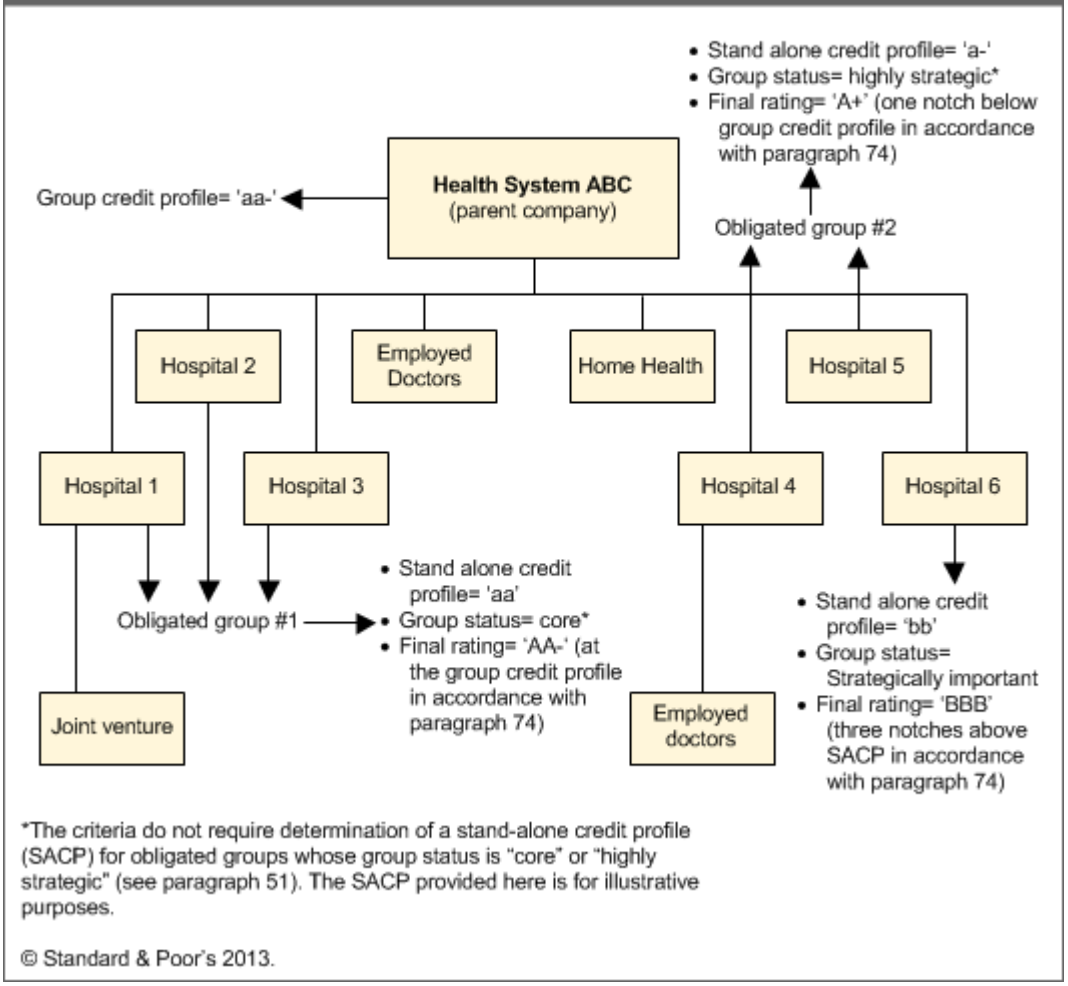


Chart 3—Example of Group Rating Methodology Application to U.S. Public Finance—Rating Profile



*The criteria do not require determination of a stand-alone credit profile (SACP) for obligated groups whose group status is "core" or "highly strategic" (see paragraph 51). The SACP provided here is for illustrative purposes.

IX: METHODOLOGY: CORPORATE GROUPS

A. Identifying Members Of A Corporate Group

136. For the purposes of these criteria, the scope of consolidation for corporate entities is generally the same as that of the group's consolidated audited accounts, plus proportionate stakes in joint ventures exclusively or jointly controlled, when we believe that the group has access to these JVs' cash flows and/or is likely to support them under stress.

137. We may adjust the consolidated statements we use to determine the GCP to include proportionately consolidated stakes in joint ventures that aren't included in the accounts, or adjust to treat as equity affiliates (using the equity method of accounting) subsidiaries that the group doesn't control or whose cash flows it doesn't have full (or unfettered) access to. Similarly, we may adjust consolidated statements to treat proportionately consolidated joint ventures as equity investees, when we believe that the group does not have sufficient control or access to these

entities' cash flows, or is unlikely to provide financial support to them.

138. The ICR of the parent is the same as the GCP. We analyze the GCP on a consolidated basis except where it has an insulated subsidiary to which we've assigned a potential ICR that is two or more notches higher than the GCP, as described in paragraph 38.

139. In line with paragraphs 38 and 39, the existence of an insulated subsidiary could negatively affect the GCP as its cash flows may not be available to the group. In cases where these subsidiaries represent such a material part of the organization's financial strength as to have an impact on the GCP, we generally would adjust the GCP down one to two notches from what it would have been if determined on a fully consolidated basis reflecting the potential for reduced cash flow.

B. Group Status Of Members Of Specific Corporate Groups

140. We're supplementing the definitions in paragraph 30 of "group" and "group members" to include:

- Insulated subsidiaries,
- Captive finance subsidiaries,
- Financing subsidiaries,
- Joint ventures,
- Dedicated suppliers/purchasers, and
- Entities with interlocking business relationships.

i. Insulated subsidiaries

141. Following on from paragraphs 38 and 39, we may rate some subsidiaries of groups higher than the GCP if all the following conditions are met:

- The subsidiary's SACP plus the potential for government support is higher than the GCP;
- The subsidiary's financial performance and funding prospects are highly independent from those of the group, so that even if other core entities encounter severe setbacks, the relative strength of the subsidiary would remain nearly intact;
- The subsidiary is severable from the group, in our opinion, and able to stand on its own or subcontract certain functions previously provided by the parent;
- The parent's strategy with respect to the subsidiary is clear and, in particular, the parent has a compelling economic incentive to preserve the subsidiary's credit strength;
- It is unlikely, in our opinion, that the subsidiary will be drawn into bankruptcy proceedings at the group level that would lead to a default on the subsidiary's obligations;
- For regulated entities, there is evidence that legislative, regulatory, or structural restrictions would inhibit the subsidiary from supporting the group to an extent that would in turn unduly impair the subsidiary's stand-alone creditworthiness; and

The subsidiary meets the following provisions:

- It holds itself out as a separate entity and maintains arm's-length relationships with its affiliates;
- It doesn't commingle its funds, other assets, and cash flows with those of any other entity;
- It maintains its own records, books of account, financial statements, and other corporate documents separate from

those of any other company; and
- It pays its own liabilities out of its own funds and observes all corporate formalities.

142. In line with paragraph 141, the indicative long-term ICR for an insulated subsidiary is one notch above the GCP if:

- The subsidiary's SACP plus the potential for government support is at least one notch above the GCP, and
- The conditions listed in paragraph 141 are met.

143. The indicative long-term ICR for an insulated subsidiary, as explained in paragraph 141, is two notches above the GCP if:

- The subsidiary's SACP plus the potential for government support is at least two notches above the GCP;
- The conditions listed in paragraph 141 are met;
- Standard & Poor's concludes that it is unlikely that the assets and liabilities of the subsidiary would be substantively consolidated into those of the parent company in the event of the parent company's bankruptcy; and

At least one of the following three characteristics are met:

- There are significant minority shareholders with an active economic interest;
- Independent directors on the board have effective influence on decision making;
- There is evidence of strong legislative, regulatory, or structural restrictions, coupled with active regulatory oversight. The latter could include ongoing review of financial statements; approval of debt issuances, dividend distributions, and intercompany transactions; and requirements related to maintaining capital structure metrics. Alternatively, the regulator or appropriate legislative body has a publicly stated policy of protecting the credit quality of the subsidiary that would keep the subsidiary from supporting the group to an extent that would in turn unduly impair the subsidiary's stand-alone creditworthiness.

144. The indicative long-term ICR for an insulated subsidiary, as defined in paragraph 141, is three notches above the GCP if:

- The subsidiary's SACP plus the potential for government support stands at least three notches above the GCP;
- The conditions listed in paragraph 141 are met;
- Standard & Poor's concludes that it is unlikely that the assets and liabilities of the subsidiary would be substantively consolidated into those of the parent company in the event of the parent company's bankruptcy;
- Strong legislative, regulatory, or structural restrictions exist, coupled with active regulatory oversight. The latter could include ongoing review of financial statements; approval of debt issuances, dividend distributions, and intercompany transactions; and requirements related to maintaining capital structure metrics. Alternatively, the regulator or appropriate legislative body has a publicly stated policy of protecting the credit quality of the subsidiary that would keep the subsidiary from supporting the group to an extent that would in turn unduly impair the subsidiary's stand-alone creditworthiness; and

Either:

- There are significant minority shareholders with an active economic interest; or
- Independent directors on the board have effective influence on decision making; or
- There is a near-term likelihood of regulatory intervention restricting dividends or other payments from the subsidiary to its parent based on the financial condition of the group.

145. The indicative long-term ICR for an insulated subsidiary (as per paragraph 141) that is a regulated entity could be

de-linked from the GCP if either:

- The regulator has taken action to prevent the subsidiary from transferring cash flows to its parent, or
- For a regulated financial institution that is a subsidiary of a corporate group, where that corporate parent is experiencing material and sustained stress, the regulator could, in our opinion, act at some point (or has acted) to prevent the subsidiary from supporting the group to an extent that would impair the subsidiary's stand-alone creditworthiness.

146. The indicative long-term ICR for a subsidiary could be de-linked from the GCP even if the parent company owns more than 50% of its equity, but doesn't exert control due to the existence of substantial creditor protections and the provisions set out in paragraphs 147 through 149 below are met. In such cases, we generally expect the minority shareholders to hold at least a 15% equity stake in the subsidiary, to be unaffiliated with the majority shareholder, to take an active role in corporate governance and have rights to ensure the company is adequately capitalized to conduct its business, to maintain fair relationships with the majority shareholder, to have some experience in the industry, and to have veto rights on such matters as material changes to the business, dividend payments, and voluntary bankruptcy filings.

147. In addition to meeting the conditions in the preceding paragraph, to be de-linked from the GCP, a subsidiary must:

- Maintain independent directors or an equivalent anti-filing mechanism (as an example, having a minority parent whose vote is required for major corporate decisions such as voluntary bankruptcy filings);
- Have no cross-default provisions with the parent;
- Meet the separateness provisions described below; and
- Maintain arm's-length relationships with its parent and affiliates.

148. The presence of independent directors on the governing board of an entity may help reduce the likelihood of the subsidiary filing voluntary insolvency proceedings merely for the convenience of its parent, in our opinion. An anti-filing mechanism, sometimes referred to as a "hindrance mechanism," is any sort of contractual mechanism between a debtor and a creditor that creates a disincentive for the debtor to file for bankruptcy. Examples include: 1) the appointment of an independent director to the borrower's board of directors and requiring unanimous board approval to file a petition for bankruptcy; or 2) inclusion of a pre-petition waiver, which is typically a contract between a debtor and a creditor where the debtor voluntarily waives a right guaranteed in bankruptcy in exchange for consideration by a creditor.

149. We assess separateness by reviewing whether the subsidiary meets these conditions:

- Maintains books, records, financial statements, and its accounts separate from any other entity;
- Holds itself out as a separate entity and conducts its own business in its own name;
- Doesn't pledge or commingle its funds, other assets, and cash flows for the benefit of any other entity or to make any loans or advances to any other entity;
- Avoids acquiring obligations or securities of its parent(s) or affiliates;
- Allocates fairly and reasonably any overhead for shared office space;
- Uses separate stationery, invoices, and checks;
- Pays the salaries of its own employees and maintains a sufficient number of employees in light of its contemplated business; and

- Avoids guaranteeing or becoming obliged for the debts of its parent(s) or affiliates.

150. We evaluate the breadth and specific separateness conditions listed in paragraphs 147 through 149 based on the likelihood that the courts might, in a specific jurisdiction, bring the subsidiary or its assets into the insolvency proceeding of another entity (for instance, a parent).

151. In line with paragraphs 38 and 39 and supplementing paragraph 28, we'll not assign an indicative long-term ICR for an insulated entity below 'B-' as a result of the GCP falling into the 'ccc' category. This would apply if the SACP is at least 'b-' and we believe it's unlikely that the subsidiary will be drawn into proceedings at the group level that would lead to a default of the subsidiary.

ii. Captive finance subsidiaries

152. A captive finance subsidiary (as opposed to a financing subsidiary) functions primarily as a means to market a company's products--by providing financing (in the form of loans or leases) to the company's dealers or end customers. When such a captive finance subsidiary generates 70% or more of its receivables from sales of its parent's or group's goods or services, we generally view the captive's default risk as indistinguishable from that of the parent, and we assess these captive finance subsidiaries as core to the group. We may also assess a captive finance subsidiary with less than 70% of its portfolio related to its parent as having core status to the group if facilitating the parent's product sales is the key strategic mission of the finance unit and if the captive-related business is the most important factor in the unit's financial performance.

153. For us to assess a captive finance subsidiary as core or highly strategic to a group, the subsidiary must provide significant benefits to the parent's marketing efforts. We determine significance by evaluating:

- The percent of parent product sold via the subsidiary (penetration rate). For diversified groups, the percent of total sales may be less important than the percent of certain specific product lines. In turn, those products must be important to the overall performance of the company. For example, a manufacturer of both aircraft and widgets may rely on its captive finance unit only for the former.
- The alternatives available to sell the parent's products. For example, at times, there are numerous banks in a given market eager to lend to car buyers.
- The costs and challenges in conducting its own financing. For some entities, the funding costs may outweigh the benefits--or it may become difficult to gain access to capital.

154. If a captive finance entity is an insulated subsidiary according to the insulated subsidiaries portion of this section, then we could rate the subsidiary up to three notches higher than the GCP. We assess a captive finance entity as severable when it is able to operationally stand on its own, by taking over or subcontracting to external companies certain functions that were previously provided by its parent. Given the nature of the business model of a captive finance entity, we would expect that it actually retains commercial ties with its parent.

iii. Financing subsidiaries

155. A financing subsidiary is a separate legal entity created for the sole purpose of carrying out certain financial activities on behalf of its parent company (such as raising debt for the group). When a financing subsidiary is wholly owned, shares the same corporate name, and issues debt on behalf of the group, we treat that finance subsidiary as core.

iv. Joint ventures

156. Supplementing paragraph 45, for JVs, we may attribute support to one of its owners (sponsors), even if the sponsor does not own a controlling stake in the JV and the JV is not part of its group. In these cases, we believe that there would be situations in which the sponsor would support the JV, regardless of the actions of the other JV sponsors. Situations in which one sponsor may be willing to support such a JV arrangement include when the JV operates in the same line of business as the sponsor and the sponsor essentially makes all day-to-day business and operating decisions. Alternatively, the JV may be of critical importance to another asset that is majority owned by the sponsor or to the overall market strategy of the sponsor. An example would be a 50%/50% JV refinery that is deeply integrated into a highly strategic chemical complex of one of the JV sponsors. In this case, the sponsor owning the chemical complex may have a strong incentive to support the JV refinery even if the other sponsor does not. We'd usually consider the JV to be strategically important, moderately strategic, or nonstrategic to one or more of its sponsors if it meets the conditions described in sections VI.C.1.c, C.1.d, or C.1.e, respectively. In rare cases, however, we could consider the JV highly strategic to one or more of its sponsors if it met the conditions in section VI.C.1.b.

v. Dedicated supplier/purchaser relationships

157. Although usually associated with ownership, support can also arise from other relevant circumstances. Even without having any ownership interest, an entity can support another entity based on economic incentives or contractual arrangements.

158. Group members are typically owned or controlled by the parent or ultimate parent. But there can be instances in corporate ratings in which a company has a dedicated supplier/purchaser relationship with an affiliated entity and only a minority ownership interest or none at all. For example, a beverage company (supplier) has numerous strategic relationships with its authorized bottlers allowing these bottlers exclusive right to bottle and sell the beverage company's soft drinks within specified territories. In many instances, the beverage company might not have an economic interest in a specific bottler, but their relationship is tied to the bottling, licensing, and distribution agreements. Alternatively, the beverage company (supplier) may have an ownership interest, yet there is also a second majority or significant owner.

159. A pre-condition to including such entities as part of the group is that the corporate entities have contractual commitments to purchase/supply the primary components of their product from the single supplier/purchaser affiliated entity. In addition, the supplier's/purchaser's product must represent more than 75% of the entity's (including joint ventures) net sales/cost of goods sold and EBITDA. In general, we believe economic incentive is the most important factor on which to base judgments about the degree of linkage between entities with dedicated supplier/purchaser relationships. We define the group in this instance as the supplier and its affiliated entity/purchaser. It does not include other affiliated entities/purchasers/suppliers. When a shareholder other than the supplier/purchaser owns or controls the affiliated entity and the contractual agreement is not perpetual, we believe the insolvency or financial difficulty of the larger investor or significant owner may weigh more on the affiliated entity's credit quality than if it were controlled by the supplier/purchaser. In these cases, we would not include the affiliated entity/purchaser/supplier in the group analysis of the supplier/purchaser.

160. We'll classify an entity as moderately strategic to the supplier/purchaser if at least three of the following five conditions are met:

- The entity represents more than 20% of the cash flow of the supplier/purchaser or more than 10% of the supplier's/purchaser's total volume.
- The term of the supplier/purchaser agreement is either perpetual or long-term (at least two years with automatic renewals).
- The supplier or purchaser has an economic interest in the entity that we assess to be material. We determine this by looking at the absolute value of the supplier's/purchaser's investment.
- There is evidence of the supplier's/purchaser's willingness and ability to provide financial support to the purchaser/supplier. We determine this by looking at prior loans, capital investments, or marketing support given to the purchaser.
- There is a shared name. We believe that a shared name creates an incentive for the supplier to provide support to prevent reputational risk in the capital markets.

vi. Entities with interlocking business relationships

161. Some groups of entities with interlocking business relations could benefit the rating of individual entities belonging to that group even in the absence of control as defined in paragraph 31. Group membership will be based on meeting at least four of the following conditions:

- Name affiliation,
- Common management,
- Board composition or board control,
- Shared corporate history,
- Common business ties,
- Common financing group members,
- Shared corporate support functions, and
- Cross ownership holdings.

162. In such cases, we determine the GCP as the weighted average of the creditworthiness of the material group members.

163. If the GCP, determined as in paragraph 162, is higher than the SACP of a specific group member, that group member could be assigned a strategically important classification or a moderately strategic classification, subject to the conditions in paragraphs 164 and 165, respectively.

164. We classify an entity as strategically important to the group if it meets all of the following:

- Is likely to remain a part of the group;
- Is likely to receive support from the group should it fall into financial difficulty;
- Is important to the group's long-term strategy;
- Has the long-term commitment of senior group management, or incentives exist to induce such commitment; and
- Is reasonably successful at what it does or has realistic medium-term prospects of success relative to group management's specific expectations or group earnings norms.

165. We classify an entity as moderately strategic to the group if it meets the first two conditions (below) and at least one of the following last three conditions:

- Is likely to remain a part of the group in the near term;
- Is likely to receive support from the group should it fall into financial difficulty;
- Is important to the group's long-term strategy;

- Has the long-term commitment of senior group management, or incentives exist to induce such commitment;
- Is reasonably successful at what it does or has realistic medium-term prospects of success relative to group management's specific expectations or group earnings norms.

C. Rating Corporate Group Entities Above The Sovereign

166. Implicit group support can result in the ICR on a group member being higher than the relevant sovereign rating if the sovereign is rated 'B-' or lower, or in the following situations.

167. Supplementing paragraph 77, if we consider the parent group able and willing to sufficiently support the subsidiary during stress associated with a sovereign default, the ICR of the subsidiary could be higher than the foreign currency rating of the sovereign:

- If the subsidiary is core to the group, the rating is the lower of: (1) the foreign currency sovereign credit rating plus three notches, and (2) the potential rating otherwise derived from these criteria;
- If subsidiary is highly strategic to the group, the rating is the lower of: (1) the foreign currency sovereign credit rating plus two notches, and (2) the potential rating otherwise derived from these criteria; and,
- If the subsidiary is strategically important, moderately strategic, or nonstrategic to the group, we do not consider parent support as a basis for a rating above the sovereign foreign currency rating. Therefore, in these cases, the rating is the potential rating otherwise derived from these criteria and "Ratings Above The Sovereign--Corporate And Government Ratings: Methodology And Assumptions," published Nov. 19, 2013.

168. Implicit group support can result in the ICR on a group member being higher than the relevant T&C if the sovereign is rated 'B-' or lower and if we consider the parent group to be able and willing to sufficiently support the subsidiary during transfer and convertibility restrictions. For these cases, the ICR of the subsidiary could be higher than the T&C assessment for the country where that subsidiary operates:

- If the subsidiary is core to the group, the foreign currency rating is the lower of: (1) the T&C assessment for the country plus one notch, and (2) the potential rating otherwise derived from paragraph 167.
- If the subsidiary is highly strategic, strategically important, moderately strategic, or nonstrategic to the group, we do not consider parent support as a basis for a rating above the T&C assessment for the country.

X. APPENDICES

Appendix A: Glossary

169. All financial metrics used to apply these criteria, including geographic or business-line breakdowns of a group's activities, include projections over the next two to three years.

170. Captive insurer: A subsidiary that mainly provides insurance services for group members. Captive insurers typically show a very high degree of integration with group financial and risk management strategy. Captive insurers include captive reinsurance subsidiaries of insurance groups and captive insurance and reinsurance subsidiaries of corporate or FI groups. The captives of corporate or FI groups insure risks of non-insurance subsidiaries either directly as

insurers or indirectly as reinsurers. In turn, they may reinsure some of the aggregated risk with third-party reinsurers, thereby playing a central role in the group's risk retention strategy.

171. Financial institution: The term "financial institution" includes retail banks, commercial banks, corporate and investment banks, large broker-dealers, mortgage lenders, trust banks, credit unions, building societies, custody banks, finance companies, asset managers, exchanges, clearinghouses, regional securities brokers, and similar financial institutions.

172. Financial services sector: Consists of banks, nonbank financial institutions, and insurers.

173. Financial sponsor: This is an entity that does not have a long-term, strategic investment in a company. Rather, the financial sponsor is a financial investment firm, trying to increase the value of its investment by improving management, capital, or both, typically with the ultimate goal of liquidating the investment. Financial sponsors include private-equity firms, hedge funds, venture capital, public and private investment companies, and mutual funds.

174. Financial strength rating (FSR): A Standard & Poor's insurer financial strength rating is a forward-looking opinion about the financial security characteristics of an insurer with respect to its ability to pay under its insurance policies and contracts in accordance with their terms (see "Standard & Poor's Ratings Definitions," published Oct. 24, 2013).

175. Fully integrated: This refers to a subsidiary that depends on the rest of the group for its administrative and operational activities, and infrastructure. These ties render it highly improbable to sever the subsidiary from the group. Examples of such subsidiaries can include booking or cost centers, or captive insurers, captive financing operations, and entities that exist solely to issue debt or carry on treasury operations on behalf of a group.

176. Group credit profile (GCP): The GCP is Standard & Poor's opinion of a group's creditworthiness as if the group were a single legal entity, and is conceptually equivalent to an ICR. A GCP does not address any specific obligation.

177. Insurance company or insurers: Entities that carry insurance risk, excluding for example, insurance brokers and companies servicing an insurance sector. In these criteria, unless otherwise stated, these terms include reinsurance companies and reinsurers.

178. Insurance group: A group of companies that has insurance as its predominant activity.

179. Intermediate holding company of a financial services group: A legal entity that is a subsidiary within a group that does not carry out its own prudentially regulated business activities, but is the legal owner of at least one subsidiary that conducts prudentially regulated business activities.

180. Investment holding company: A corporate entity that invests in, but does not intend to support, other companies (which are usually operating entities).

181. Issuer credit rating (ICR): Also called "counterparty credit rating," a Standard & Poor's issuer credit rating is a forward-looking opinion about an obligor's overall creditworthiness, focusing on its capacity and willingness to meet its financial obligations in full and as they come due (see "Standard & Poor's Ratings Definitions," published Oct. 24, 2013).

182. Local currency issuer credit rating: A nonsovereign entity's local currency ICR reflects Standard & Poor's opinion of that entity's willingness and ability to service its financial obligations, regardless of currency and in the absence of restrictions on its access to foreign exchange needed to service debt.

183. Nonoperating holding company (NOHC) of a financial services group: A legal entity that does not carry out its own prudentially regulated business activities, but is the legal owner of at least one subsidiary that conducts prudentially regulated business activities. An NOHC may also provide services to subsidiaries such as investment and treasury management.

184. Operating holding company (OHC) of a financial services group: A legal entity that conducts prudentially regulated business activities and also is the legal owner of at least one subsidiary that conducts prudentially regulated business activities. If a holding company has a banking license, it is an OHC.

185. Parent: An entity with controlling or joint-control interest in another incorporated entity (a subsidiary) or a joint venture.

186. Prudentially regulated: This refers to the regulation of a financial services entity by one or more regulatory authority by setting standards for capitalization and potential restrictions on distributions. For examples, see paragraph 84.

187. Stand-alone credit profile (SACP): See "Stand-Alone Credit Profiles: One Component Of A Rating," published Oct. 1, 2010.

188. Start-up: An entity operating for five years or less.

189. Subgroup: A group of legal entities within a wider group that are either controlled by a single legal entity, or collectively by several entities.

190. Transfer and convertibility (T&C): Defined in "Criteria For Determining Transfer And Convertibility Assessments," published May 18, 2009. A country T&C assessment reflects Standard & Poor's view of the likelihood of a sovereign restricting nonsovereign access to foreign exchange needed to satisfy the nonsovereign's debt service obligations.

191. Ultimate parent: The legal entity at the top of a group structure, in which the control chain may include several successive layers and exclusive controlling or joint-control interest in another incorporated entity ("subsidiary") or joint venture. Under the criteria, a natural person, family firm, foundation, investment holding company, managed fund, or private equity firm would not generally be treated as an ultimate parent. In general, "family firm" refers to one that is family-controlled, and "private equity firm" to a natural person or fund-controlled entity primarily investing in a private capacity in operating entities.

Appendix B: Frequently Asked Questions: Implications Of Membership On An FI Group

192. Q: How do the criteria take into account the impact on a subsidiary's SACP from being part of an FI group?

193. A: Our criteria recognize the actual business and financial links between a subsidiary and its wider group. We also

acknowledge that even absent such interactions, the ownership link itself means that the parent operating entity's credit standing usually influences the financial position of the subsidiary. In our view, this is particularly true for institutions where continued confidence among customers and investors is paramount. As a result, we believe that financial stress at the parent level will likely affect the subsidiary's creditworthiness to at least some extent, particularly if there are close business or funding ties between the two.

194. A subsidiary's creditworthiness can be affected by its existing financial, commercial, and reputational linkages with the wider group. These can affect the assessments that we use to determine the SACP. Factors that we consider include:

- Whether the subsidiary's prospects in terms of financial performance and funding are sufficiently independent from those of the group so that the relative strength of the subsidiary can remain nearly intact even if other group entities encounter severe setbacks.
- Direct financial exposures to the parent or other group, which may include but not be limited to funding links--for example, where the subsidiary is funding the parent or other group companies, or is relying on the continued ability of affiliates to provide it with funding or liquidity.
- Capital mobility--such as when a subsidiary depends on capital injections from the parent or has significant excess capital resources from a regulatory perspective that could be passed to its parent.
- Strong reputational or franchise linkages—for example, through sharing a common brand or identity that becomes contaminated. In the case of a bank, concerns about the position of the parent could undermine the confidence of depositors, existing and potential clients, and the wholesale market, causing the subsidiary to lose business.
- Operational linkages--for example, when the subsidiary has a high dependence on group affiliates to provide critical operational and technological functions.
- Strategic decisions--such as when the parent decides to exit a product or market that provides its subsidiary important revenues or is a good source for future growth.

195. The subsidiary's creditworthiness could also be undermined by a continued ability of the weaker parent to take assets from the subsidiary or burden it with liabilities during financial stress, leaving the subsidiary with less flexibility to raise debt or capital. Furthermore, in some jurisdictions, a bankruptcy petition by the parent would include the subsidiary or cause the subsidiary to go into administration.

196. We consider that factors such as tight regulatory oversight and the legal powers of the relevant authorities can create regulatory restrictions that would prevent or limit a foreign bank subsidiary from supporting the group to an extent that would impair the subsidiary's stand-alone creditworthiness. This influences our view of the extent to which the SACP reflects the potential for negative intervention by the parent. Among the factors that we consider are:

- The potential effectiveness of government support in protecting the credit strength of the subsidiary based on the nature of the regulatory oversight and the degree of legal intervention powers that the host government can exercise, which is also informed by the scores assigned to "banking regulation and supervision" and "regulatory track record" when assessing the institutional framework for the host country in our BICRA assessment (see "Banking Industry Country Risk Assessment Methodology And Assumptions," published Nov. 9, 2011), and our view of the legal infrastructure.
- Whether the regulatory capital requirements of the host regulator are set at a transparent level that is higher than the minimum for a license.
- Whether the host regulator applies meaningful restrictions on funding and liquidity flows from its domestic banks to group entities, such as restricting the repatriation of liquidity and not allowing bond or deposit funding sourced by

the subsidiary to be used by the parent or other parts of the group.
- The degree to which the subsidiary receives funding from group entities.
- Whether the subsidiary would not be drawn into the group's bankruptcy or reorganization proceedings (this could be supported by a nonconsolidation opinion from an independent expert to confirm the separateness of the parent and subsidiary).
- Whether the host country has in place a resolution regime or other legal intervention powers that enable the host government to change the ownership of the firm prior to the bankruptcy of the subsidiary or its parent.
- The nature of any other regulatory restrictions on financial flows, such as intragroup sales.
- Whether the subsidiary is severable from the group and able to stand on its own or subcontract certain functions previously provided by the parent.
- Whether the subsidiary has sufficient capacity to ensure independence of decisions from the group, which could be reinforced by the existence of outside ownership.

197. While some of these factors may be in place even before a parent comes under stress, generally we observe that regulators tend to play an increasingly active and protective role of systemically important banks as the parental situation deteriorates. If we observe inaction on the part of the authorities in the face of a marked deterioration in the group's creditstanding, which could threaten the viability of the systemically important subsidiary, this could lead us to reconsider whether the subsidiary is indeed systemically important.

198. Q: If a foreign bank subsidiary is rated higher than its parent due to the potential for extraordinary government support in its host market, how does this affect Standard & Poor's view of the creditworthiness of the group?

199. A: When the host authorities consider a foreign bank subsidiary to be a systemically important entity in that market, the subsidiary may be subject to actions by various government authorities and regulators that would provide some protection to the subsidiary in the case of parental stress. These actions can restrict the flow of resources from the subsidiary to the parent and can therefore reduce the link between parent and group creditworthiness, and can pull down the GCP determined for the group.

200. We take account of the potential restrictions on intragroup flows on the GCP by:

- Considering the potential negative implications for the business position assessment used when determining the GCP due to the prospective impact on group strategy or franchise.
- Considering the negative impact on the risk position assessment used when determining the GCP due to restricted capital flexibility that is not otherwise captured in the RACF.
- Considering the extent of restrictions other than on capital flows.

201. Items that we consider to assess the degree of the adjustment include:

- Whether the host regulator applies meaningful restrictions on funding and liquidity flows from its domestic banks to group entities, such as restricting the repatriation of liquidity and not allowing bond or deposit funding sourced by the subsidiary to be used by the parent or other parts of the group.
- The nature of any other regulatory restrictions on financial flows, such as intragroup sales.

202. Q: Can a foreign bank subsidiary that is rated higher than the GCP because of host government support still be considered core to the parent bank?

203. A: Yes, because group status reflects the likelihood of potential group support. The potential for the subsidiary to receive host government support does not automatically affect the group incentives to provide support. However, in some circumstances, the group may have a reduced likelihood of supporting the subsidiary if the operations in the foreign jurisdiction could be ring-fenced in the future from the rest of the group.

Appendix C: Superseded And Partly Superseded Criteria

204. For issuers within the scope of these criteria, this article supersedes:

- Criteria | Corporates | Utilities: Methodology: Differentiating The Issuer Credit Ratings Of A Regulated Utility Subsidiary And Its Parent, March 11, 2010
- Regulation Benefits Ratings On European Automakers' Captive Finance Subsidiaries, May 18, 2006
- Corporate Criteria--Parent/Subsidiary Links; General Principles; Subsidiaries/Joint Ventures/Nonrecourse Projects; Finance Subsidiaries; Rating Link to Parent, Oct. 28, 2004
- Criteria | Corporates | Utilities: U.K. Regulatory Ring-Fencing Risk For Utility Holding Companies: Standard & Poor's Approach, July 8, 2003

205. The subpart titled "Rating Group Entities Above The Sovereign" in this article partly supersedes:

- Criteria Update: Factoring Country Risk Into Insurer Financial Strength Ratings, Feb. 11, 2003

206. This article partly supersedes the following article by superseding the references to group support in that article (the sections entitled "Assessing Captive Finance Operations" and "Captive-Specific Aspects" are not superseded):

- Captive Finance Operations, April 17, 2007

207. This article partly supersedes the following article, which now only applies to captive insurers that are subsidiaries of companies excluded from the scope of this article by paragraph 8:

- Rating Captive Insurers, April 13, 2004

Appendix D: A Specific Application Of The Interaction Between GRE And GRM Criteria

208. If subsidiaries classified as GREs are owned by the government via a holding or asset management company but we believe that "control" over a GRE's strategy and cash flow rests ultimately with the relevant government, or a representative thereof, we will typically analyze the GRE using our government-related-entity criteria (see paragraphs 48 and 67).

209. As an example, we are likely to rate a regulated utility that is classified as a GRE and is owned by a holding company, whose sole purpose is acting as the legal owner on behalf of the government and that does not carry out its own business activities, using our criteria for rating government-related entities.

RELATED CRITERIA AND RESEARCH

- Corporate Methodology, Nov. 19, 2013
- Ratings Above The Sovereign--Corporate And Government Ratings: Methodology And Assumptions, Nov. 19, 2013
- Standard & Poor's Ratings Definitions, Oct. 24, 2013
- Assessing Bank Branch Creditworthiness, Oct. 14, 2013
- Insurers: Rating Methodology, May 7, 2013
- Guarantee Criteria--Structured Finance, May 7, 2013
- Criteria For Assigning 'CCC+', 'CCC', 'CCC-', And 'CC' Ratings, Oct. 1, 2012
- Guarantee Default: Assessing The Impact On The Guarantor's Issuer Credit Rating, May 11, 2012
- Banks: Rating Methodology And Assumptions, Nov. 9, 2011
- Bank Hybrid Capital Methodology And Assumptions, Nov. 1, 2011
- Nonsovereign Ratings That Exceed EMU Sovereign Ratings: Methodology And Assumptions, June 14, 2011
- Principles Of Credit Ratings, Feb. 16, 2011
- Rating Government-Related Entities: Methodology And Assumptions, Dec. 9, 2010
- Stand-Alone Credit Profiles: One Component Of A Rating, Oct. 1, 2010
- Refined Methodology And Assumptions For Analyzing Insurer Capital Adequacy Using The Risk-Based Insurance Capital Model, June 7, 2010
- Criteria For Determining Transfer And Convertibility Assessments, May 18, 2009
- Recovery Ratings For U.S. Finance Companies, June 19, 2008
- Rating Private Equity Companies' Debt And Counterparty Obligations, March 11, 2008
- Legal Criteria For U.S. Structured Finance Transactions: Select Issues Criteria, Oct. 1, 2006
- Counterparty And Debt Rating Methodology For Alternative Investment Organizations: Hedge Funds, Sept. 12, 2006
- Standard & Poor's Updated Methodology For Rating Exchanges And Clearinghouses, July 10, 2006
- Rating Network Payment Providers, June 1, 2005
- Rating Securities Companies, June 9, 2004
- Rating Finance Companies, March 18, 2004
- Rating Asset Management Companies, March 18, 2004
- Ring-Fencing A Subsidiary, Oct. 19, 1999

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.

(And watch the related CreditMatters TV segment titled, "How Standard & Poor’s Group Rating Methodology Applies To U.S. Public Finance Borrowers," dated Dec. 9, 2013.)

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Criteria | Corporates | General:

Corporate Methodology

1. Standard & Poor's Ratings Services is updating its criteria for rating corporate industrial companies and utilities. The criteria organize the analytical process according to a common framework and articulate the steps in developing the stand-alone credit profile (SACP) and issuer credit rating (ICR) for a corporate entity.
2. This article is related to our criteria article "Principles Of Credit Ratings," which we published on Feb. 16, 2011.

SUMMARY OF THE CRITERIA

3. The criteria describe the methodology we use to determine the SACP and ICR for corporate industrial companies and utilities. Our assessment reflects these companies' business risk profiles, their financial risk profiles, and other factors that may modify the SACP outcome (see "General Criteria: Stand-Alone Credit Profiles: One Component Of A Rating," published Oct. 1, 2010, for the definition of SACP). The criteria provide clarity on how we determine an issuer's SACP and ICR and are more specific in detailing the various factors of the analysis. The criteria also provide clear guidance on how we use these factors as part of determining an issuer's ICR. Standard & Poor's intends for these criteria to provide the market with a framework that clarifies our approach to fundamental analysis of corporate credit risks.
4. The business risk profile comprises the risk and return potential for a company in the markets in which it participates, the competitive climate within those markets (its industry risk), the country risks within those markets, and the competitive advantages and disadvantages the company has within those markets (its competitive position). The business risk profile affects the amount of financial risk that a company can bear at a given SACP level and constitutes the foundation for a company's expected economic success. We combine our assessments of industry risk, country risk, and competitive position to determine the assessment for a corporation's business risk profile.
5. The financial risk profile is the outcome of decisions that management makes in the context of its business risk profile and its financial risk tolerances. This includes decisions about the manner in which management seeks funding for the company and how it constructs its balance sheet. It also reflects the relationship of the cash flows the organization can achieve, given its business risk profile, to the company's financial obligations. The criteria use cash flow/leverage analysis to determine a corporate issuer's financial risk profile assessment.
6. We then combine an issuer's business risk profile assessment and its financial risk profile assessment to determine its anchor (see table 3). Additional rating factors can modify the anchor. These are: diversification/portfolio effect, capital structure, financial policy, liquidity, and management and governance. Comparable ratings analysis is the last analytical factor under the criteria to determine the final SACP on a company.
7. These criteria are complemented by industry-specific criteria called Key Credit Factors (KCFs). The KCFs describe the industry risk assessments associated with each sector and may identify sector-specific criteria that supersede certain sections of these criteria. As an example, the liquidity criteria state that the relevant KCF article may specify different standards than those stated within the liquidity criteria to evaluate companies that are part of exceptionally stable or

volatile industries. The KCFs may also define sector-specific criteria for one or more of the factors in the analysis. For example, the analysis of a regulated utility's competitive position is different from the methodology to evaluate the competitive position of an industrial company. The regulated utility KCF will describe the criteria we use to evaluate those companies' competitive positions (see "Key Credit Factors For The Regulated Utility Industry," published Nov. 19, 2013).

SCOPE OF THE CRITERIA

8. This methodology applies to nonfinancial corporate issuer credit ratings globally. Please see "Criteria Guidelines For Recovery Ratings On Global Industrial Issuers' Speculative-Grade Debt," published Aug. 10, 2009, and "2008 Corporate Criteria: Rating Each Issue," published April 15, 2008, for further information on our methodology for determining issue ratings. This methodology does not apply to the following sectors, based on the unique characteristics of these sectors, which require either a different framework of analysis or substantial modifications to one or more factors of analysis: project finance entities, project developers, transportation equipment leasing, auto rentals, commodities trading, investment holding companies and companies that maximize their returns by buying and selling equity holdings over time, Japanese general trading companies, corporate securitizations, nonprofit and cooperative organizations, master limited partnerships, general partnerships of master limited partnerships, and other entities whose cash flows are primarily derived from partially owned equity holdings.

IMPACT ON OUTSTANDING RATINGS

9. We expect about 5% of corporate industrial companies and utilities ratings within the scope of the criteria to change. Of that number, we expect approximately 90% to receive a one-notch change, with the majority of the remainder receiving a two-notch change. We expect the ratio of upgrades to downgrades to be around 3:1.

EFFECTIVE DATE AND TRANSITION

10. These criteria are effective immediately on the date of publication. We intend to complete our review of all affected ratings within the next six months.

METHODOLOGY

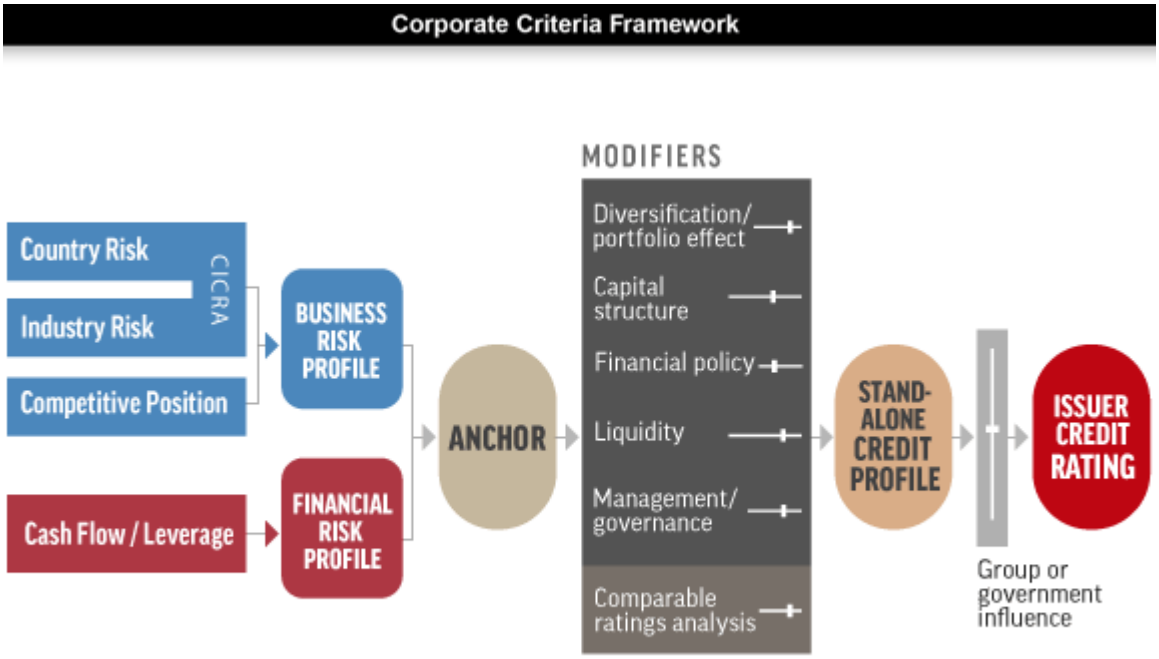
A. Corporate Ratings Framework

11. The corporate analytical methodology organizes the analytical process according to a common framework, and it divides the task into several factors so that Standard & Poor's considers all salient issues. First we analyze the company's business risk profile, then evaluate its financial risk profile, then combine those to determine an issuer's anchor. We then analyze six factors that could potentially modify our anchor conclusion.

12. To determine the assessment for a corporate issuer's business risk profile, the criteria combine our assessments of industry risk, country risk, and competitive position. Cash flow/leverage analysis determines a company's financial risk profile assessment. The analysis then combines the corporate issuer's business risk profile assessment and its financial risk profile assessment to determine its anchor. In general, the analysis weighs the business risk profile more heavily for investment-grade anchors, while the financial risk profile carries more weight for speculative-grade anchors.

13. After we determine the anchor, we use additional factors to modify the anchor. These factors are: diversification/portfolio effect, capital structure, financial policy, liquidity, and management and governance. The assessment of each factor can raise or lower the anchor by one or more notches--or have no effect. These conclusions take the form of assessments and descriptors for each factor that determine the number of notches to apply to the anchor.

14. The last analytical factor the criteria call for is comparable ratings analysis, which may raise or lower the anchor by one notch based on a holistic view of the company's credit characteristics.



15. The three analytic factors within the business risk profile generally are a blend of qualitative assessments and quantitative information. Qualitative assessments distinguish risk factors, such as a company's competitive advantages, that we use to assess its competitive position. Quantitative information includes, for example, historical cyclicality of revenues and profits that we review when assessing industry risk. It can also include the volatility and level of profitability we consider in order to assess a company's competitive position. The assessments for business risk profile are: 1, excellent; 2, strong; 3, satisfactory; 4, fair; 5, weak; and 6, vulnerable.

16. In assessing cash flow/leverage to determine the financial risk profile, the analysis focuses on quantitative measures. The assessments for financial risk profile are: 1, minimal; 2, modest; 3, intermediate; 4, significant; 5, aggressive; and 6, highly leveraged.

17. The ICR results from the combination of the SACP and the support framework, which determines the extent of the difference between the SACP and the ICR, if any, for group or government influence. Extraordinary influence is then captured in the ICR. Please see "Group Rating Methodology," published Nov. 19, 2013, and "Rating Government-Related Entities: Methodology And Assumptions," published Dec. 9, 2010, for our methodology on group and government influence.

18. Ongoing support or negative influence from a government (for government-related entities), or from a group, is factored into the SACP (see "SACP criteria"). While such ongoing support/negative influence does not affect the industry or country risk assessment, it can affect any other factor in business or financial risk. For example, such support or negative influence can affect: national industry analysis, other elements of competitive position, financial risk profile, the liquidity assessment, and comparable ratings analysis.

19. The application of these criteria will result in an SACP that could then be constrained by the relevant sovereign rating and transfer and convertibility (T&C) assessment affecting the entity when determining the ICR. In order for the final ICR to be higher than the applicable sovereign rating or T&C assessment, the entity will have to meet the conditions established in "Ratings Above The Sovereign--Corporate And Government Ratings: Methodology And Assumptions," published Nov. 19, 2013.

1. Determining the business risk profile assessment

20. Under the criteria, the combined assessments for country risk, industry risk, and competitive position determine a company's business risk profile assessment. A company's strengths or weaknesses in the marketplace are vital to its credit assessment. These strengths and weaknesses determine an issuer's capacity to generate cash flows in order to service its obligations in a timely fashion.

21. Industry risk, an integral part of the credit analysis, addresses the relative health and stability of the markets in which a company operates. The range of industry risk assessments is: 1, very low risk; 2, low risk; 3, intermediate risk; 4, moderately high risk; 5, high risk; and 6, very high risk. The treatment of industry risk is in section B.

22. Country risk addresses the economic risk, institutional and governance effectiveness risk, financial system risk, and payment culture or rule of law risk in the countries in which a company operates. The range of country risk assessments is: 1, very low risk; 2, low risk; 3, intermediate risk; 4, moderately high risk; 5, high risk; and 6, very high risk. The treatment of country risk is in section C.

23. The evaluation of an enterprise's competitive position identifies entities that are best positioned to take advantage of key industry drivers or to mitigate associated risks more effectively--and achieve a competitive advantage and a stronger business risk profile than that of entities that lack a strong value proposition or are more vulnerable to industry risks. The range of competitive position assessments is: 1, excellent; 2, strong; 3, satisfactory; 4, fair; 5, weak; and 6, vulnerable. The full treatment of competitive position is in section D.

24. The combined assessment for country risk and industry risk is known as the issuer's Corporate Industry and Country Risk Assessment (CICRA). Table 1 shows how to determine the combined assessment for country risk and industry risk.

Table 1

Determining The CICRA

	--Country risk assessment--					
Industry risk assessment	**1 (very low risk)**	**2 (low risk)**	**3 (intermediate risk)**	**4 (moderately high risk)**	**5 (high risk)**	**6 (very high risk)**
1 (very low risk)	1	1	1	2	4	5
2 (low risk)	2	2	2	3	4	5
3 (intermediate risk)	3	3	3	3	4	6
4 (moderately high risk)	4	4	4	4	5	6
5 (high risk)	5	5	5	5	5	6
6 (very high risk)	6	6	6	6	6	6

25. The CICRA is combined with a company's competitive position assessment in order to create the issuer's business risk profile assessment. Table 2 shows how we combine these assessments.

Table 2

Determining The Business Risk Profile Assessment

	--CICRA--					
Competitive position assessment	**1**	**2**	**3**	**4**	**5**	**6**
1 (excellent)	1	1	1	2	3*	5
2 (strong)	1	2	2	3	4	5
3 (satisfactory)	2	3	3	3	4	6
4 (fair)	3	4	4	4	5	6
5 (weak)	4	5	5	5	5	6
6 (vulnerable)	5	6	6	6	6	6

*See paragraph 26.

26. A small number of companies with a CICRA of 5 may be assigned a business risk profile assessment of 2 if all of the following conditions are met:

- The company's competitive position assessment is 1.
- The company's country risk assessment is no riskier than 3.
- The company produces significantly better-than-average industry profitability, as measured by the level and volatility of profits.
- The company's competitive position within its sector transcends its industry risks due to unique competitive advantages with its customers, strong operating efficiencies not enjoyed by the large majority of the industry, or scale/scope/diversity advantages that are well beyond the large majority of the industry.

27. For issuers with multiple business lines, the business risk profile assessment is based on our assessment of each of the factors--country risk, industry risk, and competitive position--as follows:

- Country risk: We use the weighted average of the country risk assessments for the company across all business lines

that generate more than 5% of sales or where more than 5% of fixed assets are located.

- Industry risk: We use the weighted average of the industry risk assessments for all business lines representing more than 20% of the company's forecasted earnings, revenues or fixed assets, or other appropriate financial measures if earnings, revenue, or fixed assets do not accurately reflect the exposure to an industry.
- Competitive position: We assess all business lines identified above for the components competitive advantage, scope/scale/diversity, and operating efficiency (see section D). They are then blended using a weighted average of revenues, earnings, or assets to form the preliminary competitive position assessment. The level of profitability and volatility of profitability are then assessed based on the consolidated financials for the enterprise. The preliminary competitive position assessment is then blended with the profitability assessment, as per section D.5, to assess competitive position for the enterprise.

2. Determining the financial risk profile assessment

28. Under the criteria, cash flow/leverage analysis is the foundation for assessing a company's financial risk profile. The range of assessments for a company's cash flow/leverage is 1, minimal; 2, modest; 3, intermediate; 4, significant; 5, aggressive; and 6, highly leveraged. The full treatment of cash flow/leverage analysis is the subject of section E.

3. Merger of financial risk profile and business risk profile assessments

29. An issuer's business risk profile assessment and its financial risk profile assessment are combined to determine its anchor (see table 3). If we view an issuer's capital structure as unsustainable or if its obligations are currently vulnerable to nonpayment, and if the obligor is dependent upon favorable business, financial, and economic conditions to meet its commitments on its obligations, then we will determine the issuer's SACP using "Criteria For Assigning 'CCC+', 'CCC', 'CCC-', And 'CC' Ratings," published Oct. 1, 2012. If the issuer meets the conditions for assigning 'CCC+', 'CCC', 'CCC-', and 'CC' ratings, we will not apply Table 3.

Table 3

Combining The Business And Financial Risk Profiles To Determine The Anchor

	--Financial risk profile--					
Business risk profile	**1 (minimal)**	**2 (modest)**	**3 (intermediate)**	**4 (significant)**	**5 (aggressive)**	**6 (highly leveraged)**
1 (excellent)	aaa/aa+	aa	a+/a	a-	bbb	bbb-/bb+
2 (strong)	aa/aa-	a+/a	a-/bbb+	bbb	bb+	bb
3 (satisfactory)	a/a-	bbb+	bbb/bbb-	bbb-/bb+	bb	b+
4 (fair)	bbb/bbb-	bbb-	bb+	bb	bb-	b
5 (weak)	bb+	bb+	bb	bb-	b+	b/b-
6 (vulnerable)	bb-	bb-	bb-/b+	b+	b	b-

30. When two anchor outcomes are listed for a given combination of business risk profile assessment and financial risk profile assessment, an issuer's anchor is determined as follows:

- When a company's financial risk profile is 4 or stronger (meaning, 1-4), its anchor is based on the comparative strength of its business risk profile. We consider our assessment of the business risk profile for corporate issuers to be points along a possible range. Consequently, each of these assessments that ultimately generate the business risk profile for a specific issuer can be at the upper or lower end of such a range. Issuers with stronger business risk profiles for the range of anchor outcomes will be assigned the higher anchor. Those with a weaker business risk profile for the range of anchor outcomes will be assigned the lower anchor.
- When a company's financial risk profile is 5 or 6, its anchor is based on the comparative strength of its financial risk

profile. Issuers with stronger cash flow/leverage ratios for the range of anchor outcomes will be assigned the higher anchor. Issuers with weaker cash flow/leverage ratios for the range of anchor outcomes will be assigned the lower anchor. For example, a company with a business risk profile of (1) excellent and a financial risk profile of (6) highly leveraged would generally be assigned an anchor of 'bb+' if its ratio of debt to EBITDA was 8x or greater and there were no offsetting factors to such a high level of leverage.

4. Building on the anchor

31. The analysis of diversification/portfolio effect, capital structure, financial policy, liquidity, and management and governance may raise or lower a company's anchor. The assessment of each modifier can raise or lower the anchor by one or more notches--or have no effect in some cases (see tables 4 and 5). We express these conclusions using specific assessments and descriptors that determine the number of notches to apply to the anchor. However, this notching in aggregate can't lower an issuer's anchor below 'b-' (see "Criteria For Assigning 'CCC+', 'CCC', 'CCC-', And 'CC' Ratings," published Oct. 1, 2012, for the methodology we use to assign 'CCC' and 'CC' category SACPs and ICRs to issuers).

32. The analysis of the modifier diversification/portfolio effect identifies the benefits of diversification across business lines. The diversification/portfolio effect assessments are 1, significant diversification; 2, moderate diversification; and 3, neutral. The impact of this factor on an issuer's anchor is based on the company's business risk profile assessment and is described in Table 4. Multiple earnings streams (which are evaluated within a firm's business risk profile) that are less-than-perfectly correlated reduce the risk of default of an issuer (see Appendix D). We determine the impact of this factor based on the business risk profile assessment because the benefits of diversification are significantly reduced with poor business prospects. The full treatment of diversification/portfolio effect analysis is the subject of section F.

Table 4

Modifier Step 1: Impact Of Diversification/Portfolio Effect On The Anchor

	--Business risk profile assessment--					
Diversification/portfolio effect	**1 (excellent)**	**2 (strong)**	**3 (satisfactory)**	**4 (fair)**	**5 (weak)**	**6 (vulnerable)**
1 (significant diversification)	+2 notches	+2 notches	+2 notches	+1 notch	+1 notch	0 notches
2 (moderate diversification)	+1 notch	+1 notch	+1 notch	+1 notch	0 notches	0 notches
3 (neutral)	0 notches	0 notches	0 notches	0 notches	0 notches	0 notches

33. After we adjust for the diversification/portfolio effect, we determine the impact of the other modifiers: capital structure, financial policy, liquidity, and management and governance. We apply these four modifiers in the order listed in Table 5. As we go down the list, a modifier may (or may not) change the anchor to a new range (one of the ranges in the four right-hand columns in the table). We'll choose the appropriate value from the new range, or column, to determine the next modifier's effect on the anchor. And so on, until we get to the last modifier on the list--management and governance. For example, let's assume that the anchor, after adjustment for diversification/portfolio effect but before adjusting for the other modifiers, is 'a'. If the capital structure assessment is very negative, the indicated anchor drops two notches, to 'bbb+'. So, to determine the impact of the next modifier--financial policy--we go to the column 'bbb+ to bbb-' and find the appropriate assessment--in this theoretical example, positive. Applying that assessment moves the anchor up one notch, to the 'a- and higher' category. In our example, liquidity is strong, so the impact is zero notches and the anchor remains unchanged. Management and governance is satisfactory, and thus the anchor remains 'a-' (see chart following table 5).

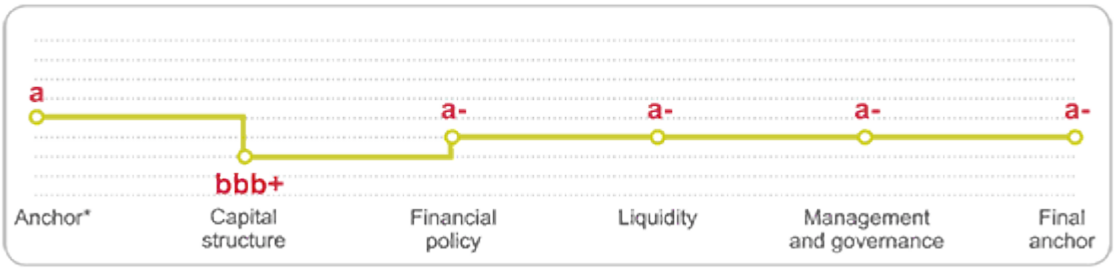
Table 5

Modifier Step 2: Impact Of Remaining Modifier Factors On The Anchor

	--Anchor range--			
	'a-' and higher	**'bbb+' to 'bbb-'**	**'bb+' to 'bb-'**	**'b+' and lower**
Factor/Assessment				
Capital structure (see section G)				
1 (Very positive)	2 notches	2 notches	2 notches	2 notches
2 (Positive)	1 notch	1 notch	1 notch	1 notch
3 (Neutral)	0 notches	0 notches	0 notches	0 notches
4 (Negative)	-1 notch	-1 notch	-1 notch	-1 notch
5 (Very negative)	-2 or more notches	-2 or more notches	-2 or more notches	-2 notches
Financial policy (FP; see section H)				
1 (Positive)	+1 notch if M&G is at least satisfactory	+1 notch if M&G is at least satisfactory	+1 notch if liquidity is at least adequate and M&G is at least satisfactory	+1 notch if liquidity is at least adequate and M&G is at least satisfactory
2 (Neutral)	0 notches	0 notches	0 notches	0 notches
3 (Negative)	-1 to -3 notches(1)	-1 to -3 notches(1)	-1 to -2 notches(1)	-1 notch
4 (FS-4, FS-5, FS-6, FS-6 [minus])	N/A(2)	N/A(2)	N/A(2)	N/A(2)
Liquidity (see section I)				
1 (Exceptional)	0 notches	0 notches	0 notches	+1 notch if FP is positive, neutral, FS-4, or FS-5 (3)
2 (Strong)	0 notches	0 notches	0 notches	+1 notch if FP is positive, neutral, FS-4, or FS-5 (3)
3 (Adequate)	0 notches	0 notches	0 notches	0 notches
4 (Less than adequate [4])	N/A	N/A	-1 notch(5)	0 notches
5 (Weak)	N/A	N/A	N/A	'b-' cap on SACP
Management and governance (M&G; see section J)				
1 (Strong)	0 notches	0 notches	0, +1 notches(6)	0, +1 notches(6)
2 (Satisfactory)	0 notches	0 notches	0 notches	0 notches
3 (Fair)	-1 notch	0 notches	0 notches	0 notches
4 (Weak)	-2 or more notches(7)	-2 or more notches(7)	-1 or more notches(7)	-1 or more notches(7)

(1) Number of notches depends on potential incremental leverage. (2) See "Assessing Financial Policy," section H.2. (3) Additional notch applies only if we expect liquidity to remain exceptional or strong. (4) See "Methodology And Assumptions: Liquidity Descriptors For Global Corporate Issuers," published Nov. 19, 2013. SACP is capped at 'bb+.' (5) If issuer SACP is 'bb+' due to cap, there is no further notching. (6) This adjustment is one notch if we have not already captured benefits of strong management and governance in the analysis of the issuer's competitive position. (7) Number of notches depends upon the degree of negative effect to the enterprise's risk profile.

Example: How Remaining Modifiers Can Change The Anchor



*After adjusting for diversification/portfolio effect. See paragraph 33.

34. Our analysis of a firm's capital structure assesses risks in the firm's capital structure that may not arise in the review of its cash flow/leverage. These risks include the currency risk of debt, debt maturity profile, interest rate risk of debt, and an investments subfactor. We assess a corporate issuer's capital structure on a scale of 1, very positive; 2, positive; 3, neutral; 4, negative; and 5, very negative. The full treatment of capital structure is the subject of section G.

35. Financial policy serves to refine the view of a company's risks beyond the conclusions arising from the standard assumptions in the cash flow/leverage, capital structure, and liquidity analyses. Those assumptions do not always reflect or adequately capture the long-term risks of a firm's financial policy. The financial policy assessment is, therefore, a measure of the degree to which owner/managerial decision-making can affect the predictability of a company's financial risk profile. We assess financial policy as 1) positive, 2) neutral, 3) negative, or as being owned by a financial sponsor. We further identify financial sponsor-owned companies as "FS-4", "FS-5", "FS-6", or "FS-6 (minus)." The full treatment of financial policy analysis is the subject of section H.

36. Our assessment of liquidity focuses on the monetary flows--the sources and uses of cash--that are the key indicators of a company's liquidity cushion. The analysis also assesses the potential for a company to breach covenant tests tied to declines in earnings before interest, taxes, depreciation, and amortization (EBITDA). The methodology incorporates a qualitative analysis that addresses such factors as the ability to absorb high-impact, low-probability events, the nature of bank relationships, the level of standing in credit markets, and the degree of prudence of the company's financial risk management. The liquidity assessments are 1, exceptional; 2, strong; 3, adequate; 4, less than adequate; and 5, weak. An SACP is capped at 'bb+' for issuers whose liquidity is less than adequate and 'b-' for issuers whose liquidity is weak, regardless of the assessment of any modifiers or comparable ratings analysis. (For the complete methodology on assessing corporate issuers' liquidity, see "Methodology And Assumptions: Liquidity Descriptors For Global Corporate Issuers," published Nov. 19, 2013.)

37. The analysis of management and governance addresses how management's strategic competence, organizational effectiveness, risk management, and governance practices shape the company's competitiveness in the marketplace, the strength of its financial risk management, and the robustness of its governance. The range of management and governance assessments is: 1, strong; 2, satisfactory; 3, fair; and 4, weak. Typically, investment-grade anchor outcomes reflect strong or satisfactory management and governance, so there is no incremental benefit. Alternatively, a fair or weak assessment of management and governance can lead to a lower anchor. Also, a strong assessment for management and governance for a weaker entity is viewed as a favorable factor, under the criteria, and can have a

positive impact on the final SACP outcome. For the full treatment of management and governance, see "Methodology: Management And Governance Credit Factors For Corporate Entities And Insurers," published Nov. 13, 2012.

5. Comparable ratings analysis

38. The anchor, after adjusting for the modifiers, could change one notch up or down in order to arrive at an issuer's SACP based on our comparable ratings analysis, which is a holistic review of a company's stand-alone credit risk profile, in which we evaluate an issuer's credit characteristics in aggregate. A positive assessment leads to a one-notch improvement, a negative assessment leads to a one-notch reduction, and a neutral assessment indicates no change to the anchor. The application of comparable ratings analysis reflects the need to 'fine-tune' ratings outcomes, even after the use of each of the other modifiers. A positive or negative assessment is therefore likely to be common rather than exceptional.

B. Industry Risk

39. The analysis of industry risk addresses the major factors that Standard & Poor's believes affect the risks that entities face in their respective industries. (See "Methodology: Industry Risk," published Nov. 19, 2013.)

C. Country Risk

40. The analysis of country risk addresses the major factors that Standard & Poor's believes affect the country where entities operate. Country risks, which include economic, institutional and governance effectiveness, financial system, and payment culture/rule of law risks, influence overall credit risks for every rated corporate entity. (See "Country Risk Assessment Methodology And Assumptions," published Nov. 19, 2013.)

1. Assessing country risk for corporate issuers

41. The following paragraphs explain how the criteria determine the country risk assessment for a corporate entity. Once it's determined, we combine the country risk assessment with the issuer's industry risk assessment to calculate the issuer's CICRA (see section A, table 1). The CICRA is one of the factors of the issuer's business risk profile. If an issuer has very low to intermediate exposure to country risk, as represented by a country risk assessment of 1, 2, or 3, country risk is neutral to an issuer's CICRA. But if an issuer has moderately high to very high exposure to country risk, as represented by a country risk assessment of 4, 5, or 6, the issuer's CICRA could be influenced by its country risk assessment.

42. Corporate entities operating within a single country will receive a country risk assessment for that jurisdiction. For entities with exposure to more than one country, the criteria prospectively measure the proportion of exposure to each country based on forecasted EBITDA, revenues, or fixed assets, or other appropriate financial measures if EBITDA, revenue, or fixed assets do not accurately reflect the exposure to that jurisdiction.

43. Arriving at a company's blended country risk assessment involves multiplying its weighted-average exposures for each country by each country's risk assessment and then adding those numbers. For the weighted-average calculation, the criteria consider countries where the company generates more than 5% of its sales or where more than 5% of its fixed assets are located, and all weightings are rounded to the nearest 5% before averaging. We round the assessment to the

nearest integer, so a weighted assessment of 2.2 rounds to 2, and a weighted assessment of 2.6 rounds to 3 (see table 6).

Table 6

Hypothetical Example Of Weighted-Average Country Risk For A Corporate Entity

Country	Weighting (% of business*)	Country risk§	Weighted country risk
Country A	45	1	0.45
Country B	20	2	0.4
Country C	15	1	0.15
Country D	10	4	0.4
Country E	10	2	0.2
Weighted-average country risk assessment (rounded to the nearest whole number)	--	--	2

*Using EBITDA, revenues, fixed assets, or other financial measures as appropriate. §On a scale from 1-6, lowest to highest risk.

44. A weak link approach, which helps us calculate a blended country risk assessment for companies with exposure to more than one country, works as follows: If fixed assets are based in a higher-risk country but products are exported to a lower-risk country, the company's exposure would be to the higher-risk country. Similarly, if fixed assets are based in a lower-risk country but export revenues are generated from a higher-risk country and cannot be easily redirected elsewhere, we measure exposure to the higher-risk country. If a company's supplier is located in a higher-risk country, and its supply needs cannot be easily redirected elsewhere, we measure exposure to the higher-risk country. Conversely, if the supply chain can be re-sourced easily to another country, we would not measure exposure to the higher risk country.

45. Country risk can be mitigated for a company located in a single jurisdiction in the following narrow case. For a company that exports the majority of its products overseas and has no direct exposure to a country's banking system that would affect its funding, debt servicing, liquidity, or ability to transfer payments from or to its key counterparties, we could reduce the country risk assessment by one category (e.g., 5 to 4) to determine the adjusted country risk assessment. This would only apply for countries where we considered the financial system risk subfactor a constraint on the overall country risk assessment for that country. For such a company, other country risks are not mitigated: Economic risk still applies, albeit less of a risk than for a company that sells domestically (potential currency volatility remains a risk for exporters); institutional and governance effectiveness risk still applies (political risk may place assets at risk); and payment culture/rule of law risk still applies (legal risks may place assets and cross-border contracts at risk).

46. Companies will often disclose aggregated information for blocks of countries, rather than disclosing individual country information. If the information we need to estimate exposure for all countries is not available, we use regional risk assessments. Regional risk assessments are calculated as averages of the unadjusted country risk assessments, weighted by gross domestic product of each country in a defined region. The criteria assess regional risk on a 1-6 scale (strongest to weakest). Please see Appendix A, Table 26, which lists the constituent countries of the regions.

47. If an issuer does not disclose its country-level exposure or regional-level exposure, individual country risk exposures or regional exposures will be estimated.

2. Adjusting the country risk assessment for diversity

48. We will adjust the country risk assessment for a company that operates in multiple jurisdictions and demonstrates a high degree of diversity of country risk exposures. As a result of this diversification, the company could have less exposure to country risk than the rounded weighted average of its exposures might indicate. Accordingly, the country risk assessment for a corporate entity could be adjusted if an issuer meets the conditions outlined in paragraph 49.

49. The preliminary country risk assessment is raised by one category to reflect diversity if all of the following four conditions are met:

- If the company's head office, as defined in paragraph 51, is located in a country with a risk assessment stronger than the preliminary country risk assessment;
- If no country, with a country risk assessment equal to or weaker than the company's preliminary country risk assessment, represents or is expected to represent more than 20% of revenues, EBITDA, fixed assets, or other appropriate financial measures;
- If the company is primarily funded at the holding level, or through a finance subsidiary in a similar or stronger country risk environment than the holding company, or if any local funding could be very rapidly substituted at the holding level; and
- If the company's industry risk assessment is '4' or stronger.

50. The country risk assessment for companies that have 75% or more exposure to one jurisdiction cannot be improved and will, in most instances, equal the country risk assessment of that jurisdiction. But the country risk assessment for companies that have 75% or more exposure to one jurisdiction can be weakened if the balance of exposure is to higher risk jurisdictions.

51. We consider the location of a corporate head office relevant to overall risk exposure because it influences the perception of a company and its reputation--and can affect the company's access to capital. We determine the location of the head office on the basis of 'de facto' head office operations rather than just considering the jurisdiction of incorporation or stock market listing for public companies. De facto head office operations refers to the country where executive management and centralized high-level corporate activities occur, including strategic planning and capital raising. If such activities occur in different countries, we take the weakest country risk assessment applicable for the countries in which those activities take place.

D. Competitive Position

52. Competitive position encompasses company-specific factors that can add to, or partly offset, industry risk and country risk--the two other major factors of a company's business risk profile.

53. Competitive position takes into account a company's: 1) competitive advantage, 2) scale, scope, and diversity, 3) operating efficiency, and 4) profitability. A company's strengths and weaknesses on the first three components shape its competitiveness in the marketplace and the sustainability or vulnerability of its revenues and profit. Profitability can either confirm our initial assessment of competitive position or modify it, positively or negatively. A stronger-than-industry-average set of competitive position characteristics will strengthen a company's business risk profile. Conversely, a weaker-than-industry-average set of competitive position characteristics will weaken a

company's business risk profile.

54. These criteria describe how we develop a competitive position assessment. They provide guidance on how we assess each component based on a number of subfactors. The criteria define the weighting rules applied to derive a preliminary competitive position assessment. And they outline how this preliminary assessment can be maintained, raised, or lowered based on a company's profitability. Standard & Poor's competitive position analysis is both qualitative and quantitative.

1. The components of competitive position

55. A company's competitive position assessment can be: 1, excellent; 2, strong; 3, satisfactory; 4, fair; 5, weak; or 6, vulnerable.

56. The analysis of competitive position includes a review of:

- Competitive advantage;
- Scale, scope, and diversity;
- Operating efficiency; and
- Profitability.

57. We follow four steps to arrive at the competitive position assessment. First, we separately assess competitive advantage; scale, scope, and diversity; and operating efficiency (excluding any benefits or risks already captured in the issuer's CICRA assessment). Second, we apply weighting factors to these three components to derive a weighted-average assessment that translates into a preliminary competitive position assessment. Third, we assess profitability. Finally, we combine the preliminary competitive position assessment and the profitability assessment to determine the final competitive position assessment. Profitability can confirm, or influence positively or negatively, the competitive position assessment.

58. We assess the relative strength of each of the first three components by reviewing a variety of subfactors (see table 7). When quantitative metrics are relevant and available, we use them to evaluate these subfactors. However, our overall assessment of each component is qualitative. Our evaluation is forward-looking; we use historical data only to the extent that they provide insight into future trends.

59. We evaluate profitability by assessing two subcomponents: level of profitability (measured by historical and projected nominal levels of return on capital, EBITDA margin, and/or sector-specific metrics) and volatility of profitability (measured by historically observed and expected fluctuations in EBITDA, return on capital, EBITDA margin, or sector specific metrics). We assess both subcomponents in the context of the company's industry.

Table 7

Competitive Position Components And Subfactors

Component	Explanation	Subfactors
1. Competitive advantage (see Appendix B, section 1)	The strategic positioning and attractiveness to customers of a company's products or services, and the fragility or sustainability of its business model	• Strategy • Differentiation/uniqueness/product positioning/bundling • Brand reputation and marketing • Product and/or service quality • Barriers to entry and customers' switching costs • Technological advantage and capabilities and vulnerability to/ability to drive technological displacement • Asset base characteristics
2. Scale, scope, and diversity (see Appendix B, section 2)	The concentration or diversification of business activities	• Diversity of products or services • Geographic diversity • Volumes, size of markets and revenues, and market share • Maturity of products or services
3. Operating efficiency (see Appendix B, section 3)	The quality and flexibility of a company's asset base and its cost management and structure	• Cost structure • Manufacturing processes • Working capital management • Technology
4. Profitability		• Level of profitability (historical and projected return on capital, EBITDA margin, and/or sector-relevant measure) • Volatility of profitability

2. Assessing competitive advantage, scale, scope, and diversity, and operating efficiency

60. We assess competitive advantage; scale, scope, and diversity; and operating efficiency as: 1, strong; 2, strong/adequate; 3, adequate; 4, adequate/weak; or 5, weak. Tables 8, 9, and 10 provide guidance for assessing each component.

61. In assessing the components' relative strength, we place significant emphasis on comparative analysis. Peer comparisons provide context for evaluating the subfactors and the resulting component assessment. We review company-specific characteristics in the context of the company's industry, not just its narrower subsector. (See list of industries and subsectors in Appendix B, table 27.) For example, when evaluating an airline, we will benchmark the assessment against peers in the broader transportation-cyclical industry (including the marine and trucking subsectors), and not just against other airlines. Likewise, we will compare a home furnishing manufacturer with other companies in the consumer durables industry, including makers of appliances or leisure products. We might occasionally extend the comparison to other industries if, for instance, a company's business lines cross several industries, or if there are a limited number of rated peers in an industry, subsector, or region.

62. An assessment of strong means that the company's strengths on that component outweigh its weaknesses, and that the combination of relevant subfactors results in lower-than-average business risk in the industry. An assessment of adequate means that the company's strengths and weaknesses with respect to that component are balanced and that the relevant subfactors add up to average business risk in the industry. A weak assessment means that the company's weaknesses on that component override any strengths and that its subfactors, in total, reveal higher-than-average business risk in the industry.

63. Where a component is not clearly strong or adequate, we may assess it as strong/adequate. A component that is not clearly adequate or weak may end up as adequate/weak.

64. Although we review each subfactor, we don't assess each individually--and we seek to understand how they may reinforce or weaken each other. A component's assessment combines the relative strengths and importance of its subfactors. For any company, one or more subfactors can be unusually important--even factors that aren't common in the industry. Industry KCF articles identify subfactors that are consistently more important, or happen not to be relevant, in a given industry.

65. Not all subfactors may be equally important, and a single one's strength or weakness may outweigh all the others. For example, if notwithstanding a track record of successful product launches and its strong brand equity, a company's strategy doesn't appear adaptable, in our view, to changing competitive dynamics in the industry, we will likely not assess its competitive advantage as strong. Similarly, if its revenues came disproportionately from a narrow product line, we might view this as compounding its risk of exposure to a small geographic market and, thus, assess its scale, scope, and diversity component as weak.

66. From time to time companies will, as a result of shifting industry dynamics or strategies, expand or shrink their product or service lineups, alter their cost structures, encounter new competition, or have to adapt to new regulatory environments. In such instances, we will reevaluate all relevant subfactors (and component assessments).

Table 8

Competitive Advantage Assessment

Qualifier	What it means	Guidance
S-trong	The company has.a major competitive advantage due to one or a combination of factors that suppons revenue and profit growth,combined with lower·than-average volatilitV of profits. There are strong prospeos that the company can sustain this advantalt" over the long term. This should enable the oompanv 10 withstand er:::onomicdowntumsand competitive and technological threius better than ltS competitors can. flny weaknesses In one or more subfactorsare more than offset bV strengths in other subfactors that produc.e sustainable and profitable revenue growth.	The company's business srrategy I highly oons1s1en1wirh,and adaptable to,Industtv trtt1ds and conditions and support. Its leadeip In the markerplace. It consistenttydevelops and markets well-differentiated produos or services, aligns products with market demand. and enhanc.es the anractiveness or uniqueness of itsvalue proposition through bundling. Itssuperiortrackrecordofproductdt"Yelopment,serviOC' qualitv,and customer satistaction and retention support its abilitv to maintain or improve its market share. Its products or services command a clear price premium relatlve to Its competitors'thanks to Its brand equity, technological leadership,or quality of service;It Is able to sustain thisadvantage with innovation and effective marketing. It benefits from barriers to entrv from regulation,market characteristics,or intrinsic benefits (such as patents, tec:hnolcsy,or customer relationships!that effectively reduOC' the threat of new competition. Ithasdemonstrated a commitment and ability to effectlvelv reinvest in its asset base,asevidenced by a continuous pipeline of new products and/or improvement in kev capabl1ill such as employee retention, cusromer care, distribution. and supplier relations. These tangible and Intangibleassets!.Upporr long term prospeas of sustainable and profitable growth.
Adequate	The company has some competitive advantages,but not so large as to create a superior business model or durable benefit c:ompad to its peers'. It has some but not all drivers of competitiveness. Certain factors support the business' long-term vlabllllty and should result In average profitability and average profit volatility during recessions or periods of increased competition. However,these drivers are partialty offset by the company's disadvantages or lack of sustainabilityof other factors.	The company'sstrategy isvtell adapted to martetplace cond itions, but it is not necessaritv a leader in setting industry trends. It exhibits neither superior nor s.ubpar abilities with respect to product or service differentiation and positionif"@. Its products command *no* p<ice p<emlum *or* advantage relative to competing brands 3:S a res.ult of Its brand equity or its tech nological positioni. It may enjoy some barriers to ntry that provide some defense asalnst competitors but don't overpower them. It faces some risk of productjservice dis.placement or substitution longer term. Its metrics of product *or* service quality and customer satisfaction or retention are in line with its industry's average. The company could lose customers to competitors if it makM operational mlss-tps. Its asset profiledoes not exhibit partirularly superior or inferiorch.iracteristics compared to other industry participants. These 3:SSets senerate consistent revenue and profit growth although long-tnn prospects are subject to some uncertainty.

Weak	The company has few, if any, competitive advantages and a number of competitive disadvantages.	The company's strategy is inconsistent with, or not well adapted to, marketplace trends and conditions..
	Because the company lacks many competitive advantages, its long-term prospects are uncertain, and its profit volatility is likely to be higher than average for its industry.	There is evidence of little innovation, slowness in developing and marketing new products, an inability to raise prices, and/or ineffective bundling.
	The company is less likely than its competitors to withstand economic, competitive, or technological threats.	Its products generally enjoy no price premium relative to competing brands and it often has to sell its products at a lower price than its peers can command.
	Alternatively, the company has weaknesses in one or more subfactors that could keep its profitability below average and its profit volatility above average during economic downturns or periods of increased competition.	It has suffered or is at risk of suffering customer defections due to falling quality and because customers perceive its products or services to be less valuable than those of its competitors.
		Its revenues and market shares are vulnerable to aggressive pricing by existing or new competitors or to technological displacement risks over the near to medium term.
		Its metrics of product or service quality and customer satisfaction or retention are weaker than the industry average.
		Its reinvestment in its business is lower than its peers', its ability to retain operational talent is limited, its distribution network is inefficient, and its revenue could stagnate or decline as a result.

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Scale, Scope, And Diversity

Qualifier	What It means	Guidance
Strong	The compan'(s overall scale, scope, and diversity supports stable revenues and profits by rendering it essentially Invu nerable to al but the most disruptive combinations of adverse factors, events, or trends. Itssign ificant advantages in scale, scope, and dvetslty enable It to withstafld economic, regional, competitive, and technological threats better than its competitors can.	The company's range of products or services is among the most comprehensive in its sector. t derives ts revenue and p<ofits fr<lma bro.)(lerset of products or services than the industry average. Its products and seMces enjoy industry.teading market shares relative to other participa nts in Its industry. It does not rely on a particular customer or small group of customers.tf it does. thec:ustotne"r(s) is/a of high credit qualltv, their demand is highly sustainable, or the company and its customer(s) have significant interd ependence. It does not depend on any part(ular supplier or related sroup of suppliers that hcould not easily repl.Ke.If h does, the supplier(s) is/are of high credit quality, or the company and its supptier(s) have significant interdependence. It enjoys broader geograph icdiversity than its peers and doesn't overty depend on a single regional or local martet. If it does, the market Is bcal, often for regulatory reasons. The company's production or service centers are dversified .Kross several bcations. It holds a strategic investment that provid es positive bus ness di rsiRcation.
Adequate	• The (Ompany's <iverall sca e, scope, and diversity is comparable to its peers'. Its ability to withstande<onoic, competitive, or technological threats is comparable to the ability of others within its sector.	The company has a broad range of products or services compared with its competitors and doesn't depend oo a particular product or service for the majority of its revenues and profits. Its martet share is average compared with that of its competitors. Its dependence on orconcentration of key customers is n o higher than the industry average, and the Sos.sof a top customer would be unlikety to pose a high risk to its bus ness stability. It isn't overly dependent on any supplieror regiooal group of suppliers that it couldn't easily replace. It doesn't depend excessively on a slnsebcal<ir regional martet, and its geographic footprint of production and revenue compares with that of other industry participa nts.

Weak	The (Ompany's lack of scale, scope, and diversitv comp<omlses the stability andsustainability of its revenues and profits. The (Ompany's w1nerabilitv to, or rel ance onvarious elements of sc.ale, scope, and diversity leaves it less likely than its competitors to withstand economic,rompetiti,or technological th<eats.	The company's product or service lineupis somewhat limited compared to those of its sector peers. The company derives its ptofits from a natrO\v tvoup of products or services, anclhasnotachievedslsrificant m.irtet share compared \vith its peers. Demand for its J)f'Oducts or sel"llices iS O'lver than forts competitors, and this trend Isn't improving. It relies heavily on a particular customer or small group of customers, and the charactetistks of the customer base do not mitigate this risk. It depends on a particular supplier or group of suppliers, which it would not be able to easily replace without incutrint high switching ('OSts. It depends disproportionately on a single local or regional economy for selling its goods or services, and the company's industry is global. Key production assets are concentrated by Socation, and the company has limited ability to quickly replace them without incun'ing hi&h ('OSts telative to its ptofits.

Table 10

Operating Efficiency Assessment

QualIffier	What It means	Guidance
S-trong	The company maximizes revenues and profits via intelligent use of assets and by minimizing costs and increasing efficiency. The comparr(s cost structure should enable it to withstand economic downtums better than its peers.	The company has a lower cost structure than its peers tesulting in higher profits or margins even if capacity utlllzatlon or demand are well belOlov icleal levels and du ring down economic and industry cycles. It has demonstrated its ability to effieiently manaiefixed ancl variable costs in cycU(al downtums, and has a history of successful and often ongolns (OSt reductions programs. Its capacity utilization is dose to optimal at the peak of the industry cycle and outperforms the indu stry average over thecye:le. It has demonstra ted th at it can pass along increases in input costs and weexpect this will continue . It has a very high ability to adjust production and labor costs in response to changes in demand without repercussions for ptoduct quality, or has demonstrated the ability to opetate very profitabtv in a mote ('OS-tfy or less fle)dble labor environment. Its suppliers have demonstrated an ability to meet swirigs in demand without causing bottlenecks or quality issues. ancl can absorb all but the most severesupply chain disruptions. It has superior wotkin& capital manager"ne"nt, as evidenced by a ('On Sistently tter.than-average 'cash conversiOn cy(le" and other working caplta metrics, supporting higher cash flaw and lo\ver funding costs. Its investr"ne"nts ii\ tethnoloe,y are likety to iocrease revenue srowth and/or improve its cost structure and operat ins efficiency.

Adequate	• A combination of (OSt structure ancl efficiency should support su stainable profits. vlith average profit volatility relative to the compan y's prs. Its cost Stl\Jctu Is slmllar to its peers'.	The company has demonstrat ed the abil ity to manage some fixed and most variable costs except during periods of extremely weak demand,ancl has some history of cutting costs in good and bad til'l'\es . Its cost stl\Jcture permits some profitability even if capacity utilization or rustomer demand is weU below ideal levels. The company can at least bak even during most of t hdustry/demand cycle. Its cost stl\Jcture is in ti ne with its peers. For exa mple, its selli ng, general, and administratille (SG&A) expense as a percent of revenue is slmllar to Its peers' and is likely to be stable. It has demonstrated an ability to adju st labor costs in most scenarios without hurting product output and quality, or (an operate profi tabilltv In a more (OSttv or less flexible labor environment; it has some success pa ss.i on input cost increases, although perhaps only partially or with time lag. Its suppliers have met typical swings in demand without causing \vides.pread bottlenecks or quality issu es, and the compan y has some capacity tovlithstand limited suppty chain disl\lptions. It has good v1orking capital management, e\lidenced by its cash conversion cycle and working capital metrics that are on par with I ts peers. Its investments in technology are likely to h elp it at least maintai n its cost structure and current level of operatil"€ efficiency.
Weak	The (Ompany's operating efficiency leaves it with lovter profitability tha n its peers' due to lovter asset utilization and/or a higher, less flexible cost structure.	The company's cost structure permits berter than-marginal profitability only if capacity utilization is at the top of the cycle or during petiods of strong demand. The compa ny needs soUd and sustained industry oon cl 1tions to gen erate fair prof 1tabllity. It h as limited success or capability of rnanagjng fixed costs and even most typically variable costs are fixed in then two to three years . It h as a limited trade record of successful cost reductions, such as reducing labor costs in the *face* of S\vings in dell'\and, or It has limited ability to pass alons fn (reases in input costs. Its costs ca higher than its peers'. For exa mple, the compa ny's SG&A expense as a percent of revenue is above that of Its peers, and llkety to remain so. Its suppliers may fac bottlenecks or quality issues in the event of modest swings in demand, or have li mited tech nologica l capabilities. There is evidence that a llmltecl supply chain disruption \vould make it difficult for suppliers to meet thei r commitments to the company. Its wotking capital management is weak, as evidenced by w0<klng capital metrics that are signifi(anttv w0<se than those of its peers, resulting in lovter cash flow and higher funding costs. It lacks investments In technology, which could hurt is revenue growth and/or result in a higher cost structure and less efficient operations relative to its peers'.

3. Determining the preliminary competitive position assessment: Competitive position group profile and category weightings

67. After assessing competitive advantage; scale, scope, and diversity; and operating efficiency, we determine a company's preliminary competitive position assessment by ascribing a specific weight to each component. The weightings depend on the company's Competitive Position Group Profile (CPGP).

68. There are six possible CPGPs: 1) services and product focus, 2) product focus/scale driven, 3) capital or asset focus, 4) commodity focus/cost driven, 5) commodity focus/scale driven, and 6) national industry and utilities (see table 11 for definitions and characteristics).

Table 11

Competitive Position Group Profile (CPGP)

	Definition and characteristics	Examples
Services and product focus	Brands, product quality or technology, and service reputation are typically key differentiating factors for competing in the industry. Capital intensity is typically low to moderate, although supporting the brand often requires ongoing reinvestment in the asset base.	Typically, these are companies in consumer-facing light manufacturing or service industries. Examples include branded drug manufacturers, software companies, and packaged food.
Product focus/scale driven	Product and geographic diversity, as well as scale and market position are key differentiating factors. Sophisticated technology and stringent quality controls heighten risk of product concentration. Product preferences or sales relationships are more important than branding or pricing. Cost structure is relatively unimportant.	The sector most applicable is medical device/equipment manufacturers, particularly at the higher end of the technology scale. These companies largely sell through intermediaries, as opposed to directly to the consumer.
Capital or asset focus	Sizable capital investments are generally required to sustain market position in the industry. Brand identification is of limited importance, although product and service quality often remain differentiating factors.	Heavy manufacturing industries typically fall into this category. Examples include telecom infrastructure manufacturers and semiconductor makers.
Commodity focus/cost driven	Cost position and efficiency of production assets are more important than size, scope, and diversification. Brand identification is of limited importance	Typically, these are companies that manufacture products from natural resources that are used as raw materials by other industries. Examples include forest and paper products companies that harvest timber or produce pulp, packaging paper, or wood products.
Commodity focus/scale driven	Pure commodity companies have little product differentiation, and tend to compete on price and availability. Where present, brand recognition or product differences are secondary or of less importance.	Examples range from pure commodity producers and most oil and gas upstream producers, to some producers with modest product or brand differentiation, such as commodity foods.
National industries and utilities	Government policy or control, regulation, and taxation and tariff policies significantly affect the competitive dynamics of the industry (see paragraphs 72-73).	An example is a water-utility company in an emerging market.

69. The nature of competition and key success factors are generally prescribed by industry characteristics, but vary by company. Where service, product quality, or brand equity are important competitive factors, we'll give the competitive advantage component of our overall assessment a higher weighting. Conversely, if the company produces a commodity product, differentiation comes less into play, and we will more heavily weight scale, scope, and diversity as well as operating efficiency (see table 12).

Table 12

Competitive Position Group Profiles (CPGPs) And Category Weightings

Component	--(%)--					
	Services and product focus	**Product focus/scale driven**	**Capital or asset focus**	**Commodity focus/cost driven**	**Commodity focus/scale driven**	**National industries and utilities**
1. Competitive advantage	45	35	30	15	10	60
2. Scale, scope, and diversity	30	50	30	35	55	20
3. Operating efficiency	25	15	40	50	35	20
Total	100	100	100	100	100	100
Weighted-average assessment*	1.0-5.0	1.0-5.0	1.0-5.0	1.0-5.0	1.0-5.0	1.0-5.0

*1 (strong), 2 (strong/adequate), 3 (adequate), 4 (adequate/weak), 5 (weak).

70. We place each of the defined industries (see Appendix B, table 27) into one of the six CPGPs (see above and Appendix B, table 27). This is merely a starting point for the analysis, since we recognize that some industries are less homogenous than others, and that company-specific strategies do affect the basis of competition.

71. In fact, the criteria allow for flexibility in selecting a company's group profile (with its category weightings). Reasons for selecting a profile different than the one suggested in the guidance table could include:

- The industry is heterogeneous, meaning that the nature of competition differs from one subsector to the next, and possibly even within subsectors. The KCF article for the industry will identify such circumstances.
- A company's strategy could affect the relative importance of its key factors of competition.

72. For example, the standard CPGP for the telecom and cable industry is services and product focus. While this may be an appropriate group profile for carriers and service providers, an infrastructure provider may be better analyzed under the capital or asset focus group profile. Other examples: In the capital goods industry, a construction equipment rental company may be analyzed under the capital or asset focus group profile, owing to the importance of efficiently managing the capital spending cycle in this segment of the industry, whereas a provider of hardware, software, and services for industrial automation might be analyzed under the services and product focus group profile, if we believe it can achieve differentiation in the marketplace based on product performance, technology innovation, and service.

73. In some industries, the effects of government policy, regulation, government control, and taxation and tariff policies can significantly alter the competitive dynamics, depending on the country in which a company operates. That can alter our assessment of a company's competitive advantage; scale, size, and diversity; or operating efficiency. When industries in given countries have risks that differ materially from those captured in our global industry risk profile and assessment (see "Methodology: Industry Risk," published Nov. 19, 2013, section B), we will weight competitive advantage more heavily to capture the effect, positive or negative, on competitive dynamics. The assessment of competitive advantage; scale, size, and diversity; and operating efficiency will reflect advantages or disadvantages based on these national industry risk factors. Table 13 identifies the circumstances under which national industry risk factors are positive or negative.

Table 13

National Industry Risk Factors	
National industry risk factors are positive	• Government policy including regulation, ownership, and taxation is supportive and has a good track record of mitigating risks to the stability of industry margins. • Any government ownership, tariff, and taxation policy supports growth prospects for revenues and profit generation. • There is very little discernible risk of negative policy, regulatory, ownership, or taxation changes that could threaten business stability.
National industry risk factors are negative	• Government policy and regulation has a weak track record of stabilizing margins and reducing industry risks. • Any government ownership, tariff, and taxation policy undermine growth prospects for revenues and profit generation. • There is an increasing risk of negative policy, ownership, and taxation changes that could undermine industry stability.

74. When national industry risk factors are positive for a company, typically they support revenue growth, profit growth, higher EBITDA margins, and/or lower-than-average volatility of profits. Often, these benefits provide barriers to entry that impede or even bar new market entrants, which should be reflected in the competitive advantage assessment. These benefits may also include risk mitigants that enable a company to withstand economic downturns and competitive and technological threats better in its local markets than its global competitors can. The scale, scope, and diversity assessment might also benefit from these policies if the company is able to withstand economic, regional, competitive, and technological threats better than its global competitors can. Likewise, the company's operating efficiency assessment may improve if, as a result, it is better able than its global competitors to withstand economic downturns, taking into account its cost structure.

75. Conversely, when national industry risk factors are negative for a company, typically they detract from revenue growth and profit growth, shrink EBITDA margins, and/or increase the average volatility of profits. The company may also have less protection against economic downturns and competitive and technological threats within its local markets than its global competitors do. We may also adjust the company's scale, scope, and diversity assessment lower if, as a result of these policies, it is less able to withstand economic, regional, competitive, and technological threats than its global competitors can. Likewise, we may adjust its operating efficiency assessment lower if, as a result of these policies, it is less able to withstand economic downturns, taking into account the company's cost structure.

76. An example of when we might use a national industry risk factor would be for a telecommunications network owner that benefits from a monopoly network position, supported by substantial capital barriers to entry, and as a result is subject to regulated pricing for its services. Accordingly, in contrast to a typical telecommunications company, our analysis of the company's competitive position would focus more heavily on the monopoly nature of its operations, as well as the nature and reliability of the operator's regulatory framework in supporting future revenue and earnings. If we viewed the regulatory framework as being supportive of the group's future earnings stability, and we considered its

monopoly position to be sustainable, we would assess these national industry risk factors as positive in our assessment of the group's competitive position.

77. The weighted average assessment translates into the preliminary competitive position assessment on a scale of 1 to 6, where one is best. Table 14 describes the matrix we use to translate the weighted average assessment of the three components into the preliminary competitive position assessment.

Table 14

Translation Table For Converting Weighted-Average Assessments Into Preliminary Competitive Position Assessments

Weighted average assessment range	Preliminary competitive position assessment
1.00 – 1.50	1
>1.50 – 2.25	2
>2.25 – 3.00	3
>3.00 – 3.75	4
>3.75 – 4.50	5
>4.50 – 5.00	6

4. Assessing profitability

78. We assess profitability on the same scale of 1 to 6 as the competitive position assessment.

79. The profitability assessment consists of two subcomponents: level of profitability and the volatility of profitability, which we assess separately. We use a matrix to combine these into the final profitability assessment.

a) Level of profitability

80. The level of profitability is assessed in the context of the company's industry. We most commonly measure profitability using return on capital (ROC) and EBITDA margins, but we may also use sector-specific ratios. Importantly, as with the other components of competitive position, we review profitability in the context of the industry in which the company operates, not just in its narrower subsector. (See list of industries and subsectors in Appendix B, table 27.)

81. We assess level of profitability on a three-point scale: above average, average, and below average. Industry KCF articles may establish numeric guidance, for instance by stating that an ROC above 12% is considered above average, between 8%-12% is average, and below 8% is below average for the industry, or by differentiating between subsectors in the industry. In the absence of numeric guidance, we compare a company against its peers across the industry.

82. We calculate profitability ratios generally based on a five-year average, consisting of two years of historical data, our projections for the current year (incorporating any reported year-to-date results and estimates for the remainder of the year), and the next two financial years. There may be situations where we consider longer or shorter historical results or forecasts, depending on such factors as availability of financials, transformational events (such as mergers or acquisitions [M&A]), cyclical distortion (such as peak or bottom of the cycle metrics that we do not deem fully representative of the company's level of profitability), and we take into account improving or deteriorating trends in profitability ratios in our assessment.

b) Volatility of profitability

83. We base the volatility of profitability on the standard error of the regression (SER) for a company's historical EBITDA, EBITDA margins, or return on capital. The KCF articles provide guidance on which measures are most appropriate for a given industry or set of companies. For each of these measures, we divide the standard error by the average of that measure over the time period in order to ensure better comparability across companies.

84. The SER is a statistical measure that is an estimate of the deviation around a 'best fit' linear trend line. We regress the company's EBITDA, EBITDA margins, or return on capital against time. A key advantage of SER over standard deviation or coefficient of variation is that it doesn't view upwardly trending data as inherently more volatile. At the same time, we recognize that SER, like any statistical measure, may understate or overstate expected volatility and thus we will make qualitative adjustments where appropriate (see paragraphs 86-90). Furthermore, we only calculate SER when companies have at least seven years of historical annual data and have not significantly changed their line of business during the timeframe, to ensure that the results are meaningful.

85. As with the level of profitability, we evaluate a company's SER in the context of its industry group. For most industries, we establish a six-point scale with 1 capturing the least volatile companies, i.e., those with the lowest SERs, and 6 identifying companies whose profits are most volatile. We have established industry-specific SER parameters using the most recent seven years of data for companies within each sector. We believe that seven years is generally an adequate number of years to capture a business cycle. (See Appendix B, section 4 for industry-specific SER parameters.) For companies whose business segments cross multiple industries, we evaluate the SER in the context of the organization's most dominant industry--if that industry represents at least two-thirds of the organization's EBITDA, sales, or other relevant metric. If the company is a conglomerate and no dominant industry can be identified, we will evaluate its profit volatility in the context of SER guidelines for all nonfinancial companies.

86. In certain circumstances, the SER derived from historical information may understate--or overstate--expected future volatility, and we may adjust the assessment downward or upward. The scope of possible adjustments depends on certain conditions being met as described below.

87. We might adjust the SER-derived volatility assessment to a worse assessment (i.e., to a higher assessment for greater volatility) by up to two categories if the expected level of volatility isn't apparent in historical numbers, and the company either:

- Has a weighted country risk assessment of 4 or worse, which may, notwithstanding past performance, result in a less stable business environment going forward;
- Operates in a subsector of the industry that may be prone to higher technology or regulation changes, or other potential disruptive risks that have not emerged over the seven year period;
- Is of limited size and scope, which will often result in inherently greater vulnerability to external changes; or
- Has pursued material M&A or internal growth projects that obscure the company's underlying performance trend line. As an example, a company may have consummated an acquisition during the trough of the cycle, masking what would otherwise be a significant decline in performance.

88. The choice of one or two categories depends on the degree of likelihood that the related risks will materialize and our view of the likely severity of these risks.

89. Conversely, we may adjust the SER-derived volatility assessment to a better assessment (i.e., to a lower assessment reflecting lower volatility) by up to two categories if we observe that the conditions historically leading to greater volatility have receded and are misrepresentative. This will be the case when:

- The company grew at a moderately faster, albeit more uneven, pace relative to the industry. Since we measure volatility around a linear trend line, a company growing at a constant percentage of moderate increase (relative to the industry) or an uneven pace (e.g., due to "lumpy" capital spending programs) could receive a relatively unfavorable assessment on an unadjusted basis, which would not be reflective of the company's performance in a steady state. (Alternatively, those companies that grow at a significantly higher-than-average industry rate often do so on unsustainable rates of growth or by taking on high-risk strategies. Companies with these high-risk growth strategies would not receive a better assessment and could be adjusted to a worse assessment;)
- The company's geographic, customer, or product diversification has increased in scope as a result of an acquisition or rapid expansion (e.g. large, long-term contracts wins), leading to more stability in future earnings in our view; or
- The company's business model is undergoing material change that we expect will benefit earnings stability, such as a new regulatory framework or major technology shift that is expected to provide a significant competitive hedge and margin protection over time.

90. The choice of one or two categories depends on the degree of likelihood that the related risks will materialize and our view of the likely severity of these risks.

91. If the company either does not have at least seven years of annual data or has materially changed its business lines or undertaken abnormally high levels of M&A during this time period, then we do not use its SER to assess the volatility of profitability. In these cases, we use a proxy to establish the volatility assessment. If there is a peer company that has, and is expected to continue having, very similar profitability volatility characteristics, we use the SER of that peer entity as a proxy.

92. If no such matching peer exists, or one cannot be identified with enough confidence, we perform an assessment of expected volatility based on the following rules:

- An assessment of 3 if we expect the company's profitability, supported by available historical evidence, will exhibit a volatility pattern in line with, or somewhat less volatile than, the industry average.
- An assessment of 2 based on our confidence, supported by available historical evidence, that the company will exhibit lower volatility in profitability metrics than the industry's average. This could be underpinned by some of the factors listed in paragraph 89, whereas those listed in paragraph 87 would typically not apply.
- An assessment of 4 or 5 based on our expectation that profitability metrics will exhibit somewhat higher (4), or meaningfully higher (5) volatility than the industry, supported by available historical evidence, or because of the applicability of possible adjustment factors listed in paragraph 87.
- Assessments of either 1 or 6 are rarely assigned and can only be achieved based on a combination of data evidence and very high confidence tests. For an assessment of 1, we require strong evidence of minimal volatility in profitability metrics compared with the industry, supported by at least five years of historical information, combined with a very high degree of confidence that this will continue in the future, including no country risk, subsector risk or size considerations that could otherwise warrant a worse assessment as per paragraph 87. For an assessment of 6 we require strong evidence of very high volatility in profitability metrics compared with the industry, supported by at least five years of historical information and very high confidence that this will continue in the future.

93. Next, we combine the level of profitability assessment with the volatility assessment to determine the final profitability

assessment using the matrix in Table 15.

Table 15

Profitability Assessment

	--Volatility of profitability assessment--					
Level of profitability assessment	**1**	**2**	**3**	**4**	**5**	**6**
Above average	1	1	2	3	4	5
Average	1	2	3	4	5	6
Below average	2	3	4	5	6	6

5. Combining the preliminary competitive position assessment with profitability

94. The fourth and final step in arriving at a competitive position assessment is to combine the preliminary competitive position assessment with the profitability assessment. We use the combination matrix in Table 16, which shows how the profitability assessment can confirm, strengthen, or weaken (by up to one category) the overall competitive position assessment.

Table 16

Combining The Preliminary Competitive Position Assessment And Profitability Assessment

	--Preliminary competitive position assessment--					
Profitability assessment	**1**	**2**	**3**	**4**	**5**	**6**
1	1	2	2	3	4	5
2	1	2	3	3	4	5
3	2	2	3	4	4	5
4	2	3	3	4	5	5
5	2	3	4	4	5	6
6	2	3	4	5	5	6

95. We generally expect companies with a strong preliminary competitive position assessment to exhibit strong and less volatile profitability metrics. Conversely, companies with a relatively weaker preliminary competitive position assessment will generally have weaker and/or more volatile profitability metrics. Our analysis of profitability helps substantiate whether management is translating any perceived competitive advantages, diversity benefits, and cost management measures into higher earnings and more stable return on capital and return on sales ratios than the averages for the industry. When profitability differs markedly from what the preliminary/anchor competitive position assessment would otherwise imply, we adjust the competitive position assessment accordingly.

96. Our method of adjustment is biased toward the preliminary competitive position assessment rather than toward the profitability assessment (e.g., a preliminary competitive assessment of 6 and a profitability assessment of 1 will result in a final assessment of 5).

E. Cash Flow/Leverage

97. The pattern of cash flow generation, current and future, in relation to cash obligations is often the best indicator of a company's financial risk. The criteria assess a variety of credit ratios, predominately cash flow-based, which

complement each other by focusing on the different levels of a company's cash flow waterfall in relation to its obligations (i.e., before and after working capital investment, before and after capital expenditures, before and after dividends), to develop a thorough perspective. Moreover, the criteria identify the ratios that we think are most relevant to measuring a company's credit risk based on its individual characteristics and its business cycle.

98. For the analysis of companies with intermediate or stronger cash flow/leverage assessments (a measure of the relationship between the company's cash flows and its debt obligations as identified in paragraphs 106 and 124), we primarily evaluate cash flows that reflect the considerable flexibility and discretion over outlays that such companies typically possess. For these entities, the starting point in the analysis is cash flows before working capital changes plus capital investments in relation to the size of a company's debt obligations in order to assess the relative ability of a company to repay its debt. These "leverage" or "payback" cash flow ratios are a measure of how much flexibility and capacity the company has to pay its obligations.

99. For entities with significant or weaker cash flow/leverage assessments (as identified in paragraphs 105 and 124), the criteria also call for an evaluation of cash flows in relation to the carrying cost or interest burden of a company's debt. This will help us assess a company's relative and absolute ability to service its debt. These "coverage"- or "debt service"-based cash flow ratios are a measure of a company's ability to pay obligations from cash earnings and the cushion the company possesses through stress periods. These ratios, particularly interest coverage ratios, become more important the further a company is down the credit spectrum.

1. Assessing cash flow/leverage

100. Under the criteria, we assess cash flow/leverage as 1, minimal; 2, modest; 3, intermediate; 4, significant; 5, aggressive; or 6, highly leveraged. To arrive at these assessments, the criteria combine the assessments of a variety of credit ratios, predominately cash flow-based, which complement each other by focusing attention on the different levels of a company's cash flow waterfall in relation to its obligations. For each ratio, there is an indicative cash flow/leverage assessment that corresponds to a specified range of values in one of three given benchmark tables (see tables 17, 18, and 19). We derive the final cash flow/leverage assessment for a company by determining the relevant core ratios, anchoring a preliminary cash flow assessment based on the relevant core ratios, determining the relevant supplemental ratio(s), adjusting the preliminary cash flow assessment according to the relevant supplemental ratio(s), and, finally, modifying the adjusted cash flow/leverage assessment for any material volatility.

2. Core and supplemental ratios

a) Core ratios

101. For each company, we calculate two core credit ratios--funds from operations (FFO) to debt and debt to EBITDA--in accordance with Standard & Poor's ratios and adjustments criteria (see "Corporate Methodology: Ratios And Adjustments," published Nov. 19, 2013). We compare these payback ratios against benchmarks to derive the preliminary cash flow/leverage assessment for a company. These ratios are also useful in determining the relative ranking of the financial risk of companies.

b) Supplemental ratios

102. The criteria also consider one or more supplemental ratios (in addition to the core ratios) to help develop a fuller understanding of a company's financial risk profile and fine-tune our cash flow/leverage analysis. Supplemental ratios

could either confirm or adjust the preliminary cash flow/leverage assessment. The confirmation or adjustment of the preliminary cash flow/leverage assessment will depend on the importance of the supplemental ratios as well as any difference in indicative cash flow/leverage assessment between the core and supplemental ratios as described in section E.3.b.

103. The criteria typically consider five standard supplemental ratios, although the relevant KCF criteria may introduce additional supplemental ratios or focus attention on one or more of the standard supplemental ratios. The standard supplemental ratios include three payback ratios--cash flow from operations (CFO) to debt, free operating cash flow (FOCF) to debt, and discretionary cash flow (DCF) to debt--and two coverage ratios, FFO plus interest to cash interest and EBITDA to interest.

104. The criteria provide guidelines as to the relative importance of certain ratios if a company exhibits characteristics such as high leverage, working capital intensity, capital intensity, or high growth.

105. If the preliminary cash flow/leverage assessment is significant or weaker (see section E.3), then two coverage ratios, FFO plus interest to cash interest and EBITDA to interest, will be given greater importance as supplemental ratios. For the purposes of calculating the coverage ratios, "cash interest" includes only cash interest payments (i.e., interest excludes noncash interest payable on, for example, payment-in-kind [PIK] instruments) and does not include any Standard & Poor's adjusted interest on such items as leases, while "interest" is the income statement figure plus Standard & Poor's adjustments to interest (see "Corporate Methodology: Ratios And Adjustments," published Nov. 19, 2013).

106. If the preliminary cash flow/leverage assessment is intermediate or stronger, the criteria first apply the three standard supplemental ratios of CFO to debt, FOCF to debt, and DCF to debt. When FOCF to debt and DCF to debt indicate a cash flow/leverage assessment that is lower than the other payback-ratio-derived cash flow/leverage assessments, it signals that the company has either larger than average capital spending or other non-operating cash distributions (including dividends). If these differences persist and are consistent with a negative trend in overall ratio levels, which we believe is not temporary, then these supplemental leverage ratios will take on more importance in the analysis.

107. If the supplemental ratios indicate a cash flow/leverage assessment that is different than the preliminary cash flow/leverage assessment, it could suggest an unusual debt service or fixed charge burden, working capital or capital expenditure profile, or unusual financial activity or policies. In such cases, we assess the sustainability or persistence of these differences. For example, if either working capital or capital expenditures are unusually low, leading to better indicated assessments, we examine the sustainability of such lower spending in the context of its impact on the company's longer term competitive position. If there is a deteriorating trend in the company's asset base, we give these supplemental ratios less weight. If either working capital or capital expenditures are unusually high, leading to weaker indicated assessments, we examine the persistence and need for such higher spending. If elevated spending levels are required to maintain a company's competitive position, for example to maintain the company's asset base, we give more weight to these supplemental ratios.

108. For capital-intensive companies, EBITDA and FFO may overstate financial strength, whereas FOCF may be a more accurate reflection of their cash flow in relation to their financial obligations. The criteria generally consider a

capital-intensive company as having ongoing capital spending to sales of greater than 10%, or depreciation to sales of greater than 8%. For these companies, the criteria place more weight on the supplementary ratio of FOCF to debt. Where we place more analytic weight on FOCF to debt, we also seek to estimate the amount of maintenance or full cycle capital required (see Appendix C) under normal conditions (we estimate maintenance or full-cycle capital expenditure required because this is not a reported number). The FOCF figure may be adjusted by adding back estimated discretionary capital expenditures. The adjusted FOCF to debt based on maintenance or full cycle capital expenditures often helps determine how much importance to place on this ratio. If both the FOCF to debt and the adjusted (for estimated discretionary capital spending) FOCF to debt derived assessments are different from the preliminary cash/flow leverage assessment, then these supplemental leverage ratios take on more importance in the analysis.

109. For working-capital-intensive companies, EBITDA and FFO may also overstate financial strength, and CFO may be a more accurate measure of the company's cash flow in relation to its financial risk profile. Under the criteria, if a company has a working capital-to-sales ratio that exceeds 25% or if there are significant seasonal swings in working capital, we generally consider it to be working-capital-intensive. For these companies, the criteria place more emphasis on the supplementary ratio of CFO to debt. Examples of companies that have working-capital-intensive characteristics can be found in the capital goods, metals and mining downstream, or the retail and restaurants industries. The need for working capital in those industries reduces financial flexibility and, therefore, these supplemental leverage ratios take on more importance in the analysis.

110. For all companies, when FOCF to debt or DCF to debt is negative or indicates materially lower cash flow/leverage assessments, the criteria call for an examination of management's capital spending and cash distribution strategies. For high-growth companies, typically the focus is on FFO to debt instead of FOCF to debt because the latter ratio can vary greatly depending on the growth investment the company is undergoing. The criteria generally consider a high-growth company one that exhibits real revenue growth in excess of 8% per year. Real revenue growth excludes price or foreign exchange related growth, under these criteria. In cases where FOCF or DCF is low, there is a greater emphasis on monitoring the sustainability of margins and return on capital and the overall financing mix to assess the likely trend of future debt ratios. In addition, debt service ratio analysis will be important in such situations. For companies with more moderate growth, the focus is typically on FOCF to debt unless the capital spending is short term or is not funded with debt.

111. For companies that have ongoing and well entrenched banking relationships we can reflect these relationships in our cash flow/leverage analysis through the use of the interest coverage ratios as supplemental ratios. These companies generally have historical links and a strong ongoing relationship with their main banks, as well as shareholdings by the main banks, and management influence and interaction between the main banks and the company. Based on their bank relationships, these companies often have lower interest servicing costs than peers, even if the macro economy worsens. In such cases, we generally use the interest coverage ratios as supplemental ratios. This type of banking relationship occurs in Japan, for example, where companies that have the type of bank relationship described in this paragraph tend to have a high socioeconomic influence within their country by way of their revenue size, total debt quantum, number of employees, and the relative importance of the industry.

c) Time horizon and ratio calculation

112. A company's credit ratios may vary, often materially, over time due to economic, competitive, technological, or investment cycles, the life stage of the company, and corporate or strategic actions. Thus, we evaluate credit ratios on a time series basis with a clear forward-looking bias. The length of the time series is dependent on the relative credit risk of the company and other qualitative factors and the weighting of the time series varies according to transformational events. A transformational event is any event that could cause a material change in a company's financial profile, whether caused by changes to the company's capital base, capital structure, earnings, cash flow profile, or financial policies. Transformational events can include mergers, acquisitions, divestitures, management changes, structural changes to the industry or competitive environment, and/or product development and capital programs. This section provides guidance on the timeframe and weightings the criteria apply to calculate the indicative ratios.

113. The criteria generally consider the company's credit ratios for the previous one to two years, current-year forecast, and the two subsequent forecasted financial years. There may be situations where longer--or even shorter--historical results or forecasts are appropriate, depending on such factors as availability of financials, transformational events, or relevance. For example, a utility company with a long-term capital spending program may lend itself to a longer-term forecast, whereas for a company experiencing a near-term liquidity squeeze even a two-year forecast will have limited value. Alternatively, for most commodities-based companies we emphasize credit ratios based on our forward-looking view of market conditions, which may differ materially from the historical period.

114. Historical patterns in cash flow ratios are informative, particularly in understanding past volatility, capital spending, growth, accounting policies, financial policies, and business trends. Our analysis starts with a review of these historical patterns in order to assess future expected credit quality. Historical patterns can also provide an indication of potential future volatility in ratios, including that which results from seasonality or cyclicality. A history of volatility could result in a more conservative assessment of future cash flow generation if we believe cash flow will continue to be volatile.

115. The forecast ratios are based on an expected base-case scenario developed by Standard & Poor's, incorporating current and near-term economic conditions, industry assumptions, and financial policies. The prospective cyclical and longer-term volatility associated with the industry in which the issuer operates is addressed in the industry risk criteria (see section B) and the longer-term directional influence or event risk of financial policies is addressed in our financial policy criteria (see section H).

116. The criteria generally place greater emphasis on forecasted years than historical years in the time series of credit ratios when calculating the indicative credit ratio. For companies where we have five years of ratios as described in section E.3, generally we calculate the indicative ratio by weighting the previous two years, the current year, and the forecasted two years as 10%, 15%, 25%, 25%, and 25%, respectively.

117. This weighting changes, however, to place even greater emphasis on the current and forecast years when:

- The issuer meets the characteristics described in paragraph 113, and either shorter- or longer-term forecasts are applicable. The weights applied will generally be quite forward weighted, particularly if a company is undergoing a transformational event and there is moderate or better cash flow certainty.
- The issuer is forecast to generate negative cash flow available for debt repayment, which we believe could lead to

deteriorating credit metrics. Forecast negative cash flows could be generated from operating activities as well as capital expenditures, share buybacks, dividends, or acquisitions, as we forecast these uses of cash based on the company's track record, market conditions, or financial policy. The weights applied will generally be 30%, 40%, and 30% for the current and two subsequent years, respectively.

- The issuer is in an industry that is prospectively volatile or that has a high degree of cash flow uncertainty. Industries that are prospectively volatile are industries whose competitive risk and growth assessments are either high risk (5) or very high risk (6) or whose overall industry risk assessments are either high risk (5) or very high risk (6). The weights applied will generally be 50% for the current year and 50% for the first subsequent forecast year.

118. When the indicative ratio(s) is borderline (i.e., less than 10% different from the threshold in relative terms) between two assessment thresholds (as described in section E.3 and tables 17, 18, and 19) and the forecast points to a switch in the ratio between categories during the rating timeframe, we will weigh the forecast even more heavily in order to prospectively capture the trend.

119. For companies undergoing a transformational event, the weighting of the time series could vary significantly.

120. For companies undergoing a transformational event and with significant or weaker cash flow/leverage assessments, we place greater weight on near-term risk factors. That's because overemphasis on longer-term (inherently less predictable) issues could lead to some distortion when assessing the risk level of a speculative-grade company. We generally analyze a company using the arithmetic mean of the credit ratios expected according to our forecasts for the current year (or pro forma current year) and the subsequent financial year. A common example of this is when a private equity firm acquires a company using additional debt leverage, which makes historical financial ratios meaningless. In this scenario, we weight or focus the majority of our analysis on the next one or two years of projected credit measures.

3. Determining the cash flow/leverage assessment

a) Identifying the benchmark table

121. Tables 17, 18, and 19 provide benchmark ranges for various cash flow ratios we associate with different cash flow/leverage assessments for standard volatility, medial volatility, and low volatility industries. The tables of benchmark ratios differ for a given ratio and cash flow/leverage assessment along two dimensions: the starting point for the ratio range and the width of the ratio range.

122. If an industry exhibits low volatility, the threshold levels for the applicable ratios to achieve a given cash flow/leverage assessment are less stringent than those in the medial or standard volatility tables, although the range of the ratios is narrower. Conversely, if an industry exhibits medial or standard levels of volatility, the threshold for the applicable ratios to achieve a given cash flow/leverage assessment are elevated, albeit with a wider range of values.

123. The relevant benchmark table for a given company is based on our assessment of the company's associated industry and country risk volatility, or the CICRA (see section A, table 1). The low volatility table (table 19) will generally apply when a company's CICRA is 1, unless otherwise indicated in a sector's KCF criteria. The medial volatility table (table 18) will be used under certain circumstances for companies with a CICRA of 1 or 2. Those circumstances are described in the respective sectors' KCF criteria. The standard volatility table (table 17) serves as the relevant benchmark table for companies with a CICRA of 2 or worse, and we will always use it for companies with a CICRA of 1 or 2 and whose competitive position is assessed 5 or 6. Although infrequent, we will use the low volatility table when

a company's CICRA is 2 for companies that exhibit or are expected to exhibit low levels of volatility. The choice of volatility tables for companies with a CICRA of 2 is addressed in the respective sector's KCF article.

Table 17

Cash Flow/Leverage Analysis Ratios--Standard Volatility

	--Core ratios--		--Supplementary coverage ratios--		--Supplementary payback ratios--		
	FFO/debt (%)	Debt/EBITDA (x)	FFO/cash interest(x)	EBITDA/interest (x)	CFO/debt (%)	FOCF/debt (%)	DCF/debt (%)
Minimal	60+	Less than 1.5	More than 13	More than 15	More than 50	40+	25+
Modest	45-60	1.5-2	9-13	10-15	35-50	25-40	15-25
Intermediate	30-45	2-3	6-9	6-10	25-35	15-25	10-15
Significant	20-30	3-4	4-6	3-6	15-25	10-15	5-10
Aggressive	12-20	4-5	2-4	2-3	10-15	5-10	2-5
Highly leveraged	Less than 12	Greater than 5	Less than 2	Less than 2	Less than 10	Less than 5	Less than 2

Table 18

Cash Flow/Leverage Analysis Ratios--Medial Volatility

	--Core ratios--		--Supplementary coverage ratios--		--Supplementary payback ratios--		
	FFO/debt (%)	Debt/EBITDA (x)	FFO/cash interest (x)	EBITDA/interest (x)	CFO/debt (%)	FOCF/debt (%)	DCF/debt (%)
Minimal	50+	less than 1.75	10.5+	14+	40+	30+	18+
Modest	35-50	1.75-2.5	7.5-10.5	9-14	27.5-40	17.5-30	11-18
Intermediate	23-35	2.5-3.5	5-7.5	5-9	18.5-27.5	9.5-17.5	6.5-11
Significant	13-23	3.5-4.5	3-5	2.75-5	10.5-18.5	5-9.5	2.5-6.5
Aggressive	9-13	4.5-5.5	1.75-3	1.75-2.75	7-10.5	0-5	(11)-2.5
Highly leveraged	Less than 9	Greater than 5.5	Less than 1.75	Less than 1.75	Less than 7	Less than 0	Less than (11)

Table 19

Cash Flow/Leverage Analysis Ratios--Low Volatility

	--Core ratios--		--Supplementary coverage ratios--		--Supplementary payback ratios--		
	FFO/debt (%)	Debt/EBITDA (x)	FFO/cash interest (x)	EBITDA/interest (x)	CFO/debt (%)	FOCF/debt (%)	DCF/debt (%)
Minimal	35+	Less than 2	More than 8	More than 13	More than 30	20+	11+
Modest	23-35	2-3	5-8	7-13	20-30	10-20	7-11
Intermediate	13-23	3-4	3-5	4-7	12-20	4-10	3-7
Significant	9-13	4-5	2-3	2.5-4	8-12	0-4	0-3
Aggressive	6-9	5-6	1.5-2	1.5-2.5	5-8	(10)-0	(20)-0
Highly leveraged	Less than 6	Greater than 6	Less than 1.5	Less than 1.5	Less than 5	Less than (10)	Less than (20)

b) Aggregating the credit ratio assessments

124. To determine the final cash flow/leverage assessment, we make these calculations:
1) First, calculate a time series of standard core and supplemental credit ratios, select the relevant benchmark table, and determine the appropriate time weighting of the credit ratios.

- Calculate the two standard core credit ratios and the five standard supplemental credit ratios over a five-year time horizon.
- Consult the relevant industry KCF article (if applicable), which may identify additional supplemental ratio(s). The relevant benchmark table for a given company is based on our assessment of the company's associated industry and country risk volatility, or the CICRA.
- Calculate the appropriate weighted average cash flow/leverage ratios. If the company is undergoing a transformational event, then the core and supplemental ratios will typically be calculated based on Standard & Poor's projections for the current and next one or two financial years.

2) Second, we use the core ratios to determine the preliminary cash flow assessment.

- Compare the core ratios (FFO to debt and debt to EBITDA) to the ratio ranges in the relevant benchmark table.
- If the core ratios result in different cash flow/leverage assessments, we will select the relevant core ratio based on which provides the best indicator of a company's future leverage.

3) Third, we review the supplemental ratio(s).

- Determine the importance of standard or KCF supplemental ratios based on company-specific characteristics, namely, leverage, capital intensity, working capital intensity, growth rate, or industry.

4) Fourth, we calculate the adjusted cash flow/leverage assessment.

- If the cash flow/leverage assessment(s) indicated by the important supplemental ratio(s) differs from the preliminary cash flow/leverage assessment, we might adjust the preliminary cash flow/leverage assessment by one category in the direction of the cash flow/leverage assessment indicated by the supplemental ratio(s) to derive the adjusted cash flow/leverage assessment. We will make this adjustment if, in our view, the supplemental ratio provides the best indicator of a company's future leverage.
- If there is more than one important supplemental ratio and they result in different directional deviations from the preliminary cash flow/leverage assessment, we will select one as the relevant supplemental ratio based on which, in our opinion, provides the best indicator of a company's future leverage. We will then make the adjustment outlined above if the selected supplemental ratio differs from the preliminary cash flow/leverage assessment and the selected supplemental ratio provides the best overall indicator of a company's future leverage.

5) Lastly, we determine the final cash flow/leverage assessment based on the volatility adjustment.

- We classify companies as stable for these cash flow criteria if cash flow/leverage ratios are expected to move up by one category during periods of stress based on their business risk profile. The final cash flow/leverage assessment for these companies will not be modified from the adjusted cash flow/leverage assessment.
- We classify companies as volatile for these cash flow criteria if cash flow/leverage ratios are expected to move one or two categories worse during periods of stress based on their business risk profiles. Typically, this is equivalent to EBITDA declining about 30% from its current level. The final cash flow/leverage assessment for these companies will be modified to one category weaker than the adjusted cash flow/leverage assessment; the adjustment will be eliminated if cash flow/leverage ratios, as evaluated, include a moderate to high level of stress already.
- We classify companies as highly volatile for these cash flow criteria if cash flow/leverage ratios are expected to move two or three categories worse during periods of stress, based on their business risk profiles. Typically, this is equivalent to EBITDA declining about 50% from its current level. The final cash flow/leverage assessment for these companies will be modified to two categories weaker than the adjusted cash flow/leverage assessment; the adjustment will be eliminated or reduced to one category if cash flow/leverage ratios, as evaluated, include a moderate to high level of stress already.

125. The volatility adjustment is the mechanism by which we factor a "cushion" of medium-term variance to current financial performance not otherwise captured in either the near-term base-case forecast or the long-term business risk

assessment. We make this adjustment based on the following:

- The expectation of any potential cash flow/leverage ratio movement is both prospective and dependent on the current business or economic conditions.
- Stress scenarios include, but are not limited to, a recessionary economic environment, technology or competitive shifts, loss or renegotiation of major contracts or customers, and key product or input price movements, as typically defined in the company's industry risk profile and competitive position assessment.
- The volatility adjustment is not static and is company specific. At the bottom of an economic cycle or during periods of stressed business conditions, already reflected in the general industry risk or specific competitive risk profile, the prospect of weakening ratios is far less than at the peak of an economic cycle or business conditions.
- The expectation of prospective ratio changes may be formed by observed historical performance over an economic, business, or product cycle by the company or by peers.
- The assessment of which classification to use when evaluating the prospective number of scoring category moves will be guided by how close the current ratios are to the transition point (i.e. "buffer" in the current scoring category) and the corresponding amount of EBITDA movement at each scoring transition.

F. Diversification/Portfolio Effect

126. Under the criteria, diversification/portfolio effect applies to companies that we regard as conglomerates. They are companies that have multiple core business lines that may be operated as separate legal entities. For the purpose of these criteria, a conglomerate would have at least three business lines, each contributing a material source of earnings and cash flow.

127. The criteria aim to measure how diversification or the portfolio effect could improve the anchor of a company with multiple business lines. This approach helps us determine how the credit strength of a corporate entity with a given mix of business lines could improve based on its diversity. The competitive position factor assesses the benefits of diversity within individual lines of business. This factor also assesses how poorly performing businesses within a conglomerate affect the organization's overall business risk profile.

128. Diversification/portfolio effect could modify the anchor depending on how meaningful we think the diversification is, and on the degree of correlation we find in each business line's sensitivity to economic cycles. This assessment will have either a positive or neutral impact on the anchor. We capture any potential factor that weakens a company's diversification, including poor management, in our management and governance assessment.

129. We define a conglomerate as a diversified company that is involved in several industry sectors. Usually the smallest of at least three distinct business segments/lines would contribute at least 10% of either EBITDA or FOCF and the largest would contribute no more than 50% of EBITDA or FOCF, with the long-term aim of increasing shareholder value by generating cash flow. Industrial conglomerates usually hold a controlling stake in their core businesses, have highly identifiable holdings, are deeply involved in the strategy and management of their operating companies, generally do not frequently roll over or reshuffle their holdings by buying and selling companies, and therefore have high long-term exposure to the operating risks of their subsidiaries.

130. In rating a conglomerate, we first assess management's commitment to maintain the diversified portfolio over a

longer-term horizon. These criteria apply only if the company falls within our definition of a conglomerate.

1. Assessing diversification/portfolio effect

131. A conglomerate's diversification/portfolio effect is assessed as 1, significant diversification; 2, moderate diversification; or 3, neutral. An assessment of moderate diversification or significant diversification potentially raises the issuer's anchor. To achieve an assessment of significant diversification, an issuer should have uncorrelated diversified businesses whose breadth is among the most comprehensive of all conglomerates'. This assessment indicates that we expect the conglomerate's earnings volatility to be much lower through an economic cycle than an undiversified company's. To achieve an assessment of moderate diversification, an issuer typically has a range of uncorrelated diversified businesses that provide meaningful benefits of diversification with the expectation of lower earnings volatility through an economic cycle than an undiversified company's.

132. We expect that a conglomerate will also benefit from diversification if its core assets consistently produce positive cash flows over our rating horizon. This supports our assertion that the company diversifies to take advantage of allocating capital among its business lines. To this end, our analysis focuses on a conglomerate's track record of successfully deploying positive discretionary cash flow into new business lines or expanding capital-hungry business lines. We assess companies that we do not expect to achieve these benefits as neutral.

2. Components of correlation and how it is incorporated into our analysis

133. We determine the assessment for this factor based on the number of business lines in separate industries (as described in table 27) and the degree of correlation between these business lines as described in table 20. There is no rating uplift for an issuer with a small number of business lines that are highly correlated. By contrast, a larger number of business lines that are not closely correlated provide the maximum rating uplift.

Table 20

Assessing Diversification/Portfolio Effect

	--Number of business lines--		
Degree of correlation of business lines	**3**	**4**	**5 or more**
High	Neutral	Neutral	Neutral
Medium	Neutral	Moderately diversified	Moderately diversified
Low	Moderately diversified	Significantly diversified	Significantly diversified

134. The degree of correlation of business lines is high if the business lines operate within the same industry, as defined by the industry designations in Appendix B, table 27. The degree of correlation of business lines is medium if the business lines operate within different industries, but operate within the same geographic region (for further guidance on defining geographic regions, see Appendix A, table 26). An issuer has a low degree of correlation across its business lines if these business lines are both a) in different industries and b) either operate in different regions or operate in multiple regions.

135. If we believe that a conglomerate's various industry exposures fail to provide a partial hedge against the consolidated entity's volatility because they are highly correlated through an economic cycle, then we assess the diversification/portfolio effect as neutral.

G. Capital Structure

136. Standard & Poor's uses its capital structure criteria to assess risks in a company's capital structure that may not show up in our standard analysis of cash flow/leverage. These risks may exist as a result of maturity date or currency mismatches between a company's sources of financing and its assets or cash flows. These can be compounded by outside risks, such as volatile interest rates or currency exchange rates.

1. Assessing capital structure

137. Capital structure is a modifier category, which adjusts the initial anchor for a company after any modification due to diversification/portfolio effect. We assess a number of subfactors to determine the capital structure assessment, which can then raise or lower the initial anchor by one or more notches--or have no effect in some cases. We assess capital structure as 1, very positive; 2, positive; 3, neutral; 4, negative; or 5, very negative. In the large majority of cases, we believe that a firm's capital structure will be assessed as neutral. To assess a company's capital structure, we analyze four subfactors:

- Currency risk associated with debt,
- Debt maturity profile (or schedule),
- Interest rate risk associated with debt, and
- Investments.

138. Any of these subfactors can influence a firm's capital structure assessment, although some carry greater weight than others, based on a tiered approach:

- Tier one risk subfactors: Currency risk of debt and debt maturity profile, and
- Tier two risk subfactor: Interest rate risk of debt.

139. The initial capital structure assessment is based on the first three subfactors (see table 21). We may then adjust the preliminary assessment based on our assessment of the fourth subfactor, investments.

Table 21

Preliminary Capital Structure Assessment

Preliminary capital structure assessment	Subfactor assessments
Neutral	No tier one subfactor is negative.
Negative	One tier one subfactor is negative, and the tier two subfactor is neutral.
Very negative	Both tier one subfactors are negative, or one tier one subfactor is negative and the tier two subfactor is negative.

140. Tier one subfactors carry the greatest risks, in our view, and, thus, could have a significant impact on the capital structure assessment. This is because, in our opinion, these factors have a greater likelihood of affecting credit metrics and potentially causing liquidity and refinancing risk. The tier two subfactor is important in and of itself, but typically less so than the tier one subfactors. In our view, in the majority of cases, the tier two subfactor in isolation has a lower likelihood of leading to liquidity and default risk than do tier one subfactors.

141. The fourth subfactor, investments, as defined in paragraph 153, quantifies the impact of a company's investments on

its overall financial risk profile. Although not directly related to a firm's capital structure decisions, certain investments could provide a degree of asset protection and potential financial flexibility if they are monetized. Thus, the fourth subfactor could modify the preliminary capital structure assessment (see table 22). If the subfactor is assessed as neutral, then the preliminary capital structure assessment will stand. If investments is assessed as positive or very positive, we adjust the preliminary capital structure assessment upward (as per table 22) to arrive at the final assessment.

Table 22

Final Capital Structure Assessment

	--Investments subfactor assessment--		
Preliminary capital structure assessment	**Neutral**	**Positive**	**Very positive**
Neutral	Neutral	Positive	Very positive
Negative	Negative	Neutral	Positive
Very negative	Very negative	Negative	Negative

2. Capital structure analysis: Assessing the subfactors

a) Subfactor 1: Currency risk of debt

142. Currency risk arises when a company borrows without hedging in a currency other than the currency in which it generates revenues. Such an unhedged position makes the company potentially vulnerable to fluctuations in the exchange rate between the two currencies, in the absence of mitigating factors. We determine the materiality of any mismatch by identifying situations where adverse exchange-rate movements could weaken cash flow and/or leverage ratios. We do not include currency mismatches under the following scenarios:

- The country where a company generates its cash flows has its currency pegged to the currency in which the company has borrowed, or vice versa (or the currency of cash flows has a strong track record and government policy of stability with the currency of borrowings), examples being the Hong Kong dollar which is pegged to the U.S. dollar, and the Chinese renminbi which is managed in a narrow band to the U.S. dollar (and China's foreign currency reserves are mainly in U.S. dollars). Moreover, we expect such a scenario to continue for the foreseeable future;
- A company has the proven ability, through regulation or contract, to pass through changes in debt servicing costs to its customers; or
- A company has a natural hedge, such as where it may sell its product in a foreign currency and has matched its debt in that same currency.

143. We also recognize that even if an entity generates insufficient same-currency cash flow to meet foreign currency-denominated debt obligations, it could have substantial other currency cash flows it can convert to meet these obligations. Therefore, the relative amount of foreign denominated debt as a proportion of total debt is an important factor in our analysis. If foreign denominated debt, excluding fully hedged debt principal, is 15% or less of total debt, we assess the company as neutral on currency risk of debt. If foreign-denominated debt, excluding fully hedged debt principal, is greater than 15% of total debt, and debt to EBITDA is greater than 3.0x, we evaluate currency risks through further analysis.

144. If an entity's foreign-denominated debt in a particular currency represents more than 15% of total debt, and if its debt to EBITDA ratio is greater than 3.0x, we identify whether a currency-specific interest coverage ratio indicates potential

currency risk. The coverage ratio divides forecasted operating cash flow in each currency by interest payments over the coming 12 months for that same currency. It is often easier to ascertain the geographic breakdown of EBITDA as opposed to operating cash flow. So in situations where we don't have sufficient cash flow information, we may calculate an EBITDA to interest expense coverage ratio in the relevant currencies. If neither cash flow nor EBITDA information is disclosed, we estimate the relevant exposures based on available information.

145. In such an instance, our assessment of this subfactor is negative if we believe any appropriate interest coverage ratio will fall below 1.2x over the next 12 months.

b) Subfactor 2: Debt maturity profile

146. A firm's debt maturity profile shows when its debt needs to be repaid, or refinanced if possible, and helps determine the firm's refinancing risk. Lengthier and more evenly spread out debt maturity schedules reduce refinancing risk, compared with front-ended and compressed ones, since the former give an entity more time to manage business- or financial market-related setbacks.

147. In evaluating debt maturity profiles, we measure the weighted average maturity (WAM) of bank debt and debt securities (including hybrid debt) within a capital structure, and make simplifying assumptions that debt maturing beyond year five matures in year six. WAM = (Maturity1/Total Debt)*tenor1 + (Maturity2/Total Debt)* tenor2 +... (Thereafter/Total Debt)* tenor6

148. In evaluating refinancing risk, we consider risks in addition to those captured under the 12-month to 24-month time-horizons factored in our liquidity criteria (see "Methodology And Assumptions: Liquidity Descriptors For Global Corporate Issuers," published Nov. 19, 2013). While we recognize that investment-grade companies may have more certain future business prospects and greater access to capital than speculative-grade companies, all else being equal, we view a company with a shorter maturity schedule as having greater refinancing risk compared to a company with a longer one. In all cases, we assess a company's debt maturity profile in conjunction with its liquidity and potential funding availability. Thus, a short-dated maturity schedule alone is not a negative if we believe the company can maintain enough liquidity to pay off debt that comes due in the near term.

149. Our assessment of this subfactor is negative if the WAM is two years or less, and the amount of these near-term maturities is material in relation to the issuer's liquidity so that under our base-case forecast, we believe the company's liquidity assessment will become less than adequate or weak over the next two years due to these maturities. In certain cases, we may assess a debt maturity profile as negative regardless of whether or not the company passes the aforementioned test. We expect such instances to be rare, and will include scenarios where we believed a concentration of debt maturities within a five-year time horizon poses meaningful refinancing risk, either due to the size of the maturities in relation to the company's liquidity sources, the company's leverage profile, its operating trends, lender relationships, and/or credit market standings.

c) Subfactor 3: Interest rate risk of debt

150. The interest rate risk of debt subfactor analyzes the company's mix of fixed-rate and floating-rate debt. Generally, a higher proportion of fixed-rate debt leads to greater predictability and stability of interest expense and therefore cash flows. The exception would be companies whose operating cash flows are to some degree correlated with interest rate movements--for example, a regulated utility whose revenues are indexed to inflation--given the typical correlation

between nominal interest rates and inflation.

151. The mix of fixed versus floating-rate debt is usually not a significant risk factor for companies with intermediate or better financial profiles, strong profitability, and high interest coverage. In addition, the interest rate environment at a given point in time will play a role in determining the impact of interest rate movements. Our assessment of this subcategory will be negative if a 25% upward shift (e.g., from 2.0% to 2.5%) or a 100 basis-point upward shift (e.g., 2% to 3%) in the base interest rate of the floating rate debt will result in a breach of interest coverage covenants or interest coverage rating thresholds identified in the cash flow/leverage criteria (see section E.3).

152. Many loan agreements for speculative-grade companies contain a clause requiring a percentage of floating-rate debt to be hedged for a period of two to three years to mitigate this risk. However, in many cases the loan matures after the hedge expires, creating a mismatched hedge. We consider only loans with hedges that match the life of the loan to be--effectively--fixed-rate debt.

d) Subfactor 4: Investments

153. For the purposes of the criteria, investments refer to investments in unconsolidated equity affiliates, other assets where the realizable value isn't currently reflected in the cash flows generated from those assets (e.g. underutilized real-estate property), we do not expect any additional investment or support to be provided to the affiliate, and the investment is not included within Standard & Poor's consolidation scope and so is not incorporated in the company's business and financial risk profile analysis. If equity affiliate companies are consolidated, then the financial benefits and costs of these investments will be captured in our cash flow and leverage analysis. Similarly, where the company's ownership stake does not qualify for consolidation under accounting rules, we may choose to consolidate on a pro rata basis if we believe that the equity affiliates' operating and financing strategy is influenced by the rated entity. If equity investments are strategic and provide the company with a competitive advantage, or benefit a company's scale, scope, and diversity, these factors will be captured in our competitive position criteria and will not be used to assess the subfactor investments as positive. Within the capital structure criteria, we aim to assess nonstrategic financial investments that could provide a degree of asset protection and financial flexibility in the event they are monetized. These investments must be noncore and separable, meaning that a potential divestiture, in our view, has no impact on the company's existing operations.

154. In many instances, the cash flows generated by an equity affiliate, or the proportional share of the associate company's net income, might not accurately reflect the asset's value. This could occur if the equity affiliate is in high growth mode and is currently generating minimal cash flow or net losses. This could also be true of a physical asset, such as real estate. From a valuation standpoint, we recognize the subjective nature of this analysis and the potential for information gaps. As a result, in the absence of a market valuation or a market valuation of comparable companies in the case of minority interests in private entities, we will not ascribe value to these assets.

155. We assess this subfactor as positive or very positive if three key characteristics are met. First, an estimated value can be ascribed to these investments based on the presence of an existing market value for the firm or comparable firms in the same industry. Second, there is strong evidence that the investment can be monetized over an intermediate timeframe--in the case of an equity investment, our opinion of the marketability of the investment would be enhanced by the presence of an existing market value for the firm or comparable firms, as well as our view of market liquidity.

Third, monetization of the investment, assuming proceeds would be used to repay debt, would be material enough to positively move existing cash flow and leverage ratios by at least one category and our view on the company's financial policy, specifically related to financial discipline, supports the assessment that the potential proceeds would be used to pay down debt. This subfactor is assessed as positive if debt repayment from the investment sale has the potential to improve cash flow and leverage ratios by one category. We assess investments as very positive if proceeds upon sale of the investment have the potential to improve cash flow and leverage ratios by two or more categories. If the three characteristics are not met, this subfactor will be assessed as neutral and the preliminary capital structure assessment will stand.

156. We will not assess the investments subfactor as positive or very positive when the anchor is 'b+' or lower unless the three conditions described in paragraph 155 are met, and:

- For issuers with less than adequate or weak liquidity, the company has provided a credible near-term plan to sell the investment.
- For issuers with adequate or better liquidity, we believe that the company, if needed, could sell the investment in a relatively short timeframe.

H. Financial Policy

157. Financial policy refines the view of a company's risks beyond the conclusions arising from the standard assumptions in the cash flow/leverage assessment (see section E). Those assumptions do not always reflect or entirely capture the short-to-medium term event risks or the longer-term risks stemming from a company's financial policy. To the extent movements in one of these factors cannot be confidently predicted within our forward-looking evaluation, we capture that risk within our evaluation of financial policy. The cash flow/leverage assessment will typically factor in operating and cash flows metrics we observed during the past two years and the trends we expect to see for the coming two years based on operating assumptions and predictable financial policy elements, such as ordinary dividend payments or recurring acquisition spending. However, over that period and, generally, over a longer time horizon, the firm's financial policies can change its financial risk profile based on management's or, if applicable, the company's controlling shareholder's (see Appendix E, paragraphs 254-257) appetite for incremental risk or, conversely, plans to reduce leverage. We assess financial policy as 1) positive, 2) neutral, 3) negative, or as being owned by a financial sponsor. We further identify financial sponsor-owned companies as "FS-4", "FS-5", "FS-6", or "FS-6 (minus)" (see section H.2).

1. Assessing financial policy

158. First, we determine if a company is owned by a financial sponsor. Given the intrinsic characteristics and aggressive nature of financial sponsor's strategies (i.e. short- to intermediate-term holding periods and the use of debt or debt-like instruments to maximize shareholder returns), we assign a financial risk profile assessment to a firm controlled by a financial sponsor that reflects the likely impact on leverage due to these strategies and we do not separately analyze management's financial discipline or financial policy framework.

159. If a company is not controlled by a financial sponsor, we evaluate management's financial discipline and financial policy framework. Management's financial discipline measures its tolerance for incremental financial risk or,

conversely, its willingness to maintain the same degree of financial risk or to lower it compared with recent cash flow/leverage metrics and our projected ratios for the next two years. The company's financial policy framework assesses the comprehensiveness, transparency, and sustainability of the entity's financial policies. We do not assess these factors for financial sponsor controlled firms.

160. The financial discipline assessments can have a positive or negative influence on an enterprise's overall financial policy assessment, or can have no net effect. Conversely, the financial policy framework assessment cannot positively influence the overall financial policy assessment. It can constrain the overall financial policy assessment to no greater than neutral.

161. The separate assessments of a company's financial policy framework and financial discipline determine the financial policy adjustment.

162. We assess management's financial discipline as 1, positive; 2, neutral; or 3, negative. We determine the assessment by evaluating the predictability of an entity's expansion plans and shareholder return strategies. We take into account, generally, management's tolerance for material and unexpected negative changes in credit ratios or, instead, its plans to rapidly decrease leverage and keep credit ratios within stated boundaries.

163. A company's financial policy framework assessment is: 1, supportive or 2, non-supportive. We make the determination by assessing the comprehensiveness of a company's financial policy framework and whether financial targets are clearly communicated to a large number of stakeholders, and are well defined, achievable, and sustainable.

Table 23

Financial Policy Assessments

Assessment	What it means	Guidance
Positive	Indicates that we expect management's financial policy decisions to have a positive impact on credit ratios over the time horizon, beyond what can be reasonably built in our forecasts on the basis of normalized operating and cash flow assumptions. An example would be when a credible management team commits to dispose of assets or raise equity over the short to medium term in order to reduce leverage. A company with a 1 financial risk profile will not be assigned a positive assessment.	If financial discipline is positive, and the financial policy framework is supportive
Neutral	Indicates that, in our opinion, future credit ratios won't differ materially over the time horizon beyond what we have projected, based on our assessment of management's financial policy, recent track record, and operating forecasts for the company. A neutral financial policy assessment effectively reflects a low probability of "event risk," in our view.	If financial discipline is positive, and the financial policy framework is non-supportive. Or when financial discipline is neutral, regardless of the financial policy framework assessment.
Negative	Indicates our view of a lower degree of predictability in credit ratios, beyond what can be reasonably built in our forecasts, as a result of management's financial discipline (or lack of it). It points to high event risk that management's financial policy decisions may depress credit metrics over the time horizon, compared with what we have already built in our forecasts based on normalized operating and cash flow assumptions.	If financial discipline is negative, regardless of the financial policy framework assessment
Financial Sponsor*	We define a financial sponsor as an entity that follows an aggressive financial strategy in using debt and debt-like instruments to maximize shareholder returns. Typically, these sponsors dispose of assets within a short to intermediate time frame. Accordingly, the financial risk profile we assign to companies that are controlled by financial sponsors ordinarily reflects our presumption of some deterioration in credit quality in the medium term. Financial sponsors include private equity firms, but not infrastructure and asset-management funds, which maintain longer investment horizons.	We define financial sponsor-owned companies as companies that are owned 40% or more by a financial sponsor or a group of three or less financial sponsors and where we consider that the sponsor(s) exercise control of the company solely or together.

*Assessed as FS-4, FS-5, FS-6, or FS-6 (minus).

2. Financial sponsor-controlled companies

164. We define a financial sponsor as an entity that follows an aggressive financial strategy in using debt and debt-like instruments to maximize shareholder returns. Typically, these sponsors dispose of assets within a short-to-intermediate time frame. Financial sponsors include private equity firms, but not infrastructure and asset-management funds, which maintain longer investment horizons.

165. We define financial sponsor-owned companies as companies that are owned 40% or more by a financial sponsor or a group of three or less financial sponsors and where we consider that the sponsor(s) exercise control of the company solely or together.

166. We differentiate between financial sponsors and other types of controlling shareholders and companies that do not have controlling shareholders based on our belief that short-term ownership--such as exists in private equity sponsor-owned companies--generally entails financial policies aimed at achieving rapid returns for shareholders typically through aggressive debt leverage.

167. Financial sponsors often dictate policies regarding risk-taking, financial management, and corporate governance for the companies that they control. There is a common pattern of these investors extracting cash in ways that increase the companies' financial risk by utilizing debt or debt like instruments. Accordingly, the financial risk profile we assign to companies that are controlled by financial sponsors ordinarily reflect our presumption of some deterioration in credit quality or steadily high leverage in the medium term.

168. We assess the influence of financial sponsor ownership as "FS-4", "FS-5", "FS-6", and "FS-6 (minus)" depending on how aggressive we assume the sponsor will be and assign a financial risk profile accordingly (see table 24).

169. Generally, financial sponsor-owned issuers will receive an assessment of "FS-6" or "FS-6 (minus)", leading to a financial risk profile assessment of '6', under the criteria. A "FS-6" assessment indicates that, in our opinion, forecasted credit ratios in the medium term are likely be to be consistent with a '6' financial risk profile, based on our assessment of the financial sponsor's financial policy and track record. A "FS-6 (minus)" will likely be applied to companies that we forecast to have near-term credit ratios consistent with a '6' financial risk profile, but we believe the financial sponsor to be very aggressive and that leverage could increase materially even further from our forecasted levels.

170. In a small minority of cases, a financial sponsor-owned entity could receive an assessment of "FS-5". This assessment will apply only when we project that the company's leverage will be consistent with a '5' (aggressive) financial risk profile (see tables 17, 18, and 19), we perceive that the risk of releveraging is low based on the company's financial policy and our view of the owner's financial risk appetite, and liquidity is at least adequate.

171. In even rarer cases, we could assess the financial policy of a financial sponsor-owned entity as "FS-4". This assessment will apply only when all of the following conditions are met: other shareholders own a material (generally, at least 20%) stake, we expect the sponsor to relinquish control over the intermediate term, we project that leverage is currently consistent with a '4' (significant) financial risk profile (see tables 17, 18, and 19), the company has said it will maintain leverage at or below this level, and liquidity is at least adequate.

Table 24

Financial Risk Profile Implications For Sponsor-Owned Issuers

Assessment	What it Means	Guidance
FS-4	Financial risk profile set at '4'	Issuer must meet all of the following conditions: • Other shareholders must own a material (no less than 20%) stake; • We anticipate that the sponsor will relinquish control over the medium term; • For issuers subject to Table 17 (standard volatility), debt to EBITDA is less than 4x, and we estimate that it will remain less than 4x. For issuers that are subject to Table 18 (medial volatility), debt to EBITDA is below 4.5x and we forecast it to remain below that level. Or for issuers subject to Table 19 (low volatility), debt to EBITDA is less than 5x and our estimation is it will remain below that level; • The company has indicated a financial policy stipulating a level of leverage consistent with a significant or better financial risk profile (that is, debt to EBITDA of less than 4x when applying standard volatility tables, 4.5x when applying medial volatility tables, or less than 5x when applying low volatility tables) and • We assess liquidity to be at least adequate, with adequate covenant headroom.
FS-5	Financial risk profile set at '5'	Issuer must meet all of the following conditions: • For issuers subject to the standard volatility table, debt to EBITDA is less than 5x, and we estimate that it will remain less than 5x. For issuers that are subject to the medial volatility table, debt to EBITDA is below 5.5x and we forecast it to remain below that level. Or for issuers subject to the low volatility table, debt to EBITDA is less than 6x and our estimation is it will remain below that level; • We believe the risk of releveraging beyond 5x (standard volatility issuer), 5.5x (medial volatility issuer), or 6x (low volatility issuer) is low; and • We assess liquidity to be at least adequate, with adequate covenant headroom.
FS-6	Financial risk profile set at '6'	Standard & Poor's debt to EBITDA is greater than 5x (when applying the standard volatility table), greater than 5.5x (when applying the medial volatility table), or greater than 6x (when applying the low volatility table). However, we believe leverage is unlikely to increase meaningfully beyond these levels.
FS-6 (minus)	Financial risk profile set at '6', and rating reduced by one notch (unless this results in a final rating below 'B-')	In determining the anchor rating the financial risk profile is a '6', but we believe the track record of the financial sponsor indicates that leverage could increase materially from already high levels.

3. Companies not controlled by a financial sponsor

172. For companies not controlled by a financial sponsor we evaluate management's financial discipline and financial policy framework to determine the influence on an entity's financial risk profile beyond what is implied by recent credit ratios and our cash flow and leverage forecasts. This influence can be positive, neutral, or negative.

173. We do not distinguish between management and a controlling shareholder that is not a financial sponsor when assessing these subfactors, as the controlling shareholder usually has the final say on financial policy.

a) Financial discipline

174. The financial discipline assessment is based on management's leverage tolerance and the likelihood of event risk. The criteria evaluate management's potential appetite to incur unforeseen, higher financial risk over a prolonged period and the associated impact on credit measures. We also assess management's capacity and commitment to rapidly decrease debt leverage to levels consistent with its credit ratio targets.

175. This assessment therefore seeks to determine whether unforeseen actions by management to increase, maintain, or reduce financial risk are likely to occur during the next two to three years, with either a negative or positive effect, or none at all, on our baseline forecasts for the period.

176. This assessment is based on the leverage tolerance of a company's management, as reflected in its plans or history of acquisitions, shareholder remuneration, and organic growth strategies (see Appendix E, paragraphs 258 to 263).

177. We assess financial discipline as positive, neutral, or negative, based on its potential impact on our forward-looking assessment of a firm's cash flow/leverage, as detailed in table 25. For example, a neutral assessment for leverage tolerance reflects our expectation that management's financial policy will unlikely lead to significant deviation from current and forecasted credit ratios. A negative assessment acknowledges a significant degree of event risk of increased leverage relative to our base-case forecast, resulting from the company's acquisition policy, its shareholder remuneration policy, or its organic growth strategy. A positive assessment indicates that the company is likely to take actions to reduce leverage, but we cannot confidently incorporate these actions into our baseline forward-looking assessment of cash flow/leverage.

178. A positive assessment indicates that management is committed and has the capacity to reduce debt leverage through the rapid implementation of credit enhancing measures, such as asset disposals, rights issues, or reductions in shareholder returns. In addition, management's track record over the past five years shows that it has taken actions to rapidly reduce unforeseen increases in debt leverage and that there have not been any prolonged periods when credit ratios were weaker than our expectations for the rating. Management, even if new, also has a track record of successful execution. Conversely, a negative assessment indicates management's financial policy allows for significant increase in leverage compared with both current levels and our forward-looking forecast under normal operating/financial conditions or does not have observable time limits or stated boundaries. Management has a track record of allowing for significant and prolonged peaks in leverage and there is no commitment or track record of management using mitigating measures to rapidly return to credit ratios consistent with our expectations.

179. As evidence of management's leverage tolerance, we evaluate its track record and plans regarding acquisitions, shareholder remuneration, and organic growth strategies (see Appendix E, paragraphs 258 to 263). Acquisitions could increase the risk that leverage will be higher than our base-case forecast if we view management's strategy as opportunistic or if its financial policy (if it exists) provides significant headroom for debt-financed acquisitions. Shareholder remuneration could also increase the risk of leverage being higher than our base-case forecast if management's shareholder reward policies are not particularly well defined or have no clear limits, management has a tolerance for shareholder returns exceeding operating cash flow, or has a track record of sustained cash returns despite weakening operating performance or credit ratios. Organic growth strategies can also result in leverage higher than our base-case forecast if these plans have no clear focus or investment philosophy, capital spending is fairly unpredictable,

or there is a track record of overspending or unexpected or rapid shifts in plans for new markets or products.

180. We also take into account management's track record and level of commitment to its stated financial policies, to the extent a company has a stated policy. Historical evidence and any deviations from stated policies are key elements in analyzing a company's leverage tolerance. Where material and unexpected deviation in leverage may occur (for example, on the back of operating weakness or acquisitions), we also assess management's plan to restore credit ratios to levels consistent with previous expectations through rapid and proactive non-organic measures. Management's track record to execute its deleveraging plan, its level of commitment, and the scope and timeframe of debt mitigating measures will be key differentiators in assessing a company's financial policy discipline.

Table 25

Assessing Financial Discipline

Descriptor	What it means	Guidance
Positive	Management is likely to take actions that result in leverage that is lower than our base-case forecast, but can't be confidently included in our base-case assumptions. Event risk is low.	Management is committed and has capacity to reduce debt leverage and increase financial headroom through the rapid implementation of credit enhancing measures, in line with its stated financial policy, if any. This relates primarily to management's careful and moderate policy with regard to acquisitions and shareholder remuneration as well as to its organic growth strategy. The assessments are supported by historical evidence over the past five years of not showing any prolonged weakening in the company's credit ratios, or relative to our base-case credit metrics' assumptions. Management, even if new, has a track record of successful execution.
Neutral	Leverage is not expected to deviate materially from our base-case forecast. Event risk is moderate.	Management's financial discipline with regard to acquisitions, shareholder remuneration, as well as its organic growth strategy does not result in significantly different leverage as defined in its stated financial policy framework.
Negative	Leverage could become materially higher than our base-case forecast. Event risk is high.	Management's financial policy framework does not explicitly rule out a significant increase in leverage compared to our base-case assumptions, possibly reflecting a greater event risk with regard to its M&A and shareholder remuneration policy as well as to its organic growth strategy. These points are supported by historical evidence over the past five years of allowing for significant and prolonged peaks in leverage, which remained unmitigated by credit supporting measures by management.

b) Financial policy framework

181. The company's financial policy framework assesses the comprehensiveness, transparency, and sustainability of the entity's financial policies (see Appendix E, paragraphs 264-268). This will help determine whether there is a satisfactory degree of visibility into the issuer's future financial risk profile. Companies that have developed and sustained a comprehensive set of financial policies are more likely to build long-term, sustainable credit quality than those that do not.

182. We will assess a company's financial policy framework as supportive or non-supportive based on evidence that supports the characteristics listed below. In order for an entity to receive a supportive assessment for financial policy framework, there must be sufficient evidence of management's financial policies to back that assessment.

183. A company assessed as supportive will generally exhibit the following characteristics:

- Management has a comprehensive set of financial policies covering key areas of financial risk, including debt leverage and liability management. Financial targets are well defined and quantifiable.
- Management's financial policies are clearly articulated in public forums (such as public listing disclosures and investor presentations) or are disclosed to a limited number of key stakeholders such as main creditors or to the credit rating agencies. The company's adherence to these policies is satisfactory.

- Management's articulated financial policies are considered achievable and sustainable. This assessment takes into consideration historical adherence to articulated policies, existing financial risk profile, capacity to sustain capital structure through nonorganic means, demands of key stakeholders, and the stability of financial policy parameters over time.

184. A company receives a non-supportive assessment if it does not meet all the conditions for a supportive assessment. We expect a non-supportive assessment to be uncommon.

I. Liquidity

185. Our assessment of liquidity focuses on monetary flows--the sources and uses of cash--that are the key indicators of a company's liquidity cushion. The analysis assesses the potential for a company to breach covenant tests related to declines in EBITDA, as well as its ability to absorb high-impact, low-probability events, the nature of the company's bank relationships, its standing in credit markets, and how prudent (or not) we believe its financial risk management to be (see "Methodology And Assumptions: Liquidity Descriptors For Global Corporate Issuers," published Nov. 19, 2013).

J. Management And Governance

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

K. Comparable Ratings Analysis

187. The comparable ratings analysis is our last step in determining a SACP on a company. This analysis can lead us to raise or lower our anchor, after adjusting for the modifiers, on a company by one notch based on our overall assessment of its credit characteristics for all subfactors considered in arriving at the SACP. This involves taking a holistic review of a company's stand-alone credit risk profile, in which we evaluate an issuer's credit characteristics in aggregate. A positive assessment leads to a one-notch upgrade, a negative assessment leads to a one-notch downgrade, and a neutral assessment indicates no change to the anchor.

188. The application of comparable ratings analysis reflects the need to "fine-tune" ratings outcomes, even after the use of each of the other modifiers. A positive or negative assessment is therefore likely to be common rather than exceptional.

189. We consider our assessments of each of the underlying subfactors to be points within a possible range. Consequently, each of these assessments that ultimately generate the SACP can be at the upper or lower end, or at the mid-point, of such a range:

- A company receives a positive assessment if we believe, in aggregate, its relative ranking across the subfactors typically to be at the higher end of the range;
- A company receives a negative assessment if we believe, in aggregate, its relative ranking across the subfactors typically to be at the lower end of the range;
- A company receives a neutral assessment if we believe, in aggregate, its relative ranking across the subfactors typically to be in line with the middle of the range.

190. The most direct application of the comparable ratings analysis is in the following circumstances:

- Business risk assessment. If we expect a company to sustain a position at the higher or lower end of the ranges for the business risk category assessment, the company could receive a positive or negative assessment, respectively.
- Financial risk assessment and financial metrics. If a company's actual and forecasted metrics are just above (or just below) the financial risk profile range, as indicated in its cash flow/leverage assessment, we could assign a positive or negative assessment.

191. We also consider additional factors not already covered, or existing factors not fully captured, in arriving at the SACP. Such factors will generally reflect less frequently observed credit characteristics, may be unique, or may reflect unpredictability or uncertain risk attributes, both positive and negative.

192. Some examples that we typically expect could lead to a positive or negative assessment using comparable ratings analysis include:

- Short operating track record. For newly formed companies or companies that have experienced transformational events, such as a significant acquisition, a lack of an established track record of operating and financial performance could lead to a negative assessment until such a track record is established.
- Entities in transition. A company in the midst of changes that we anticipate will strengthen or weaken its creditworthiness and that are not already fully captured elsewhere in the criteria could receive a positive or negative assessment. Such a transition could occur following major divestitures or acquisitions, or during a significant overhaul of its strategy, business, or financial structure.
- Industry or macroeconomic trends. When industry or macroeconomic trends indicate a strengthening or weakening of the company's financial condition that is not already fully captured elsewhere in the criteria, the company could receive a positive or negative assessment, respectively.
- Unusual funding structures. A company with exceptional financial resources that the criteria do not capture in the traditional ratio or liquidity analysis, or in capital structure analysis, could receive a positive assessment.
- Contingent risk exposures. How well (or not) a company identifies, manages, and reserves for contingent risk exposures that can arise if guarantees are called, derivative contract break clauses are activated, or substantial lawsuits are lost could lead to a negative assessment.

SUPERSEDED CRITERIA FOR ISSUERS WITHIN THE SCOPE OF THESE CRITERIA

- Companies Owned By Financial Sponsors: Rating Methodology, March 21, 2013
- Methodology: Business Risk/Financial Risk Matrix Expanded, Sept. 18, 2012
- How Stock Prices Can Affect An Issuer's Credit Rating, Sept. 26, 2008
- 2008 Corporate Criteria: Analytical Methodology, April 15, 2008
- Credit FAQ: Knowing The Investors In A Company's Debt And Equity, April 4, 2006

RELATED CRITERIA

- Methodology: Industry Risk, Nov. 19, 2013
- Corporate Criteria: Ratios And Adjustments, Nov. 19, 2013
- Country Risk Assessment Methodology And Assumptions, Nov. 19, 2013
- Ratings Above The Sovereign--Corporate And Government Ratings: Methodology And Assumptions, Nov. 19, 2013
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- Methodology: Management And Governance Credit Factors For Corporate Entities And Insurers, Nov. 13, 2012
- Criteria For Assigning 'CCC+', 'CCC', 'CCC-', And 'CC' Ratings, Oct. 1, 2012
- Principles Of Credit Ratings, published Feb. 16, 2011
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- Criteria Guidelines For Recovery Ratings On Global Industrial Issuers' Speculative-Grade Debt, Aug. 10, 2009
- 2008 Corporate Criteria: Rating Each Issue, April 15, 2008

APPENDIXES

A. Country Risk

Table 26

Country And Regional Risk

Region
Western Europe
Southern Europe
Western + Southern Europe
East Europe
Central Europe
Eastern Europe and Central Asia
Middle East
Africa
North America
Central America
Latin America
The Caribbean
Asia-Pacific
Central Asia
East Asia
Australia NZ

Country	Region	GDP weighting (%)
South Africa	Africa	30.2
Egypt	Africa	28.0
Nigeria	Africa	23.5
Morocco	Africa	8.9

Table 26

Country And Regional Risk (cont.)		
Tunisia	Africa	5.4
Senegal	Africa	1.4
Mozambique	Africa	1.4
Zambia	Africa	1.2
Indonesia	Asia-Pacific	27.1
Taiwan	Asia-Pacific	20.1
Thailand	Asia-Pacific	14.4
Malaysia	Asia-Pacific	11.0
Philippines	Asia-Pacific	9.5
Vietnam	Asia-Pacific	7.1
Bangladesh	Asia-Pacific	6.8
Sri Lanka	Asia-Pacific	2.8
Laos	Asia-Pacific	0.4
Papua New Guinea	Asia-Pacific	0.4
Mongolia	Asia-Pacific	0.3
Australia	Australia NZ	88.2
New Zealand	Australia NZ	11.8
Guatemala	Central America	40.5
Costa Rica	Central America	30.2
Panama	Central America	29.3
India	Central Asia	86.5
Pakistan	Central Asia	9.3
Kazakhstan	Central Asia	4.2
Poland	Central Europe	46.3
Czech Republic	Central Europe	16.6
Hungary	Central Europe	11.3
Slovakia	Central Europe	7.7
Bulgaria	Central Europe	6.0
Croatia	Central Europe	4.6
Lithuania	Central Europe	3.8
Latvia	Central Europe	2.1
Estonia	Central Europe	1.6
China	East Asia	64.5
Japan	East Asia	23.6
Korea	East Asia	8.4
Hong Kong	East Asia	1.9
Singapore	East Asia	1.7
Greece	East Europe	77.5
Slovenia	East Europe	16.0
Cyprus	East Europe	6.5
Russia	Eastern Europe and Central Asia	80.4

Azerbaijan	Eastern Europe and Central Asia	3.2
Georgia	Eastern Europe and Central Asia	0.9
Brazil	Latin America	35.3
Mexico	Latin America	26.3
Argentina	Latin America	11.1
Colombia	Latin America	7.5
Venezuela	Latin America	6.0
Peru	Latin America	4.9
Chile	Latin America	4.8
Ecuador	Latin America	2.0
Uruguay	Latin America	0.8
El Salvador	Latin America	0.7
Paraguay	Latin America	0.6
Belize	Latin America	0.0
Turkey	Middle East	42.8
Saudi Arabia	Middle East	28.2
Israel	Middle East	9.4
Qatar	Middle East	7.2
Kuwait	Middle East	6.3
Oman	Middle East	3.4
Jordan	Middle East	1.5
Bahrain	Middle East	1.2
United States	North America	91.5
Canada	North America	8.5
Italy	Southern Europe	52.6
Spain	Southern Europe	40.4
Portugal	Southern Europe	7.0
Dominican Republic	The Caribbean	75.4
Jamaica	The Caribbean	19.2
Barbados	The Caribbean	5.4
Germany	Western Europe	28.7
United Kingdom	Western Europe	21.3
France	Western Europe	20.7
Netherlands	Western Europe	6.5
Belgium	Western Europe	3.9
Sweden	Western Europe	3.6
Switzerland	Western Europe	3.3
Austria	Western Europe	3.3
Norway	Western Europe	2.6
Denmark	Western Europe	1.9
Finland	Western Europe	1.8

Table 26

Country And Regional Risk (cont.)		
Ireland	Western Europe	1.8
Luxembourg	Western Europe	0.4
Iceland	Western Europe	0.1
Malta	Western Europe	0.1

B. Competitive Position

Table 27

List Of Industries, Subsectors, And Standard Competitive Position Group Profiles

Industry	Subsector	Competitive position group profile
Transportation cyclical	Airlines	Capital or asset focus
	Marine	Capital or asset focus
	Trucking	Capital or asset focus
Auto OEM	Automobile and truck manufacturers	Capital or asset focus
Metals and mining downstream	Aluminum	Commodity focus/cost driven
	Steel	Commodity focus/cost driven
Metals and mining upstream	Coal and consumable fuels	Commodity focus/cost driven
	Diversified metals and mining	Commodity focus/cost driven
	Gold	Commodity focus/cost driven
	Precious metals and minerals	Commodity focus/cost driven
Homebuilders and developers	Homebuilding	Capital or asset focus
Oil and gas refining and marketing	Oil and gas refining and marketing	Commodity focus/scale driven
Forest and paper products	Forest products	Commodity focus/cost driven
	Paper products	Commodity focus/cost driven
Building Materials	Construction materials	Capital or asset focus
Oil and gas integrated, exploration and production	Integrated oil and gas	Commodity focus/scale driven
	Oil and gas exploration and production	Commodity focus/scale driven
Agribusiness and commodity foods	Agricultural products	Commodity focus/scale driven
Real estate investment trusts (REITs)	Diversified REITs	Real-estate specific*
	Health care REITS	Real-estate specific*
	Industrial REITs	Real-estate specific*
	Office REITs	Real-estate specific*
	Residential REITs	Real-estate specific*
	Retail REITs	Real-estate specific*
	Specialized REITs	Not appplicable**
	Self-storage REITs	Real-estate specific*
	Net lease REITs	Real-estate specific*
	Real estate operating companies	Real-estate specific*
Leisure and sports	Casinos and gaming	Services and product focus
	Hotels, resorts, and cruise lines	Services and product focus

	Leisure facilities	Services and product focus
Commodity chemicals	Commodity chemicals	Commodity focus/cost driven
	Diversified chemicals	Commodity focus/cost driven
	Fertilizers and agricultural chemicals	Commodity focus/cost driven
Auto suppliers	Auto parts and equipment	Capital or asset focus
	Tires and rubber	Capital or asset focus
	Vehicle-related suppliers	Capital or asset focus
Aerospace and defense	Aerospace and defense	Services and product focus
Technology hardware and semiconductors	Communications equipment	Capital or asset focus
	Computer hardware	Capital or asset focus
	Computer storage and peripherals	Capital or asset focus
	Consumer electronics	Capital or asset focus
	Electronic equipment and instruments	Capital or asset focus
	Electronic components	Capital or asset focus
	Electronic manufacturing services	Capital or asset focus
	Technology distributors	Capital or asset focus
	Office electronics	Capital or asset focus
	Semiconductor equipment	Capital or asset focus
	Semiconductors	Capital or asset focus
Specialty Chemicals	Industrial gases	Capital or asset focus
	Specialty chemicals	Capital or asset focus
Capital Goods	Electrical components and equipment	Capital or asset focus
	Heavy equipment and machinery	Capital or asset focus
	Industrial componentry and consumables	Capital or asset focus
	Construction equipment rental	Capital or asset focus
	Industrial distributors	Services and product focus
Engineering and construction	Construction and engineering	Services and product focus
Railroads and package express	Railroads	Capital or asset focus
	Package express	Services and product focus
	Logistics	Services and product focus
Business and consumer services	Consumer services	Services and product focus
	Distributors	Services and product focus
	Facilities services	Services and product focus
	General support services	Services and product focus
	Professional services	Services and product focus
Midstream energy	Oil and gas storage and transportation	Commodity focus/scale driven
Technology software and services	Internet software and services	Services and product focus
	IT consulting and other services	Services and product focus
	Data processing and outsourced services	Services and product focus
	Application software	Services and product focus
	Systems software	Services and product focus
	Consumer software	Services and product focus

Consumer durables	Home furnishings	Services and product focus
	Household appliances	Services and product focus
	Housewares and specialties	Services and product focus
	Leisure products	Services and product focus
	Photographic products	Services and product focus
	Small appliances	Services and product focus
Containers and packaging	Metal and glass containers	Capital or asset focus
	Paper packaging	Capital or asset focus
Media and entertainment	Ad agencies and marketing services companies	Services and product focus
	Ad-supported internet content platforms	Services and product focus
	Broadcast TV networks	Services and product focus
	Cable TV networks	Services and product focus
	Consumer and trade magazines	Services and product focus
	Data/professional publishing	Services and product focus
	Directories	Services and product focus
	E-Commerce (services)	Services and product focus
	Educational publishing	Services and product focus
	Film and TV programming production	Capital or asset focus
	Miscellaneous media and entertainment	Services and product focus
	Motion picture exhibitors	Services and product focus
	Music publishing	Services and product focus
	Music recording	Services and product focus
	Newspapers	Services and product focus
	Outdoor advertising	Services and product focus
	Printing	Commodity focus/scale driven
	Radio broadcasters	Services and product focus
	Trade shows	Services and product focus
	TV stations	Services and product focus
Oil and gas drilling, equipment and services	Onshore contract drilling	Commodity focus/scale driven
	Offshore contract drilling	Capital or Asset Focus
	Oil and gas equipment and services (oilfield services)	Commodity focus/scale driven
Retail and restaurants	Catalog retail	Services and product focus
	Internet retail	Services and product focus
	Department stores	Services and product focus
	General merchandise stores	Services and product focus
	Apparel retail	Services and product focus
	Computer and electronics retail	Services and product focus
	Home improvement retail	Services and product focus
	Specialty stores	Services and product focus
	Automotive retail	Services and product focus
	Home furnishing retail	Services and product focus

Health care services	Health care services	Commodity focus/scale driven
Transportation infrastructure	Airport services	National industries and utilities
	Highways	National industries and utilities
	Railtracks	National industries and utilities
	Marine ports and services	National industries and utilities
Environmental services	Environmental and facilities services	Services and product focus
Regulated utilities	Electric utilities	National industries and utilities
	Gas utilities	National industries and utilities
	Multi-utilities	National industries and utilities
	Water utilities	National industries and utilities
Unregulated power and gas	Independent power producers and energy traders	Capital or asset focus
	Merchant power	Capital or asset focus
Pharmaceuticals	Branded pharmaceuticals	Services and product focus
	Generic pharmaceuticals	Commodity focus/scale driven
Health care equipment	High-tech health care equipment	Product focus/scale driven
	Low-tech health care equipment	Commodity focus/scale driven
Branded nondurables	Brewers	Services and product focus
	Distillers and vintners	Services and product focus
	Soft drinks	Services and product focus
	Packaged foods and meats	Services and product focus
	Tobacco	Services and product focus
	Household products	Services and product focus
	Apparel, footwear, accessories, and luxury goods	Services and product focus
	Personal products	Services and product focus
Telecommunications and cable	Cable and satellite	Services and product focus
	Alternative carriers	Services and product focus
	Integrated telecommunication services	Services and product focus
	Wireless towers	Capital or asset focus
	Data center operators	Capital or asset focus
	Fiber-optic carriers	Capital or asset focus
	Wireless telecommunication services	Services and product focus

*See "Key Credit Factors For The Real Estate Industry," published Nov. 19, 2013. **For specialized REITs, there is no standard CPGP, as the CPGP will vary based on the underlying industry exposure (e.g. a forest and paper products REIT).

1. Analyzing subfactors for competitive advantage

193. Competitive advantage is the first component of our competitive position analysis. Companies that possess a sustainable competitive advantage are able to capitalize on key industry factors or mitigate associated risks more effectively. When a company operates in more than one business, we analyze each segment separately to form an overall view of its competitive advantage. In assessing competitive advantage, we evaluate the following subfactors:

- Strategy;
- Differentiation/uniqueness, product positioning/bundling;

- Brand reputation and marketing;
- Product/service quality;
- Barriers to entry, switching costs;
- Technological advantage and capabilities, technological displacement; and
- Asset profile.

a) Strategy

194. A company's business strategy will enhance or undermine its market entrenchment and business stability. Compelling business strategies can create a durable competitive advantage and thus a relatively stronger competitive position. We form an opinion as to the source and sustainability (if any) of the company's competitive advantage relative to its peers'. The company may have a differentiation advantage (i.e., brand, technology, regulatory) or a cost advantage (i.e., lower cost producer/servicer at the same quality level), or a combination.

195. Our assessment of a company's strategy is informed by a company's historical performance and how realistic we view its forward-looking business objectives to be. These may include targets for market shares, the percentage of revenues derived from new products, price versus the competition's, sales or profit growth, and required investment levels. We evaluate these objectives in the context of industry dynamics and the attractiveness of the markets in which the company participates.

b) Differentiation/uniqueness, product positioning/bundling

196. The attributes of product or service differentiation vary by sector, and may include product or services features, performance, durability, reliability, delivery, and comprehensiveness, among other measures. The intensity of competition may be lower where buyers perceive the product or service to be highly differentiated or to have few substitutes. Conversely, products and services that lack differentiation, or offer little value-added in the eyes of customers, are generally commodity-type products that primarily compete on price. Competition intensity will often be highest where limited or moderate investment (R&D, capital expenditures, or advertising) or low employee skill levels (for service businesses) are required to compete. Independent market surveys, media commentaries, market share trends, and evidence of leading or lagging when it comes to raising or lowering prices can indicate varying degrees of product differentiation.

197. Product positioning influences how companies are able to extend or protect market shares by offering popular products or services. A company's abilities to replace aging products with new ones, or to launch product extensions, are important elements of product positioning. In addition, the ability to sell multiple products or services to the same customer, known as bundling or cross-selling, (for instance, offering an aftermarket servicing contract together with the sale of a new appliance) can create a competitive advantage by increasing customers' switching costs and fostering loyalty.

c) Brand reputation and marketing

198. Brand equity measures the price premium a company receives based on its brand relative to the generic equivalent. High brand equity typically translates into customer loyalty, built partially via marketing campaigns. One measure of advertising effectiveness can be revenue growth compared with the increase in advertising expenses.

199. We also analyze re-investment and advertising strategies to anticipate potential strengthening or weakening of a

company's brand. A company's track record of boosting market share and delivering attractive margins could indicate its ability to build and maintain brand reputation.

d) Product/service level quality

200. The strength and consistency of a value proposition is an important factor contributing to a sustainable competitive advantage. Value proposition encompasses the key features of a product or a service that convince customers that their purchase has the right balance between price and quality. Customers generally perceive a product or a service to be good if their expectations are consistently met. Quality, both actual and perceived, can help a company attract and retain customers. Conversely, poor product and service quality may lead to product recalls, higher-than-normal product warnings, or service interruptions, which may reduce demand. Measures of customer satisfaction and retention, such as attrition rates and contract renewal rates, can help trace trends in product/service quality.

201. Maintaining the value proposition requires consistency and adaptability around product design, marketing, and quality-related operating controls. This is pertinent where product differentiation matters, as is the case in most noncommodity industries, and especially so where environmental or human health (concerns for the chemical, food, and pharmaceutical industries) adds a liability dimension to the quality and value proposition. Similarly, regulated utilities (which often do not set their own prices) typically focus on delivering uninterrupted service, often to meet the standards set by their regulator.

e) Barriers to entry, switching costs

202. Barriers to entry can reduce or eliminate the threat of new market entrants. Where they are effective, these barriers can lead to more predictable revenues and profits, by limiting pricing pressures and customer losses, lowering marketing costs, and improving operating efficiency. While barriers to entry may enable premium pricing, a dominant player may rationally choose pricing restraint to further discourage new entrants.

203. Barriers to entry can be one or more of: a natural or regulatory monopoly; supportive regulation; high transportation costs; an embedded customer base that would incur high switching costs; a proprietary product or service; capital or technological intensiveness.

204. A natural monopoly may result from unusually high requirements for capital and operating expenditures that make it uneconomic for a market to support more than a single, dominant provider. The ultimate barrier to entry is found among regulated utilities, which provide an essential service in their 'de juris' monopolies and receive a guaranteed rate of return on their investments. A supportive regulatory regime can include rules and regulations with high hurdles that discourage competitors, or mandate so many obligations for a new entrant as to make market entry financially unviable.

205. In certain industrial sectors, proprietary access to a limited supply of key raw materials or skilled labor, or zoning laws that effectively preclude a new entrant, can provide a strong barrier to entry. Factors such as relationships, long-term contracts or maintenance agreements, or exclusive distribution agreements can result in a high degree of customer stickiness. A proprietary product or service that's protected by a copyright or patent can pose a significant hurdle to new competitors.

f) Technological advantage and capabilities, technological displacement

206. A company may benefit from a proprietary technology that enables it to offer either a superior product or a commodity-type product at a materially lower cost. Proven research and development (R&D) capabilities can deliver a differentiated, superior product or service, as in the pharmaceutical or high tech sectors. However, optimal R&D strategies or the importance or effectiveness of patent protection differ by industry, stage of product development, and product lifecycle.

207. Technological displacement can be a threat in many industries; new technologies or extensions of current ones can effectively displace a significant portion of a company's products or services.

g) Asset profile

208. A company's asset profile is a reflection of its reinvestment, which creates tangible or intangible assets, or both. Companies in similar sectors and industries usually have similar reinvestment options and, thus, their asset profiles tend to be comparable. The reinvestment in "heavy" industries, such as oil and gas, metals and mining, and automotive, tends to produce more tangible assets, whereas the reinvestment in certain "light" industries, such as services, media and entertainment, and retail, tends to produce more intangible assets.

209. We evaluate how a company's asset profile supports or undermines its competitive advantage by reviewing its manufacturing or service creation capabilities and investment requirements, its distribution capabilities, and its track record and commitment to reinvesting in its asset base. This may include a review of the company's ability to attract and retain a talented workforce; its degree of vertical integration and how that may help or hinder its ability to secure supply sources, control the value-added part of its production chain, or adjust to technological developments; or its ability develop a broad and strong distribution network.

2. Analyzing subfactors for scale, scope, and diversity

210. In assessing the relative strength of this component, we evaluate four subfactors:

- Diversity of product or service range;
- Geographic diversity;
- Volumes, size of markets and revenues, and market shares; and
- Maturity of products or services.

211. In a given industry, entities with a broader mix of business activities are typically lower risk, and entities with a narrower mix are higher risk. High concentration of business volumes by product, customer, or geography, or a concentration in the production footprint or supplier base, can lead to less stable and predictable revenues and profits. Comparatively broader diversity helps a company withstand economic, competitive, or technological threats better than its peers.

212. There is no minimum size criterion, although size often provides a measure of diversification. Size and scope of operations is important relative to those of industry peers, though not in absolute terms. While relatively smaller companies can enjoy a high degree of diversification, they will likely be, almost by definition, more concentrated in terms of product, number of customers, or geography than their larger peers in the same industry.

213. Successful and continuing diversification supports a stronger competitive position. Conversely, poor diversification

weakens overall competitive position. For example, a company will weaken its overall business position if it enters new product lines 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.

214. Where applicable, we also include under scale, scope, and diversity an assessment of the potential benefits derived from unconsolidated (or partially consolidated) investments in strategic assets. The relative significance of such an investment and whether it is in an industry that exhibits high or, conversely, low correlation with the issuer's businesses would be considered in determining its potential benefits to scale, scope, and diversity. This excludes nonstrategic, financial investments, the analysis of which does not fall under the competitive position criteria but, instead, under the capital structure criteria.

a) Diversity of product or service range

215. The concentration of business volumes or revenues in a particular or comparatively small set of products or services can lead to less stable revenues and profits. Even if this concentration is in an attractive product or service, it may be a weakness. Likewise, the concentration of business volumes with a particular customer or a small group of customers, or the reliance on one or a few suppliers, can expose the company to a potentially greater risk of losing and having to replace related revenues and profits. On the other hand, successful diversification across products, customers, and/or suppliers can lead to more stable and predictable revenues and profits, which supports a stronger assessment of scale, scope, and diversity.

216. The relative contribution of different products or services to a company's revenues or profits helps us gauge its diversity. We also evaluate the correlation of demand between product or services lines. High correlation in demand between seemingly different product or service lines will accentuate volume declines during a weak part of the business cycle.

217. In most sectors, the share of revenue a company receives from its largest five to 10 customers or counterparties reveals how diversified its customer base is. However, other considerations such as the stability and credit quality of that customer base, and the company's ability to retain significant customers, can be mitigating or accentuating factors in our overall evaluation. Likewise, supplier dependency can often be measured based on a supplier's share of a company's operating or capital costs. However, other factors, such as the degree of interdependence between the company and its supplier(s), the substitutability of key supply sources, and the company's presumed ability to secure alternative supply without incurring substantial switching costs, are important considerations. Low switching costs (i.e. limited impact on input price, quality, or delivery times as a result of having to adapt to a new supply chain partner) can mitigate a high level of concentration.

b) Geographic diversity

218. We assess geographic diversity both from the standpoint of the breadth of the company's served or addressable markets, and from the standpoint of how geographically concentrated its facilities are.

219. The concentration of business volumes and revenues within a particular region can lead to greater exposure to economic factors affecting demand for a company's goods or services in that region. Even if the company's volumes and revenues are concentrated in an attractive region, it may still be vulnerable to a significant drop in demand for its

goods and services. Conversely, a company that serves multiple regions may benefit from different demand conditions in each, possibly resulting in greater revenue stability and more consistent profitability than a more focused peer's. That said, we consider geographic diversification in the context of the industry and the size of the local or regional economy. For instance, companies operating in local industries (such as food retailers) may benefit from a well-entrenched local position.

220. Generally, though, geographically concentrated production or service operations can expose a company to the risk of disruption, and damage revenues and profitability. Even when country risks don't appear significant, a company's vulnerability to exogenous factors (for example, natural disasters, labor or political unrest) increases with geographic concentration.

c) Volumes, size of markets and revenues, market share

221. Absolute sales or unit volumes and market share do not, by themselves, support a strong assessment of scale, scope, and diversity. Yet superior market share is a positive, since it may indicate a broad range of operations, products, or services.

222. We view volume stability (relative to peers') as a positive especially when: a company has demonstrated it during an economic downturn; if it has been achieved without relying on greater price concessions than competitors have made; and when it is likely to be sustained in the future. However, volume stability combined with shrinking market share could be evidence of a company's diminishing prospects for future profitability. We assess the predictability of business volumes and the likely degree of future volume stability by analyzing the company's performance relative to peers' on several industry factors: cyclicality; ability to adapt to technological and regulatory threats; the profile of the customer base (stickiness); and the potential life cycle of the company's products or services.

223. Depending on the industry sector, we measure a company's relative size and market share based on unit sales; the absolute amount of revenues; and the percentage of revenues captured from total industry revenues. We also adjust for industry and company specific qualitative considerations. For example, if an industry is particularly fragmented and has a number of similarly sized participants, none may have a particular advantage or disadvantage with respect to market share.

d) Maturity of products or services

224. The degree of maturity and the relative position on the lifecycle curve of the company's product or service portfolio affect the stability and sustainability of its revenues and margins. It is important to identify the stage of development of a company's products or services in order to measure the life cycle risks that may be associated with key products or services.

225. Mature products or services (e.g. consumer products or broadcast programming) are not necessarily a negative, in our view, if they still contribute reliable profits. If demand is declining for a company's product or service, we examine its track record on introducing new products with staying power. Similarly, a company's track record with product launches is particularly relevant.

3. Analyzing subfactors for operating efficiency

226. In assessing the relative strength of this component, we consider four subfactors:

- Cost structure,
- Manufacturing processes,
- Working capital management, and
- Technology.

227. To the extent a company has high operating efficiency, it should be able to generate better profit margins than peers that compete in the same markets, whatever the prevailing market conditions. The ability to minimize manufacturing and other operational costs and thus maximize margins and cash flow--for example, through manufacturing excellence, cost control, and diligent working capital management--will provide the funds for research and development, marketing, and customer service.

a) Cost structure

228. Companies that are well positioned from a cost standpoint will typically enjoy higher capacity utilization and be more profitable over the course of the business cycle. Cost structure and cost control are keys to generating strong profits and cash flow, particularly for companies that produce commodities, operate in mature industries, or face pricing pressures. It is important to consider whether a company or any of its competitors has a sustainable cost advantage, which can be based on access to cheaper energy, favorable manufacturing locations, or lower and more flexible labor costs, for example.

229. Where information is available, we examine a company's fixed versus variable cost mix as an indication of operating leverage, a measure of how revenue growth translates into growth in operating income. A company with significant operating leverage may witness dramatic declines in operating profit if unit volumes fall, as during cyclical downturns. Conversely, in an upturn, once revenues pass the breakeven point, a substantial percentage of incremental revenues typically becomes profit.

b) Manufacturing process

230. Capital intensity characterizes many heavy manufacturing sectors that require minimum volumes to produce acceptable profits, cash flow, and return on assets. We view capacity utilization through the business cycle (combined with the cost base) as a good indication of manufacturers' ability to maintain profits in varying economic scenarios. Our capacity utilization assessment is based on a company's production capacity across its manufacturing footprint. In addition, we consider the direction of a company's capacity utilization in light of our unit sales expectations, as opposed to analyzing it plant-by-plant.

231. Labor relations remain an important focus in our analysis of operating efficiency for manufacturers. Often, a company's labor cost structure is driven by its history of contractual negotiations and the countries in which it operates. We examine the rigidity or flexibility of a company's labor costs and the extent to which it relies on labor rather than automation. We analyze labor cost structure by assessing the extent of union representation, wage and benefit costs as a share of cost of goods sold (when available), and by assessing the balance of capital equipment vs. labor input in the manufacturing process. We also incorporate trends in a company's efforts to transfer labor costs from high-cost to low-cost regions.

c) Working capital management

232. Working capital management--of current or short-term assets and liabilities--is a key factor in our evaluation of operating efficiency. In general, companies with solid working capital management skills exhibit shorter cash conversion cycles (defined as days' investment in inventory and receivables less days' investment in accounts payable) than their lower-skilled peers. Short cash-conversion cycles could, for instance, demonstrate that a company has a stronger position in the supply chain (for example, requiring suppliers or dealers to hold more of its inventory). This allows a company to direct more capital than its peers can to other areas of investment.

d) Technology

233. Technology can play an important role in achieving superior operating efficiency through effective yield management (by improving input/output ratios), supply chain automation, and cost optimization.

234. Achieving high yield management is particularly important in industries with limited inventory and high fixed costs, such as transportation, lodging, media, and retail. The most efficient airlines can achieve higher revenue per available seat mile than their peers, while the most efficient lodging companies can achieve a higher revenue per available room than their peers. Both industries rely heavily on technology to effectively allocate inventory (seats and rooms) to maximize sales and profitability.

235. Effective supply chain automation systems enable companies to reduce investments in inventory and better forecast future orders based on current trends. By enabling electronic data interchange between supplier and retailer, such systems help speed orders and reorders for goods by quickly pinpointing which merchandise is selling well and needs restocking. They also identify slow moving inventory that needs to be marked down, making space available for fresh merchandise.

236. Effective use of technology can also help hold down costs by improving productivity via automation and workflow management. This can reduce selling, general, and administrative costs, which usually represent a substantial portion of expenditures for industries with high fixed costs, thus boosting earnings.

4. Industry-specific SER parameters

Table 28

SER Calibration By Industry Based On EBITDA

	--Volatility of profitability assessment*--					
	1	2	3	4	5	6
Transportation cyclical	=<10%	>10%-14%	>14%-22%	>22%-33%	>33%-76%	>76%
Auto OEM	=<25%	>25%-33%	>33%-35%	>35%-40%	>40%-46%	>46%
Metals and mining downstream	=<16%	>16%-31%	>31%-42%	>42%-53%	>53%-82%	>82%
Metals and mining upstream	=<16%	>16%-23%	>23%-28%	>28%-34%	>34%-59%	>59%
Homebuilders and developers	=<19%	>19%-33%	>33%-46%	>46%-65%	>65%-95%	>95%
Oil and gas refining and marketing	=<14%	>14%-21%	>21%-35%	>35%-46%	>46%-82%	>82%
Forest and paper products	=<9%	>9%-18%	>18%-26%	>26%-51%	>51%-114%	>114%
Building materials	=<9%	>9%-16%	>16%-19%	>19%-24%	>24%-33%	>33%
Oil and gas integrated, exploration and production	=<12%	>12%-19%	>19%-22%	>22%-28%	>28%-38%	>38%
Agribusiness and commodity foods	=<12%	>12%-19%	>19%-25%	>25%-39%	>39%-57%	>57%

Table 28

SER Calibration By Industry Based On EBITDA (cont.)						
Real estate investment trusts (REITs)	=<5%	>5%-9%	>9%-13%	>13%-20%	>20%-32%	>32%
Leisure and sports	=<5%	>5%-9%	>9%-12%	>12%-16%	>16%-24%	>24%
Commodity chemicals	=<14%	>14%-19%	>19%-28%	>28%-37%	>37%-51%	>51%
Auto suppliers	=<15%	>15%-20%	>20%-26%	>26%-32%	>32%-45%	>45%
Aerospace and defense	=<6%	>6%-9%	>9%-15%	>15%-24%	>24%-41%	>41%
Technology hardware and semiconductors	=<11%	>11%-15%	>15%-22%	>22%-31%	>31%-58%	>58%
Specialty chemicals	=<5%	>5%-10%	>10%-14%	>14%-23%	>23%-36%	>36%
Capital goods	=<12%	>12%-16%	>16%-21%	>21%-30%	>30%-45%	>45%
Engineering and construction	=<9%	>9%-14%	>14%-20%	>20%-28%	>28%-39%	>39%
Railroads and package express	=<5%	>5%-8%	>8%-10%	>10%-13%	>13%-22%	>22%
Business and consumer services	=<4%	>4%-8%	>8%-11%	>11%-16%	>16%-30%	>30%
Midstream energy	=<5%	>5%-9%	>9%-11%	>11%-15%	>15%-31%	>31%
Technology software and services	=<4%	>4%-9%	>9%-14%	>14%-19%	>19%-33%	>33%
Consumer durables	=<7%	>7%-10%	>10%-13%	>13%-19%	>19%-35%	>35%
Containers and packaging	=<5%	>5%-7%	>7%-12%	>12%-18%	>18%-26%	>26%
Media and entertainment	=<6%	>6%-10%	>10%-14%	>14%-20%	>20%-29%	>29%
Oil and gas drilling, equipment and services	=<16%	>16%-22%	>22%-28%	>28%-44%	>44%-62%	>62%
Retail and restaurants	=<4%	>4%-8%	>8%-11%	>11%-16%	>16%-26%	>26%
Health care services	=<4%	>4%-5%	>5%-9%	>9%-12%	>12%-19%	>19%
Transportation infrastructure	=<2%	>2%-4%	>4%-7%	>7%-12%	>12%-19%	>19%
Environmental services	=<5%	>5%-9%	>9%-13%	>13%-22%	>22%-29%	>29%
Regulated utilities	=<4%	>4%-7%	>7%-9%	>9%-14%	>14%-26%	>26%
Unregulated power and gas	=<7%	>7%-16%	>16%-20%	>20%-29%	>29%-47%	>47%
Pharmaceuticals	=<5%	>5%-8%	>8%-11%	>11%-17%	>17%-32%	>32%
Health care equipment	=<3%	>3%-5%	>5%-6%	>6%-10%	>10%-25%	>25%
Branded nondurables	=<4%	>4%-7%	>7%-10%	>10%-15%	>15%-43%	>43%
Telecommunications and cable	=<3%	>3%-6%	>6%-9%	>9%-13%	>13%-23%	>23%
Overall	=<5%	>5%-9%	>9%-15%	>15%-23%	>23%-43%	>43%

*The data ranges include the values up to and including the upper bound. As an example, for a range of 5%-9%, a value of 5% is excluded, while a value of 9% is included; the numbers are rounded to the nearest whole number for presentation purposes.

Table 29

SER Calibration By Industry Based On EBITDA Margin						
	--Volatility of profitability assessment*--					
	1	2	3	4	5	6
Transportation cyclical	=<4%	>4%-8%	>8%-16%	>16%-28%	>28%-69%	>69%
Auto OEM	=<15%	>15%-19%	>19%-29%	>29%-31%	>31%-45%	>45%
Metals and mining downstream	=<10%	>10%-18%	>18%-26%	>26%-36%	>36%-56%	>56%
Metals and mining upstream	=<8%	>8%-10%	>10%-14%	>14%-19%	>19%-31%	>31%
Homebuilders and developers	=<10%	>10%-18%	>18%-30%	>30%-56%	>56%-114%	>114%
Oil and gas refining and marketing	=<12%	>12%-22%	>22%-28%	>28%-42%	>42%-71%	>71%
Forest and paper products	=<8%	>8%-13%	>13%-21%	>21%-41%	>41%-117%	>117%
Building materials	=<4%	>4%-8%	>8%-13%	>13%-18%	>18%-23%	>23%

Oil and gas integrated, exploration and production	=<4%	>4%-6%	>6%-8%	>8%-13%	>13%-22%	>22%
Agribusiness and commodity foods	=<9%	>9%-14%	>14%-18%	>18%-27%	>27%-100%	>100%
Real estate investment trusts (REITs)	=<2%	>2%-5%	>5%-8%	>8%-13%	>13%-34%	>34%
Leisure and sports	=<3%	>3%-5%	>5%-6%	>6%-9%	>9%-18%	>18%
Commodity chemicals	=<9%	>9%-14%	>14%-18%	>18%-25%	>25%-37%	>37%
Auto suppliers	=<9%	>9%-13%	>13%-18%	>18%-23%	>23%-40%	>40%
Aerospace and defense	=<3%	>3%-6%	>6%-7%	>7%-12%	>12%-24%	>24%
Technology hardware and semiconductors	=<7%	>7%-10%	>10%-15%	>15%-21%	>21%-62%	>62%
Specialty chemicals	=<3%	>3%-6%	>6%-10%	>10%-19%	>19%-28%	>28%
Capital goods	=<6%	>6%-9%	>9%-13%	>13%-20%	>20%-33%	>33%
Engineering and construction	=<6%	>6%-8%	>8%-12%	>12%-17%	>17%-26%	>26%
Railroads and package express	=<2%	>2%-6%	>6%-8%	>8%-10%	>10%-17%	>17%
Business and consumer services	=<3%	>3%-5%	>5%-7%	>7%-12%	>12%-22%	>22%
Midstream energy	=<3%	>3%-6%	>6%-9%	>9%-14%	>14%-28%	>28%
Technology software and services	=<3%	>3%-6%	>6%-10%	>10%-15%	>15%-30%	>30%
Consumer durables	=<4%	>4%-8%	>8%-11%	>11%-15%	>15%-26%	>26%
Containers and packaging	=<5%	>5%-7%	>7%-9%	>9%-15%	>15%-22%	>22%
Media and entertainment	=<4%	>4%-6%	>6%-9%	>9%-14%	>14%-24%	>24%
Oil and gas drilling, equipment and services	=<6%	>6%-12%	>12%-16%	>16%-22%	>22%-32%	>32%
Retail and restaurants	=<3%	>3%-5%	>5%-7%	>7%-12%	>12%-21%	>21%
Health care services	=<3%	>3%-5%	>5%-6%	>6%-8%	>8%-15%	>15%
Transportation infrastructure	=<1%	>1%-3%	>3%-5%	>5%-7%	>7%-15%	>15%
Environmental services	=<3%	>3%-4%	>4%-6%	>6%-10%	>10%-24%	>24%
Regulated utilities	=<4%	>4%-7%	>7%-9%	>9%-14%	>14%-24%	>24%
Unregulated power and gas	=<6%	>6%-10%	>10%-15%	>15%-23%	>23%-41%	>41%
Pharmaceuticals	=<4%	>4%-5%	>5%-7%	>7%-10%	>10%-21%	>21%
Health care equipment	=<2%	>2%-4%	>4%-5%	>5%-10%	>10%-16%	>16%
Branded nondurables	=<3%	>3%-6%	>6%-9%	>9%-13%	>13%-28%	>28%
Telecommunications and cable	=<2%	>2%-4%	>4%-5%	>5%-7%	>7%-13%	>13%
Overall	=<3%	>3%-6%	>6%-10%	>10%-16%	>16%-32%	>32%

*The data ranges include the values up to and including the upper bound. As an example, for a range of 5%-9%, a value of 5% is excluded, while a value of 9% is included; the numbers are rounded to the nearest whole number for presentation purposes.

Table 30

SER Calibration By Industry Based On Return On Capital

	--Volatility of profitability assessment*--					
	1	**2**	**3**	**4**	**5**	**6**
Transportation cyclical	=<14%	>14%-28%	>28%-39%	>39%-53%	>53%-156%	>156%
Auto OEM	=<42%	>42%-64%	>64%-74%	>74%-86%	>86%-180%	>180%
Metals and mining downstream	=<25%	>25%-32%	>32%-43%	>43%-53%	>53%-92%	>92%
Metals and mining upstream	=<22%	>22%-30%	>30%-38%	>38%-45%	>45%-93%	>93%
Homebuilders and developers	=<12%	>12%-31%	>31%-50%	>50%-70%	>70%-88%	>88%

Table 30

SER Calibration By Industry Based On Return On Capital (cont.)						
Oil and gas refining and marketing	=<14%	>14%-30%	>30%-48%	>48%-67%	>67%-136%	>136%
Forest and paper products	=<10%	>10%-22%	>22%-40%	>40%-89%	>89%-304%	>304%
Building materials	=<13%	>13%-20%	>20%-26%	>26%-36%	>36%-62%	>62%
Oil and gas integrated, exploration and production	=<16%	>16%-22%	>22%-31%	>31%-43%	>43%-89%	>89%
Agribusiness and commodity foods	=<12%	>12%-15%	>15%-29%	>29%-55%	>55%-111%	>111%
Real estate investment trusts (REITs)	=<8%	>8%-14%	>14%-20%	>20%-26%	>26%-116%	>116%
Leisure and sports	=<11%	>11%-17%	>17%-26%	>26%-34%	>34%-64%	>64%
Commodity chemicals	=<19%	>19%-28%	>28%-41%	>41%-50%	>50%-73%	>73%
Auto suppliers	=<20%	>20%-39%	>39%-50%	>50%-67%	>67%-111%	>111%
Aerospace and defense	=<7%	>7%-13%	>13%-19%	>19%-27%	>27%-61%	>61%
Technology hardware and semiconductors	=<8%	>8%-21%	>21%-34%	>34%-49%	>49%-113%	>113%
Specialty chemicals	=<5%	>5%-18%	>18%-28%	>28%-43%	>43%-64%	>64%
Capital goods	=<15%	>15%-24%	>24%-31%	>31%-45%	>45%-121%	>121%
Engineering and construction	=<12%	>12%-21%	>21%-23%	>23%-33%	>33%-54%	>54%
Railroads and package express	=<3%	>3%-11%	>11%-17%	>17%-20%	>20%-27%	>27%
Business and consumer services	=<9%	>9%-17%	>17%-23%	>23%-40%	>40%-87%	>87%
Midstream energy	=<5%	>5%-11%	>11%-17%	>17%-22%	>22%-34%	>34%
Technology software and services	=<8%	>8%-21%	>21%-35%	>35%-65%	>65%-105%	>105%
Consumer durables	=<8%	>8%-13%	>13%-20%	>20%-35%	>35%-60%	>60%
Containers and packaging	=<6%	>6%-14%	>14%-23%	>23%-35%	>35%-52%	>52%
Media and entertainment	=<9%	>9%-17%	>17%-26%	>26%-40%	>40%-86%	>86%
Oil and gas drilling, equipment and services	=<25%	>25%-33%	>33%-45%	>45%-65%	>65%-90%	>90%
Retail and restaurants	=<6%	>6%-14%	>14%-18%	>18%-26%	>26%-69%	>69%
Health care services	=<6%	>6%-10%	>10%-15%	>15%-25%	>25%-44%	>44%
Transportation infrastructure	=<5%	>5%-9%	>9%-12%	>12%-16%	>16%-27%	>27%
Environmental Services	=<7%	>7%-12%	>12%-24%	>24%-35%	>35%-72%	>72%
Regulated utilities	=<6%	>6%-9%	>9%-13%	>13%-20%	>20%-36%	>36%
Unregulated power and gas	=<14%	>14%-19%	>19%-29%	>29%-55%	>55%-117%	>117%
Pharmaceuticals	=<6%	>6%-8%	>8%-15%	>15%-20%	>20%-33%	>33%
Health care equipment	=<4%	>4%-8%	>8%-19%	>19%-31%	>31%-81%	>81%
Branded nondurables	=<6%	>6%-10%	>10%-17%	>17%-29%	>29%-63%	>63%
Telecommunications and cable	=<7%	>7%-13%	>13%-19%	>19%-26%	>26%-60%	>60%
Overall	=<7%	>7%-15%	>15%-23%	>23%-38%	>38%-81%	>81%

*The data ranges include the values up to and including the upper bound. As an example, for a range of 5%-9%, a value of 5% is excluded, while a value of 9% is included; the numbers are rounded to the nearest whole number for presentation purposes.

C. Cash Flow/Leverage Analysis

1. The merits and drawbacks of each cash flow measure

a) EBITDA

237. EBITDA is a widely used, and therefore a highly comparable, indicator of cash flow, although it has significant limitations. Because EBITDA derives from the income statement entries, it can be distorted by the same accounting issues that limit the use of earnings as a basis of cash flow. In addition, interest can be a substantial cash outflow for speculative-grade companies and therefore EBITDA can materially overstate cash flow in some cases. Nevertheless, it serves as a useful and common starting point for cash flow analysis and is useful in ranking the financial strength of different companies.

b) Funds from operations (FFO)

238. FFO is a hybrid cash flow measure that estimates a company's inherent ability to generate recurring cash flow from its operations independent of working capital fluctuations. FFO estimates the cash flow available to the company before working capital, capital spending, and discretionary items such as dividends, acquisitions, etc.

239. Because cash flow from operations tends to be more volatile than FFO, FFO is often used to smooth period-over-period variation in working capital. We consider it a better proxy of recurring cash flow generation because management can more easily manipulate working capital depending on its liquidity or accounting needs. However, we do not generally rely on FFO as a guiding cash flow measure in situations where assessing working capital changes is important to judge a company's cash flow generating ability and general creditworthiness. For example, for working-capital-intensive industries such as retailing, operating cash flow may be a better indicator than FFO of the firm's actual cash generation.

240. FFO is a good measure of cash flow for well-established companies whose long-term viability is relatively certain (i.e., for highly rated companies). For such companies, there can be greater analytical reliance on FFO and its relation to the total debt burden. FFO remains very helpful in the relative ranking of companies. In addition, more established, healthier companies usually have a wider array of financing possibilities to cover potential short-term liquidity needs and to refinance upcoming maturities. For marginal credit situations, the focus shifts more to free operating cash flow--after deducting the various fixed uses such as working capital investment and capital expenditures--as this measure is more directly related to current debt service capability.

c) Cash flow from operations (CFO)

241. The measurement and analysis of CFO forms an important part of our ratings assessment, in particular for companies that operate in working-capital-intensive industries or industries in which working capital flows can be volatile. CFO is distinct from FFO as it is a pure measure of cash flow calculated after accounting for the impact on earnings of changes in operating assets and liabilities. CFO is cash flow that is available to finance items such as capital expenditures, repay borrowing, and pay for dividends and share buybacks.

242. In many industries, companies shift their focus to cash flow generation in a downturn. As a result, even though they typically generate less cash from ordinary business activities because of low capacity utilization and relatively low fixed-cost absorption, they may generate cash by reducing inventories and receivables. Therefore, although FFO is likely to be lower in a downturn, the impact on CFO may not be as great. In times of strong growth the opposite will be true, and consistently lower CFO compared to FFO without a corresponding increase in revenue and profitability can indicate an untenable situation.

243. Working capital is a key element of a company's cash flow generation. While there tends to be a need to build up working capital and therefore to consume cash in a growth or expansion phase, changes in working capital can also act as a buffer in case of a downturn. Many companies will sell off inventories and invest a lower amount in raw materials because of weaker business activities, both of which reduce the amount of capital and cash that is tied up in working capital. Therefore, working capital fluctuations can occur both in periods of revenue growth and contraction and analyzing a company's near-term working capital needs is crucial for estimating future cash flow developments.

244. Often, businesses that are capital intensive are not working-capital-intensive: most of the capital commitment is upfront in equipment and machinery, while asset-light businesses may have to invest proportionally more in inventories and receivables. That also affects margins, because capital-intensive businesses tend to have proportionally lower operating expenses (and therefore higher EBITDA margins), while working-capital-intensive businesses usually report lower EBITDA margins. The resulting cash flow volatility can be significant: because all investment is made upfront in a capital-intensive business, there is usually more room to absorb subsequent EBITDA volatility because margins are higher. For example, a capital-intensive company may remain reasonably profitable even if its EBITDA margin declines from 30% to 20%. By contrast, a working-capital-intensive business with a lower EBITDA margin (due to higher operating expenses) of 8% can post a negative EBITDA margin if EBITDA volatility is large.

d) Free operating cash flow (FOCF)

245. By deducting capital expenditures from CFO, we arrive at FOCF, which can be used as a proxy for a company's cash generated from core operations. We may exclude discretionary capital expenditures for capacity growth from the FOCF calculation, but in practice it is often difficult to discriminate between spending for expansion and replacement. And, while companies have some flexibility to manage their capital budgets to weather down cycles, such flexibility is generally temporary and unsustainable in light of intrinsic requirements of the business. For example, companies can be compelled to increase their investment programs because of strong demand growth or technological changes. Regulated entities (for example, telecommunications companies) might also face significant investment requirements related to their concession contracts (the understanding between a company and the host government that specifies the rules under which the company can operate locally).

246. Positive FOCF is a sign of strength and helpful in distinguishing between two companies with the same FFO. In addition, FOCF is helpful in differentiating between the cash flows generated by more and less capital-intensive companies and industries.

247. In highly capital-intensive industries (where maintenance capital expenditure requirements tend to be high) or in other situations in which companies have little flexibility to postpone capital expenditures, measures such as FFO to debt and debt to EBITDA may provide less valuable insight into relative creditworthiness because they fail to capture potentially meaningful capital expenditures. In such cases, a ratio such as FOCF to debt provides greater analytical insight.

248. A company serving a low-growth or declining market may exhibit relatively strong FOCF because of diminishing fixed and working capital needs. Growth companies, in contrast, exhibit thin or even negative FOCF because of the investment needed to support growth. For the low-growth company, credit analysis weighs the positive, strong current cash flow against the danger that this high level of cash flow might not be sustainable. For the high-growth company,

the opposite is true: weighing the negatives of a current cash deficit against prospects of enhanced cash flow once current investments begin yielding cash benefits. In the latter case, if we view the growth investment as temporary and not likely to lead to increased leverage over the long-term, we'll place greater analytical importance on FFO to debt rather than on FOCF to debt. In any event, we also consider the impact of a company's growth environment in our business risk analysis, specifically in a company's industry risk analysis (see section B).

e) Discretionary cash flow (DCF)

249. For corporate issuers primarily rated in the investment-grade universe, DCF to debt can be an important barometer of future cash flow adequacy as it more fully reflects a company's financial policy, including decisions regarding dividend payouts. In addition, share buybacks and potential M&A, both of which can represent very significant uses of cash, are important components in cash flow analysis.

250. The level of dividends depends on a company's financial strategy. Companies with aggressive dividend payout targets might be reluctant to reduce dividends even under some liquidity pressure. In addition, investment-grade companies are less likely to reduce dividend payments following some reversals--although dividends ultimately are discretionary. DCF is the truest reflection of excess cash flow, but it is also the most affected by management decisions and, therefore, does not necessarily reflect the potential cash flow available.

D. Diversification/Portfolio Effect

1. Academic research

251. Academic research recently concluded that, during the global financial crisis of 2007-2009, conglomerates had the advantage over single sector-focused firms because they had better access to the credit markets as a result of their debt co-insurance and used the internal capital markets more efficiently (i.e., their core businesses had stronger cash flows). Debt co-insurance is the view that the joining-together of two or more firms whose earnings streams are less-than-perfectly correlated reduces the risk of default of the merged firms (i.e., the co-insurance effect) and thereby increases the "debt capacity" or "borrowing ability" of the combined enterprise. These financing alternatives became more valuable during the crisis. (Source: "Does Diversification Create Value In The Presence Of External Financing Constraints? Evidence From The 2007-2009 Financial Crisis," Venkat Kuppuswamy and Belen Villalonga, Harvard Business School, Aug. 19, 2011.)

252. In addition, fully diversified, focused companies saw more narrow credit default swap spreads from 2004-2010 vs. less diversified firms. This highlighted that lenders were differentiating for risk and providing these companies with easier and cheaper access to capital. (Source: "The Power of Diversified Companies During Crises," The Boston Consulting Group and Leipzig Graduate School of Management, January 2012.)

253. Many rated conglomerates are either country- or region-specific; only a small percentage are truly global. The difference is important when assessing the country and macroeconomic risk factors. Historical measures for each region, based on volatility and correlation, reflect regional trends that are likely to change over time.

E. Financial Policy

1. Controlling shareholders

254. Controlling shareholder(s)--if they exist--exert significant influence over a company's financial risk profile, given their ability to use their direct or indirect control of the company's financial policies for their own benefit. Although the criteria do not associate the presence of controlling shareholder(s) to any predefined negative or positive impact, we assess the potential medium- to long-term implications for a company's credit standing of these strategies. Long-term ownership--such as exists in many family-run businesses--is often accompanied by financial discipline and reluctance to incur aggressive leverage. Conversely, short-term ownership--such as exists in private equity sponsor-owned companies--generally entails financial policies aimed at achieving rapid returns for shareholders typically through aggressive debt leverage.

255. The criteria define controlling shareholder(s) as:

- A private shareholder (an individual or a family) with majority ownership or control of the board of directors;
- A group of shareholders holding joint control over the company's board of directors through a shareholder agreement. The shareholder agreement may be comprehensive in scope or limited only to certain financial aspects; and
- A private equity firm or a group of private equity firms holding at least 40% in a company or with majority control of its board of directors.

256. A company is not considered to have a controlling shareholder if it is publicly listed with more than 50% of voting interest listed or when there is no evidence of a particular shareholder or group of shareholders exerting 'de facto' control over a company.

257. Companies that have as their controlling shareholder governments or government-related entities, infrastructure and asset-management funds, and diversified holding companies and conglomerates are assessed in separate criteria.

2. Financial discipline

a) Leverage influence from acquisitions

258. Companies may employ more or less acquisitive growth strategies based on industry dynamics, regulatory changes, market opportunities, and other factors. We consider management teams with disciplined, transparent acquisition strategies that are consistent with their financial policy framework as providing a high degree of visibility into the projected evolution of cash flow and credit measures. Our assessment takes into account management's track record in terms of acquisition strategy and the related impact on the company's financial risk profile. Historical evidence of limited management tolerance for significant debt-funded acquisitions provides meaningful support for the view that projected credit ratios would not significantly weaken as a result of the company's acquisition policy. Conversely, management teams that pursue opportunistic acquisition strategies, without well-defined parameters, increase the risks that the company's financial risk profile may deteriorate well beyond our forecasts.

259. Acquisition funding policies and management's track record in this respect also provide meaningful insight in terms of credit ratio stability. In the criteria, we take into account management's willingness and capacity to mobilize all funding resources to restore credit quality, such as issuing equity or disposing of assets, to mitigate the impact of sizable

acquisitions on credit ratios. The financial policy framework and related historical evidence are key considerations in our assessment.

b) Leverage influence from shareholder remuneration policies

260. A company's approach to rewarding shareholders demonstrates how it balances the interests of its various stakeholders over time. Companies that are consistent and transparent in their shareholder remuneration policies, and exhibit a willingness to adjust shareholder returns to mitigate adverse operating conditions, provide greater support to their long-term credit quality than other companies. Conversely, companies that prioritize cash returns to shareholders in periods of deteriorating economic, operating, or share price performance can significantly undermine long-term credit quality and exacerbate the credit impact of adverse business conditions. In assessing a company's shareholder remuneration policies, the criteria focus on the predictability of shareholder remuneration plans, including how a company builds shareholder expectations, its track record in executing shareholder return policies over time, and how shareholder returns compare with industry peers'.

261. Shareholder remuneration policies that lack transparency or deviate meaningfully from those of industry peers introduce a higher degree of event risk and volatility and will be assessed as less predictable under the criteria. Dividend and capital return policies that function primarily as a means to distribute surplus capital to shareholders based on transparent and stable payout ratios--after satisfying all capital requirements and leverage objectives of the company, and that support stable to improving leverage ratios--are considered the most supportive of long term credit quality.

c) Leverage influence from plans regarding investment decisions or organic growth strategies

262. The process by which a company identifies, funds, and executes organic growth, such as expansion into new products and/or new markets, can have a significant impact on its long-term credit quality. Companies that have a disciplined, coherent, and manageable organic growth strategy, and have a track record of successful execution are better positioned to continue to attract third-party capital and maintain long-term credit quality. By contrast, companies that allocate significant amounts of capital to numerous, unrelated, large and/or complex projects and often incur material overspending against the original budget can significantly increase their credit risk.

263. The criteria assess whether management's organic growth strategies are transparent, comprehensive, and measurable. We seek to evaluate the company's mid- to long-term growth objectives--including strategic rationales and associated execution risks--as well as the criteria it uses to allocate capital. Effective capital allocation is likely to include guidelines for capital deployment, including minimum return hurdles, competitor activity analysis, and demand forecasting. The company's track record will provide key data for this assessment, including how well it executes large and/or complex projects against initial budgets, cost overruns, and timelines.

3. Financial policy framework

a) Comprehensiveness of financial policy framework

264. Financial policies that are clearly defined, unambiguous, and provide a tight framework around management behavior are the most reliable in determining an issuer's future financial risk profile. We assess as consistent with a supportive assessment, policies that are clear, measurable, and well understood by all key stakeholders. Accordingly, the financial policy framework must include well-defined parameters regarding how the issuer will manage its cash flow protection

strategies and debt leverage profile. This includes at least one key or a combination of financial ratio constraints (such as maximum debt to EBITDA threshold) and the latter must be relevant with respect to the issuer's industry and/or capital structure characteristics.

265. By contrast, the absence of established financial policies, policies that are vague or not quantifiable, or historical evidence of significant and unexpected variation in management's long-term financial targets could contribute to an overall assessment of a non-supportive financial policy.

b) Transparency of financial policies

266. We assess as supportive financial policy objectives that are transparent and well understood by all key stakeholders and we view them as likely to influence an issuer's financial risk profile over time. Alternatively, financial policies, if they exist, that are not communicated to key stakeholders and/or where there is limited historical evidence to support the company's commitment to these policies, are non-supportive, in our view. We consider the variety of ways in which a company communicates its financial policy objectives, including public disclosures, investor presentation materials, and public commentary.

267. In some cases, however, a company may articulate its financial policy objectives to a limited number of key stakeholders, such as its main creditors or to credit rating agencies. In these situations, a company may still receive a supportive classification if we assess that there is a sufficient track record (more than three years) to demonstrate a commitment to its financial policy objectives.

c) Achievability and sustainability of financial policies

268. To assess the achievability and sustainability of a company's financial policies, we consider a variety of factors, including the entity's current and historical financial risk profile; the demands of its key stakeholders (including dividend and capital return expectations of equity holders); and the stability of the company's financial policies that we have observed over time. If there is evidence that the company is willing to alter its financial policy framework because of adverse business conditions or growth opportunities (including M&A), this could support an overall assessment of non-supportive.

4. Financial policy adjustments--examples

269. Example 1: A moderately leveraged company has just been sold to a new financial sponsor. The financial sponsor has not leveraged the company yet and there is no stated financial policy at the outset. We expect debt leverage to increase upon refinancing, but we are not able to factor it precisely in our forecasts yet.
Likely outcome: FS-6 financial policy assessment, implying that we expect the new owner to implement an aggressive financial policy in the absence of any other evidence.

270. Example 2: A company has two owners–-a family owns 75%, a strategic owner holds the remaining 25%. Although the company has provided Standard & Poor's with some guidance on long-term financial objectives, the overall financial policy framework is not sufficiently structured nor disclosed to a sufficient number of stakeholders to qualify for a supportive assessment. Recent history, however, does not provide any evidence of unexpected, aggressive financial transactions and we believe event risk is moderate.
Likely outcome: Neutral financial policy impact, including an assessment of neutral for financial discipline. Although the company's financial framework does not support long-term visibility, historical evidence and stability of management suggest that event risk is not significant. The unsupportive financial framework assessment, however,

prevents the company from qualifying for an overall positive financial policy assessment, should the conditions for positive financial discipline be met.

271. Example 3: A company (not owned by financial sponsors) has stated leverage targets equivalent to a significant financial risk profile assessment. The company continues to make debt-financed acquisitions yet remains within its leverage targets, albeit at the weaker end of these. Our forecasts are essentially built on expectations that excess cash flow will be fully used to fund M&A or, possibly pay share repurchases, but that management will overall remain within its leverage targets.
Likely outcome: Neutral financial policy impact. Although management is fairly aggressive, the company consistently stays within its financial policy targets. We think our forecasts provide a realistic view of the evolution of the company's credit metrics over the next two years. No event risk adjustment is needed.

272. Example 4: A company (not owned by a financial sponsor) has just made a sizable acquisition (consistent with its long-term business strategy) that has brought its credit ratios out of line. Management expressed its commitment to rapidly improve credit ratios back to its long-term ratio targets--–representing an acceptable range for the SACP--through asset disposals or a rights issue. We see their disposal plan (or rights issue) as realistic but precise value and timing are uncertain. At the same time, management has a supportive financial policy framework, a positive track record of five years, and assets are viewed as fairly easily tradable.
Likely outcome: Positive financial policy impact. Although forecast credit ratios will remain temporarily depressed, as we cannot fully factor in asset disposals (or rights issue) due to uncertainty on timing/value, or without leaking confidential information, the company's credit risk should benefit from management's positive track record and a satisfactory financial policy framework. The anchor will be better by one notch if management and governance is at least satisfactory and liquidity is at least adequate.

273. Example 5: A company (not owned by a financial sponsor) has very solid financial ratios, providing it with meaningful flexibility for M&A when compared with management's long-term stated financial policy. Also, its stock price performance is somewhat below that of its closest industry peers. Although we have no recent evidence of any aggressive financial policy steps, we fundamentally believe that, over the long-term term, the company will end up using its financial flexibility for the right M&A opportunity, or alternatively return cash to shareholders.
Likely outcome: Negative financial policy impact. Long-term event risk derived from M&A cannot be built into forecasts nor shareholder returns (share buybacks or one-off dividends) be built into forecasts to attempt aligning projected ratios with stated long-term financial policy levels. This is because our forecasts are based on realistic and reasonably predictable assumptions for the medium term. The anchor will be adjusted down, by one notch or more, because of the negative financial policy assessment.

F.Corporate Criteria Glossary

Anchor: The combination of an issuer's business risk profile assessment and its financial risk profile assessment determine the anchor. Additional rating factors can then modify the anchor to determine the final rating or SACP.

Asset profile: A descriptive way to look at the types and quality of assets that comprise a company (examples can include tangible versus intangible assets, those assets that require large and continuing maintenance, upkeep, or

reinvestment, etc.).

Business risk profile: This measure comprises the risk and return potential for a company in the market in which it participates, the country risks within those markets, the competitive climate, and the competitive advantages and disadvantages the company has. The criteria combine the assessments for Corporate Industry and Country Risk Assessment (CICRA), and competitive position to determine a company's business risk profile assessment.

Capital-intensive company: A company exhibiting large ongoing capital spending to sales, or a large amount of depreciation to sales. Examples of capital-intensive sectors include oil production and refining, telecommunications, and transportation sectors such as railways and airlines.

Cash available for debt repayment: Forecast cash available for debt repayment is defined as the net change in cash for the period before debt borrowings and debt repayments. This includes forecast discretionary cash flow adjusted for our expectations of: share buybacks, net of any share issuance, and M&A. Discretionary cash flow is defined as cash flow from operating activities less capital expenditures and total dividends.

Competitive position: Our assessment of a company's: 1) competitive advantage; 2) operating efficiency; 3) scale, scope, and diversity; and 4) profitability.

- Competitive advantage--The strategic positioning and attractiveness to customers of the company's products or services, and the fragility or sustainability of its business model.
- Operating efficiency--The quality and flexibility of the company's asset base and its cost management and structure.
- Scale, scope, and diversity--The concentration or diversification of business activities.
- Profitability--Our assessment of both the company's level of profitability and volatility of profitability.

Competitive Position Group Profile (CPGP): Used to determine the weights to be assigned to the four components of competitive position. While industries are assigned to one of the six profiles, individual companies and industry subsectors can be classified into another CPGP because of unique characteristics. Similarly, national industry risk factors can affect the weighing. The six CPGPs are:

- Services and product focus,
- Product focus/scale driven,
- Capital or asset focus,
- Commodity focus/cost driven,
- Commodity focus/scale driven, and
- National industry and utilities.

Conglomerate: Companies that have at least three distinct business segments, each contributing between 10%-50% of EBITDA or FOCF. Such companies may benefit from the diversification/portfolio effect.

Controlling shareholders: Equity owners who are able to affect decisions of varying effect on operations, leverage, and shareholder reward without necessarily being a majority of shareholders.

Corporate Industry and Country Risk Assessment (CICRA): The result of the combination of an issuer's country risk assessment and industry risk assessment.

Debt co-insurance: The view that the joining-together of two or more firms whose earnings streams are less-than-perfectly correlated reduces the risk of default of the merged firms (i.e., the co-insurance effect) and thereby increases the "debt capacity" or "borrowing ability" of the combined enterprise. These financing alternatives became more valuable during the global financial crisis of 2007-2009.

Financial headroom: Measure of deviation tolerated in financial metrics without moving outside or above a pre-designated band or limit typically found in loan covenants (as in a debt to EBITDA multiple that places a constraint on leverage). Significant headroom would allow for larger deviations.

Financial risk profile: The outcome of decisions that management makes in the context of its business risk profile and its financial risk tolerances. This includes decisions about the manner in which management seeks funding for the company and how it constructs its balance sheet. It also reflects the relationship of the cash flows the organization can achieve, given its business risk profile, to its financial obligations. The criteria use cash flow/leverage analysis to determine a corporate issuer's financial risk profile assessment.

Financial sponsor: An entity that follows an aggressive financial strategy in using debt and debt-like instruments to maximize shareholder returns. Typically, these sponsors dispose of assets within a short to intermediate time frame. Financial sponsors include private equity firms, but not infrastructure and asset-management funds, which maintain longer investment horizons.

Profitability ratio: Commonly measured using return on capital and EBITDA margins but can be measured using sector-specific ratios. Generally calculated based on a five-year average, consisting of two years of historical data, and our projections for the current year and the next two financial years.

Shareholder remuneration policies: Management's stated shareholder reward plans (such as a buyback or dividend amount, or targeted payout ratios).

Stand-alone credit profile (SACP): Standard & Poor's opinion of an issue's or issuer's creditworthiness, in the absence of extraordinary intervention or support from its parent, affiliate, or related government or from a third-party entity such as an insurer.

Transfer and convertibility assessment: Standard & Poor's view of the likelihood of a sovereign restricting nonsovereign access to foreign exchange needed to satisfy the nonsovereign's debt service obligations.

Unconsolidated equity affiliates: Companies in which an issuer has an investment, but which are not consolidated in an issuer's financial statements. Therefore, the earnings and cash flows of the investees are not included in our primary metrics unless dividends are received from the investees.

Upstream/midstream/downstream: Referring to exploration and production, transport and storage, and refining and distributing, respectively, of natural resources and commodities (such as metals, oil, gas, etc.).

Volatility of profitability/SER: We base the volatility of profitability on the standard error of the regression (SER) for a company's historical EBITDA. The SER is a statistical measure that is an estimate of the deviation around a 'best fit' trend line. We combine it with the profitability ratio to determine the final profitability assessment. We only calculate

SER when companies have at least seven years of historical annual data, to ensure that the results are meaningful.

Working-capital-intensive companies: Generally a company with large levels of working capital in relation to its sales in order to meet seasonal swings in working capital. Examples of working-capital-intensive sectors include retail, auto manufacturing, and capital goods.

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.

Central Hudson Gas & Electric Corporation Implied Credit Metrics

	Per Staff	Ratings Category	Per Company	Ratings Category
	2016 Rate Year		**2016 Rate Year**	
Net Income	$49,090,098		$50,782,860	
Depreciation and Amortization	$45,767,000		$47,100,000	
Amortization of regulatory asset	$0		$0	
Net Pension & OPEBs Accrual & Deferral	$15,780,000		$18,900,000	
Deferred Income Taxes	$17,100,000		$3,600,000	
Funds From Operation (FFO)	$127,737,098		$120,382,860	
Cash Flow From Operation (CFO)	$165,851,430		$160,305,786	
Free Operating Cash Flow (FOCF)	$7,464,430		$10,405,786	
Discretionary Cash Flow (DCF)	($535,571)		$2,405,786	
Changes in Working Capital	-		-	
Net Income	$49,090,098		$50,782,860	
Interest Expense	$26,894,332		$29,190,926	
Income Taxes	$27,000,000		$29,632,000	
Deferred Income Taxes	$17,100,000		$3,600,000	
Amortization of regulatory asset	$0		$0	
Depreciation and Amortization	$45,767,000		$47,100,000	
EBITDA	$165,851,430		$160,305,786	
Capital Expenditures	$158,387,000		$149,900,000	
Dividend Payments	8,000,000		8,000,000	
Accumulated Deferred Income Taxes	299,641,000		$299,525,000	
Total Average Debt	$604,367,000		$604,367,000	
Total Average Capitalization	$1,175,621,000		$1,175,621,000	
Standard & Poor's Credit Metrics				
Funds from Operation/Debt	21.1%	Intermediate	19.9%	Intermediate
Debt/EBITDA (x)	3.6x	Intermediate	3.8x	Intermediate
(FFO +Interest)/interest	5.7x	Modest	5.1x	Modest
EBITDA/Interest	6.2x	Intermediate	5.5x	Intermediate
CFO/Debt	27.4%	Highly leveraged	26.5%	Highly leveraged
FOCF/Debt	1.2%	Significant	1.7%	Significant
DCF/Debt	-0.1%	Aggressive	0.4%	Significant
Business Risk Profile		Excellent		Excellent
Implied Rating		A/A-		A/A-
Moody's Credit Metrics				
Cash Flow Interest Coverage (x)	5.7x	A	5.1x	A
Cash Flow/Debt	21.1%	Baa	19.9%	Baa
Retained Cash Flow/Debt	19.8%	A	18.6%	A
Debt/Capital	41.0%	A	41.0%	A
Implied Rating		A2		A2

Detailed Moody's Credit Metrics Analysis:Staff Recommendation

Qualitative Factors	Weight[1]		Rating[2]		Score	W'ted Score
Regulatory Framework	25%		A		6	1.50
Ability to Recover Cost and Earn Returns	25%		Aa		3	0.75
Diversity	10%		Ba		12	1.20
Financial Strength						
Cash Flow Interest Coverage	7.5%		A		6	0.45
Cash Flow/Debt	15.0%		Baa		9	1.35
Retained Cash Flow/Debt	10.0%		A		6	0.60
Debt/Capital	7.5%		A		6	0.45
Total	**100%**					**6.30**
Implied Rating						**A2**

Detailed Moody's Credit Metrics Analysis:Company's filing

Qualitative Factors	Weight		Rating		Score	W'ted Score
Regulatory Framework	25%		A		6	1.50
Ability to Recover Cost and Earn Returns	25%		Aa		3	0.75
Diversity	10%		Ba		12	1.20
Financial Strength						
Cash Flow Interest Coverage	7.5%		A		6	0.45
Cash Flow/Debt	15.0%		Baa		9	1.35
Retained Cash Flow/Debt	10.0%		A		6	0.60
Debt/Capital	7.5%		A		6	0.45
Total	**100%**					**6.30**
						A2

[1]Moody's respective weightings of 25%, 10%, and 25% for Regulatory Framework, Diversity, and Ability to Recover Cost and Earn Returns were taken from page 6 of Moody's Rating Methodology for Electric and Gas Utilities, published December 23, 2013.

[2]Central Hudson's respective ratings of "A", "Ba", and "Aa" for Regulatory Framework, Diversity, and Ability to Recover Cost and Earn Returns were taken from page 4 of Moody's Credit Opinion on Central Hudson, published July 3, 2014.

CENTRAL HUDSON GAS & ELECTRIC CORPORATION
EMBEDDED COST OF LONG-TERM DEBT
FOR THE TWELVE MONTHS ENDING JUNE 30, 2016
($000)

Long-Term Debt Outstanding Issues	Maturity Date (1)	Interest Rate % (2)	Principal Amount Outstanding 6/30/2015 (3)	Charges During Rate Year (4)	Months Outstanding (5)	Average Amount Outstanding During Rate Year (6)	Interest Expense During Rate Year (7)
1999 NYSERDA Series B Variable [1]	July 1, 2034	0.091	33,700	-	12	33,700	31
2004 MTN Series E @ 5.05%	November 4, 2019	5.050	27,000	-	12	27,000	1,364
2005 MTN Series E @ 5.84%	December 5, 2035	5.840	24,000	-	12	24,000	1,402
2006 MTN Series E @ 5.76%	November 17, 2031	5.760	27,000	-	12	27,000	1,555
2007 MTN Series F @ 5.80%	March 23, 2037	5.804	33,000	-	12	33,000	1,915
2007 MTN Series F @ 6.03%	September 19, 2017	6.028	33,000	-	12	33,000	1,989
2009 MTN Series F @ 5.80%	November 1, 2039	5.800	24,000	-	12	24,000	1,392
2010 MTN Series G @ 2.756%	April 1, 2016	2.756	8,000	(8,000)	9	6,000	165
2010 MTN Series G @ 4.15%	April 1, 2021	4.150	44,150	-	12	44,150	1,832
2010 MTN Series G @ 5.716%	April 1, 2041	5.716	30,000	-	12	30,000	1,715
2011 MTN Series G @ 3.378%	April 1, 2022	3.378	23,400	-	12	23,400	790
2011 MTN Series G @ 4.707%	April 1, 2042	4.707	10,000	-	12	10,000	471
2012 MTN Series G @ 4.776%	April 1, 2042	4.776	48,000	-	12	48,000	2,292
2012 MTN Series G @ 4.065%	October 1, 2042	4.065	24,000	-	12	24,000	976
2010 Private Placmt Senior Note Series A @ 4.30%	September 21, 2020	4.300	16,000	-	12	16,000	688
2010 Private Placmt Senior Note Series B @ 5.64%	September 21, 2040	5.640	24,000	-	12	24,000	1,354
2013 Private Placmt Senior Note Series C @ 2.45%	November 1, 2018	2.450	30,000	-	12	30,000	735
2013 Private Placmt Senior Note Series D @ 4.09%	December 2, 2028	4.090	16,700	-	12	16,700	683
2014 Private Placmt Series E Variable [1]	March 26, 2024	1.240	30,000	-	12	30,000	372
2015 New Issuance (January 2015)	January 1, 2035	4.240	47,000	-	12	47,000	1,993
2015 New Issuance (June 2015)	June 1, 2035	4.240	24,000	-	12	24,000	1,018
2015 New Issuance (Dec 2015)	December 2, 2035	4.240	-	14,000	7	8,167	346
2016 New Issuance (Jan 2016)	January 1, 2036	4.240	-	20,000	6	10,000	424
2016 New Issuance (April 2016)	April 1, 2036	4.240	-	45,000	3	11,250	477
Average Long Term Debt Outstanding			576,950	71,000		$ 604,367	
Interest Charges for the Rate Year							$ 25,978
Plus: Amortization of Debt Discount and Expense							898
Less: Amortization of Premium on Debt							-
Total Cost of Debt							$ 26,877
Embedded Cost of Long-term Debt							**4.45%**

CENTRAL HUDSON's HISTORICAL ISSUANCE EXPENSE AS A PERCENTAGE OF PRINCIPAL DEBT ISSUED

	Principal Issued (x$1,000)	Issuance Expense (x$1,000)	Expense as a % of Principal
1999 NYSERDA Series B Variable	$33,700	$354	1.05%
2004 MTN Series E @ 5.05%	$27,000	$123	0.45%
2005 MTN Series E @ 5.84%	$24,000	$218	0.91%
2006 MTN Series E @ 5.76%	$27,000	$310	1.15%
2007 MTN Series F @ 5.80%	$33,000	$322	0.98%
2007 MTN Series F @ 6.03%	$33,000	$150	0.46%
2009 MTN Series F @ 5.80%	$24,000	$280	1.17%
2010 MTN Series G @ 2.756%	$8,000	$37	0.46%
2010 MTN Series G @ 4.15%	$44,150	$330	0.75%
2010 MTN Series G @ 5.716%	$30,000	$281	0.94%
2011 MTN Series G @ 3.378%	$23,400	$242	1.04%
2011 MTN Series G @ 4.707%	$10,000	$122	1.22%
2012 MTN Series G @ 4.776%	$48,000	$598	1.25%
2012 MTN Series G @ 4.065%	$24,000	$359	1.49%
2010 Private Placmt Senior Note Series A @ 4.30%	$16,000	$67	0.42%
2010 Private Placmt Senior Note Series B @ 5.64%	$24,000	$134	0.56%
2013 Private Placmt Senior Note Series C @ 2.45%	$30,000	$147	0.49%
2013 Private Placmt Senior Note Series D @ 4.09%	$16,700	$156	0.93%
2014 Private Placmt Series E Variable	$30,000	$201	0.67%
Average	**$26,628.95**	**$233**	**0.86%**

Corporate Bond Yield Averages

Public Utility Bond Yield Averages
(Source:Mergent Bond Record, Oct/2014)

Moody's: S&P:	Aa2 AA	A2 A	Baa2 BBB
Mar-14	4.40	4.51	5.00
Apr-14	4.30	4.41	4.85
May-14	4.16	4.26	4.69
Jun-14	4.23	4.29	4.73
Jul-14	4.16	4.23	4.66
Aug-14	4.07	4.13	4.65
Sep-14	4.18	4.24	4.79

Estimated Issuance Expense (%)	1.00
Annual Amortization of Debt Expenses(%)	0.05
Yield on A/A2 (%)	4.24
Marginal Cost of Debt for CHG&E(%)	4.24

Fixed Income Screening Report For A-Rated Utility Long-term Debt (30 days ending 10/15/2014)

Data Sourced on October 15, 2014

Term	Maturity Date	Issuer	Seniority Level	Coupon Rate (%)	Coupon Type	Offering Date	Offering Amount ($USDmm)	S&P Issuer Credit Rating
30	Oct-15-2044	Atmos Energy Corporation (NYSE:ATO)	Senior Unsecured	4.125	Fixed	Oct-06-2014	500.0	A-
30	Oct-15-2044	Wisconsin Power and Light Company	Senior Unsecured	4.1	Fixed	Oct-06-2014	250.0	A
20	Oct-01-2034	Niagara Mohawk Power Corporation	Senior Unsecured	4.278	Fixed	Sep-25-2014	400.0	A-
30	Oct-01-2044	Gulf Power Company	Senior Unsecured	4.55	Fixed	Sep-16-2014	200.0	A
20	Sep-18-2034	Piedmont Natural Gas Co. Inc. (NYSE:PNY)	Senior Unsecured	4.1	Fixed	Sep-15-2014	250.0	A
	Average			**4.23**				**A/A-**

Source: S&P CapitalIQ

S&P CAPITAL IQ
McGRAW HILL FINANCIAL

Central Hudson Gas & Electric Corporation
For the Rate Year Ending June 30, 2016
Summary of Cost of Equity

	Sep-14
Proxy Group DCF ROE	8.33%
Traditional CAPM ROE	9.12%
Zero Beta CAPM ROE	9.64%
Generic (Average) CAPM ROE	9.38%
2/3 DCF & 1/3 CAPM Weighting	8.68%
Recommended ROE	8.70%

	Company	Moody's Rating	S&P Rating	2013 % of Utility Rev.	Dividend Paying?	Not in M&A Activity?	Regulated by state Commission	Proxy Group
1	ALLETE, Inc.	A3	BBB+	90.8%	Yes	Yes	Yes	selected
2	Alliant Energy Corp.	A3	A-	98.4%	Yes	Yes	Yes	selected
3	Ameren Corp.	Baa2	BBB+	100.7%	Yes	Yes	Yes	selected
4	American Electric Power Co. Inc.	Baa1	BBB	88.7%	Yes	Yes	Yes	selected
5	Avista Corp.	Baa1	BBB	86.7%	Yes	Yes	Yes	selected
6	Black Hills Corp.	Baa1	BBB	93.4%	Yes	Yes	Yes	selected
7	CenterPoint Energy Inc.	Baa1	A-	69.3%	Yes	Yes	Yes	
8	Cleco Corp.	Baa2	BBB+	95.5%	Yes	Yes	Yes	selected
9	CMS Energy Corp.	Baa2	BBB	96.3%	Yes	Yes	Yes	selected
10	Consolidated Edison Inc.	A3	A-	91.1%	Yes	Yes	Yes	selected
11	Dominion Resources, Inc.	Baa2	A-	57.3%	Yes	Yes	Yes	
12	DTE Energy Co.	A3	BBB+	69.1%	Yes	Yes	Yes	
13	Duke Energy Corp.	A3	BBB+	87.3%	Yes	Yes	Yes	selected
14	Edison International	A3	BBB+	100.0%	Yes	Yes	Yes	selected
15	El Paso Electric Co.	Baa1	BBB	86.9%	Yes	Yes	Yes	selected
16	Empire District Electric Co.	Baa1	BBB	93.6%	Yes	Yes	Yes	selected
17	Entergy Corp.	Baa3	BBB	79.9%	Yes	Yes	Yes	selected
18	Exelon Corp.	Baa2	BBB	42.7%	Yes	No	Yes	
19	FirstEnergy Corp.	Baa3	BBB-	65.6%	Yes	Yes	Yes	
20	Great Plains Energy Inc.	Baa2	BBB+	100.0%	Yes	Yes	Yes	selected
21	Hawaiian Electric Industries Inc.	Baa2	BBB-	92.0%	Yes	Yes	Yes	selected
22	IDACORP Inc.	Baa1	BBB	88.4%	Yes	Yes	Yes	selected
23	Integrys Energy Group Inc.	A3	A-	60.8%	Yes	Yes	Yes	
24	ITC Holdings Corp.	Baa2	A-	100.0%	Yes	Yes	No	
25	Madison Gas & Electric Co.	A1	AA-	99.1%	Yes	Yes	Yes	selected
26	NextEra Energy, Inc.	Baa1	A-	69.0%	Yes	Yes	Yes	
27	Northeast Utilities	Baa1	A-	98.6%	Yes	Yes	Yes	selected
28	Northwestern Corporation	A3	BBB	99.9%	Yes	Yes	Yes	selected
29	OGE Energy Corp.	A3	A-	78.8%	Yes	Yes	Yes	selected
30	Otter Tail Corp.	Baa2	BBB	41.8%	Yes	Yes	Yes	
31	Pepco Holdings Inc.	Baa3	BBB+	95.8%	Yes	No	Yes	
32	PG&E Corp.	Baa1	BBB	100.0%	Yes	Yes	Yes	selected
33	Pinnacle West Capital Corp.	Baa1	A-	99.0%	Yes	Yes	Yes	selected
34	PNM Resources Inc.	Baa3	BBB	100.0%	Yes	Yes	Yes	selected
35	Portland General Electric Co.	A3	BBB	93.8%	Yes	Yes	Yes	selected
36	PPL Corp.	Baa3	BBB	60.7%	Yes	Yes	Yes	
37	Public Service Enterprise Group Inc.	Baa2	BBB+	66.8%	Yes	Yes	Yes	
38	SCANA Corp.	Baa3	BBB+	75.2%	Yes	Yes	Yes	selected
39	Sempra Energy	Baa1	BBB+	88.2%	Yes	Yes	Yes	selected
40	Southern Co. (The)	Baa1	A	88.8%	Yes	Yes	Yes	selected

41	TECO Energy Inc.	Baa1	BBB+	82.2%	Yes	Yes	Yes	selected	Page 2 of 2
42	UIL Holdings Corp.	Baa2	BBB	78.9%	Yes	Yes	Yes	selected	
43	Unitil Corp. (UTL)	NR	BBB	98.4%	Yes	Yes	Yes		
44	Vectren Corp.	NR	A-	57.4%	Yes	Yes	Yes		
45	Westar Energy Inc.	Baa1	BBB+	83.9%	Yes	Yes	Yes	selected	
46	Wisconsin Energy Corp.	A2	A-	98.7%	Yes	Yes	Yes	selected	
47	Xcel Energy Inc.	A3	A-	99.3%	Yes	Yes	Yes	selected	
	Total Selected							**33**	

STAFF PROXY GROUP STATISTICS

		Ticker	Ratings Moody's	Ratings S&P	2013% Utility Revenue	2013 Equity Ratio 10K	S&P Business Profile	Numerical Business Risk Weighting	S&P Financial Profile	Numerical Financial Risk Weighting	Business Category
1	ALLETE Inc.	ALE	A3	BBB+	91.0%	54.74%	Strong	2	Significant	4	Electric
2	Alliant Energy Corp	LNT	A3	A-	98.3%	48.12%	Excellent	1	Significant	4	Electric & Gas Combo
3	Ameren Corp.	AEE	Baa2	BBB+	81.8%	52.23%	Strong	2	Significant	4	Electric & Gas Combo
4	American Electric Power Co. Inc.	AEP	Baa1	BBB	91.5%	46.27%	Excellent	1	Significant	4	Electric
5	Avista Corp.	AVA	Baa1	BBB	87.5%	47.06%	Excellent	1	Significant	4	Electric & Gas Combo
6	Black Hills Corp.	BKH	Baa1	BBB	90.7%	48.19%	Strong	2	Intermediate	3	Electric & Gas Combo
7	Cleco Corp	CNL	Baa2	BBB+	95.0%	53.62%	Excellent	1	Aggressive	5	Electric
8	CMS Energy Corp	CMS	Baa2	BBB	96.2%	31.02%	Excellent	1	Aggressive	5	Electric & Gas Combo
9	Consolidated Edison Inc.	ED	A3	A-	90.1%	52.01%	Excellent	1	Aggressive	5	Electric
10	Duke Energy Corporation	DUK	A3	BBB+	82.0%	50.59%	Excellent	1	Significant	4	Electric & Gas Combo
11	Edison International	EIX	A3	BBB+	99.9%	44.53%	Strong	2	Aggressive	5	Electric
12	El Paso Electric Co.	EE	Baa1	BBB	86.9%	48.56%	Excellent	1	Aggressive	5	Electric
13	Empire District Electric Co.	EDE	Baa1	BBB	98.8%	49.94%	Excellent	1	Aggressive	5	Electric & Gas Combo
14	Entergy Corporation	ETR	Baa3	BBB	77.8%	42.58%	Strong	2	Significant	4	Electric & Gas Combo
15	Great Plains Energy Inc.	GXP	Baa2	BBB+	100.0%	49.42%	Excellent	1	Aggressive	5	Electric
16	Hawaiian Electric Industries Inc.	HE	Baa2	BBB-	92.1%	52.29%	Strong	2	Aggressive	5	Electric
17	IDACORP Inc.	IDA	Baa1	BBB	86.8%	53.32%	Excellent	1	Aggressive	5	Electric
18	Madison Gas & Electric Co.	MGEE	A1	AA-	98.3%	60.48%	Excellent	1	Aggressive	5	Electric & Gas Combo
19	Northeast Utilities	NU	Baa1	A-	98.0%	53.17%	Excellent	1	Aggressive	5	Electric & Gas Combo
20	Northwestern Corp	NYSE:NWE	A3	BBB	99.9%	47.15%	Excellent	1	Aggressive	5	Electric & Gas Combo
21	OGE Energy Corp.	OGE	A3	A-	78.0%	55.14%	Excellent	1	Significant	4	Electric
22	PG&E Corp.	PCG	Baa1	BBB	100.0%	50.86%	Strong	2	Aggressive	5	Electric & Gas Combo
23	Pinnacle West Capital Corp.	PNW	Baa1	A-	99.7%	54.10%	Excellent	1	Significant	4	Electric
24	PNM Resources Inc.	PNM	Baa3	BBB	100.0%	47.53%	Excellent	1	Aggressive	5	Electric
25	Portland General Electric Co.	POR	A3	BBB	95.2%	48.69%	Excellent	1	Significant	4	Electric
26	SCANA Corp.	SCG	Baa3	BBB+	77.1%	44.84%	Excellent	1	Significant	4	Electric & Gas Combo
27	Sempra Energy	SRE	Baa1	BBB+	87.5%	45.11%	Strong	2	Aggressive	5	Electric & Gas Combo
28	Southern Co.(The)	SO	Baa1	A	89.5%	45.30%	Excellent	1	Intermediate	5	Electric
29	TECO Energy Inc.	TE	Baa1	BBB+	79.3%	43.06%	Excellent	1	Significant	4	Electric & Gas Combo
30	UIL Holdings Corp.	UIL	Baa2	BBB	100.0%	43.82%	Excellent	1	Significant	4	Electric
31	Westar Energy Inc.	WR	Baa1	BBB+	76.0%	47.05%	Excellent	1	Aggressive	5	Electric
32	Wisconsin Energy Corp.	WEC	A2	A-	98.7%	47.75%	Excellent	1	Intermediate	3	Electric & Gas Combo
33	Xcel Energy Inc.	XEL	A3	A-	99.3%	45.48%	Excellent	1	Significant	4	Electric & Gas Combo
	Median		Baa1	BBB+	**92.13%**	**48.19%**	Excellent	1	Significant	5	
	Average of Proxy Group		Baa1	BBB+	**91.61%**	**48.61%**	Close to Excellent	1.2	Significant/Aggressive	4.5	

Sources

Latest credit ratings from Standard & Poor's & Moody's credit reports as of August 2014
% utility revenue from 2013 annual reports(10K)
2013 equity ratios from CapitalIQ, a business unit of Standard and Poor's
Business & financial profiles from Standard & Poor's latest credit reports

Staff Proxy Group Statistics: Common Equity Ratio ($ Millions)

	Company	Ticker	Long-term Debt (LTD)	Current portion of LTD	Total Long-term Debt	Preferred Stock	Minority Interest	Customer Deposits	Common Equity	Total Capital	Common Equity Ratio
1	ALLETE Inc.	ALE	$1,083	$27	$1,110	$0	$0	$0	$1,343	$2,453	54.74%
2	Alliant Energy Corp	LNT	$2,978	$359	$3,336	$0	$202	$0	$3,281	$6,820	48.12%
3	Ameren Corp.	AEE	$5,210	$529	$5,739	$0	$142	$105	$6,544	$12,530	52.23%
4	American Electric Power Co. Inc.	AEP	$16,828	$1,549	$18,377	$0	$1	$299	$16,085	$34,762	46.27%
5	Avista Corp.	AVA	$1,320	$17	$1,337	$0	$36	$88	$1,298	$2,759	47.06%
6	Black Hills Corp.	BKH	$1,403	$3	$1,406	$0	$0	$0	$1,308	$2,714	48.19%
7	Cleco Corp.	CNL	$1,309	$15	$1,324	$0	$0	$48	$1,586	$2,958	53.62%
8	CMS Energy Corp	CMS	$7,101	$541	$7,642	$0	$37	$0	$3,454	$11,133	31.02%
9	Consolidated Edison Inc.	ED	$10,489	$487	$10,976	$0	$0	$321	$12,245	$23,542	52.01%
10	Duke Energy Corporation	DUK	$38,160	$2,123	$40,283	$0	$78	$0	$41,330	$81,691	50.59%
11	Edison International	EIX	$9,825	$601	$10,426	$0	$1,753	$201	$9,938	$22,318	44.53%
12	El Paso Electric Co.	EE	$1,000	$0	$1,000	$0	$0	$0	$944	$1,943	48.56%
13	Empire District Electric Co.	EDE	$739	$0	$739	$0	$0	$13	$750	$1,502	49.94%
14	Entergy Corporation	ETR	$12,139	$457	$12,596	$0	$305	$87	$9,632	$22,620	42.58%
15	Great Plains Energy Inc.	GXP	$3,516	$1	$3,517	$39	$0	$0	$3,474	$7,030	49.42%
16	Hawaiian Electric Industries Inc.	HE	$1,430	$111	$1,541	$0	$34	$0	$1,727	$3,303	52.29%
17	IDACORP Inc.	IDA	$1,615	$1	$1,616	$0	$4	$0	$1,851	$3,471	53.32%
18	Madison Gas & Electric Co.	MGEE	$399	$4	$404	$0	$0	$0	$618	$1,021	60.48%
19	Northeast Utilities	NU	$7,777	$533	$8,310	$0	$156	$0	$9,612	$18,077	53.17%
20	Northwestern Corp	NYSE:NWE	$1,155	$0	$1,155	$0	$0	$0	$1,031	$2,186	47.15%
21	OGE Energy Corp.	OGE	$2,300	$100	$2,400	$0	$0	$71	$3,037	$5,508	55.14%
22	PG&E Corp.	PCG	$12,717	$889	$13,606	$0	$252	$0	$14,342	$28,200	50.86%
23	Pinnacle West Capital Corp.	PNW	$2,796	$540	$3,337	$0	$146	$76	$4,194	$7,753	54.10%
24	PNM Resources Inc.	PNM	$1,670	$75	$1,745	$0	$89	$13	$1,674	$3,521	47.53%
25	Portland General Electric Co.	POR	$1,916	$0	$1,916	$0	$1	$0	$1,819	$3,736	48.69%
26	SCANA Corp.	SCG	$5,590	$60	$5,650	$0	$0	$88	$4,664	$10,402	44.84%
27	Sempra Energy	SRE	$11,253	$1,147	$12,400	$0	$842	$154	$11,008	$24,404	45.11%
28	Southern Co.(The)	SO	$21,004	$440	$21,444	$0	$1,131	$380	$19,008	$41,963	45.30%
29	TECO Energy Inc.	TE	$2,838	$83	$2,921	$0	$0	$165	$2,334	$5,419	43.06%
30	UIL Holdings Corp.	UIL	$1,724	$12	$1,736	$0	$0	$0	$1,354	$3,090	43.82%
31	Westar Energy Inc.	WR	$3,164	$277	$3,441	$0	$6	$0	$3,063	$6,510	47.05%
32	Wisconsin Energy Corp.	WEC	$4,279	$322	$4,601	$0	$30	$0	$4,233	$8,865	47.75%
33	Xcel Energy Inc.	XEL	$10,911	$281	$11,192	$0	$0	$276	$9,566	$21,033	45.48%
	Total		***$207,637***	***$11,586***	***$219,223***	***$39***	***$5,244***	***$2,384***	***$208,346***	***$435,237***	
	Average		$6,292	$351	$6,643	$1	$159	$72	$6,314	$13,189	48.61%
	Median		$2,978	$111	$3,337	$0	$4	$0	$3,281	$6,820	48.19%

Total Capital= Common Equity+Total LTD+Customer Deposits+Pref Stock+Minority Interest

Fortis Inc	TSX:FTS	$6,474	$780	$7,254	$1,229	$375	$0	$4,772	$13,630.00	35.01%
CH Energy Group Inc	IQ259777	$495,275	$21,650	$516,925	$0	$0	$21,819	$564,689	$1,103,433	51.18%

Source:
2013 Annual reports(10K) using S&P CapitalIQ

Staff Proxy Group Stock Prices
3 Month Average Price Data

	Company	Three-month Price	Jul-14 High	Jul-14 Low	Aug-14 High	Aug-14 Low	Sep-14 High	Sep-14 Low
1	ALLETE Inc.	$47.77	51.56	46.90	48.80	46.14	48.82	44.39
2	Alliant Energy Corp	$57.50	60.89	56.50	58.51	55.04	59.36	54.69
3	Ameren Corp.	$38.98	40.96	38.44	39.99	36.65	40.31	37.53
4	American Electric Power Co. Inc.	$52.68	55.91	51.96	53.71	49.06	53.88	51.58
5	Avista Corp.	$31.80	33.60	31.02	32.47	30.35	32.88	30.45
6	Black Hills Corp.	$53.51	62.13	52.70	53.89	50.39	54.05	47.87
7	Cleco Corp.	$55.06	59.21	54.65	56.55	53.67	58.23	48.06
8	CMS Energy Corp	$29.71	31.20	28.87	30.54	27.90	30.63	29.15
9	Consolidated Edison Inc.	$56.59	57.85	55.28	57.90	54.58	58.12	55.80
10	Duke Energy Corporation	$72.82	74.48	70.81	74.00	69.48	75.21	72.95
11	Edison International	$56.67	58.11	54.72	59.18	54.32	59.54	54.12
12	El Paso Electric Co.	$37.92	40.43	36.81	39.42	35.39	39.41	36.05
13	Empire District Electric Co.	$25.03	25.87	24.36	26.00	24.02	25.95	24.00
14	Entergy Corporation	$76.18	82.48	72.81	77.45	70.70	78.37	75.29
15	Great Plains Energy Inc.	$25.23	26.95	24.71	25.91	24.09	25.80	23.91
16	Hawaiian Electric Industries Inc.	$24.79	25.38	23.44	25.41	22.71	26.89	24.91
17	IDACORP Inc.	$55.17	58.79	53.55	56.80	51.70	56.97	53.20
18	Madison Gas & Electric Co.	$38.94	40.00	37.52	40.85	37.39	40.65	37.25
19	Northeast Utilities	$44.90	47.37	43.78	45.90	41.92	46.57	43.88
20	Northwestern Corp	$47.93	52.70	46.21	48.76	45.24	49.55	45.12
21	OGE Energy Corp.	$36.77	39.29	35.95	37.60	34.88	37.76	35.15
22	PG&E Corp.	$45.69	48.09	44.65	46.48	42.92	48.24	43.76
23	Pinnacle West Capital Corp.	$55.37	57.95	53.29	56.97	52.13	57.74	54.13
24	PNM Resources Inc.	$26.30	29.94	25.64	26.25	24.26	26.97	24.76
25	Portland General Electric Co.	$33.13	34.74	31.93	34.47	31.41	34.55	31.70
26	SCANA Corp.	$51.03	53.89	50.78	51.94	48.53	52.23	48.81
27	Sempra Energy	$102.76	104.60	99.60	106.09	96.13	107.81	102.34
28	Southern Co.(The)	$43.80	45.47	43.22	44.40	41.87	44.82	43.04
29	TECO Energy Inc.	$17.67	18.48	17.42	18.10	16.91	18.14	16.98
30	UIL Holdings Corp.	$36.49	38.89	35.11	37.34	34.34	37.93	35.35
31	Westar Energy Inc.	$36.12	38.23	36.04	37.09	34.53	37.07	33.76
32	Wisconsin Energy Corp.	$44.33	47.02	43.56	45.37	41.90	45.60	42.53
33	Xcel Energy Inc.	$31.21	32.26	30.73	32.06	29.60	32.48	30.12

Data Source

Capital IQ
A Standard & Poor's Business

STAFF DCF APPROACH - GENERIC FINANCE METHOD

Company	Beta	Price	EPS 2017-19	DPS 2014	DPS 2015	DPS 2017-19	BPS 2014	BPS 2015	BPS 2017-19	# of Shares 2014	# of Shares 2017-19	DPS Growth 2017-19
ALLETE Inc.	0.80	$47.77	3.75	1.96	2.04	2.30	34.65	35.75	39.75	45.50	47.50	4.08%
Alliant Energy Corp	0.80	$57.50	4.00	2.04	2.20	2.40	30.50	31.35	34.65	111.00	115.00	2.94%
Ameren Corp.	0.75	$38.98	3.00	1.60	1.64	1.80	27.75	28.65	32.00	242.65	252.00	3.15%
American Electric Power Co. Inc.	0.70	$52.68	4.00	2.02	2.12	2.50	34.45	35.85	40.50	490.00	498.00	5.65%
Avista Corp.	0.80	$31.80	2.25	1.27	1.32	1.50	23.75	24.40	26.50	60.70	62.50	4.35%
Black Hills Corp.	0.90	$53.51	3.25	1.56	1.64	1.90	30.55	31.70	35.50	44.75	45.75	5.03%
Cleco Corp.	0.75	$55.06	3.25	1.56	1.72	2.05	27.35	28.45	31.75	60.50	60.50	6.03%
CMS Energy Corp	0.75	$29.71	2.25	1.08	1.14	1.35	13.45	14.25	17.25	275.00	283.00	5.80%
Consolidated Edison Inc.	0.60	$56.59	4.25	2.52	2.58	2.75	43.20	44.60	49.25	293.00	293.00	2.15%
Duke Energy Corporation	0.60	$72.82	5.25	3.15	3.21	3.40	58.50	59.95	65.00	707.00	711.00	1.94%
Edison International	0.75	$56.67	4.50	1.45	1.56	2.05	33.35	35.65	42.75	325.81	325.81	9.53%
El Paso Electric Co.	0.70	$37.92	2.75	1.11	1.17	1.35	24.50	25.45	28.75	40.50	40.00	4.89%
Empire District Electric Co.	0.65	$25.03	1.75	1.03	1.05	1.15	17.95	18.40	20.25	43.50	47.00	3.08%
Entergy Corporation	0.70	$76.18	6.50	3.32	3.32	3.80	56.95	58.90	66.75	179.50	179.50	4.60%
Great Plains Energy Inc.	0.85	$25.23	2.00	0.93	0.98	1.20	23.20	23.85	26.00	154.50	156.50	6.98%
Hawaiian Electric Industries Inc.	0.80	$24.79	2.00	1.24	1.24	1.30	17.60	18.20	20.50	103.00	111.00	1.59%
IDACORP Inc.	0.80	$55.17	3.75	1.76	1.90	2.20	38.60	40.30	44.90	50.20	50.20	5.01%
Madison Gas & Electric Co.	0.70	$38.94	3.20	1.11	1.15	1.30	18.85	20.00	23.60	35.00	36.00	4.17%
Northeast Utilities	0.75	$44.90	3.50	1.57	1.68	2.00	31.45	32.55	36.50	316.50	325.00	5.98%
Northwestern Corp	0.70	$47.93	3.00	1.60	1.68	1.90	28.15	29.20	32.25	39.50	39.70	4.19%
OGE Energy Corp.	0.85	$36.77	2.50	0.93	1.03	1.35	16.30	17.40	20.75	200.00	204.00	9.44%
PG&E Corp.	0.65	$45.69	3.00	1.82	1.82	2.10	32.30	33.20	36.50	477.00	500.00	4.89%
Pinnacle West Capital Corp.	0.70	$55.37	4.25	2.33	2.44	2.80	39.35	40.80	45.25	110.75	117.50	4.69%
PNM Resources Inc.	0.85	$26.30	2.35	0.74	0.80	1.15	21.50	22.10	24.50	80.00	80.00	12.86%
Portland General Electric Co.	0.80	$33.13	2.50	1.12	1.14	1.40	24.35	25.60	29.00	78.25	90.00	7.09%
SCANA Corp.	0.75	$51.03	4.25	2.10	2.16	2.35	35.00	37.10	43.30	145.00	157.50	2.85%
Sempra Energy	0.75	$102.76	6.50	2.64	2.80	3.40	46.80	48.60	56.25	246.50	252.00	6.69%
Southern Co.(The)	0.60	$43.80	3.25	2.08	2.15	2.36	22.20	22.95	26.25	902.00	940.00	3.16%
TECO Energy Inc.	0.85	$17.67	1.35	0.88	0.88	0.95	11.30	11.35	12.25	233.50	233.50	2.58%
UIL Holdings Corp.	0.80	$36.49	2.75	1.73	1.73	1.73	24.45	25.30	29.05	56.75	56.75	0.00%
Westar Energy Inc.	0.75	$36.12	2.90	1.40	1.44	1.60	24.10	25.60	29.65	129.00	135.00	3.57%
Wisconsin Energy Corp.	0.65	$44.33	3.25	1.56	1.68	2.10	19.65	20.65	21.50	225.50	220.00	7.72%
Xcel Energy Inc.	0.70	$31.21	2.50	1.20	1.26	1.45	20.05	20.95	23.75	508.00	518.00	4.79%
Median Beta	***0.75***											
Average	***0.74***										Median	**4.69%**
Data Source	Latest Value Line Investment Survey											

Central Hudson Gas & Electric Corporation
STAFF DCF APPROACH - GENERIC FINANCE METHOD

Company	Retention Rate 2018	Return on Equity 2018	B x R	Increase in Shares	PBR 2014	S Factor	V Factor	S x V	Sustainable Growth	Long-Form ROE
ALLETE Inc.	38.67%	9.60%	3.71%	1.08%	1.38	0.01	0.27	0.41%	4.12%	8.34%
Alliant Energy Corp	40.00%	11.74%	4.69%	0.89%	1.89	0.02	0.47	0.79%	5.48%	9.01%
Ameren Corp.	40.00%	9.55%	3.82%	0.95%	1.40	0.01	0.29	0.38%	4.20%	8.25%
American Electric Power Co. Inc.	37.50%	10.08%	3.78%	0.41%	1.53	0.01	0.35	0.21%	3.99%	8.16%
Avista Corp.	33.33%	8.61%	2.87%	0.73%	1.34	0.01	0.25	0.25%	3.12%	7.37%
Black Hills Corp.	41.54%	9.33%	3.87%	0.55%	1.75	0.01	0.43	0.42%	4.29%	7.38%
Cleco Corp.	36.92%	10.42%	3.85%	0.00%	2.01	0.00	0.50	0.00%	3.85%	7.12%
CMS Energy Corp	40.00%	13.46%	5.38%	0.72%	2.21	0.02	0.55	0.87%	6.25%	9.99%
Consolidated Edison Inc.	35.29%	8.77%	3.10%	0.00%	1.31	0.00	0.24	0.00%	3.10%	7.51%
Duke Energy Corporation	35.24%	8.19%	2.88%	0.14%	1.24	0.00	0.20	0.03%	2.92%	7.18%
Edison International	54.44%	10.84%	5.90%	0.00%	1.70	0.00	0.41	0.00%	5.90%	8.88%
El Paso Electric Co.	50.91%	9.76%	4.97%	-0.31%	1.55	0.00	0.35	-0.17%	4.80%	7.85%
Empire District Electric Co.	34.29%	8.78%	3.01%	1.95%	1.39	0.03	0.28	0.77%	3.78%	7.86%
Entergy Corporation	41.54%	9.94%	4.13%	0.00%	1.34	0.00	0.25	0.00%	4.13%	8.50%
Great Plains Energy Inc.	40.00%	7.80%	3.12%	0.32%	1.09	0.00	0.08	0.03%	3.15%	7.41%
Hawaiian Electric Industries Inc.	35.00%	9.95%	3.48%	1.89%	1.41	0.03	0.29	0.77%	4.25%	8.87%
IDACORP Inc.	41.33%	8.50%	3.51%	0.00%	1.43	0.00	0.30	0.00%	3.51%	7.06%
Madison Gas & Electric Co.	59.38%	13.93%	8.27%	0.71%	2.07	0.01	0.52	0.75%	9.03%	11.54%
Northeast Utilities	42.86%	9.77%	4.19%	0.66%	1.43	0.01	0.30	0.28%	4.47%	8.32%
Northwestern Corp	36.67%	9.46%	3.47%	0.13%	1.70	0.00	0.41	0.09%	3.56%	7.09%
OGE Energy Corp.	46.00%	12.40%	5.70%	0.50%	2.26	0.01	0.56	0.62%	6.33%	9.31%
PG&E Corp.	30.00%	8.35%	2.50%	1.18%	1.41	0.02	0.29	0.49%	3.00%	7.15%
Pinnacle West Capital Corp.	34.12%	9.55%	3.26%	1.49%	1.41	0.02	0.29	0.61%	3.87%	8.33%
PNM Resources Inc.	51.06%	9.76%	4.98%	0.00%	1.22	0.00	0.18	0.00%	4.98%	8.66%
Portland General Electric Co.	44.00%	8.80%	3.87%	3.56%	1.36	0.05	0.27	1.28%	5.16%	8.73%
SCANA Corp.	44.71%	10.07%	4.50%	2.09%	1.46	0.03	0.31	0.96%	5.46%	9.36%
Sempra Energy	47.69%	11.84%	5.65%	0.55%	2.20	0.01	0.54	0.66%	6.31%	9.00%
Southern Co.(The)	27.38%	12.66%	3.47%	1.04%	1.97	0.02	0.49	1.01%	4.48%	9.17%
TECO Energy Inc.	29.63%	11.16%	3.31%	0.00%	1.56	0.00	0.36	0.00%	3.31%	8.16%
UIL Holdings Corp.	37.09%	9.68%	3.59%	0.00%	1.49	0.00	0.33	0.00%	3.59%	7.86%
Westar Energy Inc.	44.83%	10.02%	4.49%	1.14%	1.50	0.02	0.33	0.57%	5.06%	8.85%
Wisconsin Energy Corp.	35.38%	15.22%	5.38%	-0.62%	2.26	-0.01	0.56	-0.77%	4.61%	8.67%
Xcel Energy Inc.	42.00%	10.75%	4.51%	0.49%	1.56	0.01	0.36	0.27%	4.79%	8.78%
Average	***40.27%***	***10.26%***	***4.16%***	***0.67%***	***160.07%***	***1.03%***	***35.21%***	***0.35%***	***4.51%***	***8.35%***
Median	***40.00%***	***9.77%***	***3.85%***	***0.55%***	***149.26%***	***0.97%***	***33.00%***	***0.28%***	***4.25%***	***8.33%***

Quantitative Profiles

Equity & Quant Strategy | United States
18 August 2014 (Corrected)

A PM's guide to stock picking

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Value and Quality fared best in July

Valuation factors were most resilient amid July's market weakness. Four of the top five performers last month were low valuation factors, with High Free Cash Flow to EV and Low EV/EBITDA leading (+1.0% each). As is typically the case in a declining market, Quality factors outperformed the index with High 5-yr Debt Adjusted ROE (+0.2%) faring best and also claiming a spot among the top five factors. Interestingly, Risk factors, which normally underperform in a declining market, were more resilient than the index, as High EPS Estimate Dispersion (-1.1%), Low Price (-1.4%) and High Beta (-1.7%) all outperformed.

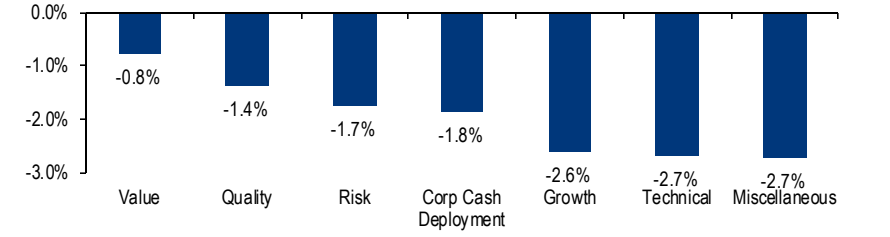
Growth and Momentum trailed; Cash Deployment mixed

With July delivering the first down month for the S&P 500 since January, Momentum and Technical factors bore the brunt of selling. Three of last month's five weakest performing factors were Relative Strength factors, which each posted ~4% declines. Growth factors were generally weak, although stocks with highest secular growth prospects beat the index with a -2.1% return. In terms of other factors, High Foreign Exposure (-4.0%) finished among bottom five amid rising geopolitical tensions, despite improving revision trends and earnings results for this group. Cash Deployment factor returns were mixed, as Share Repurchase (-0.3%) staged a comeback to be among July's top factors while High Dividend Growth (-2.3%) and High Dividend Yield (-2.8%) underperformed.

High Dividend Yield leads YTD; Prefer Dividend Growth through year end

Cash Deployment is beating other factor groups so far this year, with High Dividend Yield (+14.3%) outperforming all other factors we follow. While declining interest rates may have helped the highest yielding stocks YTD, our house forecast of rising interest rates for the remainder of the year poses a risk for this group. We prefer exposure to dividend payers through High Dividend Growth stocks, which typically fare better in rising rate environments and benefit from a pick-up in economic growth.

Chart 1: Factor group performance in July



Source: BofA Merrill Lynch US Equity and US Quant Strategy

Top 5 screens in July	Perf.
High Free Cash Flow to EV	1.0%
Low EV/EBITDA	1.0%
Low Price to Sales	0.6%
Low Price to Free Cash Flow	0.5%
ROE (5-Yr Avg. Adj. by Debt)	0.2%
S&P 500 (Equal weighted)	**-2.3%**

Bottom 5 screens in July	Perf.
Relative Strength (Price/200d MA)	-4.3%
High Foreign Exposure	-4.0%
Relative Strength (10wk/40wk)	-4.0%
Analyst Coverage Neglect	-4.0%
Relative Strength (5wk/30wk)	-3.8%
S&P 500 (Equal weighted)	**-2.3%**

Disclaimer: The valuations and screens contained herein are useful in assessing comparative valuations and comparative earnings prospects and are not intended to recommend transactions relating to any specific security. These indicators should be used in investment decisions only with other factors including financial risk, investment risk, management strategies and operating and financial outlooks.

Refer to important disclosures on page 63 to 65. Link to Definitions on page 62.

BofAML Universe Sector/Industry Factor Evaluation (cont'd)

			Valuation Analysis								Expectation Analysis							
	# of	% Univ	Impl.	Reqd	DDM	Eqty.	BofAML	P/E	Price/		Earnings (Decile)					PR 5yr	EPS Growth	
	Comp	BofAML	Return	Return	Alpha	Duration	Adj ßeta	Ratio	Book	Yield	Surprise	Risk	Torp	Disp	Est. Rev.	Growth	2014E	2015E
CONSUMER STAPLES	51	8.26	10.4	8.6	1.8	31.0	0.72	17.0	3.76	2.8	7	3	4	2	6	8.5	5	10
FOOD & STAPLES RETAILING	13	1.95	11.1	9.8	1.3	31.2	0.86	16.6	3.06	1.8	7	2	4	3	7	11.7	7	12
BEVERAGES	7	1.77	10.0	8.1	1.9	32.0	0.67	18.1	4.85	2.8	9	3	3	2	5	7.3	3	10
FOOD PRODUCTS	17	1.41	10.5	7.9	2.6	32.6	0.65	16.9	2.82	2.3	5	4	5	3	6	10.4	13	11
TOBACCO	4	1.28	10.6	9.2	1.4	25.4	0.79	15.4	13.48	4.6	6	2	3	1	5	5.4	1	7
HOUSEHOLD PRODUCTS	6	1.70	9.9	7.4	2.5	32.2	0.60	17.5	3.97	3.1	7	2	3	1	6	6.9	5	9
PERSONAL PRODUCTS	4	0.15	9.7	12.5	-2.8	39.3	1.14	18.2	6.44	1.4	8	6	3	4	4	8.5	-4	13
HEALTH CARE	163	13.67	10.5	9.7	0.8	34.1	0.84	17.0	3.72	1.5	6	5	5	4	4	12.9	19	14
HEALTH CARE EQUIP	31	2.11	10.4	10.7	-0.3	35.6	0.94	17.3	3.44	1.5	5	5	4	3	5	9.9	11	10
HEALTH CARE PROV	45	2.52	10.8	10.1	0.7	35.6	0.88	15.0	2.50	0.8	6	4	5	3	5	11.0	9	13
HEALTH CARE TECH	3	0.06	10.6	9.1	1.5	36.8	0.77	16.6	3.86	0.0	4	4	8	3	9	11.3	2	27
BIOTECH	41	2.76	15.8	9.6	6.2	26.8	0.83	20.1	7.52	0.3	6	4	7	7	3	24.9	149	27
PHARMACEUTICALS	32	5.56	10.3	9.1	1.2	32.2	0.78	16.4	3.75	2.5	6	5	3	4	5	8.9	5	10
LIFE SCIENCES	11	0.66	10.2	10.8	-0.6	39.8	0.96	19.7	3.40	0.3	7	4	6	2	4	13.6	19	14
FINANCIALS	276	14.97	11.4	12.8	-1.4	29.7	1.17	12.6	1.40	2.5	5	6	5	4	5	10.4	4	9
BANKS	39	4.83	12.0	13.4	-1.4	28.0	1.23	11.1	1.15	2.1	3	5	5	4	7	8.7	0	10
THRIFTS & MORTGAGE FINANCE	10	0.15	10.8	9.6	1.2	29.1	0.84	12.2	1.30	2.7	6	5	5	7	7	7.3	13	25
DIV FINANCIALS	6	0.34	11.2	10.1	1.1	32.4	0.89	17.0	1.23	1.7	3	6	5	4	9	13.0	5	17
CONSUMER FINANCE	7	0.91	10.8	12.3	-1.5	34.5	1.12	12.3	1.94	1.3	7	6	6	4	3	14.3	21	8
CAPITAL MARKETS	44	2.34	11.6	14.8	-3.2	31.1	1.39	13.3	1.56	2.1	5	5	6	5	5	15.3	12	12
INSURANCE	40	2.77	11.7	13.5	-1.8	29.5	1.24	10.8	1.08	2.0	6	6	3	4	4	8.7	-1	7
REITS	125	3.52	10.3	10.4	-0.1	30.3	0.92	16.7	2.25	3.9	5	7	4	3	6	9.5	6	7
REAL ESTATE MGMT & DEV	5	0.11	13.3	12.7	0.6	30.0	1.16	20.0	3.02	0.3		6			7	16.7	-14	26
INFO TECH	160	20.22	11.7	11.9	-0.2	31.5	1.08	16.1	4.23	1.3	6	5	6	5	5	15.1	12	13
INTERNET SOFTWARE	26	4.99	12.2	12.5	-0.3	33.2	1.13	22.9	6.85	0.0	8	3	6	6	5	24.2	21	18
IT SERVICES	21	2.95	11.3	10.2	1.1	31.6	0.90	14.7	6.71	1.5	7	3	6	2	5	12.0	10	14
SOFTWARE	29	3.61	10.5	11.7	-1.2	35.5	1.06	17.2	4.13	1.6	6	4	5	5	7	11.5	4	10
COMMUNICA. EQUIP	16	1.58	12.0	13.0	-1	28.3	1.19	13.6	2.76	2.3	7	4	5	4	3	13.5	9	9
COMPUTERS & PERIPH	12	4.08	12.2	11.4	0.8	28.9	1.03	13.1	3.95	1.9	4	6	6	5	4	13.7	10	11
ELECTR EQUIP & INSTR	20	0.59	12.1	15.0	-2.9	30.2	1.40	13.2	1.81	1.3	5	6	7	4	5	13.7	14	15
SEMICONDUCTORS	36	2.44	11.8	12.9	-1.1	29.3	1.18	15.6	3.02	2.0	8	8	6	7	3	8.9	23	15
TELECOMMUNICATION SERVICES	16	2.68	10.1	8.2	1.9	29.1	0.68	16.0	3.03	4.0	5	9	6	6	7	9.5	4	11
DIVERSIFIED TELECOM SVS	11	2.32	10.1	7.9	2.2	29.1	0.65	13.8	3.42	4.6	5	9	6	5	6	4.3	-1	9
WIRELESS TELECOM SVS	5	0.36		11.2			1.00	nm	1.75	0.0	4		8	10	8	43.2	nm	nm
UTILITIES	46	2.64	9.8	7.3	2.5	32.2	0.59	15.7	1.64	3.8	5	5	3	3	5	7.6	9	3
ELECTRIC UTILITIES	16	1.42	9.8	7.0	2.8	31.6	0.56	14.8	1.50	4.0	5	5	2	2	4	3.3	1	4
GAS UTILITIES	14	0.23	9.6	7.8	1.8	32.8	0.64	16.4	1.80	4.3	4	5	4	4	3	5.2	18	-6
MULTI-UTILITIES	9	0.78	9.8	7.1	2.7	31.6	0.56	16.3	1.86	3.7	3	5	3	2	5	5.3	8	3
WATER UTILITIES	1	0.04	10.3			31.3		18.9	1.78	2.6	6	2	4	1	5	9.8	17	7
INDEP POWER PROD & ENERGY TRAD	6	0.18	10.1	10.0	0.1	41.0	0.88	20.5	1.79	1.1	7	8	8	8	4	54.9	490	18
BofAML UNIVERSE	**1240**	**100.0**	**11.2**	**11.4**	**-0.2**	**31.3**	**1.03**	**16.6**	**2.68**	**2.0**						**12.9**	**9**	**13**
S&P 500	**501**	**90.12**	**11.2**	**11.4**	**-0.2**	**31.1**	**1.03**	**16.1**	**2.63**	**2.0**						**11.5**	**9**	**13**

Source: BofA Merrill Lynch US Equity and US Quant Strategy

Quantitative Profiles

Equity & Quant Strategy | United States
08 September 2014 (Corrected)

A PM's guide to stock picking

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Quality outperformed in August; remains behind for the year

Despite strong equity returns last month (S&P 500 +4.0%) return-based Quality factors outperformed in August, uniformly beating the index and claiming four of the five top spots for the month. Although Quality factors had strong results in July and August, it remains the weakest performing style category so far this year despite a respectable 8.8% average year-to-date (YTD) gain.

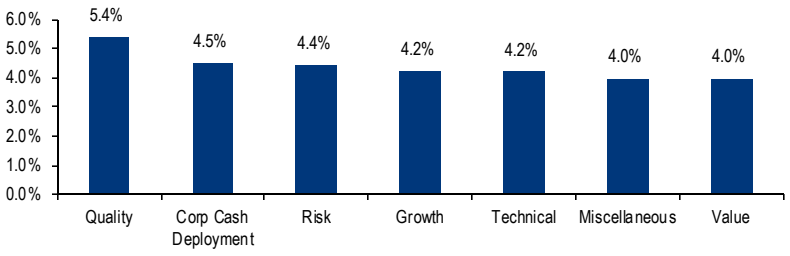
Cash Deployment and Risk fared well in August and YTD

High Dividend Growth (+5.0%) and Share Repurchase (+4.5%) outperformed last month, making Cash Deployment factors the second best performers in August after Quality factors; it is also the best-performing factor group YTD. High Dividend Yield lagged last month, but remains best performing factor so far this year, helped by the decline in interest rates YTD. We continue to prefer dividend growth over dividend yield, as the latter tends to lag in a rising interest rate environment. And while Share Repurchase has outperformed the last two months, it has underperformed YTD as investors have instead rewarded companies spending on growth via capex and M&A. Risk factors performed well last month, led by High EPS Estimate Dispersion (+5.3%) and High Beta (+5.1%). YTD all of the risk factors we track have outperformed the index.

Value mixed; free cash flow factors lead in August

Value factors saw mixed performance: Low Price to Book Value lagged most (+3.5%), while Forward EPS Yield led (+4.5%). Free cash flow based factors, High FCF/EV (+4.4%) and Low Price/FCF (+4.2%), fared well, as they tend to do in the later phases of expansion cycle when M&A activity picks up and healthy cash flows attract more attention. Year-to-date, Low Price/Cash Flow (+16.7%) and High FCF/EV (+15.6%) are among the top five factors we follow and Low Price/FCF (+13.1%) handily beats the index.

Chart 1: Factor group performance in August



Source: BofA Merrill Lynch US Equity and US Quant Strategy

Top 5 screens in August	Perf.
ROE (1-Yr Average)	5.8%
ROC	5.6%
ROA	5.6%
ROE (1-Yr Avg. Adj. by Debt)	5.6%
High EPS Estimate Dispersion	5.3%
S&P 500 (Equal weighted)	**4.0%**

Bottom 5 screens in August	Perf.
Alpha Surprise Model	3.1%
Forecast Positive Earnings Surprise	3.2%
Low Price	3.3%
Most Active	3.4%
Low EPS Torpedo	3.4%
S&P 500 (Equal weighted)	**4.0%**

Disclaimer: The valuations and screens contained herein are useful in assessing comparative valuations and comparative earnings prospects and are not intended to recommend transactions relating to any specific security. These indicators should be used in investment decisions only with other factors including financial risk, investment risk, management strategies and operating and financial outlooks.

BofAML Universe Sector/Industry Factor Evaluation (cont'd)

			Valuation Analysis									Expectation Analysis						
	# of	% Univ	Impl.	Reqd	DDM	Eqty.	BofAML	P/E	Price/			Earnings (Decile)				PR 5yr	EPS Growth	
	Comp	BofAML	Return	Return	Alpha	Duration	Adj ßeta	Ratio	Book	Yield	Surprise	Risk	Torp	Disp	Est. Rev.	Growth	2014E	2015E
CONSUMER STAPLES	51	8.32	10.2	8.5	1.7	32.2	0.72	17.6	3.91	2.7	6	3	4	2	6	8.2	5	9
FOOD & STAPLES RETAILING	13	1.89	11.1	9.5	1.6	31.8	0.83	16.6	3.03	1.8	5	2	4	3	7	11.7	6	11
BEVERAGES	7	1.80	9.8	8.0	1.8	33.2	0.68	19.0	5.11	2.6	9	3	3	2	5	7.3	3	9
FOOD PRODUCTS	17	1.44	10.3	7.8	2.5	33.7	0.66	17.7	2.93	2.1	5	4	5	3	7	8.6	12	11
TOBACCO	4	1.29	10.2	9.2	1	28.2	0.80	16.0	14.28	4.5	6	2	3	1	6	5.4	1	7
HOUSEHOLD PRODUCTS	6	1.74	9.9	7.3	2.6	32.7	0.60	18.5	4.35	2.9	6	2	3	1	7	7.2	5	8
PERSONAL PRODUCTS	4	0.15	8.8	12.1	-3.3	43.6	1.10	19.4	6.49	1.4	8	5	2	4	8	4.6	-10	12
HEALTH CARE	162	13.85	10.4	9.4	1	34.6	0.82	17.7	3.89	1.4	6	5	5	4	4	12.8	19	13
HEALTH CARE EQUIP	32	2.06	10.4	10.6	-0.2	35.7	0.94	17.5	3.46	1.4	6	5	4	3	5	9.8	11	9
HEALTH CARE PROV	44	2.56	10.8	10.0	0.8	35.7	0.88	15.6	2.61	0.8	6	4	5	3	4	11.1	8	14
HEALTH CARE TECH	3	0.06	10.3	9.6	0.7	38.0	0.84	17.9	4.72	0.0	3	4	8	3	5	11.4	1	27
BIOTECH	41	2.96	12.8	9.6	3.2	29.1	0.84	21.5	8.43	0.3	5	4	7	7	2	24.0	152	26
PHARMACEUTICALS	31	5.55	10.2	8.4	1.8	32.9	0.71	16.9	3.85	2.4	7	5	4	4	5	8.6	5	10
LIFE SCIENCES	11	0.66	10.1	10.8	-0.7	40.3	0.96	20.1	3.51	0.3	7	4	6	2	5	13.8	19	14
FINANCIALS	276	14.91	11.3	12.5	-1.2	30.2	1.15	12.9	1.44	2.4	4	6	5	4	5	9.6	4	9
BANKS	40	4.76	11.9	13.1	-1.2	28.3	1.21	11.3	1.18	2.1	3	6	5	4	6	8.7	0	10
THRIFTS & MORTGAGE FINANCE	10	0.14	10.9	9.8	1.1	29.1	0.86	13.4	1.30	2.7	7	5	5	7	6	7.5	-1	23
DIV FINANCIALS	6	0.33	11.3	10.1	1.2	32.3	0.89	17.2	1.24	1.7	4	6	5	4	8	13.6	5	18
CONSUMER FINANCE	7	0.91	10.7	11.9	-1.2	34.8	1.09	12.5	1.98	1.3	7	7	6	3	4	13.9	22	8
CAPITAL MARKETS	44	2.35	11.5	14.8	-3.3	31.7	1.39	13.7	1.66	2.1	5	5	6	5	5	14.7	11	12
INSURANCE	40	2.82	11.5	12.8	-1.3	30.3	1.17	11.2	1.12	1.9	6	6	4	4	5	8.7	0	7
REITS	124	3.49	10.2	10.2	0	30.7	0.90	17.0	2.29	3.8	5	7	4	2	5	6.6	9	7
REAL ESTATE MGMT & DEV	5	0.12	13.1	12.5	0.6	30.5	1.15	21.9	3.18	0.2		6				16.7	-13	28
INFO TECH	159	20.19	11.6	11.6	0	32.0	1.06	16.5	4.39	1.3	6	5	6	5	5	11.9	13	13
INTERNET SOFTWARE	25	4.88	12.2	11.3	0.9	33.2	1.02	23.1	7.02	0.0	8	3	6	6	5	24.9	22	18
IT SERVICES	21	2.86	11.2	10.1	1.1	31.8	0.89	14.7	6.78	1.5	7	3	6	2	5	12.0	10	14
SOFTWARE	30	3.61	10.4	11.7	-1.3	36.0	1.06	17.9	4.28	1.5	6	5	5	6	7	11.1	4	9
COMMUNICA. EQUIP	16	1.56	11.9	12.9	-1	28.7	1.19	13.9	2.80	2.2	7	4	5	5	4	12.8	10	8
COMPUTERS & PERIPH	12	4.20	12.0	11.4	0.6	29.9	1.03	13.8	4.21	1.8	4	6	6	6	5	13.7	10	11
ELECTR EQUIP & INSTR	20	0.60	11.9	14.9	-3	31.1	1.40	13.6	1.90	1.2	6	6	7	4	5	13.4	14	15
SEMICONDUCTORS	35	2.48	11.8	12.8	-1	29.9	1.18	16.0	3.22	1.9	8	8	7	7	3	-17.0	25	15
TELECOMMUNICATION SERVICES	14	2.51	10.1	8.1	2	28.9	0.68	15.2	2.95	4.1	4	9	6	5	6	7.8	2	9
DIVERSIFIED TELECOM SVS	10	2.21	10.1	7.9	2.2	28.9	0.66	13.6	3.39	4.6	4	9	6	4	6	4.2	-2	9
WIRELESS TELECOM SVS	4	0.30		9.7			0.85	115.8	1.52	0.0	5		8	10	6	33.8	119	-2
UTILITIES	46	2.67	9.7	7.2	2.5	32.5	0.59	16.4	1.71	3.6	5	5	3	3	5	9.9	9	2
ELECTRIC UTILITIES	16	1.44	9.8	7.0	2.8	31.7	0.57	15.4	1.57	3.9	5	5	2	2	5	2.9	2	3
GAS UTILITIES	14	0.23	9.4	7.8	1.6	33.9	0.65	17.4	1.92	4.1	5	5	4	4	4	5.6	18	-6
MULTI-UTILITIES	9	0.78	9.7	7.0	2.7	32.6	0.57	17.0	1.95	3.6	3	4	3	2	5	5.9	9	3
WATER UTILITIES	1	0.05	10.1			32.5		19.9	1.86	2.5	6	2	4	2	6	9.8	17	7
INDEP POWER PROD & ENERGY TRAD	6	0.18	10.7	9.9	0.8	37.3	0.88	22.1	1.80	1.1	7	8	8	9	8	90.2	445	9
BofAML UNIVERSE	**1228**	**100.0**	**11.1**	**11.2**	**-0.1**	**31.8**	**1.01**	**17.2**	**2.78**	**2.0**						**12.4**	**10**	**13**
S&P 500	**502**	**90.11**	**11.1**	**11.2**	**-0.1**	**31.6**	**1.02**	**16.8**	**2.72**	**2.0**						**11.5**	**9**	**13**

Source: BofA Merrill Lynch US Equity and US Quant Strategy

Equity & Quant Strategy | United States
09 October 2014

A PM's guide to stock picking

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Quality Quality Quality

Quality factors (High ROE, High ROA, and High ROC) held up better than other factor groups amid rising volatility, and in 3Q, Quality was the only factor group that registered gains, handily beating its peers (Chart 1) and claiming four of the top spots this quarter. Cash return factors had mixed results: last month High Dividend Yield (-2.9%) outperformed High Dividend Growth (-4.1%), but underperformed the market amid rising rates. For the full year, however, Dividend Yield retains its top spot with a 15.3% return. Share Repurchase (-2.8%) was weak in September and lags the market for the full year.

Risk and Foreign Exposure lagged

Risk factors lagged last month: stocks with the highest earnings estimate dispersion dropped 7.0% and high beta stocks suffered a similar fate (-6.3%). High Foreign Exposure underperformed last month (-4.5%) and was the weakest factor for the quarter as the dollar strengthened and risks to Europe and China growth came into focus. Foreign Exposure (-5.1% in 3Q) may be due for a relief rally, as a decline of this magnitude implies over a 16% move in the USD based on historical sensitivity, where in reality we have only seen half of this strength.

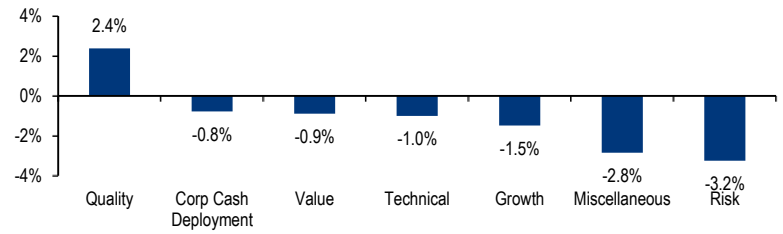
An un-popularity contest

Stocks most shunned by institutional investors outperformed last month (-2.0%), in 3Q (-0.1%), and year-to-date (+9.9%). These stocks tend to have a much higher dividend yield than the S&P 500, and tend to be concentrated in sectors like REITs and Utilities, that are generally underowned by traditional active large cap funds. This year's active managers' underperformance may be explained by this phenomenon.

4Q strategy: sell 3Q winners and buy free cash flow yield

Based on our historical data, we tracked which factors tend to work best and worst in the fourth quarter of the year relative to their typical performance. Stocks with strongest performance over the last three months (p. 27) tend to underperform in the fourth quarter – the hit rate of outperforming in the fourth quarter is 37%, where the average quarterly hit rate is 51%. And stocks with attractive Free Cash Flow to Enterprise Value (p.17) tend to outperform the market with an impressive 4Q outperformance rate of 96% since 1986.

Chart 1: Factor group performance in 3Q 2014



Source: BofA Merrill Lynch US Equity and US Quant Strategy

Top 5 screens in 3Q	Perf.
ROE (5-Yr Avg. Adj. by Debt)	3.8%
ROA	3.4%
ROE (1-Yr Avg. Adj. by Debt)	3.1%
ROC	2.6%
High Free Cash Flow to EV	2.3%
S&P 500 (Equal weighted)	**-1.1%**

Bottom 5 screens in 3Q	Perf.
High Foreign Exposure	-5.1%
Low Price to Cash Flow	-4.8%
Low EPS Torpedo	-4.7%
Analyst Coverage Neglect	-3.9%
Low Price	-3.6%
S&P 500 (Equal weighted)	**-1.1%**

Disclaimer: The valuations and screens contained herein are useful in assessing comparative valuations and comparative earnings prospects and are not intended to recommend transactions relating to any specific security. These indicators should be used in investment decisions only with other factors including financial risk, investment risk, management strategies and operating and financial outlooks.

Refer to important disclosures on page 63 to 65.

BofAML Universe Sector/Industry Factor Evaluation (cont'd)

			Valuation Analysis								Expectation Analysis							
	# of	% Univ	Impl.	Reqd	DDM	Eqty.	BofAML	P/E	Price/			Earnings (Decile)				PR 5yr	EPS Growth	
	Comp	BofAML	Return	Return	Alpha	Duration	Adj ßeta	Ratio	Book	Yield	Surprise	Risk	Torp	Disp	Est. Rev.	Growth	2014E	2015E
CONSUMER STAPLES	50	8.45	10.2	8.5	1.7	32.2	0.72	17.7	3.94	2.7	7	3	4	2	6	7.8	5	8
FOOD & STAPLES RETAILING	12	1.91	11.1	9.6	1.5	31.9	0.83	16.6	3.05	1.8	5	2	4	3	6	11.7	8	11
BEVERAGES	7	1.88	9.5	8.0	1.5	34.3	0.66	19.5	5.16	2.6	8	3	3	2	5	6.4	3	7
FOOD PRODUCTS	17	1.43	10.3	7.9	2.4	33.4	0.66	17.3	2.87	2.2	5	4	5	3	7	8.2	12	11
TOBACCO	4	1.32	10.2	9.2	1	26.4	0.80	16.3	15.10	4.6	7	2	3	2	7	4.9	0	6
HOUSEHOLD PRODUCTS	6	1.78	9.8	7.3	2.5	33.0	0.60	18.8	4.38	2.9	8	2	3	1	7	7.1	4	7
PERSONAL PRODUCTS	4	0.13	9.0	12.1	-3.1	42.4	1.11	18.3	6.13	1.5	7	5	2	3	9	5.2	-11	11
HEALTH CARE	163	13.96	10.6	9.5	1.1	34.3	0.82	17.4	3.88	1.4	6	5	5	4	4	15.4	17	14
HEALTH CARE EQUIP	32	2.03	10.4	10.6	-0.2	34.8	0.94	16.9	3.37	1.5	5	5	4	3	5	9.7	10	9
HEALTH CARE PROV	44	2.54	10.8	10.1	0.7	35.8	0.89	15.2	2.56	0.8	6	4	5	3	4	11.1	8	14
HEALTH CARE TECH	3	0.06	10.5	9.7	0.8	36.8	0.85	16.1	4.32	0.0	3	4	8	3	5	11.3	1	27
BIOTECH	41	2.93	11.5	9.8	1.7	33.3	0.86	20.4	8.29	0.3	5	4	7	7	3	36.5	111	28
PHARMACEUTICALS	32	5.75	10.2	8.4	1.8	33.2	0.71	17.1	3.93	2.4	6	6	4	4	5	8.7	5	10
LIFE SCIENCES	11	0.65	10.1	10.8	-0.7	39.9	0.97	19.4	3.42	0.3	7	4	6	2	5	13.7	19	13
FINANCIALS	275	14.97	11.4	12.5	-1.1	29.8	1.15	12.5	1.42	2.4	4	6	5	4	5	9.3	4	9
BANKS	40	4.84	11.8	13.0	-1.2	28.4	1.21	11.2	1.18	2.1	3	6	5	4	6	8.7	0	10
THRIFTS & MORTGAGE FINANCE	10	0.14	11.0	9.9	1.1	28.6	0.87	12.8	1.26	2.7	7	5	5	6	6	11.4	-1	22
DIV FINANCIALS	6	0.34	11.2	10.0	1.2	32.7	0.88	17.4	1.27	1.7	3	6	4	4	7	13.6	5	18
CONSUMER FINANCE	8	1.00	10.7	11.9	-1.2	34.7	1.09	11.9	2.04	1.1	5	7	6	4	3	8.1	18	6
CAPITAL MARKETS	44	2.38	11.5	14.7	-3.2	31.5	1.39	13.4	1.64	2.1	5	6	6	5	4	14.9	12	12
INSURANCE	40	2.79	11.6	12.8	-1.2	30.0	1.18	10.9	1.09	1.9	5	6	3	4	5	8.7	1	5
REITS	122	3.37	10.5	10.2	0.3	29.1	0.90	15.7	2.16	4.1	5	7	5	2	5	6.3	9	7
REAL ESTATE MGMT & DEV	5	0.11	13.4	12.6	0.8	29.9	1.16	20.3	2.97	0.3		6			2	16.6	-14	29
INFO TECH	161	20.57	11.6	11.6	0	32.6	1.05	16.3	4.01	1.3	7	5	6	5	5	12.0	12	13
INTERNET SOFTWARE	26	5.15	12.3	11.0	1.3	33.1	0.99	23.3	4.57	0.0	7	3	6	6	5	25.1	22	18
IT SERVICES	21	2.82	10.8	10.1	0.7	34.0	0.89	14.4	6.63	1.6	6	3	6	2	6	11.4	11	12
SOFTWARE	30	3.78	10.4	11.6	-1.2	35.8	1.05	17.9	4.23	1.7	7	5	5	6	8	10.8	3	8
COMMUNICA. EQUIP	16	1.56	11.9	12.9	-1	28.4	1.19	13.7	2.78	2.2	7	4	5	5	5	13.0	10	8
COMPUTERS & PERIPH	12	4.15	11.1	11.3	-0.2	34.6	1.02	13.3	4.10	1.8	9	6	6	5	5	11.4	11	12
ELECTR EQUIP & INSTR	20	0.56	11.9	14.9	-3	30.7	1.41	12.5	1.75	1.3	6	6	7	4	5	13.3	13	14
SEMICONDUCTORS	36	2.56	12.0	12.9	-0.9	29.0	1.19	15.1	3.25	1.9	7	8	6	7	3	-12.0	23	18
TELECOMMUNICATION SERVICES	14	2.58	10.2	8.1	2.1	28.5	0.67	15.2	2.98	4.1	4	9	6	5	6	6.4	2	9
DIVERSIFIED TELECOM SVS	10	2.26	10.2	7.9	2.3	28.5	0.65	13.5	3.41	4.7	4	9	6	5	6	4.5	-2	10
WIRELESS TELECOM SVS	4	0.32		9.5			0.83	185.4	1.58	0.0	4		8	10	3	19.6	119	-58
UTILITIES	46	2.65	9.8	7.3	2.5	32.2	0.60	16.0	1.67	3.7	5	5	3	3	5	9.9	10	2
ELECTRIC UTILITIES	16	1.43	9.8	7.1	2.7	31.1	0.57	15.0	1.53	4.0	5	5	2	2	5	2.8	2	3
GAS UTILITIES	14	0.22	9.5	7.8	1.7	32.5	0.65	16.7	1.83	4.3	5	5	4	4	5	5.6	21	-5
MULTI-UTILITIES	9	0.79	9.7	7.1	2.6	32.2	0.57	16.6	1.91	3.6	3	4	3	2	6	5.9	8	3
WATER UTILITIES	1	0.04	9.9			32.7		18.8	1.77	2.6	6	2	4	1	6	8.7	17	8
INDEP POWER PROD & ENERGY TRAD	6	0.17	10.2	9.9	0.3	40.8	0.87	21.8	1.70	1.1	7	8	8	9	6	93.7	431	8
BofAML UNIVERSE	**1235**	**100.0**	**11.2**	**11.2**	**0**	**31.6**	**1.01**	**17.0**	**2.70**	**2.0**						**12.6**	**10**	**13**
S&P 500	**502**	**90.39**	**11.1**	**11.2**	**-0.1**	**31.5**	**1.02**	**16.6**	**2.65**	**2.0**						**11.7**	**8**	**13**

Source: BofA Merrill Lynch US Equity and US Quant Strategy

Central Hudson Gas & Electric Corporation

INPUTS AND CALCULATIONS FOR STAFF CAPM

Merrill Lynch Cost of Market[1]

	Implied	Required
Jul-14	11.20%	11.40%
Aug-14	11.10%	11.20%
Sep-14	11.10%	11.20%

Merrill Lynch Cost of Market 11.20%

Treasury Rates[2]

	10 year	30 year
Jul-14	2.54%	3.33%
Aug-14	2.42%	3.20%
Sep-14	2.53%	3.26%

Risk-Free Rate (7/14-9/14) 2.88%

Market Risk Premium (7/14-9/14) 8.32%

Proxy Group Beta 0.75

Traditional CAPM Calculation
Risk Free Rate + (Beta * (Market Return - Risk Free Rate)

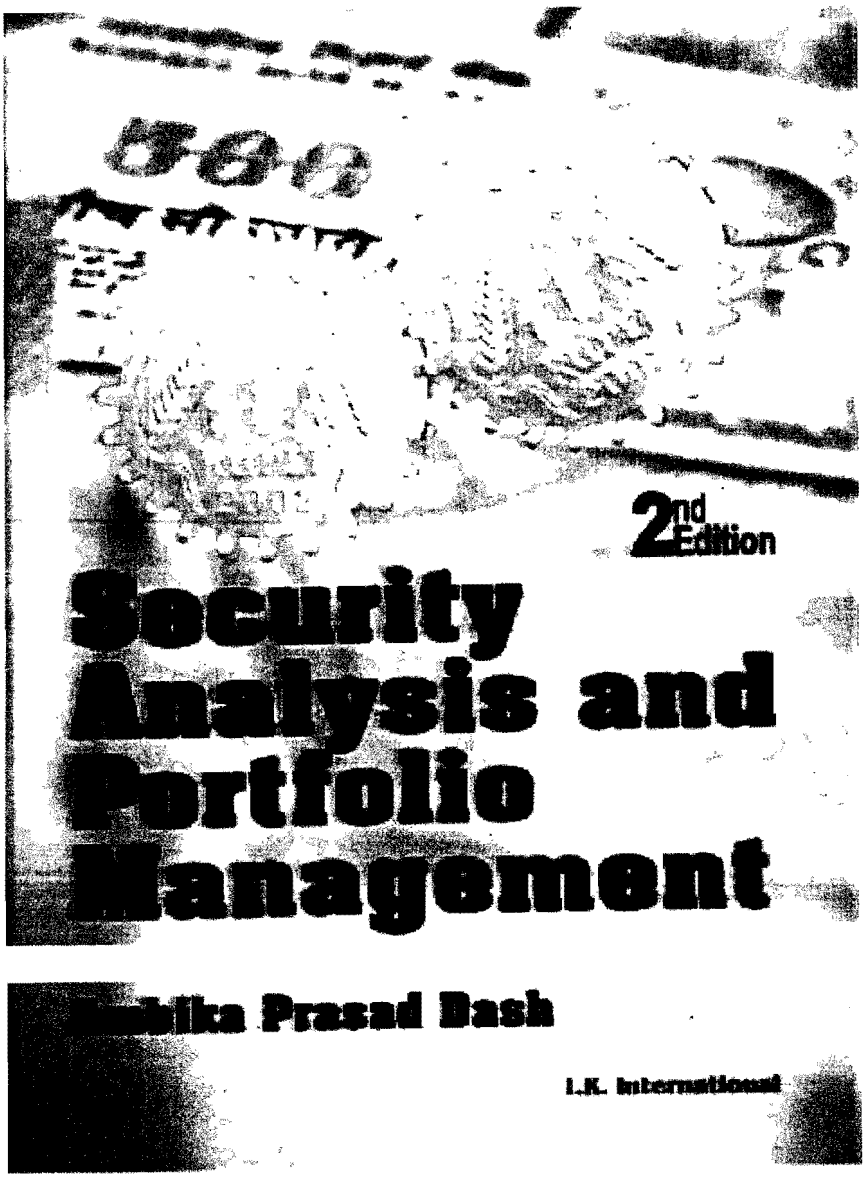
Traditional CAPM ROE 9.12%

Zero Beta CAPM Calculation
Risk Free Rate + (0.75*Beta * (Market Return - Risk Free Rate))+(0.25*(Market Return - Risk Free Rate))

Zero Beta CAPM ROE 9.64%

[1] Merrill Lynch cost of market figure is average of Implied and Required Returns for the 3 months ending September 2014

[2] Federal Reserve Statistical Release, FRB: Federal Reserve Statistical Release H.15 - Historical Data
Website : 'http://federalreserve.gov/releases/h15/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Security Analysis and Portfolio Management
I.K. International

THE MARKET PORTFOLIO

An investor might choose to invest a proportion of his or her wealth in a portfolio of risky assets with the remainder in cash—earning interest at the risk free rate (or indeed may borrow money to fund his or her purchase of risky assets in which case there is a negative cash weighting). Here, the ratio of risky assets to risk free asset determines overall return—this relationship is clearly linear. It is thus possible to achieve a particular return in one of two ways:

1. By investing all of one's wealth in a risky portfolio,
2. By investing a proportion in a risky portfolio and the remainder in cash (either borrowed or invested).

For a given level of return, however, only one of these portfolios will be optimal (in the sense of lowest risk). Since the risk free asset is, by definition, uncorrelated with any other asset, option 2) will generally have the lower variance and hence be the more efficient of the two.

This relationship also holds for portfolios along the efficient frontier: a higher return portfolio plus cash is more efficient than a lower return portfolio alone for that lower level of return. For a given risk free rate, there is only one optimal portfolio which can be combined with cash to achieve the lowest level of risk for any possible return. This is the market portfolio.

ASSUMPTIONS OF CAPM

- All investors have rational expectations.
- There are no arbitrage opportunities.
- Returns are normally distributed.
- Fixed quantity of assets.
- Perfectly efficient capital markets.
- Separation of financial and production sectors.
- Thus, production plans are fixed.
- Risk-free rates exist with limitless borrowing capacity and universal access.
- The Risk-free borrowing and lending rates are equal.
- No inflation and no change in the level of interest rate exists.
- Perfect information, hence all investors have the same expectations about security returns for any given time period.

from the mean) occur in the market more frequently than the normal distribution assumption would expect.

- The model assumes that the variance of returns is an adequate measurement of risk. This might be justified under the assumption of normally distributed returns, but for general return distributions other risk measures (like coherent risk measures) will likely reflect the investors' preferences more adequately.
- The model does not appear to adequately explain the variation in stock returns. Empirical studies show that low beta stocks may offer higher returns than the model would predict. Some data to this effect was presented as early as a 1969 conference in Buffalo, New York in a paper by Farhan Mukadam, Fischer Black, Michael Jensen, and Myron Scholes. Either that fact is itself rational (which saves the efficient markets hypothesis EMH but makes CAPM wrong), or it is irrational (which saves CAPM, but makes EMH wrong – indeed, this possibility makes volatility arbitrage a strategy for reliably beating the market).
- The model assumes that given a certain expected return investors will prefer lower risk (lower variance) to higher risk and conversely given a certain level of risk will prefer higher returns to lower ones. It does not allow for investors who will accept lower returns for higher risk. Casino gamblers clearly pay for risk, and it is possible that some stock traders will pay for risk as well.
- The model assumes that all investors have access to the same information and agree about the risk and expected return of all assets. (Homogeneous expectations assumption)
- The model assumes that there are no taxes or transaction costs, although this assumption may be relaxed with more complicated versions of the model.

- The market portfolio consists of all assets in all markets, where each asset is weighted by its market capitalization. This assumes no preference between markets and assets for individual investors, and that investors choose assets solely as a function of their risk-return profile. It also assumes that all assets are infinitely divisible as to the amount which may be held or transacted.
- The market portfolio should in theory include all types of assets that are held by anyone as an investment (including works of art, real estate, human capital...) In practice, such a market portfolio is unobservable and people usually substitute a stock index as a proxy for the true market portfolio. Unfortunately, it has been shown that this substitution is not innocuous and can lead to false inferences as to the validity of the CAPM, and it has been said that due to the unobservability of the true market portfolio, the CAPM might not be empirically testable. This was presented in greater depth in a paper by Richard Roll in 1977, and is generally referred to as Roll's Critique. Theories such as the Arbitrage Pricing Theory (APT) have since been formulated to circumvent this problem.

SUMMARY UPDATE OF CENTRAL HUDSON'S COST OF EQUITY

	Sep-14
Proxy Group DCF ROE	8.29%
Traditional CAPM ROE	9.14%
Zero Beta CAPM ROE	9.66%
Generic (Average) CAPM ROE	9.40%
2/3 DCF & 1/3 CAPM Weighting	8.66%
ROE of Proxy Group	8.66%

CENTRAL HUDSON'S PROXY GROUP STATISTICS

	Ticker	Ratings Moody's	Ratings S&P	2013% Utility Revenue	Equity Ratio	S&P Business Profile	Numerical Business Risk Weighting	S&P Financial Profile	Numerical Financial Risk Weighting	Business Category
AGL Resources	GAS	Baa1	BBB+	75%	56.11%	Strong	2	Significant	4	Integrated Natural gas
ALLETE Inc.	ALE	A3	BBB+	91%	55.82%	Strong	2	Significant	4	Electric
Alliant Energy Corp	LNT	A3	A-	98%	57.78%	Excellent	1	Significant	4	Electric & Gas Combo
Ameren Corp.	AEE	Baa2	BBB+	100%	58.04%	Excellent	1	Intermediate	3	Electric & Gas Combo
American Electric Power Co. Inc.	AEP	Baa1	BBB	95%	52.73%	Strong	2	Significant	4	Electric
Avista Corp.	AVA	Baa1	BBB	87%	52.50%	Strong	2	Significant	4	Electric & Gas Combo
Black Hills Corp.	BKH	Baa1	BBB	94%	51.12%	Excellent	1	Significant	4	Electric & Gas Combo
Cleco Corp	CNL	(P)Baa1	BBB+	100%	55.01%	Strong	2	Intermediate	3	Electric & Gas Combo
CMS Energy Corp	CMS	Baa2	BBB	96%	36.53%	Excellent	1	Significant	4	Electric & Gas Combo
Consolidated Edison Inc.	ED	A3	A-	91%	57.44%	Excellent	1	Significant	4	Electric
Dominion Resources	D	Baa2	A-	90%	43.67%	Excellent	1	Significant	4	Electric & Gas Combo
DTE Energy	DTE	A3	BBB+	70%	56.21%	Excellent	1	Significant	4	Electric & Gas Combo
Duke Energy Corporation	DUK	A3	BBB+	85%	29.72%	Excellent	1	Significant	4	Electric & Gas Combo
Edison International	EIX	A3	BBB+	100%	56.57%	Excellent	1	Significant	4	Electric & Gas Combo
El Paso Electric Co.	EE	Baa1	BBB	100%	48.84%	Excellent	1	Aggressive	5	Electric
Empire District Electric Co.	EDE	Baa1	BBB	99%	50.33%	Strong	2	Significant	4	Electric
Entergy Corporation	ETR	Baa3	BBB	80%	48.56%	Strong	2	Significant	4	Electric
Great Plains Energy Inc.	GXP	Baa2	BBB+	100%	51.97%	Excellent	1	Significant	4	Electric & Gas Combo
Hawaiian Electric Industries Inc.	HE	(P)Baa2	BBB-	92%	58.62%	Strong	2	Significant	4	Electric
IDACORP Inc.	IDA	Baa1	BBB	100%	54.27%	Strong	2	Significant	4	Electric & Gas Combo
Northeast Utilities	NU	Baa1	A-	99%	58.93%	Excellent	1	Significant	4	Electric & Gas Combo
Northwest Natural Gas	NWN	(P)A3	A+	100%	59.31%	Excellent	1	Intermediate	3	Integrated Natural gas
Northwestern Corp	NYSE:NWE	A3	BBB	101%	49.75%	Strong	2	Significant	4	Electric & Gas Combo
OGE Energy Corp.	OGE	A3	A-	101%	60.00%	Strong	2	Intermediate	3	Electric & Gas Combo
PG&E Corp.	PCG	Baa1	BBB	100%	55.95%	Excellent	1	Significant	4	Electric & Gas Combo
Piedmont Natural Gas	PNY	A2	A	100%	60.80%	Excellent	1	Intermediate	3	Integrated Natural gas
Pinnacle West Capital Corp.	PNW	Baa1	A-	100%	63.65%	Excellent	1	Significant	4	Electric & Gas Combo
PNM Resources Inc.	PNM	Baa3	BBB	100%	54.21%	Excellent	1	Aggressive	5	Electric & Gas Combo
Portland General Electric Co.	POR	A3	BBB	100%	49.43%	Strong	2	Significant	4	Electric & Gas Combo
SCANA Corp.	SCG	Baa3	BBB+	75%	48.51%	Excellent	1	Significant	4	Electric
Sempra Energy	SRE	Baa1	BBB+	74%	54.33%	Strong	2	Significant	4	Electric & Gas Combo
Southern Co.(The)	SO	Baa1	A	94%	50.88%	Excellent	1	Significant	5	Electric
TECO Energy Inc.	TE	(P)Baa1	BBB+	82%	46.64%	Excellent	1	Significant	4	Electric & Gas Combo
Westar Energy Inc.	WR	Baa1	BBB+	100%	52.32%	Excellent	1	Intermediate	3	Electric & Gas Combo
Wisconsin Energy Corp.	WEC	A2	A-	99%	54.02%	Excellent	1	Significant	4	Electric & Gas Combo
Xcel Energy Inc.	XEL	A3	A-	99%	49.19%	Excellent	1	Significant	4	Electric & Gas Combo
Median		Baa2	BBB+	**98.67%**	**54.02%**	Excellent	1	Significant	4	
Average of Proxy Group		Baa1	BBB+	**94.04%**	**52.68%**	Close to Excellent	1.3	Close to Significant	3.9	

Sources
Latest Credit Ratings from Standard & Poor's & Moody's Credit Reports
% Utility Revenue from 2013 Annual reports(10K)
2013 Equity Ratios from CapitalIQ, a business sunit of Standard and Poor's
Business & Financial Profiles From Standard & Poor's Latest Credit Reports

CENTRAL HUDSON'S DCF APPROACH - GENERIC FINANCE METHOD

Company	Beta	Price	EPS 2017-19	DPS 2014	DPS 2015	DPS 2017-19	BPS 2014	BPS 2015	BPS 2017-19	# of Shares 2014	# of Shares 2017-19	DPS Growth 2017-19
AGL Resources	0.80	52.32	4.30	1.96	2.04	2.40	32.45	33.40	36.65	120.00	125.00	5.57%
ALLETE Inc.	0.80	47.77	3.75	1.96	2.04	2.30	34.65	35.75	39.75	45.50	47.50	4.08%
Alliant Energy Corp	0.80	57.50	4.00	2.04	2.20	2.40	30.50	31.35	34.65	111.00	115.00	2.94%
Ameren Corp.	0.75	38.98	3.00	1.60	1.64	1.80	27.75	28.65	32.00	242.65	252.00	3.15%
American Electric Power Co. Inc.	0.70	52.68	4.00	2.02	2.12	2.50	34.45	35.85	40.50	490.00	498.00	5.65%
Avista Corp.	0.75	31.80	2.25	1.27	1.32	1.50	23.25	23.80	23.75	61.00	63.00	4.35%
Black Hills Corp.	0.85	53.51	3.25	1.56	1.64	1.90	30.45	31.70	35.50	44.75	45.75	5.03%
Cleco Corp.	0.75	55.06	3.25	1.56	1.72	2.05	27.35	28.45	31.75	60.50	60.50	6.03%
CMS Energy Corp	0.75	29.75	2.25	1.08	1.14	1.35	13.45	14.25	17.25	275.00	283.00	5.80%
Consolidated Edison Inc.	0.60	56.59	4.25	2.52	2.58	2.75	43.20	44.60	49.25	293.00	293.00	2.15%
Dominion Resources	0.70	68.82	4.00	2.40	2.50	2.80	20.50	21.85	28.00	582.00	636.00	3.85%
DTE Energy Corp	0.75	75.87	5.50	2.73	2.83	3.30	46.75	49.15	56.75	177.00	187.00	5.25%
Duke Energy Corporation	0.60	72.82	5.25	3.15	3.21	3.40	58.50	59.95	65.00	707.00	711.00	1.94%
Edison International	0.75	56.67	4.50	1.45	1.56	2.05	32.80	34.95	41.50	325.81	325.81	9.53%
El Paso Electric Co.	0.70	37.92	2.75	1.11	1.17	1.35	24.50	25.50	28.75	40.50	40.00	4.89%
Empire District Electric Co.	0.65	25.03	1.75	1.03	1.05	1.15	17.95	18.40	20.25	43.50	47.00	3.08%
Entergy Corporation	0.70	76.18	6.50	3.32	3.32	3.80	56.95	58.90	66.75	179.50	179.50	4.60%
Great Plains Energy Inc.	0.85	25.23	2.00	0.93	0.98	1.20	23.20	23.85	26.00	154.50	156.50	6.98%
Hawaiian Electric Industries Inc.	0.75	24.79	2.00	1.24	1.24	1.30	17.60	18.15	20.25	103.00	111.00	1.59%
IDACORP Inc.	0.80	55.17	3.65	1.72	1.80	2.00	38.65	40.45	44.55	50.23	51.20	3.57%
Northeast Utilities	0.75	44.90	3.50	1.57	1.68	2.00	31.45	32.55	36.50	316.50	325.00	5.98%
Northwest Natural Gas	0.70	44.34	3.30	1.87	1.91	2.10	28.60	29.65	34.20	27.00	28.00	3.21%
Northwestern Corp	0.70	47.93	3.00	1.60	1.68	1.90	27.75	28.80	31.75	39.50	39.70	4.19%
OGE Energy Corp.	0.85	36.77	2.50	0.93	1.03	1.35	16.30	17.40	20.75	200.00	204.00	9.44%
PG&E Corp.	0.65	45.69	3.00	1.82	1.82	2.10	32.30	33.20	36.50	477.00	500.00	4.89%
Piedmont Natural Gas	0.80	35.81	2.10	1.27	1.31	1.43	16.80	17.50	19.45	76.00	76.00	2.96%
Pinnacle West Capital Corp.	0.70	55.37	4.25	2.32	2.41	2.75	39.45	40.95	45.75	110.75	117.50	4.50%
PNM Resources Inc.	0.85	26.30	2.35	0.74	0.80	1.15	21.50	22.10	24.50	80.00	80.00	12.86%
Portland General Electric Co.	0.75	33.13	2.50	1.12	1.14	1.40	24.25	25.40	28.25	78.25	90.00	7.09%
SCANA Corp.	0.75	51.03	4.25	2.10	2.16	2.35	35.00	37.10	43.30	145.00	157.50	2.85%
Sempra Energy	0.75	102.76	6.25	2.64	2.80	3.40	46.60	48.30	55.50	246.50	252.00	6.69%
Southern Co.(The)	0.60	43.80	3.25	2.08	2.15	2.36	22.20	22.95	26.25	902.00	940.00	3.16%
TECO Energy Inc.	0.85	17.67	1.35	0.88	0.88	0.95	11.30	11.35	12.25	233.50	233.50	2.58%
Westar Energy Inc.	0.75	36.12	2.90	1.40	1.44	1.60	24.10	25.60	29.65	129.00	135.00	3.57%
Wisconsin Energy Corp.	0.65	44.33	3.25	1.56	1.68	2.10	19.65	20.65	21.50	225.50	220.00	7.72%
Xcel Energy Inc.	0.65	31.21	2.50	1.20	1.26	1.45	20.30	21.35	24.25	512.00	533.00	4.79%
Median Beta	***0.75***											
Average	***0.74***										Median	**4.55%**
Data Source	Latest Value Line Investment Survey										Avg	**4.90%**

CENTRAL HUDSON'S DCF APPROACH - GENERIC FINANCE METHOD

Company	Retention Rate 2018	Return on Equity 2018	B x R	Increase in Shares	PBR 2014	S Factor	V Factor	S x V	Sustainable Growth	Long-Form ROE
AGL Resources	44.19%	11.91%	5.26%	1.03%	1.61	0.02	0.38	0.63%	5.89%	9.66%
ALLETE Inc.	38.67%	9.60%	3.71%	1.08%	1.38	0.01	0.27	0.41%	4.12%	8.31%
Alliant Energy Corp	40.00%	11.74%	4.69%	0.89%	1.89	0.02	0.47	0.79%	5.48%	9.00%
Ameren Corp.	40.00%	9.55%	3.82%	0.95%	1.40	0.01	0.29	0.38%	4.20%	8.23%
American Electric Power Co. Inc.	37.50%	10.08%	3.78%	0.41%	1.53	0.01	0.35	0.21%	3.99%	8.09%
Avista Corp.	33.33%	9.47%	3.16%	0.81%	1.37	0.01	0.27	0.30%	3.45%	7.62%
Black Hills Corp.	41.54%	9.33%	3.87%	0.55%	1.76	0.01	0.43	0.42%	4.29%	7.34%
Cleco Corp.	36.92%	10.42%	3.85%	0.00%	2.01	0.00	0.50	0.00%	3.85%	7.06%
CMS Energy Corp	40.00%	13.46%	5.38%	0.72%	2.21	0.02	0.55	0.87%	6.26%	9.94%
Consolidated Edison Inc.	35.29%	8.77%	3.10%	0.00%	1.31	0.00	0.24	0.00%	3.10%	7.49%
Dominion Resources	30.00%	14.88%	4.46%	2.24%	3.36	0.08	0.70	5.29%	9.75%	12.79%
DTE Energy Corp	40.00%	9.92%	3.97%	1.38%	1.62	0.02	0.38	0.86%	4.83%	8.51%
Duke Energy Corporation	35.24%	8.19%	2.88%	0.14%	1.24	0.00	0.20	0.03%	2.92%	7.17%
Edison International	54.44%	11.15%	6.07%	0.00%	1.73	0.00	0.42	0.00%	6.07%	8.96%
El Paso Electric Co.	50.91%	9.76%	4.97%	-0.31%	1.55	0.00	0.35	-0.17%	4.80%	7.81%
Empire District Electric Co.	34.29%	8.78%	3.01%	1.95%	1.39	0.03	0.28	0.77%	3.78%	7.84%
Entergy Corporation	41.54%	9.94%	4.13%	0.00%	1.34	0.00	0.25	0.00%	4.13%	8.45%
Great Plains Energy Inc.	40.00%	7.80%	3.12%	0.32%	1.09	0.00	0.08	0.03%	3.15%	7.32%
Hawaiian Electric Industries Inc.	35.00%	10.06%	3.52%	1.89%	1.41	0.03	0.29	0.77%	4.29%	8.91%
IDACORP Inc.	45.21%	8.32%	3.76%	0.48%	1.43	0.01	0.30	0.20%	3.97%	7.13%
Northeast Utilities	42.86%	9.77%	4.19%	0.66%	1.43	0.01	0.30	0.28%	4.47%	8.26%
Northwest Natural Gas	36.36%	9.88%	3.59%	0.91%	1.55	0.01	0.35	0.50%	4.09%	8.24%
Northwestern Corp	36.67%	9.60%	3.52%	0.13%	1.73	0.00	0.42	0.09%	3.61%	7.10%
OGE Energy Corp.	46.00%	12.40%	5.70%	0.50%	2.26	0.01	0.56	0.62%	6.33%	9.24%
PG&E Corp.	30.00%	8.35%	2.50%	1.18%	1.41	0.02	0.29	0.49%	3.00%	7.09%
Piedmont Natural Gas	31.90%	10.99%	3.51%	0.00%	2.13	0.00	0.53	0.00%	3.51%	7.06%
Pinnacle West Capital Corp.	35.29%	9.46%	3.34%	1.49%	1.40	0.02	0.29	0.60%	3.94%	8.27%
PNM Resources Inc.	51.06%	9.76%	4.98%	0.00%	1.22	0.00	0.18	0.00%	4.98%	8.52%
Portland General Electric Co.	44.00%	9.01%	3.96%	3.56%	1.37	0.05	0.27	1.30%	5.27%	8.76%
SCANA Corp.	44.71%	10.07%	4.50%	2.09%	1.46	0.03	0.31	0.96%	5.46%	9.35%
Sempra Energy	45.60%	11.52%	5.25%	0.55%	2.21	0.01	0.55	0.67%	5.92%	8.60%
Southern Co.(The)	27.38%	12.66%	3.47%	1.04%	1.97	0.02	0.49	1.01%	4.48%	9.14%
TECO Energy Inc.	29.63%	11.16%	3.31%	0.00%	1.56	0.00	0.36	0.00%	3.31%	8.13%
Westar Energy Inc.	44.83%	10.02%	4.49%	1.14%	1.50	0.02	0.33	0.57%	5.06%	8.83%
Wisconsin Energy Corp.	35.38%	15.22%	5.38%	-0.62%	2.26	-0.01	0.56	-0.77%	4.61%	8.59%
Xcel Energy Inc.	42.00%	10.53%	4.42%	1.01%	1.54	0.02	0.35	0.54%	4.96%	8.89%
Average	***39.38%***	***10.38%***	***4.07%***	***0.78%***	**1.66**	**0.01**	**0.37**	**0.01**	***4.59%***	***8.38%***
Median	***40.00%***	***9.93%***	***3.86%***	***0.69%***	**1.53**	**0.01**	**0.35**	**0.00**	***4.29%***	***8.29%***

Central Hudson's Proxy Group
3 Month Average Price Data

Company	Three-month Price	Jul-14 High	Jul-14 Low	Aug-14 High	Aug-14 Low	Sep-14 High	Sep-14 Low	
AGL Resources	$52.32	55.30	51.55	53.34	48.72	54.27	50.71	1
ALLETE Inc.	$47.77	51.56	46.90	48.80	46.14	48.82	44.39	2
Alliant Energy Corp	$57.50	60.89	56.50	58.51	55.04	59.36	54.69	3
Ameren Corp.	$38.98	40.96	38.44	39.99	36.65	40.31	37.53	4
American Electric Power Co. Inc.	$52.68	55.91	51.96	53.71	49.06	53.88	51.58	5
Avista Corp.	$31.80	33.60	31.02	32.47	30.35	32.88	30.45	6
Black Hills Corp.	$53.51	62.13	52.70	53.89	50.39	54.05	47.87	7
Cleco Corp.	$55.06	59.21	54.65	56.55	53.67	58.23	48.06	8
CMS Energy Corp	$29.75	31.20	28.87	30.54	27.90	30.83	29.15	9
Consolidated Edison Inc.	$56.59	57.85	55.28	57.90	54.58	58.12	55.80	10
Dominion Resources	$68.82	71.62	67.58	70.38	64.71	71.33	67.29	11
DTE Energy Corp.	$75.87	78.10	73.74	78.26	71.60	78.89	74.62	13
Duke Energy Corporation	$72.82	74.48	70.81	74.00	69.48	75.21	72.95	12
Edison International	$56.67	58.11	54.72	59.18	54.32	59.54	54.12	14
El Paso Electric Co.	$37.92	40.43	36.81	39.42	35.39	39.41	36.05	15
Empire District Electric Co.	$25.03	25.87	24.36	26.00	24.02	25.95	24.00	16
Entergy Corporation	$76.18	82.48	72.81	77.45	70.70	78.37	75.29	17
Great Plains Energy Inc.	$25.23	26.95	24.71	25.91	24.09	25.80	23.91	18
Hawaiian Electric Industries Inc.	$24.79	25.38	23.44	25.41	22.71	26.89	24.91	19
IDACORP Inc.	$55.17	58.79	53.55	56.80	51.70	56.97	53.20	20
Northeast Utilities	$44.90	47.37	43.78	45.90	41.92	46.57	43.88	21
Northwest Natural Gas	$44.34	47.50	43.22	45.60	41.81	45.66	42.25	22
Northwestern Corp	$47.93	52.70	46.21	48.76	45.24	49.55	45.12	23
OGE Energy Corp.	$36.77	39.29	35.95	37.60	34.88	37.76	35.15	24
PG&E Corp.	$45.69	48.09	44.65	46.48	42.92	48.24	43.76	25
Piedmont Natural Gas	$35.81	37.86	34.69	37.48	33.78	37.58	33.49	26
Pinnacle West Capital Corp.	$55.37	57.95	53.29	56.97	52.13	57.74	54.13	27
PNM Resources Inc.	$26.30	29.94	25.64	26.25	24.26	26.97	24.76	28
Portland General Electric Co.	$33.13	34.74	31.93	34.47	31.41	34.55	31.70	29
SCANA Corp.	$51.03	53.89	50.78	51.94	48.53	52.23	48.81	30
Sempra Energy	$102.76	104.60	99.60	106.09	96.13	107.81	102.34	31
Southern Co.(The)	$43.80	45.47	43.22	44.40	41.87	44.82	43.04	32
TECO Energy Inc.	$17.67	18.48	17.42	18.10	16.91	18.14	16.98	33
Westar Energy Inc.	$36.12	38.23	36.04	37.09	34.53	37.07	33.76	34
Wisconsin Energy Corp.	$44.33	47.02	43.56	45.37	41.90	45.60	42.53	35
Xcel Energy Inc.	$31.21	32.26	30.73	32.06	29.60	32.48	30.12	36

Data Source

Capital IQ
A Standard & Poor's Business

INPUTS AND CALCULATIONS FOR CENTRAL HUDSON'S CAPM

Merrill Lynch Cost of Market[1]

	Implied	Required
Jul-14	11.10%	11.40%
Aug-14	11.20%	11.40%
Sep-14	11.10%	11.20%

Merrill Lynch Cost of Market 11.23%

Treasury Rates[2]

	10 year	30 year
Jul-14	2.54%	3.33%
Aug-14	2.42%	3.20%
Sep-14	2.53%	3.26%

Risk-Free Rate (7/14-9/14) 2.88%

Market Risk Premium (7/14-9/14) 8.35%

Proxy Group Beta 0.75

Traditional CAPM Calculation
Risk Free Rate + (Beta * (Market Return - Risk Free Rate)

Traditional CAPM ROE 9.14%

Zero Beta CAPM Calculation
Risk Free Rate + (0.75*Beta * (Market Return - Risk Free Rate))+(0.25*(Market Return - Risk Free Rate))

Zero Beta CAPM ROE 9.66%

[1] Merrill Lynch cost of market figure is average of Implied and Required Returns for the 3 months ending September 2014 (Feb-Mar-Apr. 2014 Editions)

[2] Federal Reserve Statistical Release, FRB: Federal Reserve Statistical Release H.15 - Historical Data
Website : 'http://federalreserve.gov/releases/h15/