



**STANDARD & POOR'S  
RATINGS SERVICES**

McGRAW HILL FINANCIAL

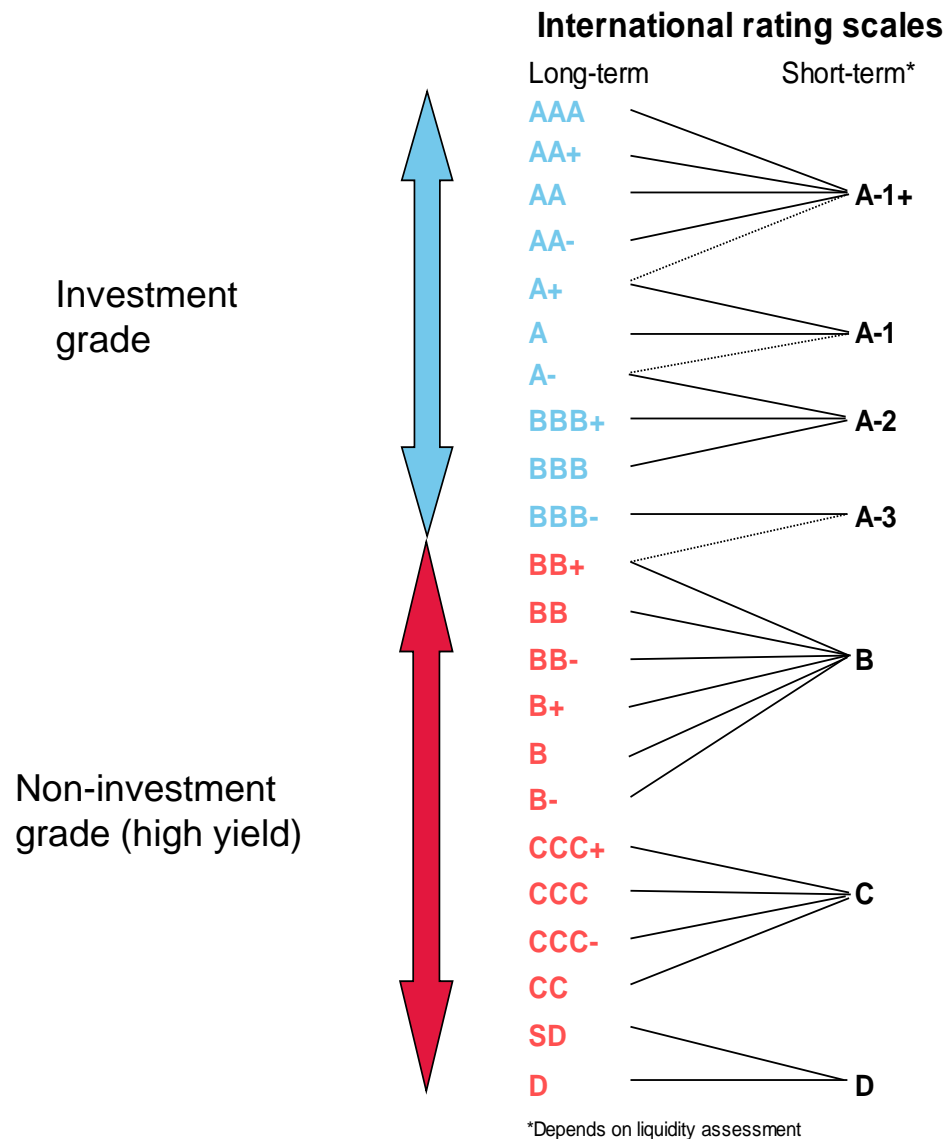
# Standard & Poor's Rating Process

**David Gillmor**  
**European Head of Leveraged Analytics**

**2<sup>nd</sup> December 2015**

# Understanding Credit Ratings

# Standard & Poor's Rating Scales



## Ratings are actively monitored

### Outlook

- How the rating can change in the near to medium term
  - 6 months-1 years for non-IG
  - <2 years for IG
- 1-in-3 chance of alternative scenario materializing
- Positive', 'Negative', 'Stable' or 'Developing'

### Credit Watch

- Possible near-term change
  - <90 days
- 1-in-2 chance of alternative scenario materializing
- Most likely event driven
- 'Positive', 'Negative', or 'Developing'

# Historical Inverse Correlation Between Rating Levels and Defaults

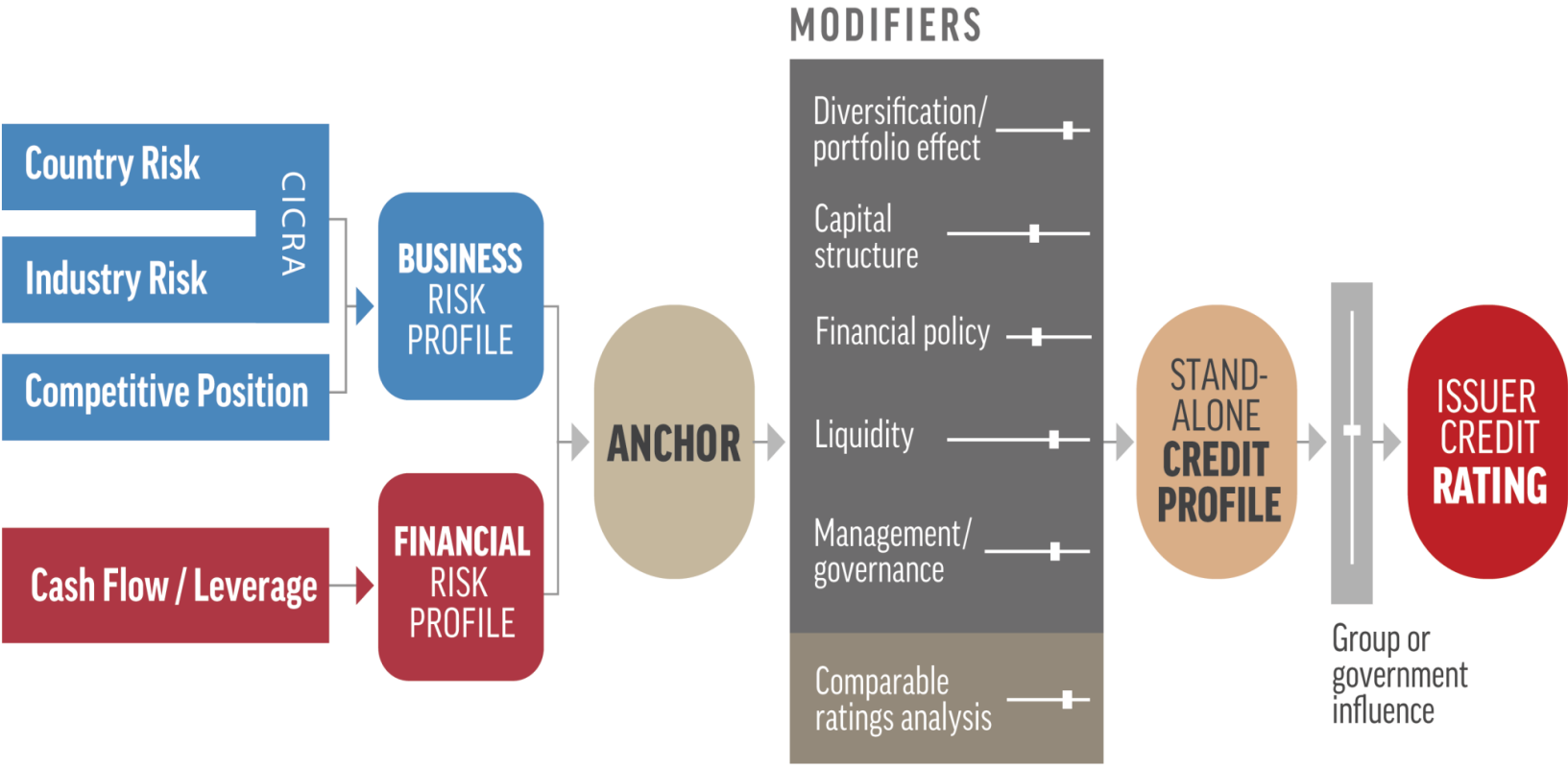
Global Corporate Average Cumulative Default Rates, 1981 - 2012 (%)															
—Time horizon (years)—															
Rating	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11	Y12	Y13	Y14	Y15
AAA	0.00	0.03	0.14	0.25	0.36	0.5	0.5	0.6	0.7	0.8	0.8	0.8	0.9	0.9	1.0
AA	0.02	0.04	0.09	0.24	0.39	0.5	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5
A	0.07	0.18	0.28	0.43	0.59	0.8	1.0	1.2	1.4	1.7	1.9	2.1	2.2	2.3	2.5
BBB+	0.14	0.40	0.70	1.00	1.3	1.7	2.0	2.3	2.6	3.0	3.3	3.5	3.8	4.2	4.7
BBB	0.20	0.52	0.81	1.3	1.7	2.2	2.6	3.0	3.5	3.9	4.4	4.9	5.3	5.4	5.7
BBB-	0.35	1.1	1.9	2.9	3.8	4.7	5.5	6.2	6.8	7.5	8.1	8.7	9.3	10.1	10.7
BB+	0.47	1.3	2.5	3.6	4.7	5.9	6.9	7.7	8.6	9.6	10.3	11.0	11.6	12.1	13.0
BB	0.71	2.2	4.3	6.2	8.1	9.6	11.0	12.2	13.2	14.0	14.9	15.6	16.0	16.3	16.6
BB-	1.2	3.7	6.2	8.6	10.8	12.9	14.7	16.4	17.9	19.2	20.2	20.9	21.8	22.5	23.3
B+	2.4	6.5	10.4	13.9	16.5	18.5	20.4	22.0	23.5	25.0	26.2	27.1	28.0	28.8	29.5
B	5.1	11.2	16.0	19.5	22.0	24.4	26.0	27.0	28.0	28.9	29.7	30.4	31.1	31.7	32.5
B-	8.2	15.8	21.3	25.1	28.0	29.9	31.6	32.6	33.2	33.7	34.4	35.0	35.4	35.8	36.3
CCC/C	26.9	35.9	41.2	44.2	46.6	47.7	48.7	49.4	50.4	51.1	51.8	52.6	53.5	54.3	54.3
Investment grade	0.1	0.3	0.5	0.8	1.1	1.4	1.7	1.9	2.2	2.5	2.7	2.9	3.1	3.3	3.5
Speculative grade	4.1	8.1	11.5	14.2	16.4	18.3	19.9	21.2	22.4	23.5	24.4	25.2	25.9	26.5	27.1
All rated	1.6	3.1	4.4	5.5	6.5	7.3	8.0	8.6	9.1	9.6	10.1	10.5	10.8	11.1	11.5

Sources: Standard & Poor's Global Fixed Income Research and Standard & Poor's CreditPro®.

- Lower rating implies higher risk of default
- However, investment grade ratings have never been risk free
- Defaults are cyclical, these are just averages through the cycle

**Corporate Credit Rating  
Methodology**

# Framework



**Business Risk Profile  
Assessment**



# Corporate Industry And Country Risk Assessment (CICRA)

*“The combined assessment for country risk and industry risk”*

## 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



# Competitive Position

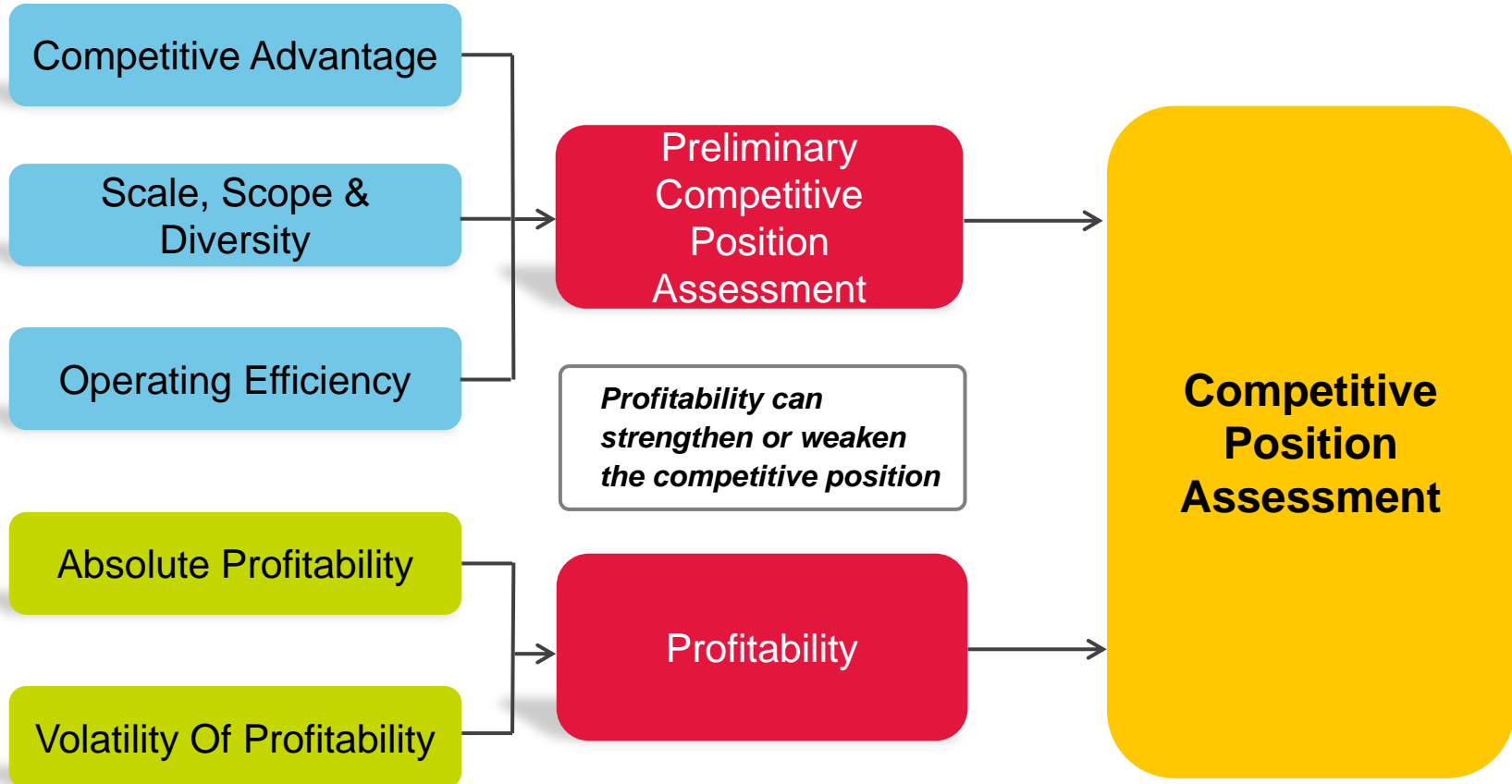
Business Risk Profile

Financial Risk Profile

Anchor

Modifiers

Group methodology



# Determining The Business Risk Profile

Business Risk Profile

Financial Risk Profile

Anchor

Modifiers

Group methodology

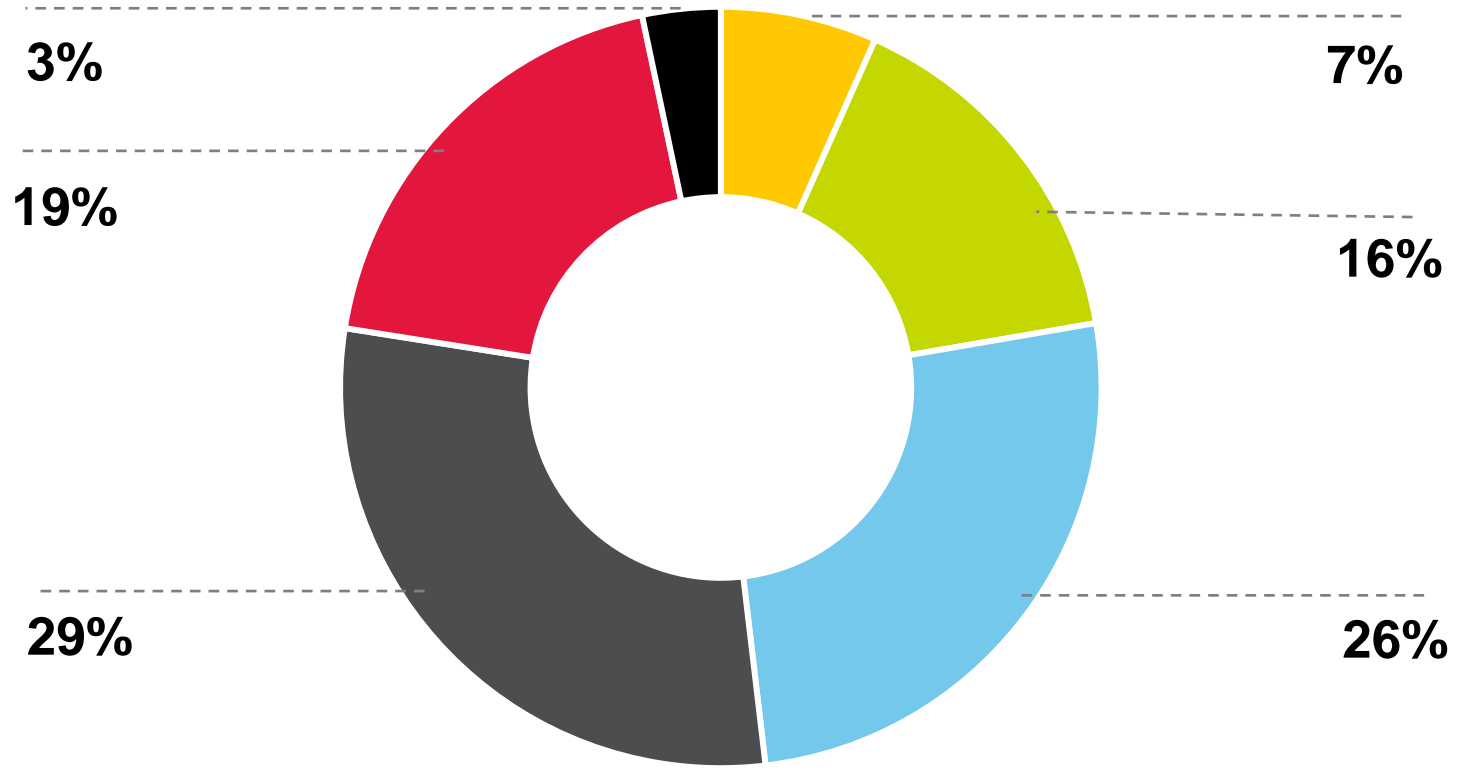
## Determining The Business Risk Profile Assessment

-- CICRA--

Competitive position assessment	-- CICRA--					
	1	2	3	4	5	6
1	1	1	1	2	3	5
2	1	2	2	3	4	5
3	2	3	3	3	4	6
4	3	4	4	4	5	6
5	4	5	5	5	5	6
6	5	6	6	6	6	6

\*A small number of companies with a CICRA of '5' may be assigned a business risk profile of '2' if certain conditions are met

# Distribution Of Business Risk Profiles In EMEA\*



■ Excellent (1) ■ Strong (2) ■ Satisfactory (3) ■ Fair (4) ■ Weak (5) ■ Vulnerable (6)

Source: "European Corporate Rating Scores By Industry Sector As Of Jan. 22, 2014", published on RatingsDirect on Jan. 22, 2014

\*As of January 22, 2014

**Financial Risk Profile  
Assessment**

# Cash Flow/Leverage (CFL)

Business Risk Profile

Financial Risk Profile

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## Step 1:

Apply weights to ratios  
Over, typically, 5-year  
time horizon

**Core payback ratios**  
(FFO/debt; Debt/EBITDA)

## Step 2:

Compare core ratios  
to appropriate volatility  
table benchmarks

**Preliminary CFL  
assessment**

Supplemental ratios +  
additional industry credit  
ratios

## Step 3:

Determine importance  
of supplemental ratios

**Adjusted CFL assessment**

## Step 4:

Derive adjusted CFL  
score if supplemental  
ratios indicate a  
different conclusion

## Step 5:

Based on a volatility  
adjustment, determine  
the final CFL score

“Volatile” may modify  
1 category down

“Highly Volatile” may  
modify 2 categories  
down

**Final CFL assessment**

# Benchmark Ratio Tables

Business Risk Profile

Financial Risk Profile

Anchor

Modifiers

Group methodology

Three benchmark tables provide ranges for various cash flow/leverage assessments

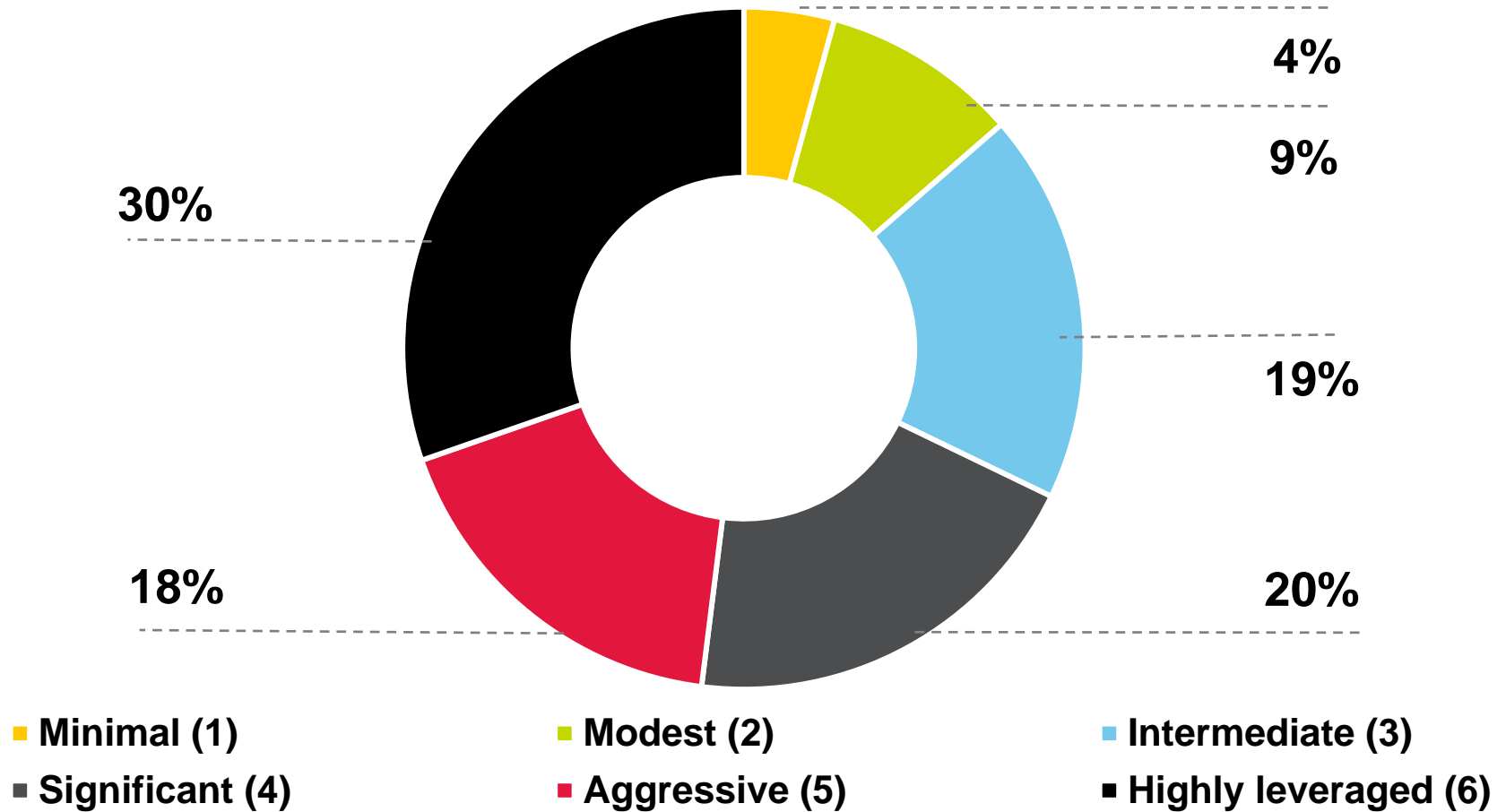
## CICRA assessment and KCFs determine which table to apply

- **Low** volatility; generally applied to entities with a CICRA of ‘1’ (except those with competitive position of ‘5’ or ‘6’)
- **Medial** volatility; used under certain circumstances for entities with a CICRA of ‘1’ or ‘2’
- **Standard** volatility; CICRA ‘2’ or worse

## 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 (%)
<b>Minimal</b>	60+	Less than 1.5	More than 13	More than 15	More than 50	40+	25+
<b>Modest</b>	45 – 60	1.5 – 2	9 – 13	10 – 15	35 – 50	25 – 40	15 – 25
<b>Intermediate</b>	30 – 45	2 – 3	6 – 9	6 – 10	25 – 35	15 – 25	10 – 15
<b>Significant</b>	20 – 30	3 – 4	4 – 6	3 – 6	15 – 25	10 – 15	5 – 10
<b>Aggressive</b>	12 – 20	4 – 5	2 – 4	2 – 3	10 – 15	5 – 10	2 – 5
<b>Highly Leveraged</b>	Less than 12	5+	Less than 2	Less than 2	Less than 10	Less than 5	Less than 2

# Distribution Of Financial Risk Profiles In EMEA\*



Source: "European Corporate Rating Scores By Industry Sector As Of Jan. 22, 2014", published on RatingsDirect on Jan. 22, 2014

\*As of January 22, 2014



A A B C A B A C B A C A B A B C  
B C B A C B B B A A A B A C B A  
C A C B B A C A B B B C C C A B  
A B A C C C C B A C A C B C B A  
A A B C A B A C C A B A C A A B  
C **Anchor** B A C A C A A  
C B C B A B A B C B C B A B A C  
A B A C B B A C A B A C B B A A  
B C C C B A C C B C C C B A C C  
C A B C A B A C C A B C A B A B  
B C C C B A C A B C C C B A C C

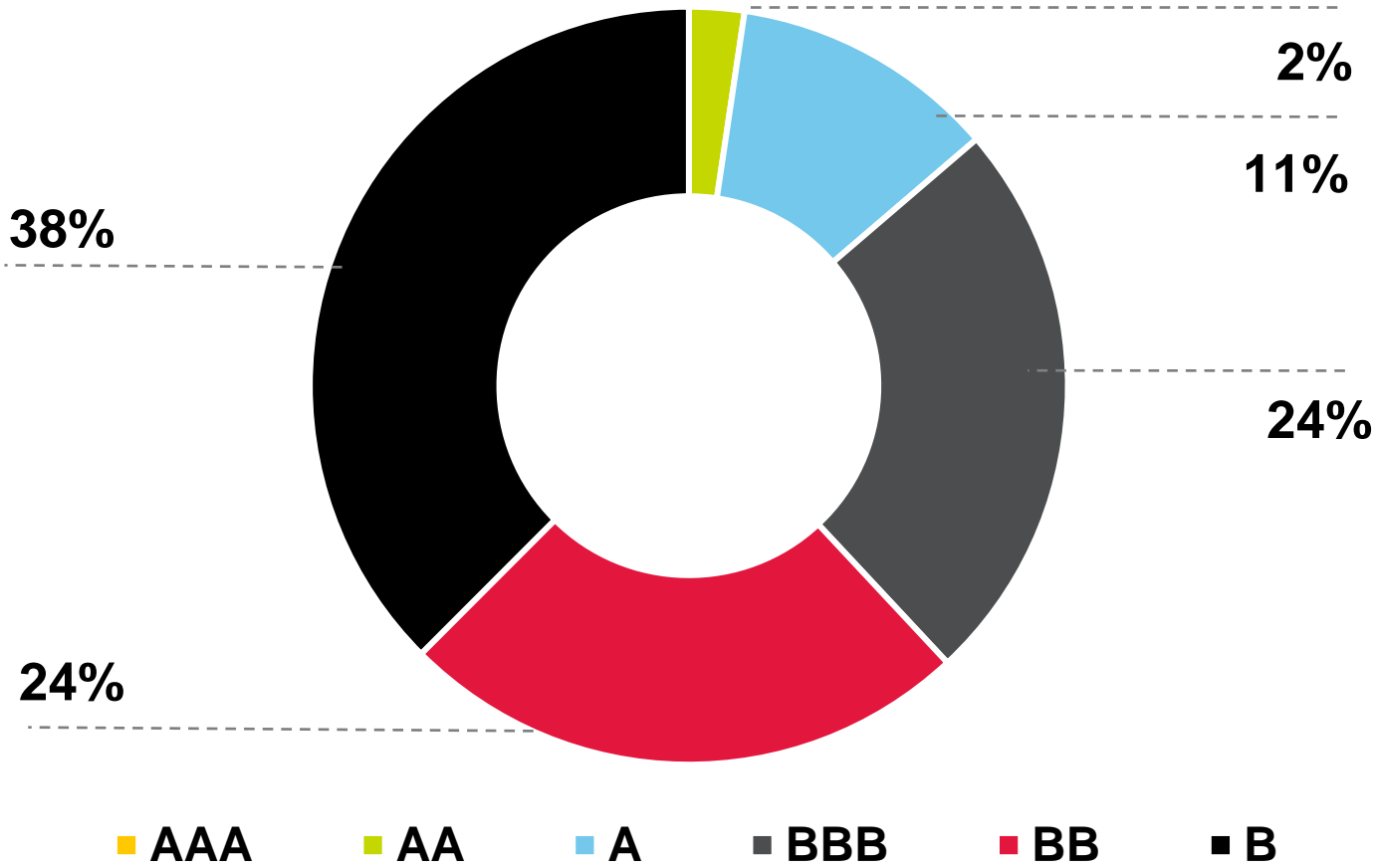
## Combining The Business And Financial Risk Profiles To Determine The Anchor

-- Business risk profile --	-- Financial 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-

When two anchor outcomes are listed for a given combination of business risk profile assessment and financial risk profile assessment, the anchor will be based on the:

- **Comparative strength of its business risk profile** if the financial risk profile is '4' or stronger (i.e. 1-4)
- **Comparative strength of its financial risk profile** if its financial risk profile is '5-6'

# Distribution Of Anchor Outcomes In EMEA\*



Source: "European Corporate Rating Scores By Industry Sector As Of Jan. 22, 2014", published on RatingsDirect on Jan. 22, 2014

\*As of January 22, 2014

A A B C A B A C B A C A B A B C  
B C B A C B B B A A A B A C B A  
C A C B B A C A B B B C C C A B  
A B A C C C C B A C A C B C B A  
A A B C A B A C C A B A C A A B

**Modifiers**

C B A C A A  
C B C B A B A B C B C B A B A C  
A B A C B B A C A B A C B B A A  
B C C C B A C C B C C C B A C C  
C A B C A B A C C A B C A B A B  
B C C C B A C A B C C C B A C C

# Modifiers

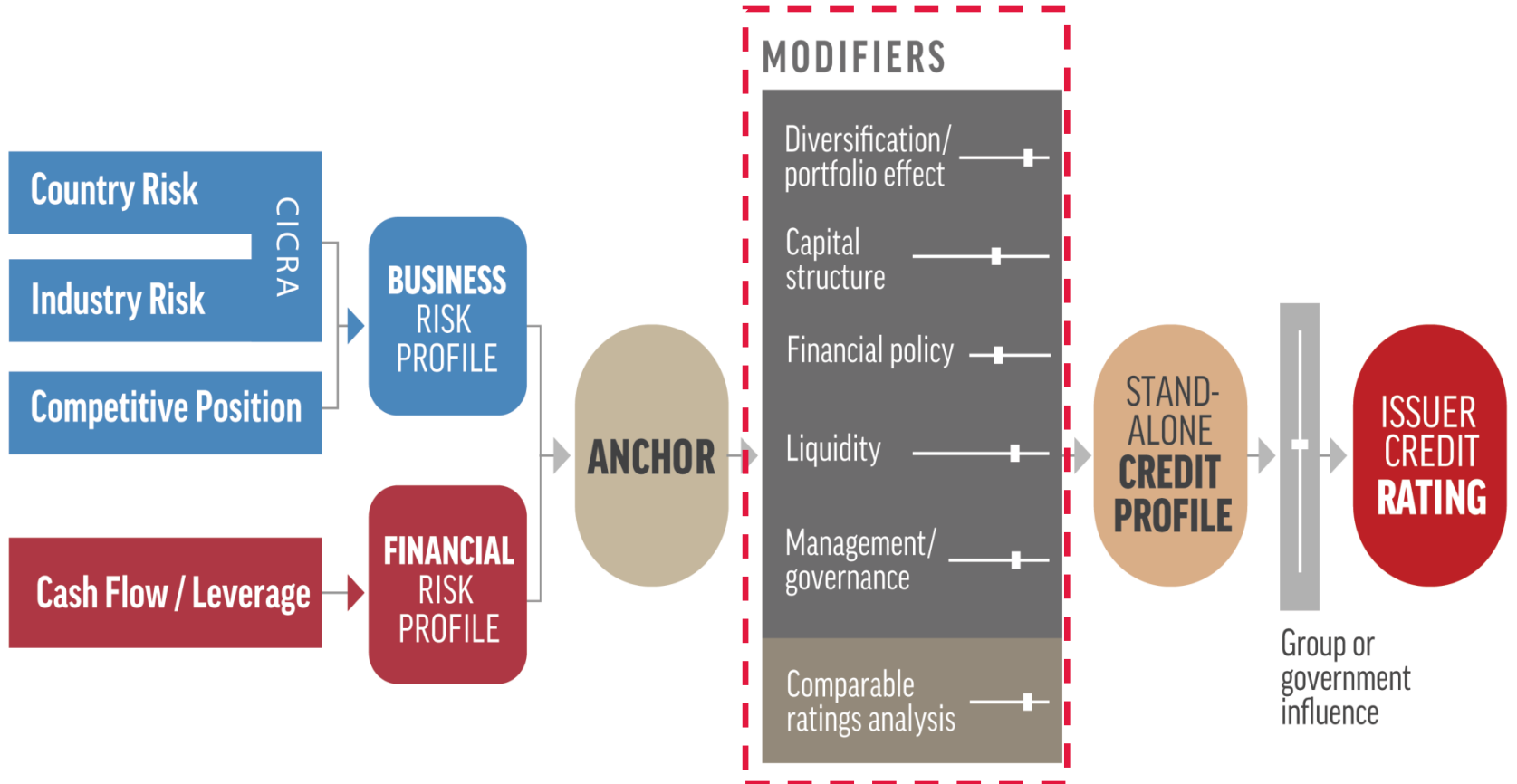
Business Risk Profile

Financial Risk Profile

Anchor

Modifiers

Group methodology



## Liquidity

- Minor revisions and clarifications
- Analysis continues to focus on:
  - Monetary flows--the *sources and uses* of cash--that are the key indicators of a company's liquidity cushion;
  - The potential for a company to breach covenant tests related to declines in EBITDA; and
  - The company's 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

## Management and governance

- Measures an enterprise's ability to manage important strategic and operating risks

## Modifier Step 2: Impact Of Remaining Modifiers On The Anchor

--Anchor range--

Factor/ranking	'a-' and higher	'bbb+' to 'bbb-'	'bb+' to 'bb-'	'b+' and lower
<b>Liquidity</b>				
1. Exceptional	0 notches	0 notches	0 notches	+1 notch if FP is positive, neutral, FS-4 or FS-5 <sup>1</sup>
2. Strong	0 notches	0 notches	0 notches	+1 notch if FP is positive, neutral, FS-4 or FS-5 <sup>1</sup>
3. Adequate	0 notches	0 notches	0 notches	0 notches
4. Less than adequate <sup>2</sup>	N/A	N/A	- 1 notch <sup>3</sup>	0 notches
5. Weak	N/A	N/A	N/A	'b-' cap on SACP
<b>Management and Governance</b>				
1. Strong	0 notches	0 notches	0, +1 notches <sup>4</sup>	0, +1 notches <sup>4</sup>
2. Satisfactory	0 notches	0 notches	0 notches	0 notches
3. Fair	- 1 notches	0 notches	0 notches	0 notches
4. Weak	- 2 or more notches <sup>5</sup>	- 2 or more notches <sup>5</sup>	- 1 or more notches <sup>5</sup>	- 1 or more notches <sup>5</sup>

<sup>1</sup>Additional notch applies only if we expect liquidity to remain exceptional or strong.

<sup>2</sup>SACP is capped at 'bb+.'

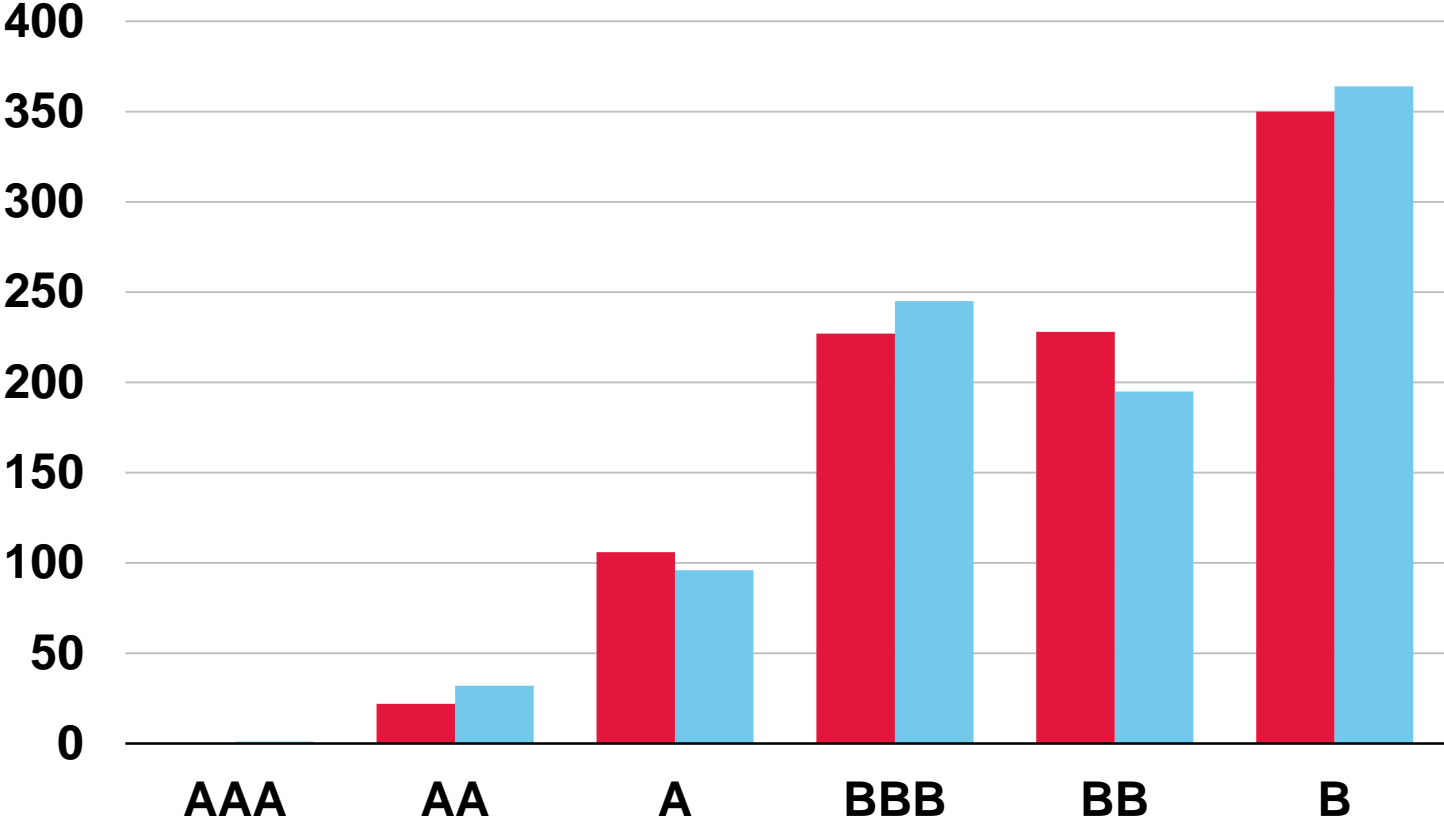
<sup>3</sup>If issuer SACP is 'bb+' due to cap, there is no further notching.

<sup>4</sup>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.

<sup>5</sup>Number of notches depends upon the degree of negative effect to the enterprise's risk profile.



# Application Of Modifiers In EMEA\*



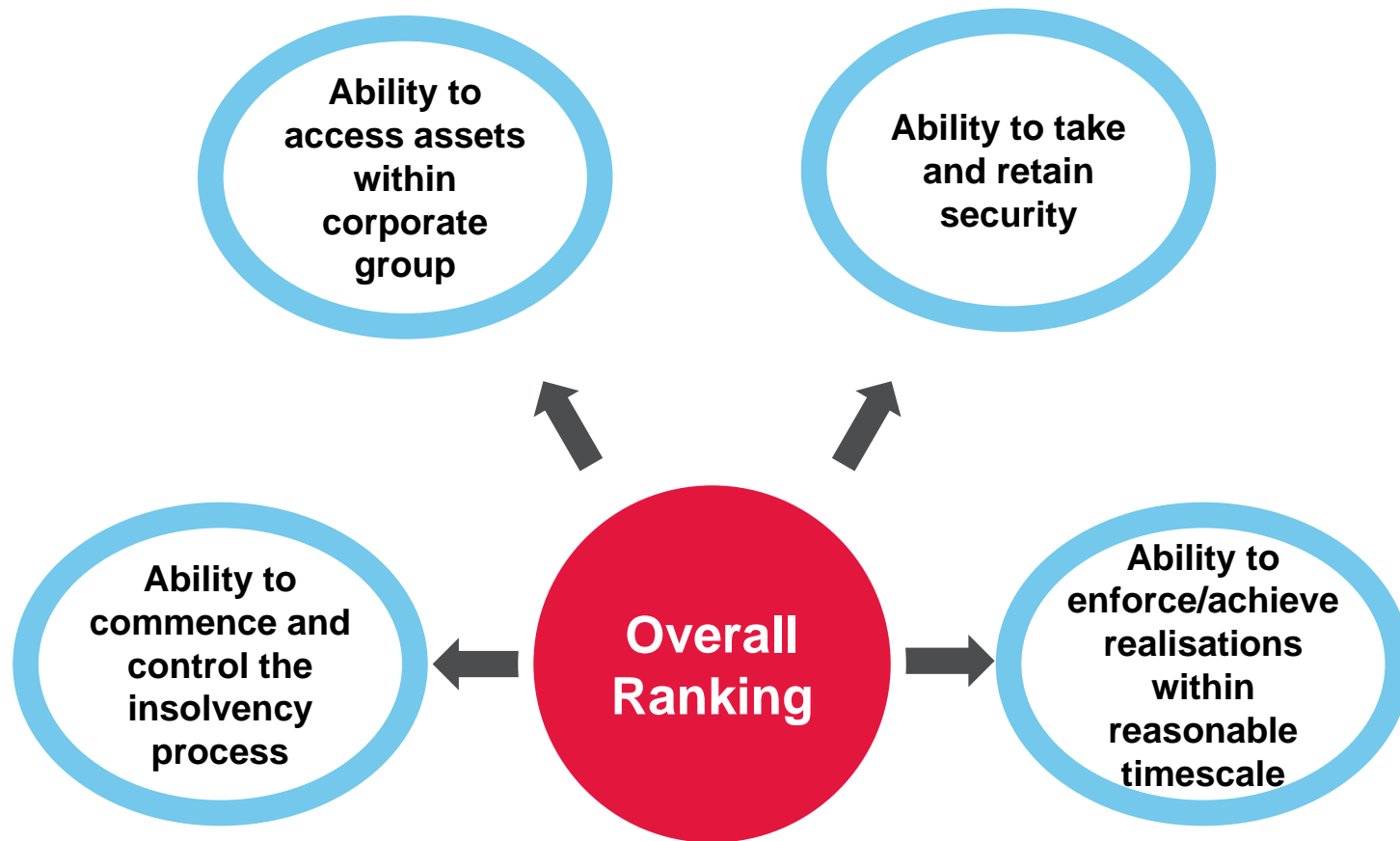
\*As of January 22, 2014

■ Anchor ■ Final rating

Source: "European Corporate Rating Scores By Industry Sector As Of Jan. 22, 2014", published on RatingsDirect on Jan. 22, 2014

**Insolvency Process &  
Jurisdictional Considerations  
Overview**

# Ranking a Jurisdiction



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# Insolvency Overview – S&P’s Jurisdictional Framework

## S&P’s framework for assessing “creditor friendliness”

- **Security**
  - Proven effective in protecting creditor rights?
- **Creditor participation/influence**
  - Can creditors influence the process in a manner commensurate with their relative position in the capital structure and their reasonable prospects for recovery?
- **Distribution of value/certainty of priorities**
  - Are distributions to creditors done in a fair and equitable manner?
- **Time to resolution**
  - Expected time between insolvency and ultimate resolution (may include prospects for monetizing noncash distributions)
  - General expectations should be 2 years or less

**See: Criteria|Corporates|Recovery: Update: Jurisdiction-Specific Adjustments To Recovery And Issue Ratings, published June 20, 2008**

# Publicly Ranked Jurisdictions

Countries are classified into three categories, placing the most creditor-friendly insolvency regimes in Group A and the least creditor-friendly environments in Group C.

← **Creditor friendly**

**Creditor Unfriendly** →

Publicly Ranked Jurisdictions			
A1	A2	B	C
Netherlands	South Africa	Spain	Russia
Ireland	Germany	Turkey	Kazakhstan
Finland	Belgium	Mexico	Ukraine
Denmark	Luxembourg	Chile	
Singapore	Switzerland	France	
Hong Kong	Japan	Italy	
Australia	Portugal	Brazil	
U.K.	Canada		
Norway	U.S.		
Sweden			

# Jurisdiction-Specific Adjustments to Recovery And Issue Ratings

## Jurisdiction-Specific Adjustments To Recovery And Issue Ratings

Jurisdictions by group	Recovery range (%)*	Recovery rating cap¶	Issue rating notches§
A	100	1+	+3
B	100	2	+1
C	100	2	+1
-----			
A	90-100	1	+2
B	90-100	2	+1
C	90-100	3	0
-----			
A	70-90	2	+1
B	70-90	3	0
C	70-90	3	0

\*Denotes the recovery range that would be expected, prior to factoring the impact of the jurisdiction on ultimate recovery prospects. ¶Denotes the highest possible recovery rating that could be assigned to an issue, based primarily on the group in which the jurisdiction is classified and the expected recovery range. §Indicates issue-level rating "notches" relative to Standard & Poor's corporate credit rating on the issuer.

- **Multi-jurisdictional issues lead us to factor in increased insolvency costs and delays**
  - Geographic spread of a company's assets, debt, and revenues

# European Recoveries by Seniority

	no. of instruments	Amount debt (bil. \$)	Mean (%)	Median (%)	Standard deviation (%)
First lien	598	90.5	75.5	90.0	28.8
Second lien*	72	17.9	35.7	10.0	41.6
Mezzanine*	123	17.2	35.9	1.5	45.0
Senior unsecured	46	18.9	46.7	38.0	34.8
Subordinated	16	2.8	29.0	1.8	40.9

\* Mean and median results are less indicative of actual recoveries, given that results are binary in the majority of these cases

- **First Lien Debt recoveries remain strong at 76%**
- **Second Lien Debt recoveries remain very similar to Mezzanine recoveries**
- **71% of Second Lien and 87% of Mezzanine facilities with binary recoveries (either 100% or 0%)**
- **Interim Recoveries remain a major risk factor given that they make up the majority of our data set**



# Secured Bond Recoveries – First Indications

First-lien debt instrument	Companies	Instruments	Mean (%)	Median (%)
All senior secured bank debt	155	548	77.3	94.2
Senior secured bonds ranked pari passu with bank debt	6	25	67.3	66.4
Super senior RCF* and senior secured bonds	2	7	39.2	37.2
All senior secured bonds and no super senior RCF*	8	18	43.8	40.1

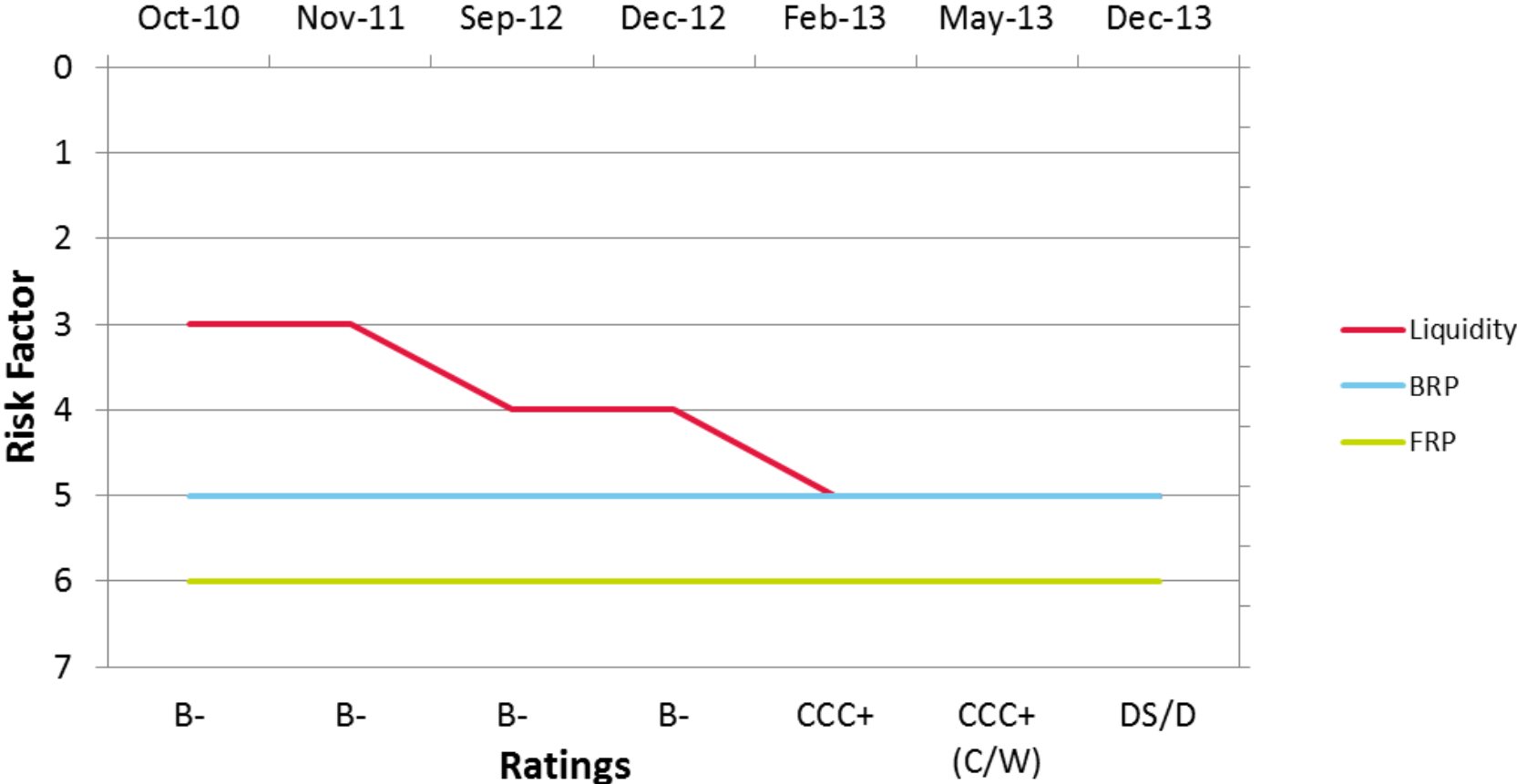
\*RCF stands for revolving credit facility

- **First Lien Bank Debt recoveries outperform Secured Bond recoveries**
- **Impact of covenant-lite transactions on credit quality remains unknown at this early stage in Europe**
- **Lower recoveries for secured bondholders when there is a super senior RCF in the capital structure**

**Case Analysis: A.T.U.**

**Auto-Teile Unger Handels GmbH**

# ATU Rating Development





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RATINGS SERVICES**

**McGRAW HILL FINANCIAL**

**Thank You**

**David Gillmor**

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# Appendices

# Key Attributes Of Standard & Poor's Credit Ratings

*“S&P credit ratings are designed primarily to provide relative rankings among issuers and obligations; the ratings are not measures of absolute default probability”*

## Rank ordering of creditworthiness among issuers and obligations

- Forward opinions about the creditworthiness of issuers and obligations
- Relative ranking; higher ratings are judged by us to be more creditworthy and should:
  - Default less frequently
  - Withstand successively more stressful economic environments that we view as less likely to occur
- Absolute stress levels is part of how we try to achieve comparability of ratings
  - Used to calibrate criteria across sectors and over time

## Ratings are not measures of absolute default probability

- We recognize that observed default rates for all rating categories rise and fall as the economic environment changes
- Each economic cycle is unique and produces different default rates across sectors and regions
- We do observe long-term default frequencies to inform future changes to criteria and analytics

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# S&P Default Events

## Bankruptcy filings

## Failure to pay

- Principal or interest

## Distressed exchange offers

- No legal default
- Exchange offers and buybacks
- Two conditions need to be met:
  1. The offer implies the investor will receive less value than the promise of the original securities
  2. The offer is distressed rather than purely opportunistic
    - Investors accept less than the original promise because of the risk that the issuer will not fulfill its original obligations
    - If rating is 'B-' or lower, then the exchange is ordinarily viewed as distressed
    - Can include secondary market repurchases below par, if the company is advertising itself as the buyer

## Debt standstill agreements and writedowns also default



# Defaults Are Cyclical, Beware Of Long-Term Averages

## Descriptive Statistics On One-Year Global Default Rates

(%)	AAA	AA	A	BBB	BB	B	CCC/C
Minimum	0.00	0.00	0.00	0.00	0.00	0.25	0.00
Maximum	0.00	0.38	0.38	1.02	4.22	13.84	48.94
Weighted long-term average	0.00	0.02	0.07	0.22	0.86	4.28	26.85
Median	0.00	0.00	0.00	0.18	0.72	3.55	22.80
Standard deviation	0.00	0.07	0.11	0.26	1.04	3.32	12.48
2008 default rates	0.00	0.38	0.38	0.48	0.79	4.01	26.47
Latest four quarters (Q1 2012 - Q4 2012)	0.00	0.00	0.00	0.00	0.29	1.50	26.62
Difference between last four quarters and average	0.00	(0.02)	(0.07)	(0.22)	(0.58)	(2.78)	(0.23)
Number of standard deviations	0.00	(0.31)	(0.64)	(0.85)	(0.55)	(0.84)	(0.02)

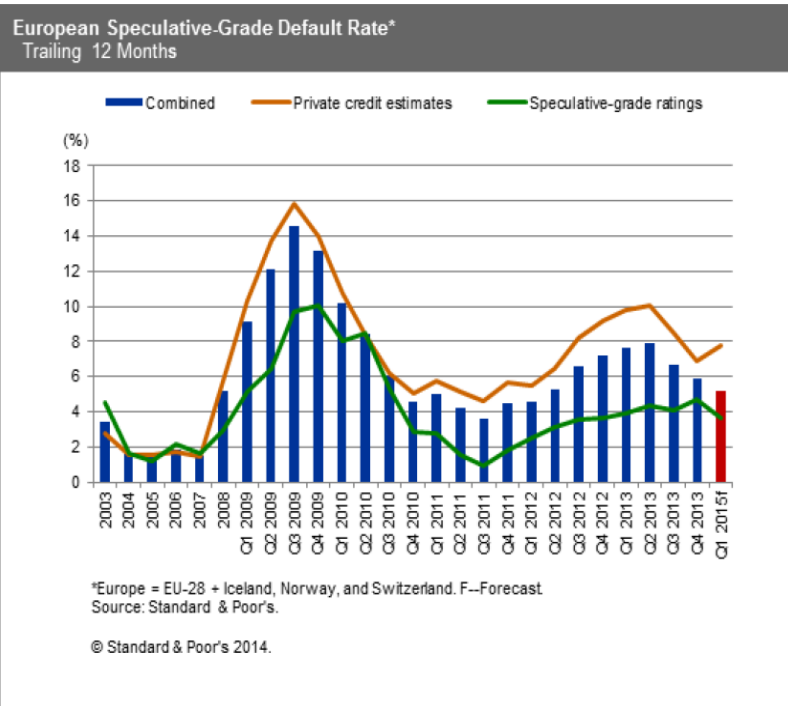
# Ratings Transition Continues to Exhibit Consistency

**Average Global Corporate One-Year Corporate Transition Rates, 1981-2012 (%)**

Global Corporate		Rating at the end of the year								
		AAA	AA	A	BBB	BB	B	CCC/CC	D	NR
Rating at the beginning of the year	AAA	<b>87.2</b>	8.7	0.5	0.1	0.1	0.0	0.1	0.0	3.4
	AA	0.5	<b>86.3</b>	8.4	0.6	0.1	0.1	0.0	0.0	4.1
	A	0.0	1.9	<b>87.3</b>	5.5	0.4	0.2	0.0	0.1	4.7
	BBB	0.0	0.1	3.5	<b>85.1</b>	3.9	0.6	0.1	0.2	6.4
	BB	0.0	0.0	0.2	5.2	<b>76.1</b>	7.2	0.7	0.9	9.7
	B	0.0	0.0	0.1	0.2	5.4	<b>73.8</b>	4.4	4.3	11.7
	CCC/CC	0.0	0.0	0.2	0.2	0.7	13.7	<b>43.9</b>	26.9	14.4

- Investment-grade-rated issuers tend to exhibit greater credit stability as measured by the frequency of rating transition

# European Default Rates – Expected At 5.2% By March 2015



- **Trailing 12-month speculative-grade default rate was 5.9% to Dec. 31, 2013 (6.7% in Q3-2013)**

- 42 EU-31 entities defaulted on €24.3 billion of debt
- 11 entities defaulted in Q4-2013 on €4.9 billion of debt

- **Basecase default forecast 5.2% to March 2015 (versus five-year average of 7.4%)**

- Downside forecast 6.7%
- Largely driven by a rise in our private credit estimates portfolio and serial defaulters

- **Favorable debt and interest rate environment**

- Helped rated companies to bolster their liquidity positions by terming out debt maturities and refinancing bank debt

## European Speculative-Grade Default Projections To March 2015

One-Year Default Assumptions For Ratings/Credit Estimates

Ratings/Credit Estimates	Default Assumptions					
	Base case			Downside		
	Public ratings	Credit estimates	Combined	Public ratings	Credit estimates	Combined
(% per year)						
>B+	0.6	0.6		0.8	0.9	
B+	1.9	2.1		2.4	2.6	
B	3.8	4.3		5.1	5.5	
B-	6.0	6.7		8.2	8.9	
CCC/CC	21.7	23.4		26.9	28.6	
<b>Default rates</b>						
Percentage	3.6	7.9	5.2	4.7	10.0	6.7
No. of defaults	15	20	35	20	26	46

# Competitive Position Group Profile

Business Risk Profile

Financial Risk Profile

Anchor

Modifiers

Group methodology

*“...we determine a company’s preliminary competitive position assessment by ascribing a specific weight to each component”*

## Competitive Position Group Profiles (CPGPs) And Category Weightings

-- %--

Component	Service 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
<b>Total</b>	100	100	100	100	100	100
<b>Weighted-average assessment</b>	1.0-5.0	1.0-5.0	1.0-5.0	1.0-5.0	1.0-5.0	1.0-5.0

## Diversification/portfolio effect

- Identifies the benefits of diversification across business lines (conglomerates)
- Minimum (usually) of three business lines, smallest >10% of EBITDA (or FOCF) and largest <50%
- Assessment impacted by our view of correlation between segments

### Assessing Diversification/ Portfolio Effect

Degree of correlation of business lines	-- Number 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

### Assessing Diversification/ Portfolio Effect

Diversification/ portfolio effect	-- Business risk profile --					
	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

## Capital structure

- Assesses risks in a company’s capital structure that may not show up in our standard ratio analysis
- An analysis of four subfactors
  - Currency risk associated with debt (tier 1)
  - Debt maturity profile (tier 1)
  - Interest rate risk associated with debt (tier 2)
  - Investments (can modify preliminary capital structure assessment)

### Final Capital Structure Assessment

-- Investment subfactor assessment --

Preliminary capital structure assessment	-- Investment subfactor assessment --		
Neutral	Neutral	Positive	Very positive
Neutral	Neutral	Positive	Very positive
Negative	Negative	Neutral	Positive
Very negative	Very negative	Negative	Negative

## Refines the view of a company's risks beyond the conclusions arising from the standard assumptions in the cash flow/leverage assessment

- Assumptions do not always reflect or entirely capture the short-to-medium term event risks or longer-term risks stemming from a company's financial policy

## Analysis depends on the nature of the company's controlling shareholder(s)

- For companies not owned by financial sponsors, we assess:
  1. Management's financial discipline
    - Determines whether unforeseen actions by management to increase, maintain, or reduce financial risk are likely to occur during the next two to three years
  2. The company's financial policy framework
    - Assess the comprehensiveness, transparency, and sustainability of the entity's financial policies
    - Assessed as supportive or non-supportive

*“The influence management is likely to exert on an entity's financial risk profile beyond what is implied by recent credit ratios and cash flow and leverage forecasts”*

**For companies that are owned =>40% by a financial sponsor (or a group of three or less), we assess the influence of financial sponsor ownership**

- Range from “FS4” to “FS6 (minus)”
  - Depending on how aggressive we assume the sponsor will be
  - FS5 and FS4 are expected to be used only in rare instances
- Generally financial sponsor-owned issuers will receive an assessment of “FS6” or “FS6 (minus)”
  - Leads to a financial risk profile of ‘6/Highly Leveraged’ under the criteria



## Modifier Step 2: Impact Of Remaining Modifiers On The Anchor

--Anchor range--

Factor/ranking	'a-' and higher	'bbb+' to 'bbb-'	'bb+' to 'bb-'	'b+' and lower
<b>Capital structure</b>				
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 or more notches
<b>Financial policy (FP)</b>				
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 <sup>1</sup>	- 1 to - 3 notches <sup>1</sup>	- 1 to - 2 notches <sup>1</sup>	- 1 notch
4. FS-4, FS-5, FS-6, FS-6 (minus)	N/A	N/A	N/A	N/A

<sup>1</sup>Number of notches depends on potential incremental leverage.

- **Last step in determining a stand-alone credit profile on a company**
- **An holistic review of a company's stand-alone credit risk profile**
  - Evaluates an issuer's credit characteristics in aggregate
  - Based on positive and negative nuances and reflects the need to 'fine-tune' ratings outcomes
  - A positive or negative assessment is therefore likely to be common rather than exceptional
- **A company's rating may be changed by one notch in either direction in this comparable ratings analysis**
  - Assessed as neutral, positive, or negative
- **Examples that can lead to an adjustment (up or down) include:**
  - A company being strong/weak within its business risk and/or financial risk profile (or metrics)
  - Contingent risk exposures
  - Short operating track record
  - Unusual funding structures
  - Entities in transition
  - Industry or macroeconomic trends



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