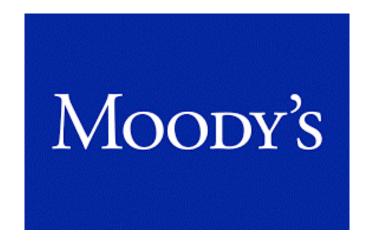
# Rating

Olivier Levyne (2021)

# Rating agencies











**S&P Global** Ratings

### Definitions and usefulness

### Definitions

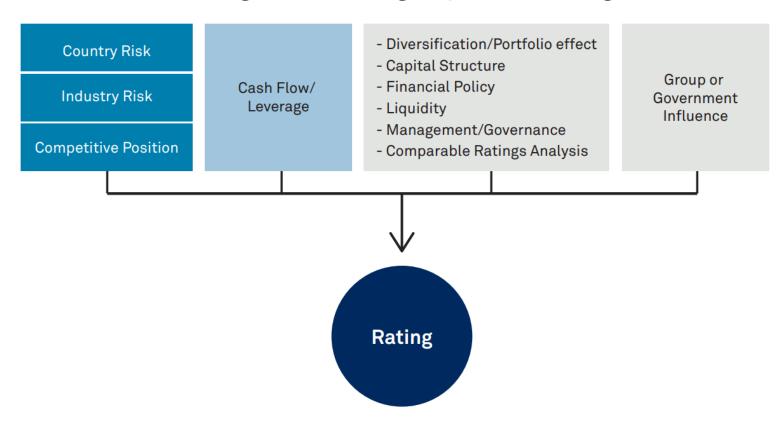
- Forward looking opinions about an issuer's relative creditworthiness
- Common and transparent global language for investors to form a view on the relative likelihood of whether an issuer may repay its debts on time and in full
- One of many inputs that investors and other market participants can consider As part of their decision-making processes

### Usefulness

- For issuers
  - Diversification of funding sources
  - Expansion of the pool of investors and available capital
  - Optimization of the cost of funding
  - Lengthening of the terms of financing
- For intermediaries
  - · Benchmarking of the relative credit risk of different debt issues
  - Setting of the initial pricing for individual debt issues they structure
  - Determination of the interest rate issuers will pay
  - Packaging of assets into securities or structured finance instruments to market to investors
- For investors
  - Third-party opinion of credit quality
  - Basis for comparison across asset classes, geographies, and peers
  - Information and metrics to make informed decisions, such as supplementing their own credit analysis or establishing thresholds for credit risk and investment guideline

## Principle

### Factors used for assessing S&P Global Ratings corporate credit ratings



## S&P ratings for long term debt

Investment Grade	AAA	Extremely strong capacity to meet financial commitments. Highest rating
	AA	Very strong capacity to meet financial commitments
	A	Strong capacity to meet financial commitments, but somewhat susceptible to adverse economic conditions and changes in circumstances
	BBB	Adequate capacity to meet financial commitments, but more subject to adverse economic conditions
	BBB-	Considered lowest investment-grade by market participants
Speculative Grade —	BB+	Considered highest speculative-grade by market participants
Speculative Grade —	ВВ	Less vulnerable in the near-term but faces major ongoing uncertainties to adverse business, financial and economic conditions
	В	More vulnerable to adverse business, financial and economic conditions but currently has the capacity to meet financial commitments
	ссс	Currently vulnerable and dependent on favorable business, financial and economic conditions to meet financial commitments
	СС	Highly vulnerable; default has not yet occurred, but is expected to be a virtual certainty
	С	Currently highly vulnerable to non-payment, and ultimate recovery is expected to be lower than that of higher rated obligations
	D	Payment default on a financial commitment or breach of an imputed promise; also used when a bankruptcy petition has been filed or similar action taken

Ratings from 'AA' to 'CCC' may be modified by the addition of a plus (+) or minus (-) sign to show relative standing within the major rating categories.

### Rating changes

Recer	nt Rating A	ctions					
Date	Action	Issuer	Industry	Country	То	From	Debt vol (mil. \$)
4-Nov	Upgrade	La Poste	Bank	France	A+	Α	33,523
5-Nov	Upgrade	Cleveland-Cliffs Inc.	Metals, mining, and steel	U.S.	B+	В	4,542
3-Nov	Downgrade	Hyatt Hotels Corp.	Media and entertainment	U.S.	BB+	BBB-	2,700
			Oil and gas exploration and				
2-Nov	Upgrade	Vine Energy Inc.	production	U.S.	BB-	B-	1,100
5-Nov	Upgrade	Kontoor Brands Inc.	Consumer products	U.S.	BB	BB-	1,050
•			Oil and gas exploration and				
2-Nov	Upgrade	Chesapeake Energy Corp.	production	U.S.	BB-	B+	1,000
4-Nov	Upgrade	S&S Holdings LLC	Consumer products	U.S.	В	B-	950
4-Nov	Downgrade	Ruby Pipeline LLC	Utility	U.S.	CC	CCC	825

Bank

Media and entertainment

U.S.

Switzerland

AA-

A+

640

366

Source: S&P Global Ratings

Upgrade

Upgrade

Hova Midco LLC

Banque Cantonale de Geneve

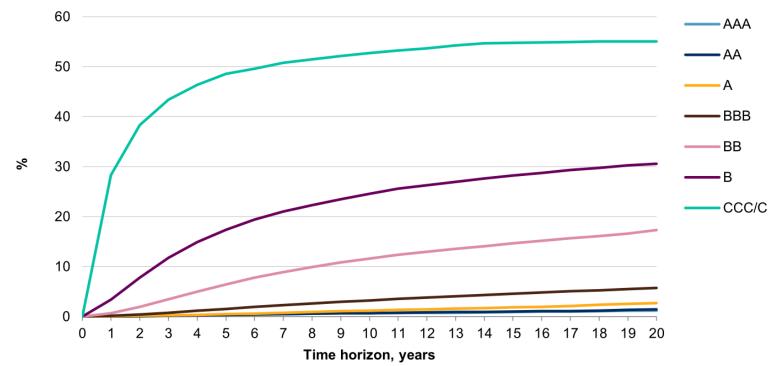
4-Nov

4-Nov

- Upgrades outpaced downgrades again this week, led by banks, consumer products, and oil and gas exploration and production with two upgrades each.
- Hyatt Hotels Corp. became a fallen angel this week after we downgraded it to 'BB+' from 'BBB-'. While Hyatt has a plausible and publicly stated goal to reduce leverage, the acquisition of Apple Leisure Group introduces near-term risks and causes our measure of pro forma net leverage to be above our 3.75x downgrade threshold at the 'BBB-' rating through 2022.
- The 2021 global corporate default tally increased to 64 after the default of Texas-based business process automation company Exela Technologies Inc. while defaults in both the U.S. and Europe have slowed so far in 2021, the U.S. has demonstrated a starker recovery as defaults have contracted by 73% from this point in 2020. Meanwhile defaults in Europe have contracted by 64% during the same period.

### Cumulative default rate by rating based on a S&P global sample over 20 years

### Global Corporate Average Cumulative Default Rates By Rating (1981-2020)



Sources: S&P Global Ratings Research and S&P Global Market Intelligence's CreditPro®. Copyright © 2021 by Standard & Poor's Financial Services LLC. All rights reserved.

### Average Cumulative Default Rates For Corporates By Region (1981-2020) (%)

		Time horizon (years)													
Rating	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
U.S.															
AAA	0.00	0.04	0.17	0.29	0.41	0.54	0.58	0.66	0.75	0.83	0.87	0.91	0.96	1.05	1.14
AA	0.03	0.08	0.17	0.29	0.42	0.56	0.70	0.81	0.90	1.00	1.09	1.17	1.25	1.32	1.40
A	0.07	0.19	0.33	0.50	0.67	0.87	1.09	1.30	1.51	1.74	1.94	2.12	2.30	2.46	2.63
BBB	0.20	0.52	0.89	1.37	1.88	2.38	2.83	3.28	3.72	4.14	4.55	4.85	5.13	5.45	5.78
ВВ	0.74	2.31	4.18	6.01	7.68	9.29	10.66	11.94	13.08	14.13	15.01	15.85	16.60	17.21	17.87
В	3.53	8.31	12.61	16.02	18.72	20.95	22.73	24.18	25.46	26.65	27.66	28.44	29.20	29.90	30.56
CCC/C	30.26	41.68	47.45	50.92	53.49	54.65	56.04	56.84	57.58	58.20	58.79	59.26	59.77	60.22	60.22
Investment grade	0.11	0.30	0.52	0.80	1.10	1.40	1.69	1.96	2.23	2.50	2.75	2.95	3.14	3.33	3.53
Speculative grade	4.14	8.11	11.57	14.38	16.66	18.57	20.17	21.50	22.69	23.77	24.70	25.48	26.21	26.85	27.46

Time horizon (years)															
Rating	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
All rated	1.86	3.67	5.26	6.60	7.72	8.67	9.48	10.17	10.80	11.37	11.87	12.28	12.67	13.02	13.36
Europe															
AAA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00					
AA	0.00	0.02	0.05	0.10	0.16	0.21	0.24	0.27	0.30	0.30					
A	0.03	0.07	0.10	0.15	0.23	0.29	0.38	0.41	0.43	0.44					
BBB	0.06	0.17	0.30	0.43	0.54	0.78	0.96	1.11	1.27	1.42					
ВВ	0.36	1.13	1.89	2.68	3.59	4.30	4.98	5.42	5.78	6.18					
В	2.22	5.71	8.89	11.44	13.56	15.20	16.50	17.36	18.21	18.99					
CCC/C	28.64	38.72	42.75	46.63	48.95	49.85	50.39	51.06	51.06	51.86					
Investment grade	0.03	0.09	0.15	0.22	0.30	0.41	0.50	0.56	0.62	0.67					
Speculative grade	2.88	5.59	7.78	9.64	11.23	12.39	13.34	13.98	14.53	15.10					
All rated	0.78	1.50	2.08	2.56	2.97	3.30	3.55	3.71	3.85	3.97					
-															

### Largest defaulters over 20 years

#### Largest corporate defaulters by outstanding debt amount

Year defaulted	Issuer	Amount (mil. \$)		
1994	Confederation Life Insurance	2,415		
1995	Grand Union Co./Grand Union Capital	2,163		
1996	Tiphook Finance	700		
1997	Flagstar Corp.	1,021		
1998	Service Merchandise Co.	1,326		
1999	Integrated Health Services Inc.	3,394		
2000	Owens Corning	3,299		
2001	Enron Corp.	10,779		
2002	WorldCom Inc.	30,000		
2003	Parmalat Finanziaria SpA	7,177		
2004	RCN Corp.	1,800		
2005	Calpine Corp.	9,559		
2006	Pliant Corp.	1,644		
2007	Movie Gallery Inc.	1,225		
2008	Lehman Brothers Holdings Inc.	144,426		
2009	Ford Motor Co.	70,989		
2010	Energy Future Holdings Corp.	47,648		
2011	Texas Competitive Electric Holdings Co. LLC	32,460		
2012	BTA Bank J.S.C.	10,184		
2013	Texas Competitive Electric Holdings Co. LLC	31,628		
2014	Texas Competitive Electric Holdings Co. LLC	28,651		
2015	Arch Coal Inc.	6,025		
2016	Petroleos de Venezuela, S.A.	19,859		
2017	Petroleos de Venezuela, S.A.	17,617		

### Largest Global Rated Defaulters By Year (cont.)

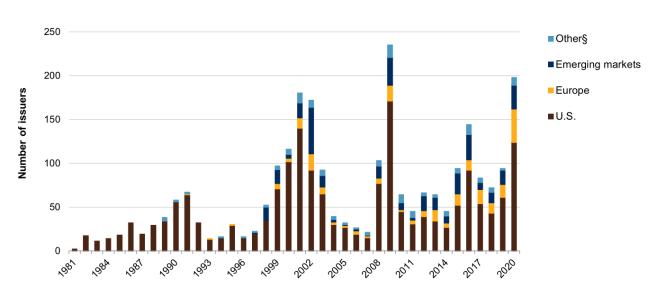
Largest corporate defaulters by outstanding debt amount

Year defaulted	Issuer	Amount (mil. \$)
2018	iHeartCommunications Inc.	20,176
2019	Community Health Systems Inc.	23,432
2020	Frontier Communications Corp.	22,453

Sources: S&P Global Ratings Research and S&P Global Market Intelligence's CreditPro®.

Chart 5

### Annual Corporate Defaults By Number Of Issuers\*



<sup>\*</sup>Count excludes defaults that were not rated prior to Jan. 1 of each year. §Other developed is Australia, Canada, Japan, and New Zealand. Sources: S&P Global Ratings Research and S&P Global Market Intelligence's CreditPro®.

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### Transition rates by region in 2020

- Consistency of analysis of ratings behavior with long-term trends
- Negative correspondence of higher ratings with the observed frequency of default.
- Greater ratings stability (as measured by the frequency of rating transitions)
  of investment-grade-rated issuers
- Global decline of the number of 'AAA' rated issuers globally to just 8 by the end of 2020 from 89 at the beginning of 2008 and correlative surge of lowest-rated investment-grade companies
- Events over the long term that have contributed to the decline of global 'AAA' rated issuers
  - Sovereign downgrades of China in 2017, the U.K. in 2016, France in 2012, and the U.S. in 2011
  - Implied downgrades of many higher-rated financial services companies.
- Low number of highest rated entities
  - Among nonfinancial entities, increase in willingness to operate with higher leverage to fund share buybacks, expand businesses, or finance acquisitions
  - Asset managers' growing tolerance for investing in lower-rated companies

From/to	AAA	AA	Α	BBB	ВВ	В	CCC/C	D	NR
Global									
AAA	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ΔД	0.00	87.27	9.63	0.00	0.00	0.00	0.00	0.00	3.11
Д	0.00	0.00	92.88	4.05	0.00	0.07	0.00	0.00	3.00
BBB	0.00	0.05	0.59	90.13	4.47	0.22	0.00	0.00	4.53
ВВ	0.00	0.00	0.00	0.78	78.20	11.40	0.85	0.93	7.84
В	0.00	0.00	0.00	0.05	0.96	71.99	12.56	3.51	10.92
CCC/C	0.00	0.00	0.00	0.00	0.00	5.46	34.45	47.48	12.61
U.S.									
AAA	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AA	0.00	90.30	8.96	0.00	0.00	0.00	0.00	0.00	0.75
Д	0.00	0.00	93.86	3.79	0.00	0.00	0.00	0.00	2.35
BBB	0.00	0.14	0.98	90.17	4.49	0.56	0.00	0.00	3.65
ВВ	0.00	0.00	0.00	0.90	76.13	15.55	0.72	1.27	5.42
В	0.00	0.00	0.00	0.09	1.20	73.05	12.36	3.61	9.70
CCC/C	0.00	0.00	0.00	0.00	0.00	4.58	35.95	49.02	10.46
Europe									
AAA	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AA	0.00	85.71	10.20	0.00	0.00	0.00	0.00	0.00	4.08
A	0.00	0.00	93.13	3.56	0.00	0.00	0.00	0.00	3.31
BBB	0.00	0.00	0.46	89.47	5.49	0.00	0.00	0.00	4.58
ВВ	0.00	0.00	0.00	0.96	75.60	9.09	1.44	0.96	11.96
В	0.00	0.00	0.00	0.00	0.87	74.78	12.17	3.04	9.13
CCC/C	0.00	0.00	0.00	0.00	0.00	8.16	32.65	44.90	14.29
Emerging	g markets	i							
AAA	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AA	0.00	93.18	0.00	0.00	0.00	0.00	0.00	0.00	6.82
Α	0.00	0.00	91.94	5.49	0.00	0.37	0.00	0.00	2.20
BBB	0.00	0.00	0.19	89.60	4.91	0.00	0.00	0.00	5.29
ВВ	0.00	0.00	0.00	0.42	81.10	7.64	0.64	0.64	9.55
В	0.00	0.00	0.00	0.00	0.54	68.12	11.99	3.54	15.80
CCC/C	0.00	0.00	0.00	0.00	0.00	4.00	28.00	44.00	24.00

# Appendices

### Appendix 1: Altman score

### **Function**

$$Z = 1.2X_1 + 1.4X_2 + 3.3X_3 + 0.6X_4 + 1X_5$$

### **Variables**

 $X_1$  = net working capital / total assets

 $X_2$  = retained earnings / total assets

 $X_3 = EBIT / total assets$ 

 $X_4$  = market value of equity / total liabilities

 $X_5$  = sales / total assets

### Conclusion

Z > 2.99: "safe" zone

1.81 < Z < 2.99: "grey" zone

Z < 1.81: "distress" zone

### Measure

Liquidity

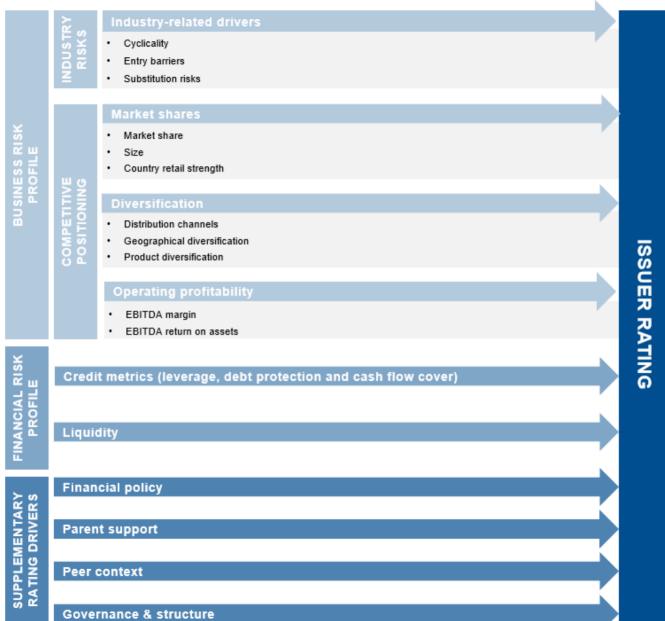
Cumulative profitability

Return on Assets

Market leverage

Sales generating potential of assets

### Appendix 2: Scope's rating drivers



### Business risks benchmarks for retail

Figure 3 - Scope's industry risk assessment for different retail segments

Entry barriers Cyclicality	Low	Medium	High		
High	CCC/B	B/BB	BB/BBB		
Medium	B/BB	BB/BBB	BBB/A		
Low	BB/BBB	BBB/A	AA/AAA		

Figure 4 – Market share assessment by rating category

	A and above	BBB	ВВ	B and below
Market shares	Top 3 in over 5 countries or large presence over a continent (continental incumbent)	Top 3 in 2-5 countries	Top 3 in 1 country	Below top 3 in a single country
Sales (EUR bn)	> 15	15 to 7.5	7.5 to 1.5	< 1.5
Country retail strength	High	High - medium	Medium - low	Low

Figure 5 – Diversification by rating category

	A and above	ВВВ	ВВ	B and below
Distribution channels	Hybrid model with high percentage of sales generated via each channel	Relatively high sales via other distribution channels in addition to primary distribution channel	Relatively low sales via other distribution channels in addition to primary distribution channel	Single channel distributor
Geographical diversification	Global	Active in one continent	Operates in one country and its immediate neighbours	Solely active in one country
Product diversification <sup>4</sup>	Large assortment of products sold across more than two consumer goods categories	Products sold belong to two consumer goods categories	Products sold belong to a single consumer goods category which is deemed non-cyclical	Products sold belong to a single consumer goods category which is deemed cyclical

Figure 6 - Operating profitability by rating category

	AA and above	A	BBB	ВВ	В	CCC and below
Scope-adjusted EBITDA margin	> 10%	10 to 8%	8 to 6%	6 to 4%	4 to 2%	< 2%
Scope-adjusted EBITDA return on assets	> 40%	40 to 30%	30 to 25%	25 to 20%	20 to 10%	< 10%

### Scope-adjusted EBITDA return on assets

Operational efficiency measure

Scope-adjusted EBITDA

Net PPE + right-of-use assets + inventory

This measures a company's profitability compared with the assets used for its activity. Right-of-use assets is either taken from the balance sheet if the company reports under IFRS16 or is estimated via a proxy by discounting future operating lease payments by 5%.

### Days inventory outstanding (DIO)

Operational efficiency measure

Average inventory ×365

Cost of goods sold

This ratio counts the number of days a retailer would normally need to sell its entire inventory. The 'average inventory' is calculated as the average of the value recorded for the last three years on the balance sheet. The smaller the ratio the better, as it indicates rapid sales and implies better turnover possibilities.

### Days sales outstanding (DSO)

Operational efficiency measure

Average commercial receivables

(Revenues ÷365)

This ratio counts the average number of days needed to collect the cash generated from sales. We only include receivables which are used in operational activities and exclude receivables linked to taxes, e.g. 'commercial receivables', when applicable. 'Average commercial receivables' are calculated as the average of the value recorded for the last three years on the balance sheet.

### Days payables outstanding (DPO)

Operational efficiency measure

Average commercial payables

(Cost of goods sold ÷365)

This ratio counts the number of days that the retailer holds the cash to pay its suppliers. We only include payables which are used in operational activities and exclude payables linked to taxes, e.g. 'commercial payables', when applicable. 'Average commercial payables' are calculated as the average of the value recorded for the last three years on the balance sheet.

### Cash conversion cycle

Operational efficiency measure

Cash conversion cycle = DIO + DSO - DPO

The cash conversion cycle factors in the DIO, DPO and DSO (see above) and measures the time a retailer needs to convert investments in assets into cash.

### Common benchmarks for corporate bodies

Figure 5: Financial guidance table

	Leve	erage	Interest cover	Cash flow cover
	Scope-adjusted debt (SaD)/EBITDA (x)	FFO/Scope-adjusted debt (SaD)	EBITDA/interest cover	FOCF/Scope-adjusted debt (SaD)
AA and above	< 1x	> 60%	> 10x	> 35%
Α	1x-2x	45%-60%	7x-10x	25%-35%
ВВВ	2x-3x	30%-45%	4x-7x	15%-25%
ВВ	3x-4x	15%-30%	2x-4x	5%-15%
В	4x-6x	0%-15%	1x-2x	< 5%
CCC and below	> 6x	Negative	< 1x	Very negative

#### Figure 6: Our key value and metrics definitions<sup>1</sup>

	•	•	
	Scope-adjusted EBITDA		
	Cash flow measure		
Reported EBITDA		eported EBITDA	
	±	Rental payments	
	_	One off items	

± One-off items= Scope-adjusted EBITDA

Funds from operations (FFO)

Scope-adjusted EBITDA

- Interest paid (net)
- Tax paid

Cash flow measure

- + Associate dividends received
- ± Other non-operating charges before FFO
- = FFO

Reported earnings before interest, taxes, depreciation and amortisation, plus rental payments for the year adjusted for material one-off items (cash and non-cash), subject to analytical judgment.

Funds from operations represent operating cash flows before changes in working capital and after dividends received, interest paid (including accrued interest on positions that we treat as debt-like such as pensions, asset retirement obligations, and lease obligations) and long-term operating lease charges and other non-recurring income or expenses, adjusted by the depreciation component of operating leases

### Free operating cash flow (FOCF)

#### Cash flow measure

#### **FFO**

- ± Working capital changes
- ± Non-operating cash flow
- Capex (net)
- Lease amortisation (if applicable)
- = FOCF

reduction of financial debt.

An issuer's free operating cash flow represents its operating cash flow

after changes in working capital and non-operating cash flow and reported capital expenditures (netted with fixed-asset divestitures).

Acquisitions are not capex. For issuers with substantial lease obligations, we likewise deduct the amortisation element of lease

obligations. FOCF represents the cash flow available for discretionary

spending such as for dividends, acquisitions, share buybacks, or the

#### Discretionary cash flow

#### Cash flow measure

#### FOCF

- Dividends paid
- = Discretionary cash flow

### This measures FOCF after dividends that is available for discretionary spending such as for acquisitions, share buybacks, or the reduction of financial debt.

### Scope-adjusted debt (SaD)

#### Debt measure

#### Reported financial debt

- Adjustments such as operating leases (if applicable), unfunded pensions, guarantees, provisions (if applicable), hybrid bonds (equity credit), off-balance sheet debt
- Available cash and cash equivalents
- = SaD

SaD is a key determinant for many credit metrics. We apply adjustments based on a company's annual reports (reported financial debt), which typically consist of bank loans, leases and capital market debt such as bonds. The main adjustments relate to unfunded pension obligations, operating lease obligations and guarantees given. For specific industries (such as utilities) debt-like provisions are included if material, for example, for the decommissioning of power plants.

<sup>&</sup>lt;sup>1</sup> For companies reporting under IFRS, no adjustments will be required for operating leases regarding the calculation of i) Scope-adjusted EBITDA; ii) funds from operations (FFO); iii) Scope-adjusted debt (SaD); and iv) Scope-adjusted interest