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S&P Credit Process & Ratings

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S&P Global Ratings: Credit Ratings

A Credit Rating Is:

- A forward-looking opinion of relative creditworthiness
- A key component in pricing debt
  - Typically: higher rating = lower default risk = lower cost of capital
  - Rating scale runs from "AAA" (highest) to "D" (lowest; indicates default)

A Credit rating is not:

- A recommendation to purchase, sell or hold a particular security
- A comment on the liquidity of the instrument or any other element affecting the suitability of the investment for an investor, including interest rate, currency and prepayment risk
- An audit of the obligor's financials or operations

Issuer Ratings

Issuer ratings assess:

- **Capacity & willingness of an obligor to meet financial commitments**

- **Default baselines expressed variously as …**
  - **Corporate Credit Ratings ("CCR") or**
  - **Issuer Credit Ratings ("ICR")**
  - **Counterparty ratings**

Long-Term Debt Rating Scale…as applied to Issuers

AAA	Highest Credit Quality
AA	
A	
BBB	↑ Investment Grade
BB	↓ Non-Investment Grade
B	
CCC	
CC	
SD/D	Debt in Selective Default / Default

Default Risk by Rating: Cumulative Default Rates (%) 1981-2015*

Year	Rating Category						
	AAA	AA	A	BBB	BB	B	CCC/C
1	0.00	0.02	0.06	0.19	0.73	3.77	26.36
2	0.03	0.06	0.15	0.53	2.25	8.56	35.54
3	0.13	0.13	0.26	0.91	4.07	12.66	40.83
4	0.24	0.23	0.40	1.37	5.86	15.82	44.05
5	0.35	0.34	0.55	1.84	7.51	18.27	46.43
6	0.46	0.45	0.72	2.30	9.03	20.26	47.28
7	0.52	0.55	0.92	2.71	10.34	21.89	48.24
8	0.61	0.63	1.10	3.11	11.49	23.19	49.05
9	0.66	0.71	1.28	3.50	12.53	24.32	49.95
10	0.72	0.79	1.48	3.89	13.45	25.37	50.60
11	0.76	0.87	1.65	4.31	14.20	26.26	51.09
12	0.79	0.94	1.81	4.66	14.85	26.97	51.73
13	0.82	1.01	1.97	4.99	15.39	27.61	52.57
14	0.89	1.08	2.11	5.33	15.87	28.21	53.25
15	0.96	1.15	2.28	5.68	16.39	28.80	53.25

Rating Direction

"OUTLOOK"

- Assesses potential long-term direction
- Assigned to all long-term Issuer ratings

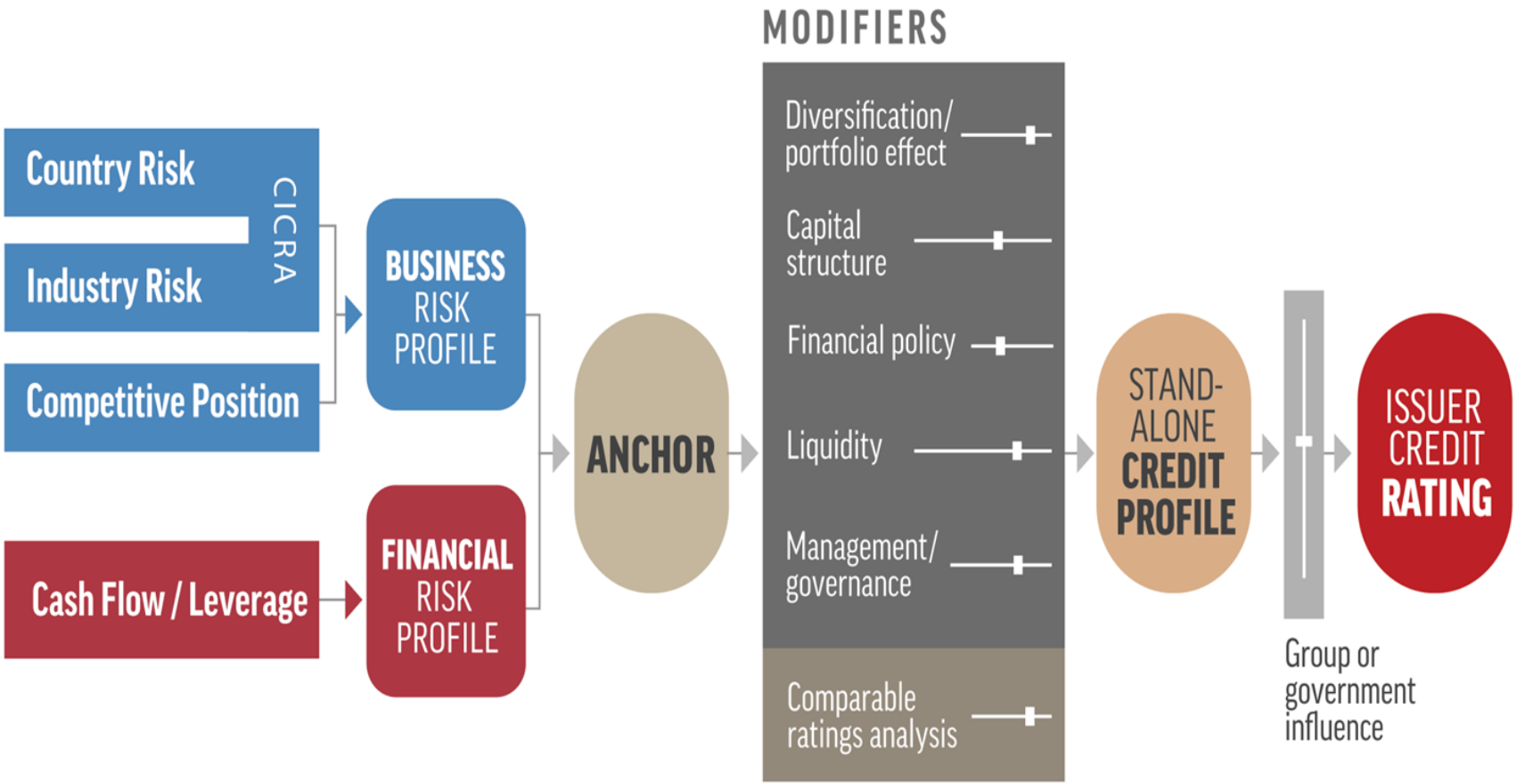
- **Time horizon –**
  - Investment Grade: up to 2 years
  - Speculative Grade: 1 year or less
- **Not necessarily a precursor to a…**
  - Rating change
  - "Credit Watch" listing
- **Outcomes: Positive, Negative, Stable, Developing**
  - "A 1 in 3 likelihood of a rating change"

"CREDIT WATCH"

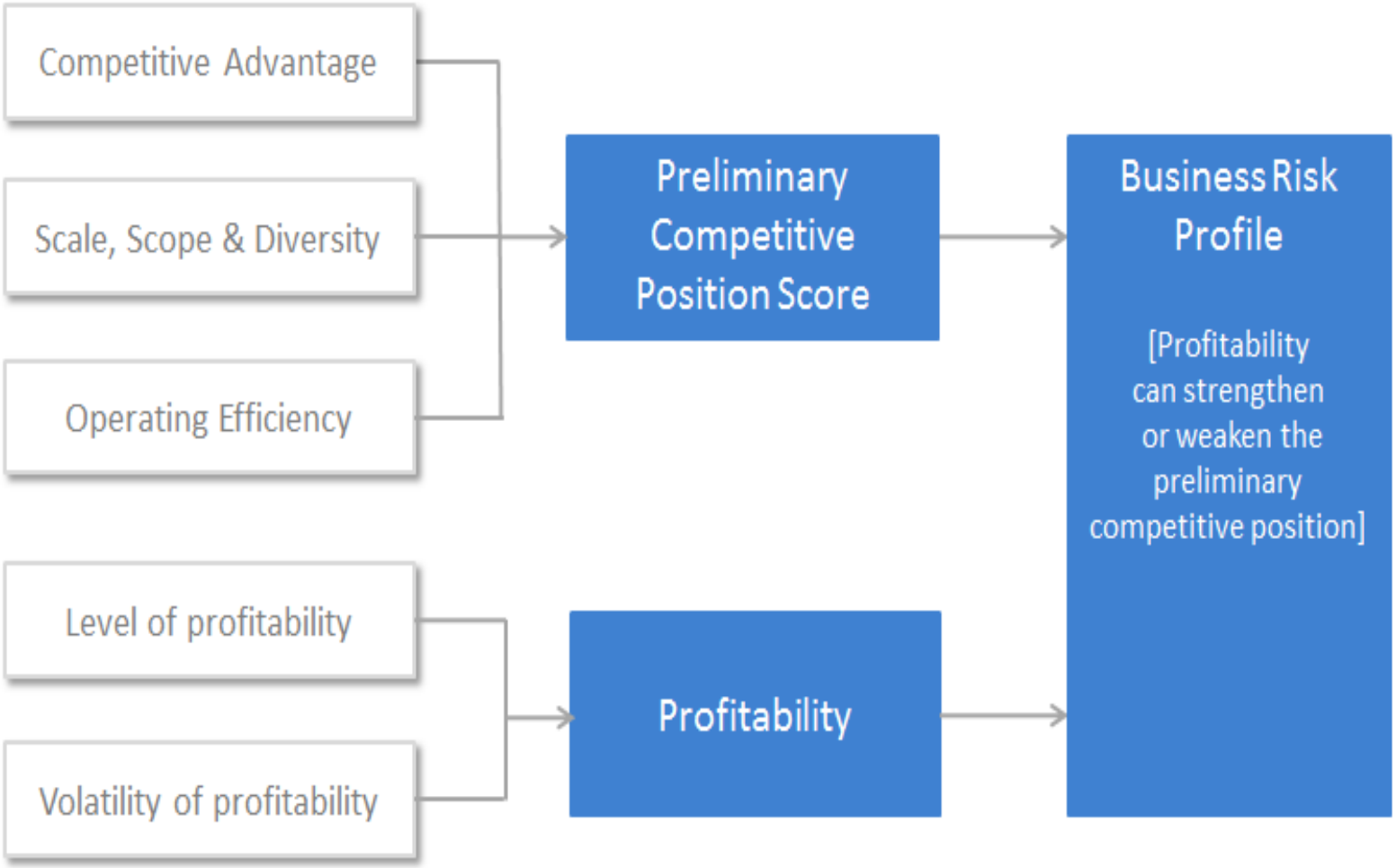
Assigned selectively to long-term Issuer and Issue ratings

- **Focus on short-term direction**
  - Fundamentals driven
  - Driven by identifiable events or circumstances
- **Time Horizon: targeted for 90 days or less**
- **Additional information necessary**
- **Outcomes: Positive, Negative, Developing**
  - "A 50% or greater likelihood of a rating change"

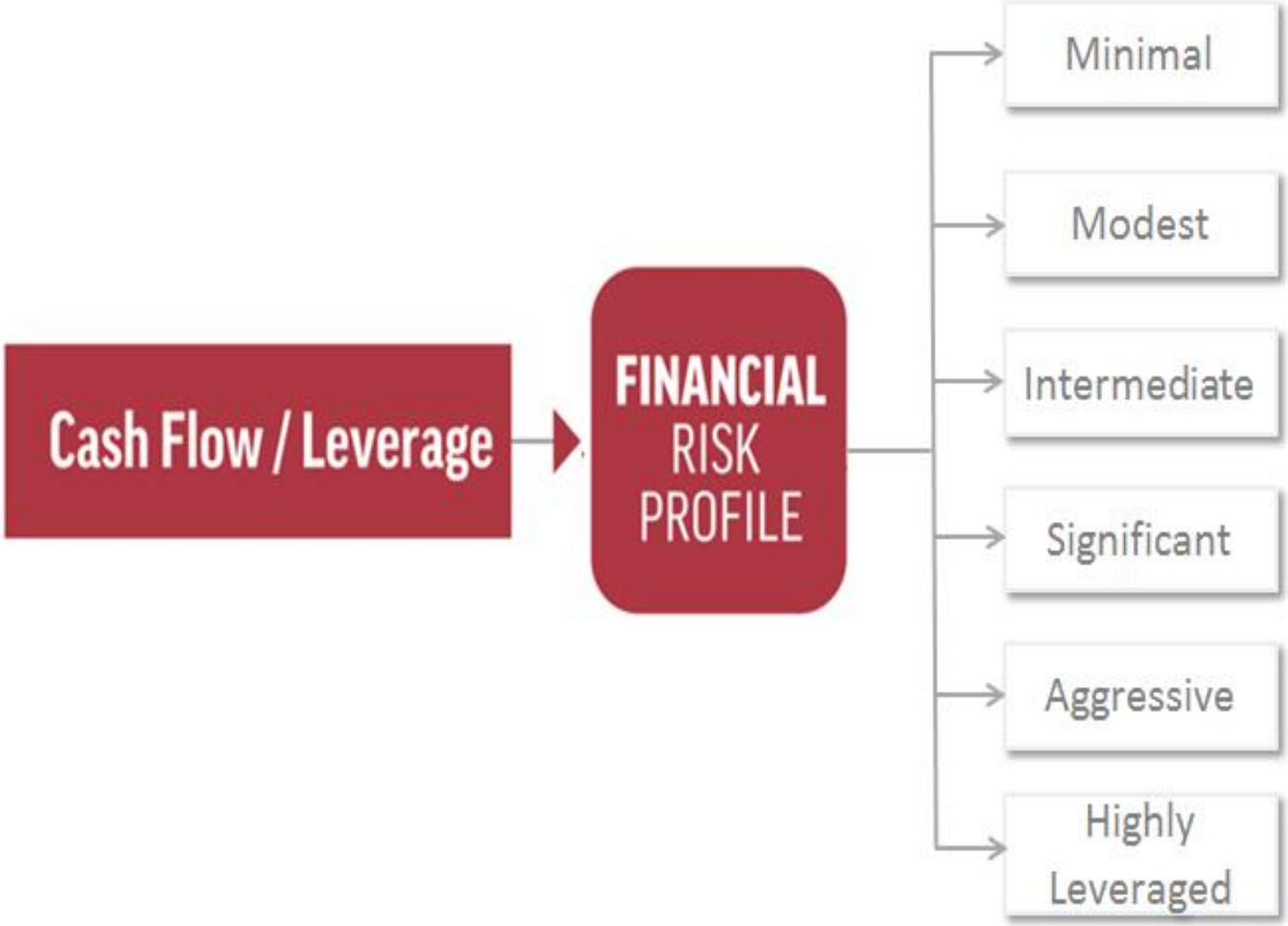
The Corporate Ratings Criteria Framework



Business Risk Profile (Competitive Position + Profitability)



Financial Risk Profile



Cash Flow/Leverage (CFL)

Core Ratios

FFO/Debt
Debt/EBITDA

Supplemental Ratios

If preliminary score is Intermediate or stronger:

- CFO/Debt
- FOCF/Debt
- DCF/Debt

Greater importance when preliminary assessment is minimal to intermediate

If preliminary score is Significant or weaker:

- EBITDA/Interest
- (FFO + Interest)/ Cash Interest

Greater importance when preliminary assessment is significant to highly leveraged

Industry Key Credit Factor commentaries may identify additional supplemental ratio(s)

Key Credit Factors for E&P

Competitive Advantage(10%)	Scale, Scope, Diversity(55%)	Operating Efficiency(35%)	Profitability
• Growth prospects in its acreage	• Size of reserves	• Unit cash costs & F&D	• ROC
• Mix of liquids vs. gas	• Mix	• Unit cash margin relative to F&D	• EBI/unit
• Unit revenues at each producing regions	• Operational risk	• Revenue per unit relative to uleveraged costs	• EBI margin
• Extent of any vertical integration	• Geographic diversification		
	• Production & growth prospects		

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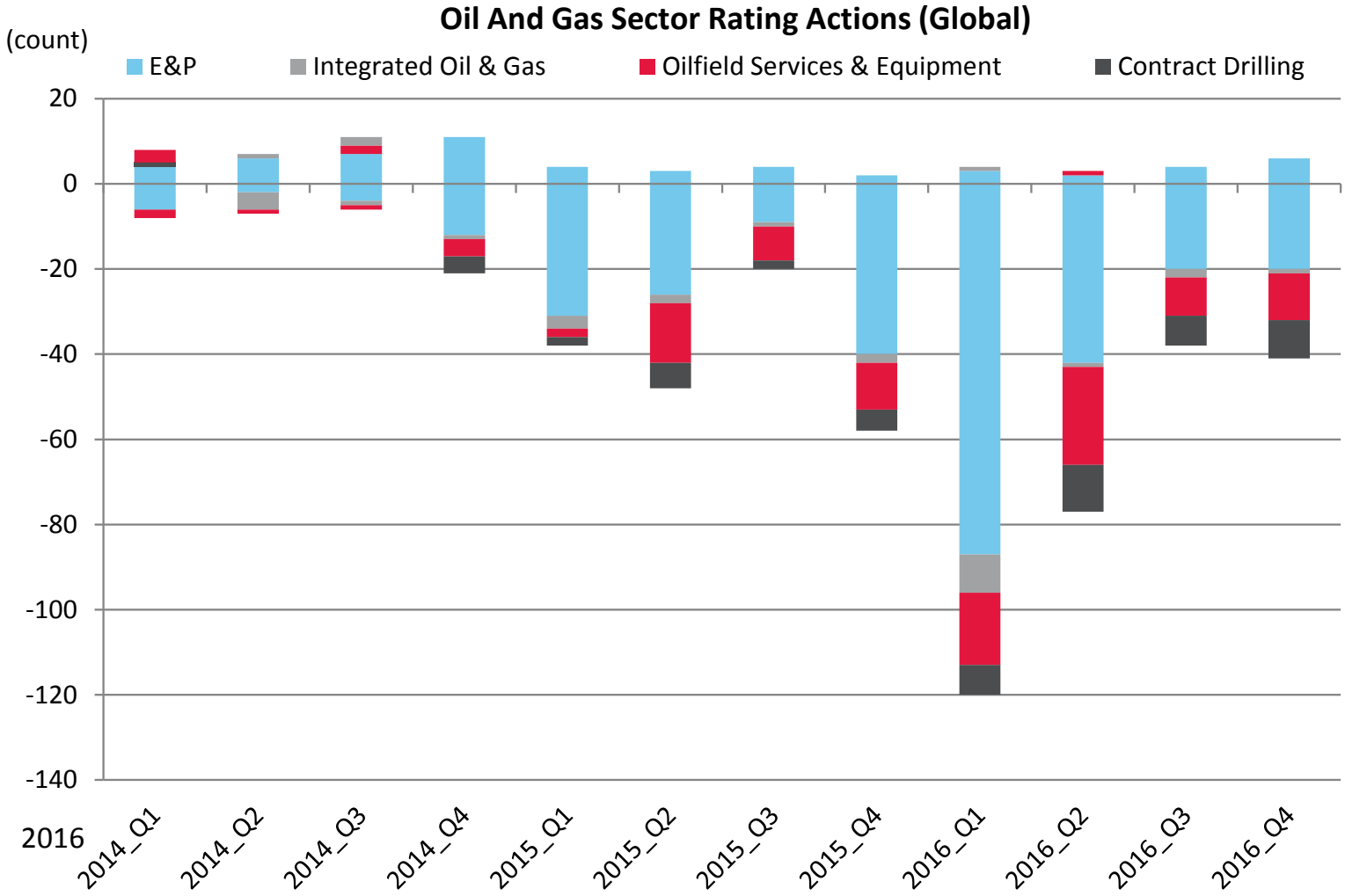
Credit Outlook

Quarterly Rating Actions (Global) For The Oil And Gas Sector



Source: S&P Global Fixed Income Research.

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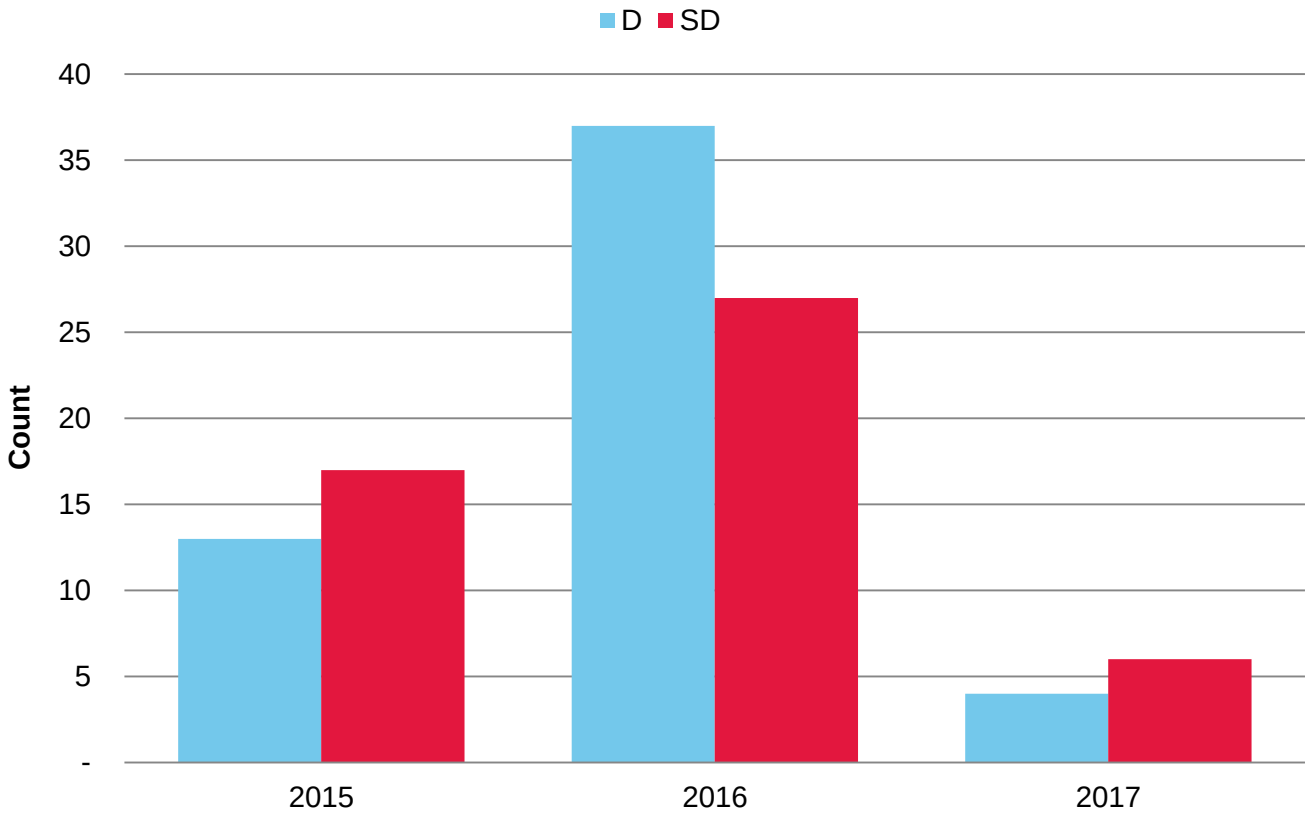
Global Defaults For Oil & Gas



As of April 20, 2017. Source: S&P Global Fixed Income Research.

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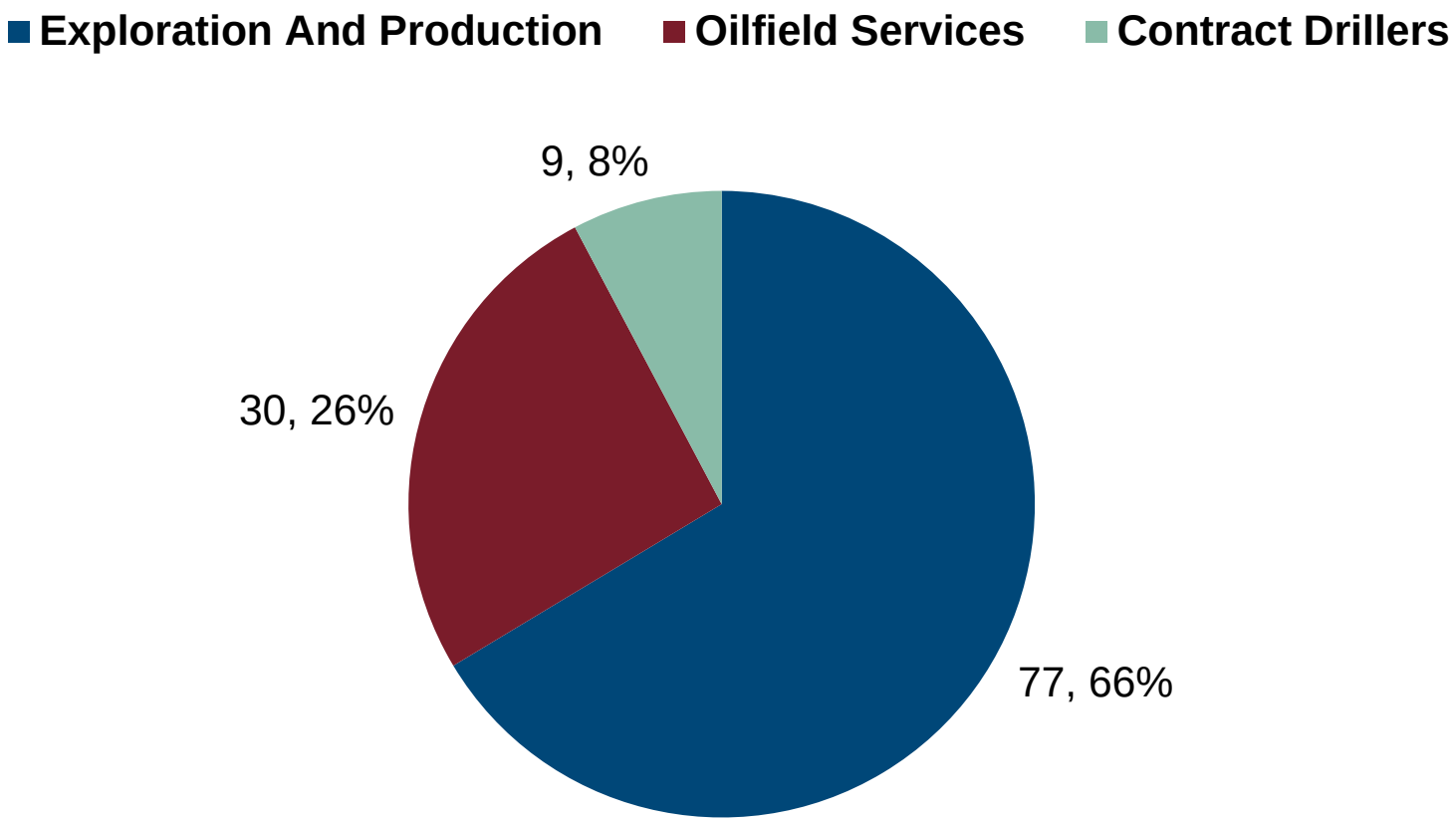
U.S. Oil & Gas Distribution



Source: S&P Global Ratings.

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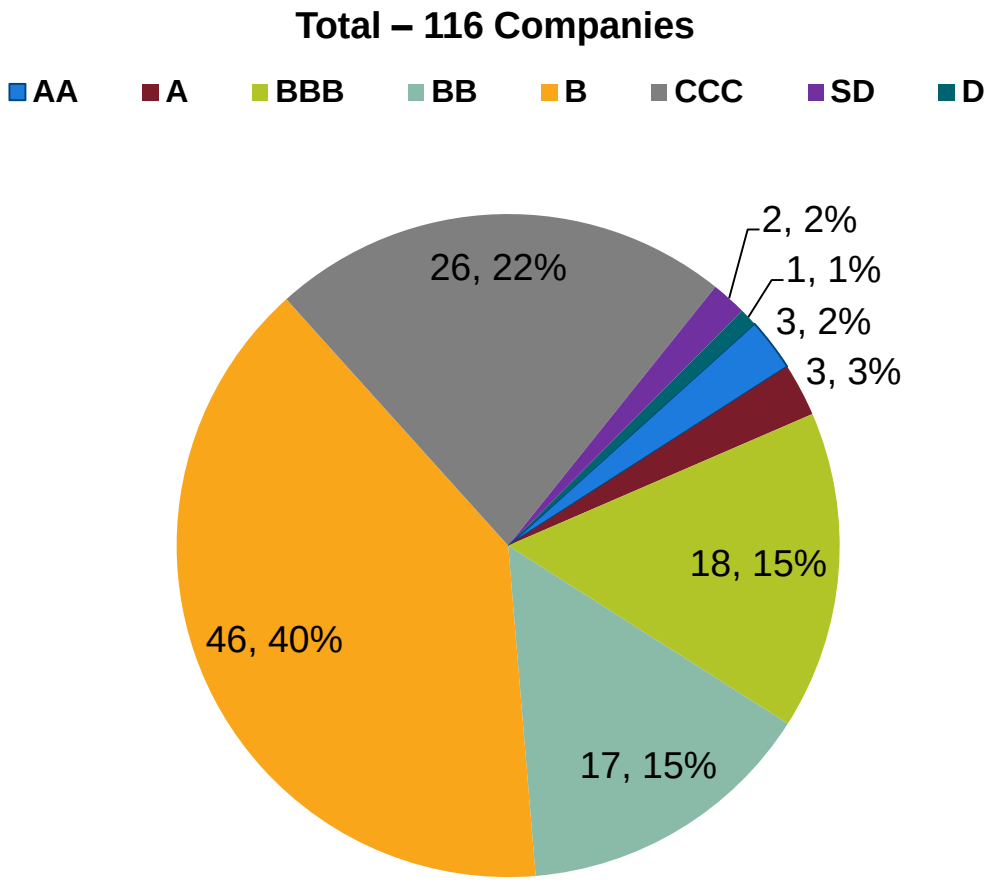
U.S. Oil & Gas Ratings And Outlook Distribution

Ratings Distribution



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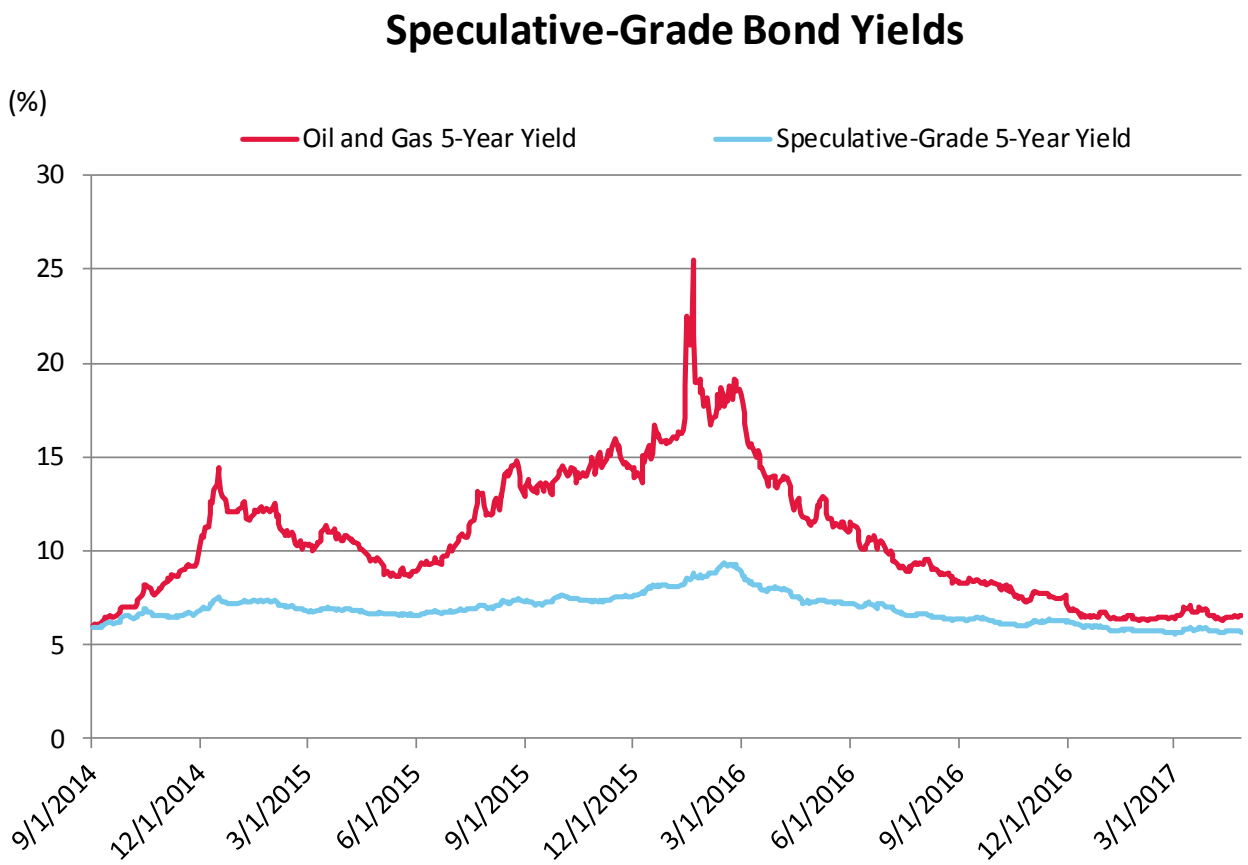
Schedule Of Maturing Rated Debt – Oil And Gas Sector

(US$ blns)							
Investment grade	**2016.2H**	**2017**	**2018**	**2019**	**2020**	**2021**	**Total**
U.S.	5.0	22.4	27.1	31.3	27.0	20.4	133.2
Europe	8.8	37.7	35.0	40.6	44.6	31.3	198.0
Other Developed	0.3	1.4	3.6	2.1	0.8	2.5	10.6
Emerging Markets	5.7	10.3	11.8	14.2	10.3	9.0	61.3
Total Investment grade	**19.8**	**71.8**	**77.5**	**88.2**	**82.8**	**63.2**	**403.1**
Speculative grade							
U.S.	0.3	8.7	15.2	33.9	31.1	27.9	117.1
Europe	2.2	6.6	7.9	16.6	12.3	8.5	54.1
Other Developed		2.8	1.1	2.5	5.9	2.6	14.9
Emerging Markets	2.4	16.9	13.5	13.2	11.0	16.7	73.7
Total Speculative grade	**4.8**	**35.0**	**37.8**	**66.3**	**60.3**	**55.7**	**259.9**
Totals							
U.S.	5.3	31.1	42.3	65.2	58.2	48.2	250.3
Europe	11.0	44.3	42.9	57.2	56.9	39.8	252.2
Other Developed	0.3	4.2	4.8	4.6	6.7	5.0	25.5
Emerging Markets	8.0	27.3	25.3	27.4	21.3	25.7	135.0
Total Oil and Gas	**24.6**	**106.8**	**115.2**	**154.5**	**143.1**	**118.8**	**663.0**

Includes Integrated and exploration and production sectors. Data as of June 30, 2016. Includes bonds, loans, and revolving credit facilities that are rated by S&P Global Ratings. Foreign currencies are converted to U.S. dollars at the exchange rate on close of business on June 30, 2016.

Source: S&P Global Fixed Income Research.

Speculative-Grade Bond Yields



Note: Credit yields for U.S. corporate speculative-grade bonds with a five-year maturity, calculated as a composite. Data as of April, 26, 2017. Source: S&P Global Fixed Income Research.

Source: S&P Global Fixed Income Research

Thank you

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