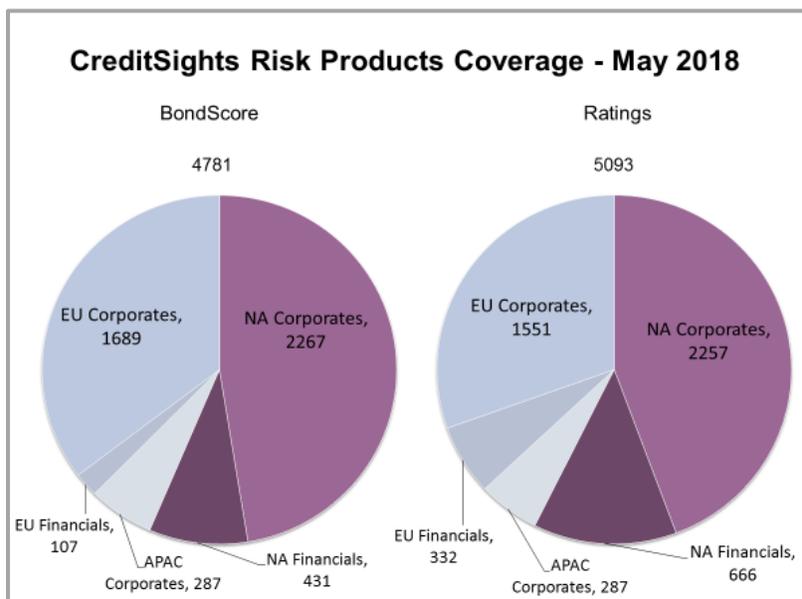


CreditSights Risk Products produces **medium-term ratings** and short-term default measures and is an excellent complement to our fundamental credit research. **Website delivery** provides an efficient screening and credit risk surveillance tool. **Regular commentary** from our fundamental analyst team is also featured.

Risk Products: Active Coverage



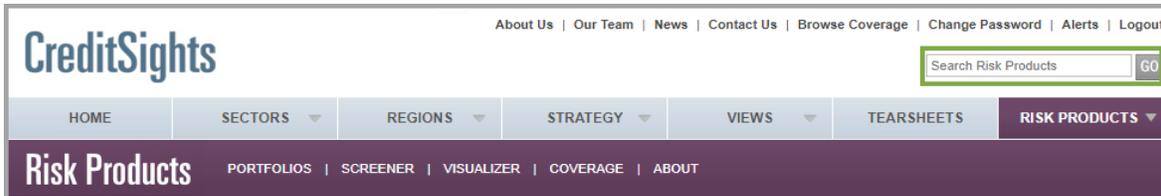
Risk Products: Outputs and Interpretation

- **1-year forward PD (probability of default)** (known as "**Credit Risk Estimate**" or "**CRE**"). Identify short-term default risks, rapid changes in a company's credit profile and short-term relative value opportunities.
- **Medium-term credit rating ("CreditSights Rating" or "CSR")**. Non-financial CSRs are based on a cumulative 5-yr PD which is mapped to one of 22 ratings buckets. The CSR for financial companies is based on historical ratings. Address potential ratings migration and standalone medium-term credit risk
- **CRE-based Credit Risk Level ("CRL")** allows for easy interpretation of a company's CRE. Provided in five buckets from very low to very high.
- **"CSR Trend" indicator** highlights directional change in a company's CSR.
- **CRE-based Credit Risk Trend ("CRT") indicator** highlights improvement or deterioration in a company's CRE.
- **3-month CreditSights Rating (CSR) Outlook** alerts you to those companies that may see a CSR upgrade or downgrade soon.
- **Input calculator** allows users to change the input ratios used in a company's CRE, CRL and CSR estimation to reflect any anticipated scenario. Reflect future expectations for a company's fundamental and equity market profiles.
- **New private company** CREs for over 150 companies, along with the ability to generate Ratings and CREs for private companies using the input calculator and a new bulk download template.
- Easy ability to **track week-to-week changes/updates** in CRLs, CSRs, analyst recommendations and CreditSights analyst ratings comments with custom e-mail alerts.

The Risk Products section of CreditSights' website is the best place to view CreditSights Risk Products output. Log in at www.creditsights.com and follow the "Risk Products" link on the top navigation bar.

Website: Individual Company Analysis

- Enter a ticker or company name in the box labeled "Search Risk Products" in the upper-right hand corner of any Risk Products page. One can also navigate to a company's page from a portfolio at any time.



The "Company View" page provides a table summarizing all key CRE and CSR outputs;

Mattel, Inc. (MAT US)							CCC1, Medium Volatility						
PRINT PAGE ★ SEE DATA NOTES							CS RESEARCH: CONSUMER PRODUCTS AND SERVICES						
CALCULATION DATE	FUNDAMENTAL DATE	MODEL	AGENCY COMPOSITE RATING (ACR)			NOTCHES DIFF	CS ANALYST RECOMMENDATION						
			CURRENT	LAST CHG	PREV								
16 Apr 2018	31 Dec 2017	Consumer	B1	5	BB3	-3	Underperform						
CREDITSIGTS RATING (CSR)							CREDIT RISK ESTIMATE (CRE: 1-YR PD)						
CURRENT	LAST CHG	PREV	TREND 1Y	TREND 3Y	OUTLOOK	VOLATILITY	CURRENT CRE (1-YR PD)	CREDIT RISK LEVEL (CRL)	CRL LAST CHG	3-YEAR PD	5-YEAR PD	TREND 6M	TREND 1Y
CCC1	2	B3	⬇	⬇	—	Medium	3.12%	High	5 (Moderate)	11.61%	18.35%	⬇	⬇

As well as graphical histories of the CRE, CRL, CSR, Fundamental Rating (FR) and Agency Composite Rating (ACR) for up to the past decade.



The ability to review charts showing the evolution of the input ratios used in a company's CreditSights Risk Products output and a comparison of current input ratios across up to four comparison companies is also provided (not shown).

- All column headings in the portfolio view are able to be sorted and the columns displayed are user-driven. Export functionality is available, while flat files containing all outputs are also available at an additional charge.

COMPANY	CREDITSGHTS RATING (CSR)	CSR TREND 1Y	CSR OUTLOOK	AGENCY COMPOSITE RATING (ACR)	NOTCHES DIFF	CS ANALYST RECOMMENDATION
FTR US Frontier Communications Corp.	CCC2	⚡	—	B2	-3	Market perform
HUN US Huntsman Corp.	BBB3	⬆️	—	BB2	2	Outperform

The image above shows the results from the query outlined above for the week of 18 April 2018.

Risk Products: Data Visualizer

- The new Data Visualization Spreadsheet (DVS) allow users to take maximum advantage of the data which drives our **non-financial** Risk Products models, as well as the outputs of those models, presented in a standard format in numerous tables and charts.
- A historical view of all inputs and outputs is also available, in contrast to the limited historical dataset available in the current flat files.
- A web-based version of the Visualizer will be available sometime in 2018.

	Fundamental Metrics						Equity Market Metrics			Default Probabilities				
	Total Assets (\$mn)	Leverage	Interest Coverage	Cash Flow	Earnings Volatility	Profitability	Market Leverage	Idiosyncratic Volatility	Alpha Percentile	1-Year	2-Year	3-Year	4-Year	5-Year
Average	14,151	4.07	13.3x	0.07	7.3%	12.0%	37.9%	19.4%	47	0.67%	1.60%	2.48%	3.50%	4.61%
Median	5,349	3.75	7.0x	0.06	4.0%	10.6%	35.0%	16.7%	47	0.09%	0.45%	0.90%	1.61%	2.52%
>=AA	110,239	2.17	29.1x	0.13	2.4%	19.8%	24.6%	11.8%	50	0.02%	0.08%	0.20%	0.42%	0.66%
A	29,767	2.10	29.7x	0.14	4.1%	18.9%	21.6%	13.6%	50	0.02%	0.11%	0.26%	0.55%	0.88%
BBB	15,658	3.22	14.0x	0.10	4.2%	13.6%	32.8%	15.2%	48	0.08%	0.35%	0.71%	1.27%	1.93%
BB	7,315	4.14	11.3x	0.08	7.4%	11.3%	38.3%	19.6%	47	0.27%	0.93%	1.66%	2.68%	3.83%
B	5,711	5.40	5.8x	0.04	9.6%	9.1%	50.3%	24.1%	47	0.89%	2.48%	3.97%	5.62%	7.42%
<=CCC	2,737	6.11	1.8x	0.00	13.5%	6.9%	66.5%	39.1%	29	5.80%	10.95%	14.74%	17.80%	20.73%

Source: CreditSights Risk Products
 Average and Median Market Leverage, Idiosyncratic Volatility, Alpha and Default Probabilities are calculated for public companies only.
 For each rating tier, numbers shown are averages across the rating tier

Risk Products: Supported by CreditSights' Analysts

- CreditSights' fundamental analysts played an **integral role in the creation of the fundamental factor models** that underlie Risk Products' methodology.
- CreditSights' **fundamental analyst recommendations are also included** in CreditSights Risk Products.
- Many analysts making use of the Risk Products calculator to frame a company against a narrow peer group and provide forward expectations for a company's business.

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