

Put CreditModel to Work for You

- ▶ Use any of the 46 industry models now available through FACT
- ▶ Look up credit scores for over 10 million companies in Orbis
- ▶ Enter financials and score a company on your own
- ▶ Score an entire portfolio of companies in batch
- ▶ Analyse the sensitivity of outputs to changes in key inputs

CREDITMODEL



SCORING
MODEL

Leverage a State-of-the-Art Methodology to Evaluate Credit Strength of Corporations in your FACT Solution

Heightened market volatility and uncertainty requires financial professionals to take a deeper look at potential risks. S&P Capital IQ's CreditModel provides actionable information to support risk management across a range of functional areas within banks, corporations and asset management firms.

A powerful credit risk analysis solution

CreditModel is a suite of 46 industry models now available through FACT which use financial statement information to estimate the credit quality of publicly-traded and privately-owned mid-cap and large corporations.¹ The models cover more than 50 countries including the U.S., Canada, Japan, all of Europe (including Nordic, Baltic, Russia, ex-CIS, Western, Central and Eastern Europe regions) and the Pacific (Australia and New Zealand).

Clients of CreditModel benefit from:

A rigorous, segment focused modeling approach that uses a unique series of newly retrained region- and industry-specific models based on the Global Industry Classification Standard (GICS).

Efficient access to estimates of creditworthiness ("credit scores") are represented by familiar Standard & Poor's letter grade rating symbols using lowercase to indicate they are quantitatively derived.

Flexibility to quickly derive scores on additional companies by simply entering key financial ratios into FACT.

A glimpse into the future with sensitivity analysis and stress testing capabilities to evaluate the impact of changes in inputs to stimulate upgrades, downgrades and resilience.

The models are rigorously validated and credit scores demonstrate a very high correlation with Standard & Poor's credit ratings.

¹ Corporate is defined as "corporate businesses excluding financial industries, insurance business, securities firms, other non-banking financial institutions or specialized lending including but not limited to project finance, asset finance and trade finance activities of flow transactions or leveraged finance."

Many CreditModel Applications Within and Across Firms

Banks	Corporations	Asset Managers
<ul style="list-style-type: none"> Efficiently screen rated and unrated borrowers, counterparties, customers, suppliers and more Expedite surveillance and identify weakest or marginal credits for review Determine the credit strength of a single company or a portfolio of companies Perform sensitivity analysis for rated or unrated counterparties Generate proactive reports for executives, shareholders and regulators Create simulation scenarios and evaluate the cost of capital after a M&A or private equity deal 		
<ul style="list-style-type: none"> Benchmark internal credit ratings against a globally recognized metric Calculate the credit contribution for the pricing of loans, credit insurance, trade credit terms and general credit exposures 		
<ul style="list-style-type: none"> Assist in the calculation of economic capital, provisioning and comply with FIRB capital reporting 	<ul style="list-style-type: none"> Support transfer pricing, trade credit and supply chain management 	<ul style="list-style-type: none"> Incorporate fundamental credit risk in the investment idea generation process

A Rigorous Methodology

S&P Capital IQ analysts work with sophisticated mathematical techniques to evaluate the relationship between financial data and ratings to develop the credit scores. Models are based on Exponential Density, where the probability distribution of each rating category takes an exponential form, predicting categories that have not been historically observed. Through this technique CreditModel achieves high levels of accuracy, granularity and predictive power.

CreditModel generates a complete probability distribution of scores for each firm to have a desirable monotonicity property with respect to the explanatory variables. This means that the credit score should be higher for a company with strong credit factors (e.g., high ROA) than for a company with weak ones. This ensures economic intuitiveness and the possibility to interpret score changes. Based on the generated distribution, CreditModel selects one score as the best representation of the firm's credit risk.

High-Performing Models

Looking at the percentage of notch difference between the credit score of a company and its Standard & Poor's credit rating helps evaluate relative model performance. CreditModel achieves high hit-rates with 56% - 72% of models being within one notch and 79% - 93% being within two.

For example, over the period 1998 to 2009 the in-sample model for European Aerospace & Defense had 88.98% of credit scores within two notches of the corresponding Standard & Poor's credit rating and European Information Technology had 81.35%.

Additional Value-Added Information

CreditModel also provides:

- Historical probability of default (PD) observations associated with a particular letter grade for one-, three- and five-year timeframes enabling users to map PDs to internal ratings.
- Input Sensitivity Ranks that show which variable or ratio has the largest impact on changes in the current credit score for different scenarios.
- Comprehensive financial reports with a credit risk assessment that can be exported in PDF, Word or Excel format.

Powerful Scenario Analysis

Clients can look at future scenarios using one of two approaches:

- Sensitivity analysis determines, through discrete and possible steps representative of recent history or industry expected scenarios, the anticipated path to improvement or default. This functionality is designed to evaluate the impact on “normal course of business” down-turn and up-turn scenarios.

CreditModel provides insight on how sensitive the model outcomes are to changes in financials with Input Sensitivity Ranks that show which variable or ratio has the largest impact on changes in the current credit score for the specific scenario.

- Stress testing analysis allows for additional “severe scenario” stress testing and it best fits less frequently occurring events (black swan events).

With stress testing, users can automatically adjust financials based on a pre-determined “light” or “heavy” stress scenario. The two scenarios are executed simultaneously and the output is displayed in the same format as the sensitivity analysis along with the original credit score. Both the light and heavy stressed-test scores are mapped to stressed PDs for one, three and five years.

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Brussels · London · New York
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web: factcreditrisk.com email: fact@bvinfo.com
phone: + 32 2 639 06 06



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