Credit Risk Indicators

Fast markets. Fast analysis.

Coverage Across the Full Credit Risk Spectrum

Identify weakening credit and fortify your surveillance process for both rated and unrated entities with an array of quantitative tools for credit risk analysis.

**POINT-IN-TIME MEASURES OF CREDIT RISK**

How does the market perceive current credit risk?

Identify weakening credit profiles ad-hoc via daily changing credit risk indicators based on market signals such as credit default swaps (CDS) spreads or stock price volatility. Be the first in the market to know about rapid credit deterioration for immediate action.

Ideal for ongoing monitoring or surveillance and the setup of early warning alerts.

**SHORT-TO-MID TERM MEASURES OF CREDIT RISK**

How big is credit risk within a year or two from now?

Evaluate the probability that an entity will not meet its obligations over the course of a year or two with probabilities of default (PD) generated from state-of-the-art credit risk models that cover any public or private companies globally.

Ideal for the most precise quantitative assessment of credit risk with PD over a mid-term time horizon.

**LONG-TERM MEASURES OF CREDIT RISK**

What is the long-term view of credit risk?

Readily generate stable high-quality assessments of creditworthiness for hundreds of thousands of public and private firms using a unique series of industry- and region-specific quantitative scoring models that are aligned with the Standard & Poor’s ratings methodology.

Ideal for the most stable long-term assessment of credit risk leveraging our in-house ratings expertise.

A Range of Quantitative Tools

Our well-known Standard & Poor’s credit ratings provide longer-term, stable assessments of risk that involve extensive qualitative and quantitative analysis. Our pure quantitative models leverage both fundamental data and/or market-driven factors to provide perspectives on credit risk with different time horizons both for the rated and unrated universe. They offer a timely source of information to cross-check credit ratings where available, evaluate unrated entities and detect potential changes in credit quality.

Use our quantitative tools to:

- Make faster and more informed credit decisions
- Leverage state-of-the-art modeling techniques that are embedded in transparent, well documented, intuitive and user-friendly credit risk products
- Understand the key drivers of a company’s credit risk, and how it ranks against peers
- Assess your own credit risk profile and compare against your peers
- Question the outlook of a single company or a portfolio in what-if scenario analysis or stress testing
- Get daily updates on credit risk assessments in a data feed and set up automated alerts for the deterioration of credit risk
- Calculate reserves or regulatory or economic capital
- Improve portfolio-level default analysis

Gain Additional Insight into Credit Risk—Quickly and Easily

Standard & Poor’s Credit Ratings
Market Derived Signals
PD Model Market Signals
PD Model Fundamentals
CreditModel Scores

www.spcapitaliq.com
**Market Signals—Point-in-Time Measures of Credit Risk**

**GET THE LATEST INFORMATION ON HOW THE MARKET SEES CREDIT RISK**

We offer two distinct models that leverage different types of market signals:

- **Market Derived Signals** is based on changes in CDS spreads
- **PD Model Market Signals** is based on stock price volatility

A CDS spread is most closely related to credit risk and therefore the most relevant market signal whenever spread data is available. Stock price volatility is translated into credit risk measures using a sophisticated extension of so-called Merton models\(^1\) which are well established types of credit risk models used in the academic sector and by practitioners.

The advantage of using stock price volatility as a market signal is it is applicable to a much broader universe of companies—all publicly listed companies—than the universe of companies with liquid CDS spreads.

Both models produce daily changing market signals, which is ideal for the detection of early warning signs even if no new financials are available.

**Short-to-Mid-Term Measures of Credit Risk**

**ASSESS, BENCHMARK AND PREDICT POTENTIAL DEFAULTS**

Our **PD Model Fundamentals** model provides an innovative approach to assessing potential default that separates credit risk into two components—financial risk and business risk. The PDs are applicable for any public or private company and provide a short- to mid-term view of credit risk.

They are based purely on fundamental data—financial ratios and macro factors — and are updated when new financials are released or there is some change in the macro factors.

- A financial risk and business risk PD is created for each entity and then combined into one PD that reflects the overall creditworthiness of the company.
- The financial risk PDs are based on an assessment of various financial ratios. The business risk PDs are based on an assessment of various systemic risk components and firm-specific components, which reflect the competitiveness of a company by assessing its diversification, market share and operating efficiency against peers. The country intelligence behind the business risk PDs produce scores for industry risk, separate for any type of corporates and banks, country risk and economic risk.

**Long-term View of Credit Risk**

**REPLICATE THE THOUGHT PROCESS OF A RATINGS ANALYST**

Our **CreditModel** suite offers a series of proprietary industry- and region-specific credit scoring models that have been developed by our analysts working with sophisticated mathematical techniques to evaluate the relationship between financial data and ratings within individual sectors.

The model output is a stable credit score, which is expressed in the well-known nomenclature of ratings but in lower case letters, such as bbb, in order to indicate that this score is the outcome of a pure quantitative model.

CreditModel is unique in the market because it is trained on ratings rather than on default data. It is this model feature that helps CreditModel generate a long-term stable view of credit risk that is aligned with a ratings process. Therefore, CreditModel is an ideal tool for any application where volatile outcomes are a nuisance, such as reserves calculation, or as an internal rating system for regulatory or economic capital.

By design, CreditModel is the perfect tool for the extension of the ratings universe to unrated companies within a well formulized, cutting-edge quantitative framework.

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## Navigating The Complete Credit Landscape

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### FUNDAMENTALS (FINANCIALS) Market Factors

**Long Run**
- **FUNDAMENTALS-BASED**
  - Rating
  - CDS—Market Derived Signals (MDS)
- **MARKET SIGNALS**
  - PD Market Signals

**Point-In-Time**
- **FUNDAMENTALS-BASED**
  - PD Model Fundamentals
  - CreditModel Suite
- **MARKET SIGNALS**
  - Not applicable to private companies
  - Not recommended for small companies

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### Summary

Our suite of credit risk models can be tailored to your needs for the assessment for both state-of-the-art quantitative fundamental credit risk analysis and for surveillance purposes. We offer full coverage of publicly listed and private firms across asset classes and industry sectors, and our models are best-performing in the market place by accuracy, discriminatory power for the separation of creditworthy companies from others and—dependent on the model you choose—either model outcome stability or immediate detection of rapid credit deterioration.

Our models are:

- Applicable globally with coverage of almost 250 countries and territories thanks to S&P Capital IQ’s in-house data on systemic risk factors to capture country risk, sovereign risk, industry risk and economic risk for both financial industries and non-financial corporates.
- Calibrated on data from the last 10 years with optimal coverage of a full economic cycle, capturing both the economic boom phases pre-2008 and the financial crisis and post-crisis phases.
- Rigorously validated at least once a year and maintained on an on-going basis.
- Fully documented with white papers, technical documentation and user guides including coverage of any aspects related to regulatory matters.

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1 From Standard & Poor’s Ratings Services. S&P Capital IQ, as well as its products and services are analytically and editorially separate and independent from other analytical areas at S&P, including S&P Credit Ratings.

2 Territories are not sovereign entities themselves but they follow different or special economic environments or laws enforcements than the sovereigns which they belong to. Examples are: Macao or Hong Kong (sovereign China), Channel Islands or Gibraltar (UK) or overseas departments of France, such as Guadaloupe or Martinique.
• Available via various channels for various in-depth analyses dependent on your interest and resource capacity, [e.g. just as a data package with final credit risk assessments or with a user-friendly interface via Excel® Plug-in to facilitate data uploads and scenario analysis]

• Summarized in one single credit surveillance tool together with ratings [where available] and firm-specific key risk indicators or industry- and market-specific benchmarks to enable customized alert systems

In addition, our models:

• Produce either probabilities of default (such as 0.68%) or credit scores (such as bbb+) and every PD model maps to credit scores and scoring models; models that primarily produce a credit score map to PDs

• Generate a 1–5 year term structure of PDs

• Produce a PD and credit score both on a standalone basis, without any potential adverse impact from sovereign risk, and a final score that takes such sovereign risk into account

Finally, our models are pre-scored with S&P Capital IQ’s database of public and private companies, the most comprehensive, up-to-date and accurate global database of company financials and other firm-specific content. The table below indicates the dimension of the database, which runs through our model engines to produce updated PDs or credit scores at a high frequency, which users only need to look up, together with company financial profiles for further analysis.

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As a CreditModel score is a quantitatively derived estimate of a Standard & Poor’s credit rating, the default rates associated with ratings may be reasonably applied to CreditModel scores. For each score, the associated one-year, three-year and five-year default rates from Standard & Poor’s CreditPro® are displayed on the score report. All of Standard & Poor’s default studies have found a correlation between credit ratings and default risk; the higher the rating, the lower the probability of default.

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