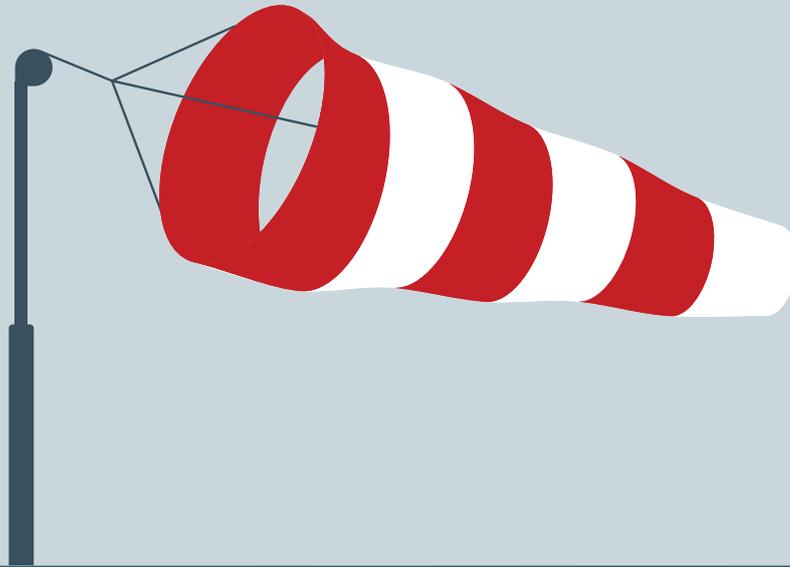# Risk Analyzer

A web-based application for timely market data-based credit assessment

Overview

Using both capital market and financial reporting data *Risk Analyzer* provides monthly credit assessments on more than 30,000 listed companies and financial institutions worldwide. These may serve as separate evaluations in their own right or to complement existing risk assessment systems.

Other than individual counterparties *Risk Analyzer* also allows to assess entire industries or sectors and can be used in portfolio modelling.

Scope of application

Reliable risk assessments on corporate counterparties are important for lenders and investors. These analyses need to be updated more and more often: not only should they be permanently available, they are also expected to appropriately reflect current developments.

Risk Analyzer may be used on a stand-alone basis when evaluating transactions that do not warrant or require comprehensive assessment (which usually involves expert judgement) or where there is little capacity for in-depth analysis. It may also be used in support of existing risk assessment systems, for example as a tool for monitoring markets (to visualize developments in specific industries or sectors) or for the preliminary assessment of prospective customers.

In portfolio management *Risk Analyzer* allows to consistently assess the development of a company's creditworthiness beyond the current risk situation based on historical time series. This information is particularly useful for calculating asset correlations or configuring customer-specific (credit) portfolio models. Another area of application for the time series is the creation of models for stress testing.

Methodology

Risk Analyzer employs a Merton model that has been modified and optimized by RSU. Following Merton's approach (1974) option pricing theory is used to determine the probability of default, assuming that a company becomes insolvent if its enterprise value drops below a specific limit, which is defined by its liabilities.
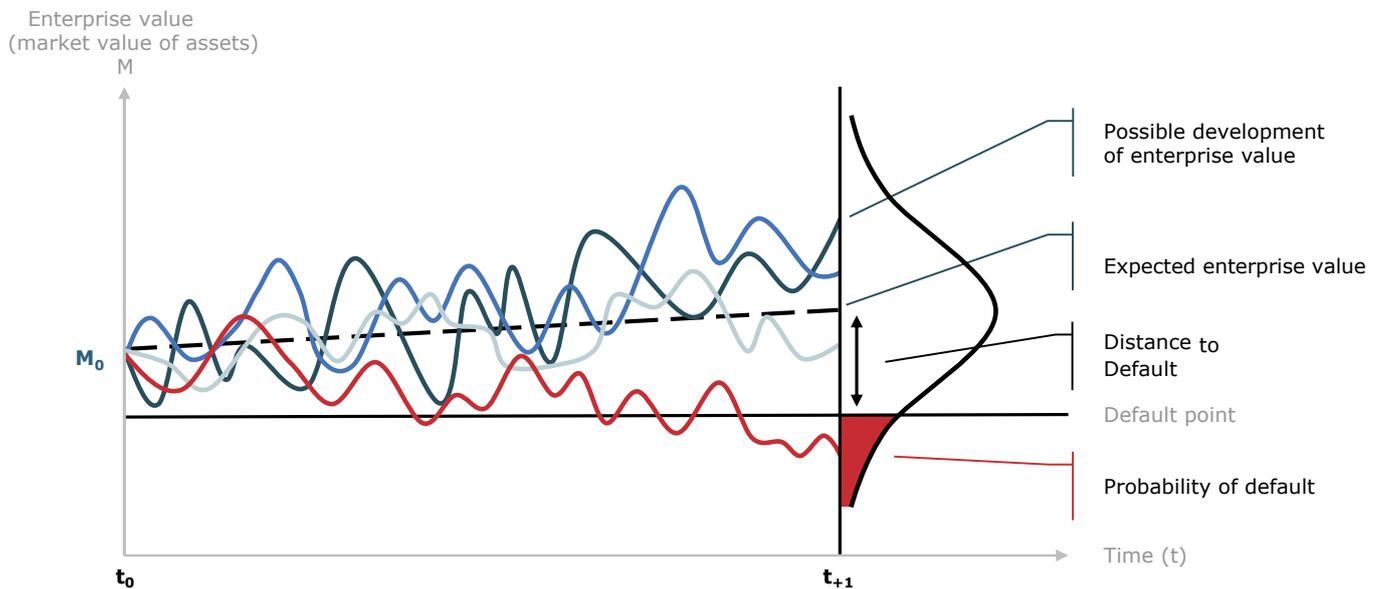
Based on the relevant inputs to the RSU Merton Model - market capitalization, share price, and liabilities – a one-year probability of default, the RSU Merton model PD, is determined separately for companies and financial institutions using regional calibration functions. Thus the credit assessment is based on the current collective evaluation of the company's prospects by the global stock markets as well as on the company's liabilities.

Implementation

Interactive charts enable users to view the past development of the RSU Merton model PD, the underlying values (market value of company's assets (enterprise value) and asset volatility), and all inputs for a period of up to ten years.

The RSU Merton model PD of a company can be viewed and analyzed in comparison to regional, sector-specific, and individually definable peer groups. Alternative PD scenarios can be explored by varying the input values. In addition users can create monitoring lists with customizable warning thresholds to identify significant changes of risk, with the option to receive email alerts. Extensive graphics and data export functionalities enable users to perform additional analyses and include results in reports outside *Risk Analyzer*.

The application is available both in German and English and is web-based – it only requires a VPN (or CredNet) connection. Like all RSU applications *Risk Analyzer* is operated under the strict security standards customary in the banking industry. Protected transmission lines and secure data storage at a level 3-certified data processing center ensure a high degree of data security.