Revolutionising SME risk assessment:

Replicating human insight in the digital rating journey

How does it work?

At the heart of our approach is the innovative **replication of human risk analyst expertise**, seamlessly integrated into a digital framework. This journey begins with an in-depth analysis of an SME's financial and non-financial data, leveraging advanced algorithms and AI to pass through complex information.

The process mirrors the nuanced decision making of a human analyst, yet operates at a speed and **accuracy that only digital technology can provide**. By capturing the essence of human judgement and combining it with real-time data analytics, our models offer a uniquely comprehensive and predictive insight into SME risk.

Based on data from more than 30 million SMEs worldwide from 1998-2022, covering more than two full economic cycles, our models provide the most comprehensive assessment of SMEs available.

Financial Information

Analysis starts with financial data, typically corresponding to 40%-60% of the final score. Based on a statistic model, this uses stepwise variable selection for a logistic PD function.

- Leverage
- Liquidity
- Profitability
- Coverage
- Activity

01.

Non-financial data

Next, we process non-financial data providing valuable additional information about a company's exposure to risk. In our models we typically try to source data from the following list of variables:

- Legal events
- Ownership structure
- Media coverage
- Adverse social media
- Corporate governance

02.

Macro-economic data

Finally, our variables are based on patterns in models that capture correlation between the default rate and macro-economic performance. A six-month forecast can be generated by plugging future values of the macro-economic variables into the regression model to help predict credit risk.

- Consumer Price Index (CPI)
- Market conditions

03.

Up-to-date financials

If available, up-to-date financials give a current snapshot of an organisation's financial health. Combined with macro-economic data, other financial and non-financial data, this allows a real-time assessment of risks, allowing immediate response to changing conditions.

Validis

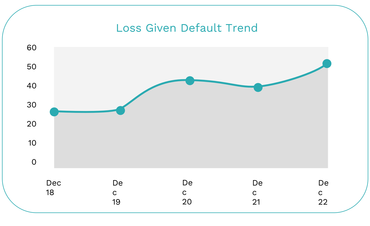
codat

- Management accounts

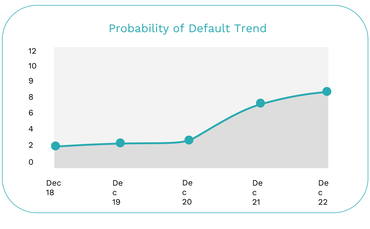
04.

This innovative combination results in the most accurate, predictive insights, enabling smarter, data-driven decision making for businesses and investors alike.

See our risk intelligence metrics below:

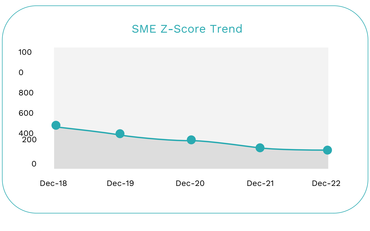


The score represents the portion of the loan that is not expected to be recovered if a borrower defaults. Considering the strong correlation with PD, we have developed functions to estimate the LGD given a SME Z-Score, the level and type of assets, cash flow and section conditions.



The SME Z-Score is transformed in Probability of Default (PD).

This is the probability that the company would become insolvent or go bankrupt within the next 12 months.



The score is a number between 0 and 1000 that summarises the risk profile of companies.

This represents a point-in-time, independent and objective assessment of the credit risk of a counter party.

D	CC	CCC-	CCC	CCC+	B-	B	BB	BBB-	BBB	BBB+	A

Using a methodology invented by Prof. Altman in 1989, we derive the Bond Rating Equivalent (BRE) for each company by mapping our score to the S&P rating scale.