

A Guide to Dun & Bradstreet's Predictive Indicators

UK & Ireland



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Dun & Bradstreet Risk Assessment Explained

Decide With Confidence

Understanding and minimising risk is fundamental to your organisation. Staying informed of any changes is key to enabling you to profitably grow your customer portfolio without increasing risk exposure. Knowing a customer's or prospect's long-term commercial sustainability is critical to your organisation and a commercial imperative.

To evaluate risks objectively and consistently, you need to combine a multitude of business information sources with expert analysis to develop an Informed Perspective. By choosing Dun & Bradstreet (D&B) you can be assured of accurate, up-to-date and quality assured insight supporting your decision making.



The DUNSRight process includes separate automated and manual checks to ensure D&B data meets the high quality standards demanded by our customers."



DUNSRight And What It Means For Your Organisation

All D&B data and insight has been quality assured via our patented DUNSRight process. In this process we collect, aggregate, verify and enhance data from thousands of sources daily so customers can use our information and assessments with the confidence to make profitable decisions. The DUNSRight process includes separate automated and manual checks to ensure D&B data meets the high quality standards demanded by our customers.

The DUNSRight process has 5 Quality Drivers and works in this way:

1. Global Data Collection brings together information from a variety of sources worldwide, delivering more robust and accurate information.
2. D&B integrate the data into our database through our patented Entity Matching, which produces a single, accurate picture of each business.
3. We apply the D-U-N-S® Number as a unique means of identifying and tracking a business globally through every step in the life and activity of that business.
4. We use Corporate Linkage to enable our customers to view their total risk or opportunity across related businesses.

The first 4 DUNSRight drivers provide the platform to produce the final driver – the Predictive Indicators.

5. Our Predictive Indicators use statistical analysis and expert rules to indicate how an organisation is likely to perform in the future and make the information actionable.

What Are Predictive Indicators?

D&B's Predictive Indicators are tools that are designed to provide customers with insight into how an organisation is likely to behave in the future.

Utilising the insight provided by D&B's Predictive Indicators helps customers to quickly identify the organisations that are likely to fail, pay late or purchase their goods/ services, helping to drive growth, mitigate risk and increase profitability by:

- Allowing automated decisions for increased efficiency, freeing up valuable resources to focus on more important decisions.
- Enabling more consistent decisions across the entire organisation.
- Applying scores across an entire portfolio to segment risk and opportunity.
- Allowing faster processing of large volumes of transactions.



Utilising the insight provided by D&B's Predictive Indicators helps customers to quickly identify the organisations that are likely to fail, pay late or purchase their goods/services."

D&B Solutions

Risk Management Solutions identify prospects, customers or suppliers that are likely to fail owing money or who will pay invoices slowly:

- *D&B Failure Score* – Likelihood that an organisation will fail in the next 12 months.
- *D&B Delinquency Score* – Likelihood that an organisation will pay its suppliers in a severely delinquent manner in the next 12 months.

D&B models are predictors based on statistical probability and are not guarantees of a particular event. They are designed as a tool to help customers make their own decisions and should be used as part of a balanced and complete assessment relying on the knowledge and expertise of the reader, and where appropriate on other information sources.

Overall Business Risk

Dun & Bradstreet delivers an Overall Business Risk in our D&B Credit solution that uses the best available scores, ratings, and indices to provide a high-level assessment for each company. The overarching Low- to High-Risk Levels are based on the combination of individual risk levels for scores, ratings, and indices that have been assessed for the specific company.

Whilst each market globally will have their own risk scores and ratings, the Overall Business Risk uses data that is available locally to create a globally consistent view that can be used to compare businesses in different countries to one another.

Scores, ratings, and indices that give a perspective on business discontinuation or failure:

- Failure Score
- Portfolio Comparison from the Viability Rating
- Risk Indicator from the D&B Rating

Scores, ratings, and indices that give a perspective on payment behaviour:

- Delinquency Score
- PAYDEX®
- Triple-A Rating
- 1-2 Trade Experiences
- Financial Strength from the D&B Rating



The overarching Low- to High-Risk Levels are based on the combination of individual risk levels for scores, ratings, and indices that have been assessed for the specific company.”

Overall Business Risk 📌



Dun & Bradstreet Thinks...

- Overall assessment of this organization over the next 12 months: **STABLE CONDITION**
- Based on the predicted risk of failure: **STRONG LIKELIHOOD OF CONTINUED OPERATIONS**
- Based on the predicted risk of severely delinquent payments: **MODERATE POTENTIAL FOR SEVERELY DELINQUENT PAYMENTS**

D&B Failure Score

Identify Risk & Opportunity

The D&B Failure Score predicts the likelihood that an organisation will obtain legal relief from its creditors or cease operations over the next 12 month period. The Failure scorecard also looks for events signalling the onset of failure, such as a meeting of creditors, administrator appointed, bankruptcy, receiver appointed and petition for winding-up.

The Failure Score makes risks visible, allowing our customers to reduce their bad debt and identify profitable opportunities – it also improves objectivity and consistency.



Factual information is analysed using advanced statistical modelling techniques (including Logistic Regression, Discriminant and Segmentation Analysis)."

Transforming Information Into Insight

How is the D&B Failure Score calculated?

Factual information is analysed using advanced statistical modelling techniques (including Logistic Regression, Discriminant and Segmentation Analysis) and commercial expertise to identify data characteristics that are common to and most predictive of organisational failure. These characteristics are then weighted by significance to form rules for our scorecards that differentiate between organisations with a high risk of failure to those with a low risk.



How is the D&B Failure Score calculated?

The areas of information used in the D&B Failure Score include:

- *Demographics* – Including business age, location (local or national trading) and line of business incorporating the Economic Index which reflects the risk to different industries when the economy changes.
- *Corporate Linkage* – The size, strength and risk of a group of businesses as a whole is taken into consideration when calculating the Score for an individual business.
- *Principals* – The Principal's experience and performance of associated businesses.
- *Financial* – Ratios and trends taken from financial accounts. Factors assessed include liquidity, solvency, profitability, debt, late filing and detrimental notes.
- *Trade Experiences collected through the D&B Trade Programme* – D&B customers regularly provide their experiences of the payment habits of businesses they are trading with. Payment trends and percentages of prompt or late payments will affect Scores in addition to comparison with industry payment averages.

- *Public detrimental information* – Such as County Court Judgements (CCJs), mortgages / charges and the legal pre-failure events (administration, receivership, bankruptcy, etc.)

Expert rules (sometimes referred to as overrides) including the following are also used to calculate the Failure Score:

- *Minimum Data* – To identify trading activity and provide substance for the Score.
- *High Risk Parent* – The high risk of a domestic ultimate parent cascades down through the corporate family tree so that subsidiaries are also marked as high risk.
- *Detrimental Legal Events* – In addition to failure events (for example; meeting of creditors, administrator appointed, bankruptcy, etc.). Detrimental Auditors Reports will also automatically mark the subject organisation as high risk.
- *Possible Fraudulent Activity* – Our Critical Intelligence team identify potential and actual fraudulent businesses and individuals to help protect our customers.
- *Manual Overrides* – Predictive Indicators can be adjusted by authorised experts to reflect non statistical /catastrophic events. For example, news reports from trustworthy sources that indicate a material change to risk can be investigated and changes made where appropriate.



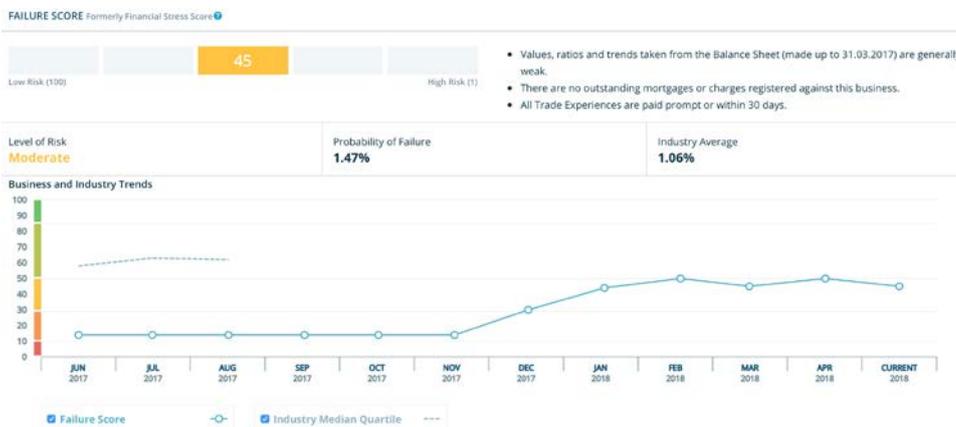
The D&B Failure Score is dynamic, meaning that it is recalculated every time we collect a new piece of information about an organisation, or when information changes.”

The information used may vary from market to market as D&B scorecards are tailored to local data and legal procedures.

The D&B Failure Score is dynamic, meaning that it is recalculated every time we collect a new piece of information about an organisation, or when information changes. For example, as the age of an organisation increases its risk typically decreases and our Failure Scores will change to reflect this.

Interpreting The D&B Failure Score

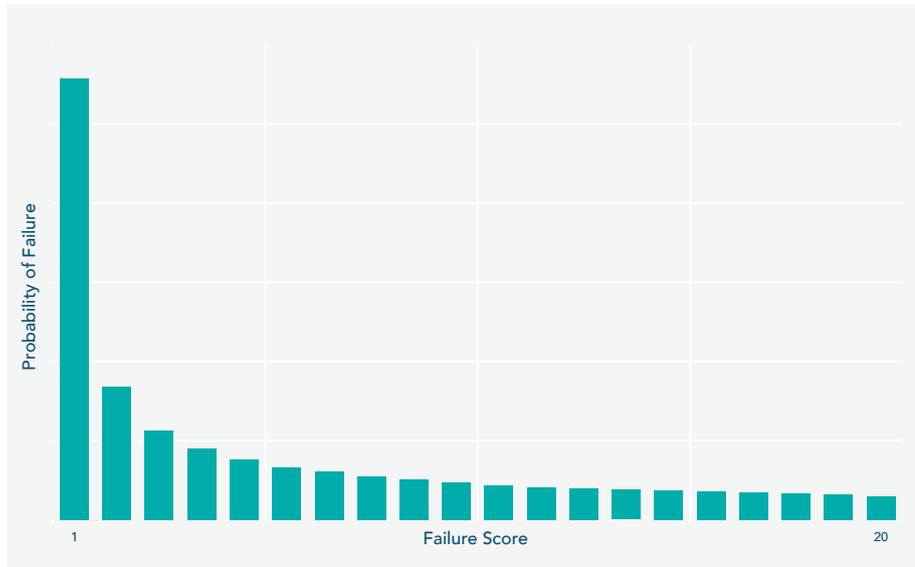
The D&B Failure Score is a relative measure of risk, whereby 1 represents organisations that have the highest probability of failure and 100 the lowest. It shows how an organisation’s risk of failure compares to other organisations within a country.



Probability of Failure

Behind each Failure Score is an associated probability of failure, which rises rapidly at the low end of the Failure Score range (1-10).

The probability of failure allows our customers to set cut-offs for decisions based on their own credit policy and attitude to risk. It can be used to show the expected level of ‘bad’ applications / accounts for each Failure Score and therefore allow our customers to balance the opportunity of increased sales against the risk of bad debt.



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The D&B Risk Indicator Table

There is a direct correlation between the Failure Score and Risk Indicator:

Please note regarding “Undetermined” or “—” Risk Indicators; this means D&B have been unable to collect or verify certain key data elements, including some that confirm that an organisation exists or is still trading. Another reason this Indicator may be assigned is when D&B learns of an event that has not yet been published through the official channels but will affect the risk assessment for an organisation. For example a business may advise they have ceased trading but not have filed the appropriate documents yet.

Therefore, when an organisation is assigned an “Undetermined” or “-” Rating we recommend that our customers conduct further analysis and investigation before making a decision. Customers can contact D&B to understand the reason for the dash rating, why it was assigned and use that insight to influence their decision.

| Failure Score | Risk Indicator | Probability of Failure |
|---------------|----------------|--------------------------|
| 86 – 100 | 1 | Minimum Risk |
| 51 – 85 | 2 | Lower than average risk |
| 11 – 50 | 3 | Higher than average risk |
| 1 – 10 | 4 | High risk |
| -- | | Insufficient information |

The D&B Financial Strength Indicator

The Financial Strength Indicator is determined by the Tangible Net Worth from the latest financial accounts and provides an indication of the strength of the organisation to cope with adverse trading periods or exploit investment opportunities.

Tangible Net Worth is defined as shareholder funds minus any Intangible Assets.

| Financial Strength Indicator | Tangible Net Worth (in £ for UK and € for Ireland) | |
|------------------------------|---|------------|
| | From | To |
| Net Worth | | |
| 5A | 35,000,000 | And above |
| 4A | 15,000,000 | 34,999,999 |
| 3A | 7,000,000 | 14,999,999 |
| 2A | 1,500,000 | 6,999,999 |
| 1A | 700,000 | 1,499,999 |
| A | 350,000 | 699,999 |
| B | 200,000 | 349,999 |
| C | 100,000 | 199,999 |
| D | 70,000 | 99,999 |
| E | 35,000 | 69,999 |
| F | 20,000 | 34,999 |
| G | 8,000 | 19,999 |
| H | 0 | 7,999 |
| Alternate Symbols Used | | |
| N | Negative net worth | |
| O | Net worth undetermined (accounts unavailable or older than 2 years) | |

The D&B Rating

Identify Credit-Worthiness Quickly

The D&B Rating provides an indication of credit-worthiness. The rating is made up of two parts:

- *Financial Strength* – Based on Tangible Net Worth from the latest financial accounts.
- *Risk Indicator* – Derived from the D&B Failure Score.

D&B Maximum Credit

Agree Appropriate Terms & Limits

The D&B Maximum Credit shows the total value of goods and / or services the ‘average’ creditor should have outstanding at any one time with an organisation. It is not necessarily the maximum the organisation can afford and helps our customers to agree appropriate terms and limits when extending credit.

The areas of information used to calculate the Maximum Credit are:

- *Organisation Size* – Based on financial information including Turnover and Total Assets when available or demographic information such as the number of employees.
- *Industry* – Based on the Standard Industrial Classification (SIC) code.
- *Risk Factor* – Banded segments of the D&B Failure Score linked to the risk of failure.



The Financial Strength Indicator is determined by the Tangible Net Worth from the latest financial accounts and provides an indication of the strength of the organisation to cope with adverse trading periods.”

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Financial Strength

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Risk Indicator

- The Financial Strength indicator is determined by the latest Tangible Net Worth.
- Based on latest filed annual accounts.
- Linked directly to the failure score.
- Dynamically kept up-to-date.

D&B Delinquency Score

Manage Your Cash Flow

The D&B Delinquency Score predicts the likelihood that an organisation will pay its bills in a severely delinquent manner over the next 12 months.

The Delinquency Score identifies organisations that are likely to pay late and helps customers manage their cash flow. Having the cash or liquid resources available to meet daily working capital requirements is fundamental to the survival of all organisations.

How is the D&B Delinquency Score Calculated?

Similar to the D&B Failure Score, factual information is analysed using advanced statistical modelling techniques (including Logistic Regression, Discriminant and Segmentation Analysis) and commercial expertise to identify data characteristics that are common to and most predictive of delinquency. These characteristics are then weighted by significance to form rules for our scorecards that differentiate between organisations with a high risk of delinquency to those with a low risk.

The main difference between the calculation of the D&B Failure and Delinquency Scores is that we use different data elements and weightings because we are predicting a different result.



The D&B Delinquency Score predicts the likelihood that an organisation will pay its bills in a severely delinquent manner over the next 12 months."

What Information is Used to Calculate the D&B Delinquency Score?

The areas of information used in the D&B Delinquency Score include:

- *Trade Experiences collected through the D&B Trade Programme* – D&B customers regularly provide their experiences of the payment habits of businesses they are trading with. Payment trends and volatility will affect Scores in addition to percentages of prompt or late payments.
- *Public detrimental information* – Such as County Court Judgements (CCJs), mortgages / charges and the legal pre-failure events (administration, receivership, bankruptcy, etc.).
- *Demographics* – Including business age, location, line of business and corporate linkage (especially when there is risk within the group).
- *Corporate Linkage* – The size, strength and risk of a group of businesses as a whole is taken into consideration when calculating the Score for an individual business.
- *Financial* – Ratios and trends taken from annual and interim accounts. Factors assessed include liquidity, solvency, profitability, debt, late filing and detrimental notes.

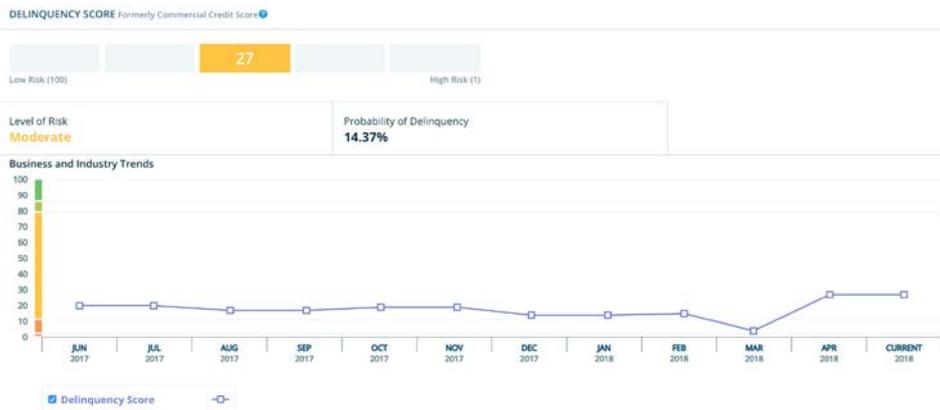
The D&B Delinquency Score is also dynamic just like the Failure Score. Whenever we collect a new piece of information or information changes the Delinquency Score is recalculated.

Interpreting the D&B Delinquency Score

The D&B Delinquency Score is a relative measure of risk, whereby 1 represents organisations that have the highest probability of delinquency and 100 the lowest. It shows an organisation's relative rank against other organisations within a country by ordering and segmenting that country's database into 100 equal percentiles. Each Delinquency Score represents 1% of organisations within that country with the same risk of delinquency.



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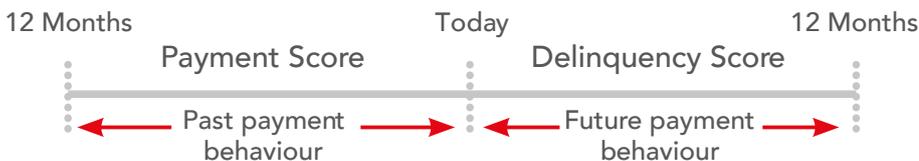
D&B Payment Scores (Paydex)

The D&B Payment Score (or Paydex) is a score that evaluates an organisation's payment history based on trade experiences collected through D&B's Trade Programme i.e. how the organisation has been paying its bills.

A Paydex Score of 80 indicates prompt payments, less than 80 (down to 1) indicates slow payments, and greater than 80 (up to 100) indicates payment before due.



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How Do Our Customers Use D&B's Predictive Indicators?

Monitoring our Predictive Indicators for key changes can provide our customers with critical early warning signs of increasing risk or opportunity. D&B experience shows:

- Over 90% of organisational failures exhibit deteriorations or fluctuations in payment behaviour 3 – 6 months before bankruptcy.
- Organisations with cash flow pressures are likely to pay less important suppliers slower or not at all, so if you are a key supplier you may be one of the last to know of impending financial stress.

However, by proactively monitoring these early warning signs, corrective action can be taken before it's too late.

Combining the power of the Failure Score and the Delinquency Score allows our customers to segment their credit risk profile and focus sales teams, credit management and collections resources where they will be most effective, for example:



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| | LOW RISK OF FAILURE | HIGH RISK OF FAILURE |
|--------------------------|--|--|
| HIGH RISK OF DELINQUENCY | Cash Vultures <ul style="list-style-type: none"> - Offer discount for prompt payment - Improve relationship with client to induce prompt payment - Charge interest on late payments - Reset payment terms accordingly | Let Your Competitors Have Them <ul style="list-style-type: none"> - Increase prices to cover risks/ costs - Reduce exposure – stop orders until paid - Take guarantees - Monitor vigorously - Avoid new clients with this profile - Up-front payments |
| LOW RISK OF DELINQUENCY | Ideal Customers – Cultivate <ul style="list-style-type: none"> - Push for more sales - Improve relationship with client - Find more like this | Monitor Closely <ul style="list-style-type: none"> - Reduce exposure – minimise outstanding balances - Monitor vigorously - Take guarantees |

To learn more about D&B's Predictive Analytics and how you can make better credit decisions for your business, call:

(0800) 001234 or visit www.dnb.co.uk.



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ABOUT DUN & BRADSTREET

Dun & Bradstreet (NYSE: DNB) grows the most valuable relationships in business. By uncovering truth and meaning from data, we connect customers with the prospects, suppliers, clients and partners that matter most, and have since 1841. Nearly ninety percent of the Fortune 500, and companies of every size around the world, rely on our data, insights and analytics. For more about Dun & Bradstreet, visit DNB.co.uk. In the UK, Dun & Bradstreet Ltd is certified to ISO 27001 and is authorised & regulated by the Financial Conduct Authority in relation to providing credit references on non-limited companies.

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