

Understanding the Italy D&B Delinquency Score

THIS DOCUMENT IS INTENDED TO ADDRESS THE FOLLOWING QUESTIONS:

- What is the Business Delinquency Score?
- What is the Availability of the Business Delinquency Score?
- What does the Business Delinquency Score Predict?
- How is the Business Delinquency Score Developed?
- How is the Business Delinquency Score Validated?



OVERVIEW

D&B's Business Delinquency Score predicts the likelihood that a company will pay its bills in a severely delinquent manner, based on the information in D&B's files.

The Business Delinquency Scoring System uses statistical methodology to assign each Italian business a score measuring the likelihood of Business Delinquency.

The Business Delinquency Model utilizes the combined power of D&B's vast information database on over 1,9 million Italian businesses including D&B proprietary payment information, demographic data, financial statements and derogatory information such as protested bills or court judgments.

AVAILABILITY OF THE BUSINESS DELINQUENCY SCORE

A Business Delinquency score is available on approximately 1,9M Italian-based companies. Business Delinquency Scores are not available on business files that fall into the following categories:

- Unknown registered business address
- Unknown registered business name
- Unknown Principal name
- Businesses where the Headquarters is based in another country
- Businesses which are no longer trading
- Unknown SIC codes
- Companies with SIC 91-97
(Public administration - Government SIC)

WHAT THE BUSINESS DELINQUENCY SCORE PREDICTS

The Business Delinquency Score predicts the likelihood that a company will pay its bills in a severely delinquent manner. A severely delinquent business is defined as a business with less than 75% of its trade experiences paid in a satisfactory manner (promptly or within 30 days) and at least 25% of its payments 90 days or more past due. Definition of severe delinquency also includes 'terminal' events classified as leading to business failure, such as Meeting of Creditors, Administrator appointed, Bankruptcy, Receiver appointed, Petition for Winding-up among others legal events.

This score is based on observed characteristics of hundreds of thousands of businesses in D&B's Italian database, and the relationship these characteristics have to the probability of a company experiencing severe delinquency over a period of 12 months following the score calculation.

The Business Delinquency model assigns two measurements of risk:

1. **A Score of 101 – 999**, where a 101 represents businesses that have the highest probability of Delinquency, and a 999, which represents businesses with the lowest probability of Delinquency. This score provides a direct relationship between the score and the level of risk. The marginal odds of being good doubles for each 40 point increase. For example, a score of 1,200, on a marginal basis, represents twice the risk of Delinquency as a score of 1,240. This score enables a customer to utilize more granular cutoffs to drive their automated decision-making process.
2. **A Percentile Score of 1 – 100**, where a 1 represents businesses that have the highest probability of delinquency, and a 100 which represents businesses with the lowest probability of delinquency. The Percentile Score shows where a company falls among businesses in the D&B information base, and is most effectively used by customers to rank order their portfolios from highest to lowest risk of delinquency.

HOW THE BUSINESS DELINQUENCY SCORE IS DEVELOPED

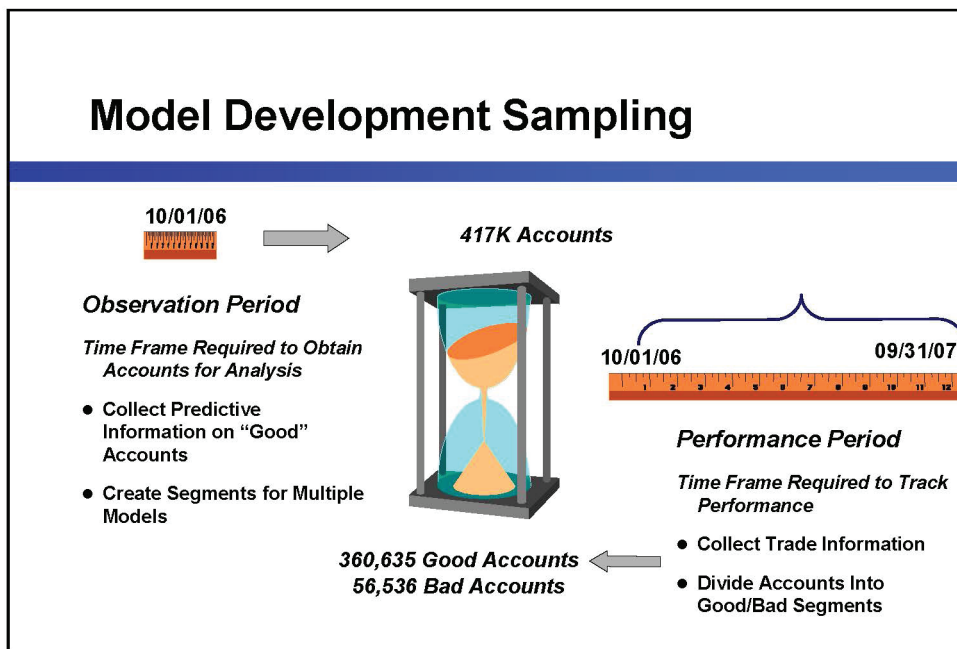
The Business Delinquency Scoring System was developed using state of the art statistical and modeling techniques to select and weight the data elements that are most predictive of delinquency. The resulting Delinquency Models are mathematical equations that consist of a series of variables and coefficients (weights) that have been calculated for each variable.

Historic data (predictors) is collected from the timeframe designated as an observation point. Data needed for good/bad classification is collected during the performance window.

- The observation point defines the sample used in the model and all identification and characteristic data are collected from this time period. For this model the observation point was October 1, 2006
- The performance window defines the length of time (12 months) during which the accounts performance is tracked. At the end of the performance period all accounts are classified as good and bad. Performance window for this model was the 12 month period from October 1, 2006 through September 30, 2007. Since the key data to determine performance is trade data, records that did not have trade data during performance period were removed from the modeling sample as indeterminate.

Chart 1, below, illustrates the model development sample for the Business Delinquency Score.

Chart 1: Model Development Sampling



An un-weighted total of approximately 400K businesses were used to develop the Business Delinquency Score Model. All those records had trade information during the performance period in order to be included.

- All companies in the file were active as of October 1, 2006, but they did not have to be 'good'. Companies already delinquent at the observation point were included in the development sample, because delinquent companies will need to be scored.
- Approximately 56K were delinquent in the following 12 month period

D&B analyzed all available information and identified the data elements, which are statistically the most significant factors for predicting delinquency. D&B, with its access to a vast database, is uniquely qualified to demonstrate this impact.

Sample data elements used in the model include:

- Payment performance information
- Company demographics (industry, size, structure, directors information, business age)
- Public records (Derogatory information from chamber of commerce - Protested bills)
- Balance sheets for companies that are required to file financials.

A more comprehensive sample of elements appears in Appendix A.

HOW THE BUSINESS DELINQUENCY SCORE IS VALIDATED

In the model development stage, rigorous modeling standards were adhered to. Each segment was validated on a control group of 'hold back' accounts the model had not seen before.

Once the model was built and validated, a new data sample, from a different timeframe, was used to perform "out of time" validation. This is typically done in modeling engagements to ensure stability of the model over time.

APPENDIX A

KEY DATA ELEMENTS IN THE BUSINESS DELINQUENCY MODEL

Following is a sample of the key data elements used in the Italian Delinquency Scorecards.

Demographic Information

FACTOR	IMPACT ON MODEL
Line of Business (SIC4)	More protected industries such as agriculture, forestry and fishing or public administration have less risk.
Region	Different regions in Italy have different levels of risk. This may happen due to cultural, historical, business structure or even government support on the different regions.
Years in Business	Older companies have lower risk than younger ones
Company Legal Form	The model takes into account the level of risk from different legal forms.
Number of Employees	In general, the larger the number of employees, the lower the risk.

Financial Information (if present)

FACTOR	IMPACT ON MODEL
Overdue Financials	Overdue financial statement indicates higher risk.
Debt-to-Income Ratio	Obligations exceeding Sales (Income) are a sign of increased risk
Return on Assets	Company profitability is measured in relation to it's assets
Net Worth	Low, especially negative, net worth is a high risk factor

Payment Information (if present)

FACTOR	IMPACT ON MODEL
Recent Overdue Balance	High value indicates higher risk.
Percent of Trades Paid Promptly	The higher the percentage of prompt payments, the lower the risk.
PAYDEX®	PAYDEX® stands for "payment index," which is based on an analysis of past payment behavior as reported to D&B. The higher the PAYDEX® values, the lower the risk.
PAYDEX® Variance over the last 12 months	Stable PAYDEX® trend, especially with an upward direction indicates lower risk.

Derogatory Information

FACTOR	IMPACT ON MODEL
Protested Bills	Existence of protested bills is a high risk factor

APPENDIX B

12 MONTH DELINQUENCY: PROJECTED PERFORMANCE TABLES

Cumulative Delinquency Score Performance					
CUMULATIVE SCORE RANGE	PERCENTILE RANGE	APPROVAL RATE	DELINQUENCY RATE	% OF DELINQUENCY IDENTIFIED	GOOD-BAD RATIO
590 - 999	96 - 100	5%	0.7	99.76	142
576 - 999	91 - 100	10%	0.86	99.4	114
564 - 999	86 - 100	15%	1.1	98.86	89
553 - 999	81 - 100	20%	1.33	98.15	74
543 - 999	76 - 100	25%	1.53	97.35	64
530 - 999	71 - 100	30%	1.83	96.19	53
513 - 999	66 - 100	35%	2.2	94.67	44
497 - 999	61 - 100	40%	2.62	92.74	37
485 - 999	56 - 100	45%	3.03	90.55	32
473 - 999	51 - 100	50%	3.49	87.92	28
461 - 999	46 - 100	55%	4.05	84.57	24
450 - 999	41 - 100	60%	4.66	80.61	20
440 - 999	36 - 100	65%	5.38	75.76	18
432 - 999	31 - 100	70%	6.11	70.33	15
432 - 999	26 - 100	75%	6.88	64.24	14
416 - 999	21 - 100	80%	7.69	57.35	12
405 - 999	16 - 100	85%	8.62	49.18	11
385 - 999	11 - 100	90%	9.63	39.92	9
318 - 999	6 - 100	95%	11.36	25.19	8
101 - 999	1 - 100	100%	14.4	0	6

Delinquency Score Performance Within Range

MARGINAL SCORE RANGE	PERCENTILE RANGE	DELINQUENCY RATE	% OF DELINQUENCY IDENTIFIED
590 - 999	96 - 100	0.7	0.24
576 - 590	91 - 95	1	0.36
564 - 575	86 - 90	1.6	0.54
553 - 563	81 - 85	2	0.71
543 - 552	76 - 80	2.3	0.8
530 - 542	71 - 75	3.4	1.16
513 - 529	66 - 70	4.4	1.52
497 - 512	61 - 65	5.6	1.93
485 - 496	56 - 60	6.3	2.19
473 - 484	51 - 55	7.6	2.63
461 - 472	46 - 50	9.7	3.35
450 - 460	41 - 45	11.4	3.96
440 - 449	36 - 40	14	4.85
432 - 439	31 - 35	15.7	5.43
424 - 431	26 - 30	17.6	6.09
416 - 423	21 - 25	19.9	6.89
405 - 415	16 - 20	23.6	8.17
385 - 404	11 - 15	26.7	9.26
318 - 384	6 - 10	42.5	14.73
101 - 317	1 - 5	72.7	25.19

EXPLANATIONS

CUMULATIVE DELINQUENCY SCORE PERFORMANCE

- **Approval Rate:** To set an approval rate, select the appropriate projected score or percentile cutoff that yields the desired approval rate. Approved businesses are companies scoring between the lowest value in the score range (or percentile) and 1999 (or 100 percentile). For example, a credit policy, which approves 70% of all accounts, requires accepting accounts between 432-999 (or 31-100 percentile). Accounts scoring below the cutoff (101 -431) are reviewed, declined, etc.
- **Delinquency Rate:** The Delinquency rate represents those businesses that score between the lowest value in the score range and 1999. For example, the Delinquency rate for a credit policy which approves all businesses with a score at or above 432 (or 31-100 percentile) is expected to 6.11%.
- **% of Delinquencies Eliminated:** The percentage of total delinquent businesses that score between 101 and the cutoff point for the approval rate. For example, approving businesses with a score above 431 (31-100 percentile) is expected to eliminate 70% of the bad accounts.
- **Good-Bad Ratio (Odds):** The ratio of “Good” accounts to “Bad” accounts among those businesses that score between the lowest value in the score range and 1999 (or 100 percentile). For example, a credit policy which approves all accounts scoring at or above 432 (or 31-100 percentile) should result in a portfolio with 15 “Good” accounts for every “Bad” account in the portfolio.

DELINQUENCY SCORE PERFORMANCE WITHIN RANGE

- **Delinquency Rate:** The incidence of Delinquency for those businesses that score within the score range. For example, the Delinquency rate for companies scoring between 416 and 423 (21-25 percentile) is expected to be 19.9%.
- **% of Delinquencies Identified:** The percentage of total delinquent businesses within the score range. For example, 6.89% of all delinquent companies are expected to score between 416 and 423 (21-25 percentile).

Notes: Each Business Delinquency score classification has an incidence of Business Delinquency associated with it that is compared to the national average for all companies. The Percentile Ranges are rounded to the nearest whole and are classified as being approximated.

This Projected Performance Table is based on a Standard model. Performance may vary based on individual customer portfolios.



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