



Article

Author

Ed Oetinger

Director of Product Management

Contact Us

Americas
+1.212.553.1653

Europe
+44.20.7772.5454

Asia-Pacific
+852.3551.3077

Japan
+81.3.5408.4100

Making Smarter Small Business Lending Decisions

Introduction

There are over 28 million small businesses in the United States. The need to fund these businesses has grown measurably in the last decade. According to the Federal Deposit Insurance Corporation and the National Credit Union Administration, approximately \$750 billion in loans are extended to small and medium-sized firms (SMEs) each year. One of the fastest-growing loan segments is between \$250,000 and \$1 million, for businesses seeking to secure facilities (for example, lines of credit or term loans).

Given that small businesses are a critical driver of the overall economy, it is no wonder that lenders and underwriters strive to make each credit decision correctly. At Moody's Analytics, we are using our credit analytics expertise to set the standard for risk assessment of small businesses by lenders, underwriters, and credit analysts.

The history of small business lending

When we reflect on lending to a small business, we think of a decision-making continuum – from relationship-based lending on one end to quantitative or financial model-driven lending on the other. How lenders assess a small business' ability to service a loan has evolved over time and will continue to evolve as credit cycles impact the lending environment.

In the past, when lending to a small business owner, the lender often used qualitative, relationship-based components such as personal knowledge of the owner and their reputation in the local community, or length of management experience in a particular industry. Community banks and credit unions were, and sometimes still are, comfortable making lending decisions based on the business owner's personal credit score. For years, this was one of the few sources of reliable and quantifiable data, and it continues to be used for business loans up to a modest size. While there could be a high correlation between the owner's personal credit score and the financial strength and payment reliability of their business, that is not a universal assumption.

Using the financials of a business is now a best practice. Historically, doing so was not always feasible because small business owners did not always have updated and reliable financial statements. There was a persistent question about the reliability of personally supplied, unaudited financial statements of the business. A business tax return was used as proxy, but information could vary depending on the business entity. Also, the timeliness of a tax return and the reported financial position was not always useful to lenders.

Using personal credit as a primary decision criteria should not be best practice for any commercial lender in today's market. Evaluating the financial strength of a business entity, based on numerous other data points and sources, is the best way to make strong credit decisions.

The evolution of small business lending

Today, with more available data, software automation, and new credit analytics, the credit decisioning process can be more targeted, in turn supporting the overall profitability of small business loans. Modern accounting systems such as QuickBooks and Xero can produce daily financial positions and cash flows which can be readily accessed via modern application programming interfaces. Regularly updated financial statement data gives underwriters a source to assess the risk and ability of a business to make loan payments through ratio analysis, and with less friction around receiving the data.

Lenders can now use a combination of data sources available on a smaller borrower quickly and efficiently. Examining firmographic information, such as a business' geographic location and the sector in which it operates, allows us to determine and apply average loan defaults for a given business. Other useful sources of information on credit worthiness include tradeline data – how a small business addresses their trade account payables, or if they have any loans or debt – and the behavioral data of how they have paid against those debts over time. For a small business with total revenue of less than \$10 million, we have validated that merging these data components enables the lender to be highly predictive in making a credit decision.

Today, detailed and high-quality business financial data can be readily obtained. In the past, if a business owner came to a lender seeking a loan, the process of collecting all the required information was cumbersome and time consuming. If a piece was missing, there was a lag in processing the loan, often resulting in significant wasted time and impacting the overall customer relationship. Unfortunately, many institutions are still using this cumbersome process. However, the technology exists for the modern loan origination system itself to collect the data directly from the tools the business owner already uses, yielding more efficiency and less wasted time. Lenders can also source data from other banks and credit bureaus.

Through different research studies, Moody's Analytics has come to understand the power of combining data and analytics to make more predictive small business lending decisions. Working with our research and product teams and our external data partners, we have studied different data attributes of small businesses and determined which are the most powerful, and ultimately most predictive of future credit success.

We are mindful that lenders do not always get all the information they would like from a business. Therefore, many of our investigations are centered on how to make strong decisions with limited information. Even with incomplete information, lenders can still determine a meaningful business credit risk score using Probability of Default (PD) modeling on a small business. For instance, you can score a business with only financial statements or business tax returns. However, that score becomes more accurate when more information is used, as depicted in the accompanying graphic.

Small Business Credit Decision – Predictive Power

GOOD SCORE

Firmographic* + Tradeline Information

Firmographic is the financial size, industry, and geographic characteristics of the small business.

BETTER SCORE

Firmographic + Tradeline Information + Financial Statement Information

Tradeline information is the accounts payable of a small business, such as supplier or utility bill. This data is typically obtained from a bureau or data provider.

BEST SCORE

Firmographic + Tradeline Information + Financial Statement Information + Loan Behavioral Data

Loan Behavior Information is the history of loan payments. In the case of a credit line, it also includes things like how much of the line was used.

The next frontier in credit data

There is another emerging source of data that we have been exploring for use in credit decisioning: “alternative” or social data. Social media platforms contain an immense amount of data on businesses, such as what locations or businesses have been visited, where and when those visits occurred, and personal reviews. Examining alternative data on an aggregate basis can offer another meaningful source to help lenders assess or determine a company’s ability to succeed and to pay back their loan.

We are currently evaluating the predictive outcome of these alternative datasets as they are applied to various stages of the credit process. While the results are preliminary, it is our view that as alternative data matures, it will be yet another source of data which lenders or underwriters should include, when available, to increase their predictive ability to score a small business.

Conclusion

Lenders and credit analysts have been challenged in recent years to make credit decisions quicker and more cost-effective. This pressure has increased given recent competition from growing and maturing fintech lending platforms. While it can be difficult to obtain data on a small business, we believe that our findings demonstrate a scoring approach that supports small business lenders and the efficient use of data sources that are readily available. Even with limited information, lenders can still determine a meaningful business credit risk score using flexible framework for a small business. Through the combination of financial statements with firmographic, tradeline and loan behavioral data, predicting a business’ ability to pay becomes highly accurate. This methodology allows small business lending portfolios to be well-balanced and profitable for their institutions. Ultimately, we view this scoring framework as a key part of streamlining small business lending overall addressing data collection, risk assessment, origination, and monitoring.

CONTACT DETAILS

Visit us at moodyanalytics.com or contact us at a location below.

AMERICAS

+1.212.553.1653

clientservices@moody.com

EMEA

+44.20.7772.5454

clientservices.emea@moody.com

ASIA (EXCLUDING JAPAN)

+852.3551.3077

clientservices.asia@moody.com

JAPAN

+81.3.5408.4100

clientservices.japan@moody.com

© 2018 Moody's Corporation, Moody's Investors Service, Inc., Moody's Analytics, Inc. and/or their licensors and affiliates (collectively, "MOODY'S"). All rights reserved.

CREDIT RATINGS ISSUED BY MOODY'S INVESTORS SERVICE, INC. AND ITS RATINGS AFFILIATES ("MIS") ARE MOODY'S CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES, AND MOODY'S PUBLICATIONS MAY INCLUDE MOODY'S CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES. MOODY'S DEFINES CREDIT RISK AS THE RISK THAT AN ENTITY MAY NOT MEET ITS CONTRACTUAL, FINANCIAL OBLIGATIONS AS THEY COME DUE AND ANY ESTIMATED FINANCIAL LOSS IN THE EVENT OF DEFAULT. CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS AND MOODY'S OPINIONS INCLUDED IN MOODY'S PUBLICATIONS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. MOODY'S PUBLICATIONS MAY ALSO INCLUDE QUANTITATIVE MODEL-BASED ESTIMATES OF CREDIT RISK AND RELATED OPINIONS OR COMMENTARY PUBLISHED BY MOODY'S ANALYTICS, INC. CREDIT RATINGS AND MOODY'S PUBLICATIONS DO NOT CONSTITUTE OR PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND CREDIT RATINGS AND MOODY'S PUBLICATIONS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. NEITHER CREDIT RATINGS NOR MOODY'S PUBLICATIONS COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR. MOODY'S ISSUES ITS CREDIT RATINGS AND PUBLISHES MOODY'S PUBLICATIONS WITH THE EXPECTATION AND UNDERSTANDING THAT EACH INVESTOR WILL, WITH DUE CARE, MAKE ITS OWN STUDY AND EVALUATION OF EACH SECURITY THAT IS UNDER CONSIDERATION FOR PURCHASE, HOLDING, OR SALE.

MOODY'S CREDIT RATINGS AND MOODY'S PUBLICATIONS ARE NOT INTENDED FOR USE BY RETAIL INVESTORS AND IT WOULD BE RECKLESS AND INAPPROPRIATE FOR RETAIL INVESTORS TO USE MOODY'S CREDIT RATINGS OR MOODY'S PUBLICATIONS WHEN MAKING AN INVESTMENT DECISION. IF IN DOUBT YOU SHOULD CONTACT YOUR FINANCIAL OR OTHER PROFESSIONAL ADVISER.

ALL INFORMATION CONTAINED HEREIN IS PROTECTED BY LAW, INCLUDING BUT NOT LIMITED TO, COPYRIGHT LAW, AND NONE OF SUCH INFORMATION MAY BE COPIED OR OTHERWISE REPRODUCED, REPACKAGED, FURTHER TRANSMITTED, TRANSFERRED, DISSEMINATED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT MOODY'S PRIOR WRITTEN CONSENT.

CREDIT RATINGS AND MOODY'S PUBLICATIONS ARE NOT INTENDED FOR USE BY ANY PERSON AS A BENCHMARK AS THAT TERM IS DEFINED FOR REGULATORY PURPOSES AND MUST NOT BE USED IN ANY WAY THAT COULD RESULT IN THEM BEING CONSIDERED A BENCHMARK.

All information contained herein is obtained by MOODY'S from sources believed by it to be accurate and reliable. Because of the possibility of human or mechanical error as well as other factors, however, all information contained herein is provided "AS IS" without warranty of any kind. MOODY'S adopts all necessary measures so that the information it uses in assigning a credit rating is of sufficient quality and from sources MOODY'S considers to be reliable including, when appropriate, independent third-party sources. However, MOODY'S is not an auditor and cannot in every instance independently verify or validate information received in the rating process or in preparing the Moody's publications.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability to any person or entity for any indirect, special, consequential, or incidental losses or damages whatsoever arising from or in connection with the information contained herein or the use of or inability to use any such information, even if MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers is advised in advance of the possibility of such losses or damages, including but not limited to: (a) any loss of present or prospective profits or (b) any loss or damage arising where the relevant financial instrument is not the subject of a particular credit rating assigned by MOODY'S.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability for any direct or compensatory losses or damages caused to any person or entity, including but not limited to by any negligence (but excluding fraud, willful misconduct or any other type of liability that, for the avoidance of doubt, by law cannot be excluded) on the part of, or any contingency within or beyond the control of, MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers, arising from or in connection with the information contained herein or the use of or inability to use any such information.

NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY SUCH RATING OR OTHER OPINION OR INFORMATION IS GIVEN OR MADE BY MOODY'S IN ANY FORM OR MANNER WHATSOEVER.

Moody's Investors Service, Inc., a wholly-owned credit rating agency subsidiary of Moody's Corporation ("MCO"), hereby discloses that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by Moody's Investors Service, Inc. have, prior to assignment of any rating, agreed to pay to Moody's Investors Service, Inc. for appraisal and rating services rendered by it fees ranging from \$1,500 to approximately \$2,500,000. MCO and MIS also maintain policies and procedures to address the independence of MIS's ratings and rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold ratings from MIS and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at www.moody.com under the heading "Investor Relations — Corporate Governance — Director and Shareholder Affiliation Policy."

Additional terms for Australia only: Any publication into Australia of this document is pursuant to the Australian Financial Services License of MOODY'S affiliate, Moody's Investors Service Pty Limited ABN 61 003 399 657 AFSL 336969 and/or Moody's Analytics Australia Pty Ltd ABN 94 105 136 972 AFSL 383569 (as applicable). This document is intended to be provided only to "wholesale clients" within the meaning of section 761G of the Corporations Act 2001. By continuing to access this document from within Australia, you represent to MOODY'S that you are, or are accessing the document as a representative of, a "wholesale client" and that neither you nor the entity you represent will directly or indirectly disseminate this document or its contents to "retail clients" within the meaning of section 761G of the Corporations Act 2001. MOODY'S credit rating is an opinion as to the creditworthiness of a debt obligation of the issuer, not on the equity securities of the issuer or any form of security that is available to retail investors. It would be reckless and inappropriate for retail investors to use MOODY'S credit ratings or publications when making an investment decision. If in doubt you should contact your financial or other professional adviser.

Additional terms for Japan only: Moody's Japan K.K. ("MJKK") is a wholly-owned credit rating agency subsidiary of Moody's Group Japan G.K., which is wholly-owned by Moody's Overseas Holdings Inc., a wholly-owned subsidiary of MCO. Moody's SF Japan K.K. ("MSFJ") is a wholly-owned credit rating agency subsidiary of MJKK. MSFJ is not a Nationally Recognized Statistical Rating Organization ("NRSRO"). Therefore, credit ratings assigned by MSFJ are Non-NRSRO Credit Ratings. Non-NRSRO Credit Ratings are assigned by an entity that is not a NRSRO and, consequently, the rated obligation will not qualify for certain types of treatment under U.S. laws. MJKK and MSFJ are credit rating agencies registered with the Japan Financial Services Agency and their registration numbers are FSA Commissioner (Ratings) No. 2 and 3 respectively.

MJKK or MSFJ (as applicable) hereby disclose that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by MJKK or MSFJ (as applicable) have, prior to assignment of any rating, agreed to pay to MJKK or MSFJ (as applicable) for appraisal and rating services rendered by it fees ranging from JPY200,000 to approximately JPY350,000,000.

MJKK and MSFJ also maintain policies and procedures to address Japanese regulatory requirements.