Ensuring Commercial Lending Stability at U.S. Community Banks in 2025

David Eads, CEO and cofounder of Vine

At many community banks, commercial lending is the lifeblood of the bank and the communities they serve. Commercial lending is one of the key lines of business for the bank. It is usually a high margin business with a higher degree of risk if not underwritten and maintained properly.

Historically, commercial lending has been an important driver of profitability for our country's banks (accounting for 20-35% of all net interest margin, depending upon the institution). Because of the size, structure and sources of these loans, banks have typically required lots of people to be involved in the origination, underwriting and monitoring of these assets.

Over the past few years, this profit pool has been attacked by asset managers and PE firms ramping up middle-market lending, leading to a notable growth in private credit. Non-bank players have moved more nimbly than banks, faced less regulatory scrutiny, and scaled their capital under management with much less friction.

Unsurprisingly, this is forcing banks to rethink everything they do, from how they originate loans to long-term asset servicing. In order to stay in the game, leading bank executives are turning to technology. This means embracing automation, alternative credit scoring, and new syndication models to streamline operations while unlocking revenue growth opportunities.

The stability of these financial institutions relies on prudent management of their credit risk and adherence to lending policies. Of course, commercial lenders, credit analysts, and their regulatory supervisors are expert at managing this risk. It's their core competency. Loan loss reserves also provide a margin for error.

However, the detailed analysis of metrics and audits of loans in the portfolio, relies on assumptions of the underlying underwriting calculations being consistent and adhering to policy. It is difficult or, at times, impossible to review the exact original calculations for all the values in an underwriting package, from even a detailed review of the credit memo or annual review and their supporting documents. It is difficult to ensure all these calculations are correct at the time of the loan approval, much less months or years later. For example, if a credit analyst uses taxable income values rather than non-taxable income values from a personal tax return, it may appear that the borrower has significantly more cash flow than they actually do.

A potentially even more significant error occurs if the credit analyst accidentally enters an extra zero in the revenue. This error shows the borrower has far more ability to pay than they actually do. These errors could be amplified by credit analysts changing formulas in their spreadsheets and others on the loan decisioning team assuming the formulas are calculated in a different way.

Credit analysts manually enter data from tax returns and financial documents provided by the borrower into spreadsheets for all of the related entities in the transaction. Depending on the institution's credit policy, there may be many entities to underwrite, such as the borrowing business, subsidiaries and pass-through entities, the personal finances of all the owners, and all the other businesses each owner may have. Lenders often spend multiple days doing financial data entry for all the related entities[1], and then they manually create key documents like credit memos and annual loan reviews. The document creation process may take another few days.

Document creation is also potentially error prone because of the complexity of managing the collation of requested revisions and ensuring all the numbers and details tie into each other in the updated draft. For example, if an interest rate changes, it may require a credit analyst to sift through many, many pages of text to update all the related numbers and calculations that use that value. With a manual document creation process, it is unlikely that a human reviewer will consistently catch all the places values should be updated. Therefore, a new loan could be approved that should not be, or an existing loan may not be downgraded that should be.

[1] From anecdotal conversations with scores of commercial lenders between 2022 and 2025.

Unfortunately, 77%[2] of U.S. commercial lenders still use a manual process and are significantly exposed to this risk. A majority of these institutions use only Microsoft Word and Excel in their commercial lending process, which is mostly unchanged since Excel and Word were introduced into banks in the 1980s.[3]

Even institutions with lending software are exposed to this risk if their software relies on manual data entry and credit analysts have to choose the source of the numbers to import. This is especially true if there are not accuracy checks to ensure the summed values match the total value. For example, some of this risk can be mitigated if the credit analyst must enter the gross revenue on the tax return, in addition to the values of the various revenue categories, and there is a visual indicator showing the sum of the individual values matches the gross revenue on the tax return.

A National Center for Biotechnology Information study[4] in 2008 found a 6.5% error rate for single data entry method in Excel, which is similar to the data entry credit analysts do. The 1-10-100 Rule states that the cost of these errors rises exponentially at each stage of the process[5]. Therefore, the manual commercial loan underwriting process provides ample opportunity for introducing significant risk, depending on which data points are entered incorrectly, the impact of the specific error, and the number of times the errors are used in the process.

Complex bank systems, such as core banking systems, also increase the opportunity for errors. Core vendors make it expensive to integrate and data is often spread across multiple systems which makes it hard to keep the data in sync. Lenders often resort to manual cut and paste. Furthermore, many lenders store data in free form fields in their core banking system. This makes the data hard to access and the lack of structure makes it hard to use programmatically even if it's accessible by other systems.

The significant effort involved in performing manual periodic loan reviews often makes it difficult to thoroughly review a large enough sample size of the loan portfolio to catch errors in the original underwriting process or previous reviews. Furthermore, institutions introduce risk if they do not perform timely reviews of their existing portfolio.

In conclusion, commercial lenders should implement lending processes that minimize manual data entry and ensure model integrity. Standard formulas, calculations, and input data must be tightly controlled to prevent model drift and ensure adherence to lending policies. Lending decision documents should be created using automated, repeatable processes that provide revision control and reduce errors from manual data entry and collation. Without proper controls to ensure consistent calculations and the use of accurate data, lenders risk carrying loans in their portfolio that should be downgraded. Without a clear understanding of the true risk of loans at origination and within the portfolio, lenders may fail to take necessary actions to mitigate risk. Lenders unaware of their portfolio's true risk may face findings from examiners or, worse, suffer unexpected losses during a market downturn without adequate loan loss reserves.

Ensuring commercial lending stability requires new technologies and enhanced controls to cut down on errors and maintain consistency. Modernizing commercial lending addresses many of the inherent risks that exist today and pose a material threat to the health of community banks. By embracing a more stable commercial lending framework, community banks can better support their local economies and foster sustainable growth among the businesses they serve.

---

[2] From Vine Financial analysis of FFIEC and NCUA data from call reports and derivative third-party solutions such as FI Navigator. 1,393 FIs have a commercial lending software solution, 6,352 do not have a commercial lending software solution. Similarly, for institutions with assets of $5B and below, the percentage is 79% using the same sources and methods.

[3] Excel for CP/M systems was introduced in 1982. Excel 2.0 for Windows was introduced in 1987. https://en.wikipedia.org/wiki/Microsoft_Excel

[4] Reducing Errors from the Electronic Transcription of Data Collected on Paper Forms: A Research Data Case Study, J Am Med Inform Assoc. 2008 May-Jun;15(3):386–389. doi: 10.1197/jamia.M2381 https://pmc.ncbi.nlm.nih.gov/articles/PMC2409998/

[5] Bank Director, "Applying the 1-10-100 Rule to Loan Management" https://www.bankdirector.com/article/applying-1-10-100-rule-loan-management/