CORPORATE BANK LENDING: SCENARIO ANALYSIS AS AN ALTERNATIVE TO TRADITIONAL METRICS

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Abstract

For most financial institutions today, lending is a multi-step process that often is separated from the credit review process. In an ideal situation, the credit proposal delineates the inherent risks to the transaction; however, the thrust of credit approval is more often the internal selling of the deal. As such, the credit proposal, if it does err, errs in overselling the strengths of the credit and in underestimating the risks in the transaction. In researching a new book on corporate lending, one of the authors examined some twenty loan agreements, selecting several for inclusion in the text. In every company or industry that was analyzed, the problems experienced could not have been discovered by traditional credit analysis. Instead, they resulted from several factors: performance not essentially at variance from that of its deteriorating industry negative conditions in the economy; fraud; and reduced demand due to the recession that began in 2008. The concept of scenario analysis in bank lending can only be effective if research is conducted to determine the causal factors that effect loan repayment. The authors suggest that non-performing loan experience should be studied over several years to develop regressions on selected independent variables.

CREDIT DECISION PROCESS

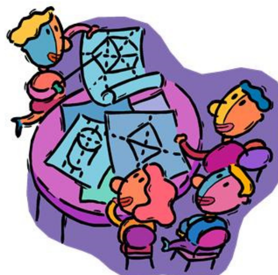
(with quantitative analysis in red)

1. Developing a commercial lending philosophy & attitude toward calling on (marketing to) corporate customers
2. Preparing the credit request including appropriate documentation
3. Evaluating collateral in support of the loan
4. Determining whether the borrower has the potential for sufficient earnings to make periodic payments on the interest & principal borrowed
   - Review audited financial statements including ratio analysis & common-size financials
   - Construct cash flow statements showing operational, investment & financial sources & uses of cash
   - Work with the borrower to develop financial forecasts
5. Preparing loan covenants that require specified levels of borrower performance during the loan period
6. Presenting the loan package to the bank's credit committee for approval
7. Drafting the formal loan agreement

PROBLEMS IN HISTORICAL DATA

1. Borrower experiences cannot be sim-plistically extrapolated into the future
2. Loan covenants do not provide adequate protection against any significant deviation or deterioration
3. Optimistic or incorrect numbers are often provided to the lender by the borrower
4. All variables that affect the loan may not have been anticipated during credit analysis

THE FOLLY OF NUMBERS



Data alone not useful without context; even information is of limited value

- Many examples of well-run companies failing to capture important changes in the market because of the metrics led them the wrong way
- Numbers can be comforting because of the illusion of diligence
- Christensen has written on the dangers of religiously following metrics

CREDIT DECISION "NUMBER" FOLLY

- Typical loan agreements are internal
  - Extrapolation of past results
  - Overreliance on ratios & protective covenants
- Credit decisions need better information that goes beyond company & industry comparisons
- Necessary to protect against loan losses
- Cases on credit decisions
  - Coldwater Creek
  - 3 Chemical Companies
  - Krispy Kreme
  - O'Reilly Automotive
  - 14 others

COVENANTS ≠ DUE DILIGENCE

- No evidence that standard lending protocols would have prevented these situations
  - Cases indicate that the use of restrictive covenants might have led to the termination ("calling") of loans
  - Makes it difficult for the companies to continue in business
- Restrictive covenants are short-cuts to the process of adequate *due diligence*
  - Investigation of a business prior to signing a loan agreement *or*
  - An act requiring a certain standard of care

WHERE IS THE DUE DILIGENCE?

- Lack of resources
  - Industry specialization & knowledge only by largest banks
- Lack of money
  - Credit lines not profitable in most situations. Irrational lending due to:
    - Borrower control (until 2008)
    - Too many banks in U.S. (~ 7,000)
    - Credit subsidized by noncredit products
    - Occasional profitable borrower

SCENARIO ANALYSIS

Business trapped in interrelated lifecycles

- Non-linear patterns driven by a variety of factors

Scenario analysis applies probabilities to various future states

- Borrower's capacity to repay a loan should involve high & low performance thresholds
- Calculation of a joint expected value
- Used in finance for risk management & in structuring investment portfolios
- Banks do not apply probabilities in the consideration of alternative (particularly worst case) borrower outcomes

Outcomes include:

- Most likely case
- Best case
- Worse case

BANKS DO NOT WANT TO LEND … SO WHAT'S A COMPANY TO DO?

- Asset-based lending with saleable assets as collateral
- Current assets are preferred as most readily converted to cash (loan as % of fair market value)
  - Inventory: 50-85%
  - Accounts receivable: 60-90%
  - Notes receivable: 60%
- Fixed asset loans: based on life of asset
- More expensive than bank lending
- Limits flexibility of business managers

FUTURE RESEARCH

Regression (or other statistical) analysis to determine the causal factors that effect loan repayment (with loan default as the dependent variable) & such independent variables as:

1. total receipts-to-cash flow
2. return-on-equity (ROE)
3. financial leverage (total debt-to-total assets)
4. inventory turnover (cost of goods sold ÷ inventory)
5. accounts receivable turnover (sales ÷ accounts receivable)
6. revenue growth (or decline)
7. competitive initiatives
8. technological changes
9. management of expenses
10. senior officer stability & experience

For additional information, see James Sagner and Herbert Jacobs, *Handbook of Corporate Lending*, Bank Credit Training Partners (2011)