The Credit Decision

信用决策

Credit Risk

- **Credit risk is the probability that a borrower will not pay back a loan in accordance with the terms of the credit agreement**. The risk can result from:
  - Default on a financial obligation.
  - An increased probability of default on a financial obligation
  - A more severe loss than expected due to a greater than expected exposure at the time of a default.
  - A more severe loss than expected due to a lower than expected recovery at the time of a default.
  - Default on payment for goods or services already rendered (i.e., **settlement risk**).

The Components of Credit Risk Evaluation

- **The four primary components of credit risk evaluation are as follows.**

  1. *The borrower 's (or obligor's) capacity and willingness to repay the loan*.
  2. *The external environment and its effect on the borrower 's capacity and willingness to repay the borrowed funds*. Factors such as the business climate, country risk, and operating conditions are relevant to the lender.
  3. *The characteristics of the credit instrument*. The credit instrument might be a bond issue, a bank loan, a loan from a finance company, trade credit, or other type of debt agreement/ security
  4. *The quality and adequacy of risk mitigants* such as collateral, credit enhancements, and loan guarantees.

Quantitative and Qualitative Techniques

- Qualitative techniques are used primarily to asses the borrower's **willingness** to repay the loan. Quantitative techniques are used primarily to assess the borrower's **ability** to repay the loan.
- **Qualitative credit analysis** techniques are largely used to evaluate the borrower's wiliness to repay. Qualitative techniques include:
  - **Gather information** from a variety of sources about the character and reputation of the potential borrower.
  - **Face-to-face meetings** with the potential borrower.
  - "**Name lending(慕名贷款)**" involves lending to an individual based on the perceived status of the individual in the business community.
  - **Extrapolating (推断) past performance into the future**. Lenders often assume that a pattern of borrowing and repaying in the past will continue in the future.
- Analyzing the borrower's **recent and past financial statements** is the primary **quantitative method** used in credit analysis.

Compare the Credit Analysis

- Four basic types of borrowers for which credit analysis must be performed are as follows:
  1. **Consumers** — the analyst evaluates the creditworthiness of individuals.
  2. **Corporations** — the analyst evaluates the creditworthiness of nonfinancial firms.
  3. **Financial institutions** — the analyst evaluates the creditworthiness of financial institutions, including banks and nonbank firms such as insurance companies and investment companies.
  4. **Government or government - related entities (i.e., sovereigns)** — the analyst evaluates the creditworthiness of nations, government bodies, and municipalities.
- *Comparisons*: **Capacity**, **Willingness**, **Methods of evaluation, Loan size/type**

Compare the Credit Analysis

Figure 1: Comparison of Borrowers (Cont.)

	Consumers	*Corporations*	*Financial Institutions*	*Sovereigns*
Methods of evaluation	Credit scoring models that consider income, duration of employment, and amount of debt for unsecured debt like credit cards. Credit scoring and some manual input and review for large exposures such as mortgage loans or automobile loans.	Detailed manual analysis including financial statement analysis, interviews with management. More complex than consumer analysis because companies are so diverse in terms of assets, cash flow, financial structure, etc.	Similar to nonfinancial firms.	Similar to financial and nonfinancial firms but with increased subjective analysis of the political environment.
Loan size/type	Large exposures are typically secured (e.g., mortgage loans). Smaller exposures are unsecured (e.g., credit card loans).	Typically larger exposures (sometimes considerably larger) than loans to consumers. Debt may be secured or unsecured.	Similar to nonfinancial firms (i.e., large).	Similar to nonfinancial and financial firms (i.e., large).

201405真题回顾

备忘录

41. An analyst is reviewing the minutes of a recent credit review meeting at a bank. Listed below are four comments made at the meeting pertaining to the credit analysis of consumers, non-financial institutions, financial institutions, and sovereigns. Which of these statements is correct?

A. Due to the relatively small amount of credit advanced to individual consumers, scoring models are typically used as the only factor in determining the creditworthiness of consumers.

B. Due to publicly available information on consumers and the lack of information on non-financial institutions, credit analysis for non-financial institutions tends to be less detailed than that for consumers.

C. Due to the similarity of institutions that comprise the financial sector, the credit analysis of financial institutions tends to be more straightforward than the credit analysis of other institutions.

D. Due to there being fewer sovereigns than non-financial institutions, the credit analysis of sovereigns tends to include fewer factors than that of non-financial institutions.

➢ Expected Loss (EL):

$$EL = PD \times LGD \times EAD$$

Example: Calculating expected loss

Star City Bank and Trust has examined its loan portfolio over the past year. It has determined that the probability of default was 4%, adjusted for the size of the exposure. The loss given default over the period was 80%. Bank risk managers estimate that the exposure at default was 75% of the potential exposure. **Calculate** the expected loss given a one-year time horizon.

Answer:

expected loss = 4% × 80% × 75% = 2.4%

Bank Failure and Bank Insolvency (无偿付能力)

- **Bank insolvency and bank failure are not one in the same**.
  - A bank may be insolvent but avoid failure so long as liquidity is available. Also, many insolvent banks are merged with financially sound banks, avoiding outright failure.
  - For the credit analyst, the fact that failure of financial institutions is rare makes analysis easier.
  - However, because banks are heavily leveraged, the risks cannot be ignored. The analyst must place the bank somewhere on the continuum between "pure creditworthiness" and bankrupt. At one end of the continuum are banks with AAA-rated debt, and at the other end are banks with default ratings. Thus, thinking about bank risk on a continuum is useful in defining the bank's credit risk.

Examples

1. Blackstone Credit, Inc., made a loan to a small start-up firm. The firm grew rapidly and it appeared that Blackstone had made a good credit decision. However, the firm grew too fast and could not sustain the growth. It eventually failed. Blackstone had initially estimated its exposure at default to be $1,200,000. Because of the firm's rapid growth and resulting increases in the line of credit, Blackstone ultimately lost $1,550,000. In terms of credit risk, this is an example of:

   A. default on payment for goods or services already rendered.

   B. a more severe loss than expected due to a ratings downgrade by a rating agency.

   C. a more severe loss than expected due to a greater than expected exposure at the time of a default.

   D. a more severe loss than expected due to a lower than expected recovery at the time of a default.

Examples

2. Brent Gulick, a credit analyst with Home Town Bank, is considering the loan application of a small, local car dealership. The dealership has been solely owned by Bob Justice for more than 20 years and sells three brands of American automobiles. Because of the rural location, most of the cars sold in the past by the dealership have been large pick-up trucks and sports utility vehicles. However, sales have declined, and gasoline prices have continued to increase. As a result, Justice is considering selling a line of hybrid cars. Justice has borrowed from Home Town Bank before but currently does not have a balance outstanding with the bank. Which of the following statements is not one of the four components of credit analysis Gulick should be evaluating when performing the credit analysis for this potential loan?

A. The business environment, competition, and economic climate in the region.

B. Justice's character and past payment history with the bank.

C. The car dealership's balance sheets and income statements for the last few years as well as Justice's personal financial situation.

D. The financial health of Justice's friends and family who could be called upon to guarantee the loan.

Examples

3. Sarah Garrison is a newly hired loan officer at Lexington Bank and Trust. Her boss told her she needs to make five commercial loans this month to meet her sales goal. Garrison talks to friends and hears about a local businessperson with a great reputation. Everyone in town says John Johnson is someone you want to meet. Garrison sets up a meeting with Johnson and is immediately impressed with his business sense. They discuss a loan for a new venture Johnson is considering, and Garrison agrees that it is a great idea. She takes the loan application back to the bank and convinces the chair of the loan committee that Lexington Bank and Trust is lucky to be able to do business with someone with Johnson's reputation. This is an example of:

A. historical analysis technique.
B. qualitative analysis technique.
C. quantitative analysis technique.
D. extrapolation analysis technique.

Examples

4. Stacy Smith is trying to forecast the potential loss on a loan her firm made to a mid -size corporate borrower. She determines that there will be a 75% loss if the borrower does not perform the financial obligation. This is the:

   A. probability of default.

   B. loss given default.

   C. expected loss.

   D. exposure at default.

Examples

5. Bank of the Plain States has been struggling with poor asset quality for some time. The bank lends primarily to large farming operations that have struggled in recent years due to a glut (供过于求) of soybeans and corn on the market. Bank regulators have recently required that the bank write off some of these loans, which has entirely wiped out the capital of the bank. However, the bank still has some liquidity sources it can use, including a correspondent bank and the Federal Reserve. Bank of the Plain States is:

   A. an insolvent but not failed bank.

   B. both a failed bank and an insolvent bank.

   C. neither a failed bank nor an insolvent bank.

   D. a failed bank but not an insolvent bank.

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