



Module 8: Credit and Financial Analysis

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Train for Employment

Module 8: Credit and Financial Analysis

Importance

The bank's credit / loans are a sensitive area of banking process that needs to very well understood and efficient handling with much care as it would either leads to success or failure of a bank.

Learning Objectives

- Identify the roles of banks
- Define financial statements
- Identify the elements affecting credit
- List the types of loans
- Explain credit facilities
- List the types of collateral
- Identify the steps to credit implementation
- Explain how to evaluate projects and develop feasibility studies

Introduction:**What is "Risk"?**

The Management & Control of Risk Is the Most Significant Topic in the Business World Today.

Definition:

Risk is the possibility of suffering harm or loss.

The relation between risk and return**Appetite for risk**

- Every individual and every company has a different appetite for risk
- Also for each of them it might differ from one time to another

Credit risk can be divided to 3 main areas

- Management risk
- Financial risk
- Market and Industry risk

Financial statements "The three audited statements":

- Balance Sheet
- Profit & Loss
- Cash Flow

Where to start?

- The auditor's opinion
- What about qualified opinions?

Integrity:**1. Quality of credit is more important than exploiting new opportunities:**

- The bank's resources are mainly short-term deposits from people who trusted the bank to keep it safe. This kind of money is not for risky lending.
- In analyzing the degree of risk, careful consideration should be given to the borrower's management experience, policies, profitability, cash flow and net worth.

2. Every loan should have two ways out that are not related and exist from the beginning:

- The first is the successful completion of the transaction and achievement of cash flows sufficient to repay the bank from the company's operations.
- The second is in the event of failure of the project, will be action by the borrower either in realizing assets or in drawing on his resources.

3. The character of the borrower:

The character of the borrower-or in the case of corporations, the principle management and shareholders-must be free of any doubt as to their integrity.

- If you have any questions as to the integrity, or honesty, or intensions of the borrower, you should not approve the loan.
- Banks associate with people of , less than acceptable character, damage their own reputation far beyond the profit they obtain.

4. If you do not understand the business, do not lend in it:

- Successful banks specify precisely their terms of lending for appropriately differentiated risk assets and they take pains to understand the market sectors in which they engage.

5. It is your decision and you must feel comfortable with it according to your own judgment:

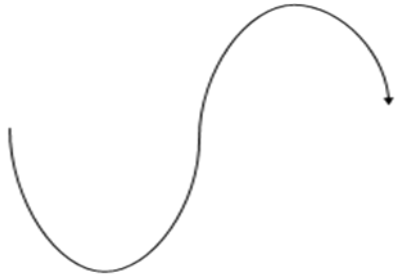
- Credit decisions are personal and can't be made solely on the basis of guidelines or analytical techniques. You must exercise common sense and good judgment. You should not be influenced by your associates.
- You must be comfortable with your decision because you will have to live with it.

6. If you have all the facts, you do not need to be a genius to make the right decision:

- Curiosity never killed a lending officer. The more questions you ask, the more you understand the case and hence gain the respect of the borrowers
- Facts are helpful and if probably organized will often make the decision easy.

7. The business cycle is inevitable:

- As a lender you must be conscious of the current point in the business cycle so that you can evaluate the risks likely to arise when economic conditions change in the future.



Business cycle

8. Although it is harder than evaluating financial statements, assessing a company's management is vital.

- The quality of management is displayed in many ways: the choice of the appropriate style of industry, the ease and difficulty with which senior positions can be filled from outside the company, the style of the company's offices and the reputation among competitors.

9. Collateral security is not a substitute for repayment.

- Repayment should come from cash flow. An additional security to support the cash flow is recommended but it shouldn't be considered as a primary source.

10. Where security is taken, a professional and impartial view of its value and marketability must be obtained.

- Security is taken partly to prevent these assets from being available to other lenders and partly to place the lender in a strong negotiating position as these assets are usually necessary to operate the business.
- When security is valued, there must be no conflict of interest by the valuer.

11. Lending to smaller borrowers is riskier than lending to larger ones

- In small firms the managerial resources are fewer and there is more dependence on the CEO; on the other hand, large firms has greater depth of management.
- Also in small firms, financial resources are more limited

12. Do not let poor attention to details and credit administration spoil an otherwise sound loan.

- A high proportion of write-offs are associated with sloppy administration or documentation.

13. Local banks should be participates in lending to local borrowers.

- It is often a danger sign if local banks are not lenders to local firms. Also, you should be cautious with those who seek to change to a new bank because they are dissatisfied with their present banks.

14. If the borrower wants a quick answer, it is “NO”.

- Anyone who rushes you into a lending decision should be told this principle. However, it pays to be prepared for requests from borrowers

15. If the loan is to be guaranteed, be sure that the guarantor’s interest is served as well as the borrower’s.

- Guarantors should not sign if they are not in principle willing to lend the money to the borrower themselves, since they may, one day in effect, have to do just that

16. See where the bank’s money is going to be spent.

- If you do not visit the company, you will not get a feel for the atmosphere, corporate style, and other intangible effects.
- It often pays to check what the management tells you

17. Think first for the bank, “Risk increase when credit principles are violated”.

- Good judgment, experience, and common sense are the markers of a good banker. If you have any doubt ask yourself “Would I lend my own money?”

Evaluating the Risks

A. Economic Environment:

- a. Demographics
- b. Socio-culture
- c. Technology
- d. Government
- e. Pluralism and power
- f. Ecology
- g. Labor Market

B. Complexity and Stability:

Simple & stable environment is one with a relatively slow rate of change with few of the factors undergoing change at once.

In dynamic conditions the environment is much more changeable and the rate may be unpredictable or rapid.

In complex conditions more than one factor influence change and the effects may even contradict each other.

How business risk is affected?

- If the environment is stable and simple, analysts can form opinions and make predictions based on past experience.
- If more dynamic conditions, the more the analyst should focus on future projections.
- If the environment is more complex, analysts should use simulation and model building.
- If conditions are both dynamic and complex, the analyst should concentrate on quality and depth of management.

Industry evaluation:

Risk is more closely associated with certain industries than others. This doesn't mean we should never lend to risky industries.

Performance in companies is always relative because you have to compare the company to those of a similar competitor within the industry.

The fortunes of the industry change over time. The first analytical decision is whether the change is temporary (cyclical). A change is structural when the change is permanent.

Competition:

Backing successful business within an industry is about spotting competitive threats that can come from existing competitors, those who may enter the industry later, and from types of products that may be adopted to meet the demands.

a. Threats of potential entrants

1. Economies of scale
2. Product differentiation
3. Capital requirements
4. Switching costs
5. Cost disadvantages independent of scale
6. Legislation or government policy.

b. The threat of substitutes

Managers are more likely to be surprised by competitive pressures from an indirect competitor than a direct one.

Faced with threat from substitutes, the firm's only recourse is through increased product differentiation or low-cost strategy.

c. The power of suppliers

Suppliers and customers can exert pressure on an industry's profits either by raising costs of inputs or by lowering costs of finished products.

Labor should be considered a supplier as well, and the degree of organization should be a key of its importance.

A company of one supplier can only be judged by the fortunes and intentions of the supplier.

Management:**A. Core skills**

1. Problem solving
2. Problem finding
3. Opportunity finding
4. Natural management style

B. Need characteristics

1. Need to manage
2. Need for power
3. Capacity for empathy

C. The management team

Types of Loans and Credit Facilities

Credit, loans, financing - all meaning the same thing - take many different forms. It is the lending of money by one party (the creditor) to another (the debtor) with the understanding that it will be repaid. A credit or a loan is different from a grant, where money is given by one party to another with no repayment required or expected.

There are loans to individuals as well as loans to businesses. Loans are granted for many different purposes. Individual loans may be to purchase a home or an automobile, to renovate a home, for education, etc. Business loans may be to purchase equipment or real estate, or to fund the purchase of inventory or a gap between the sale of goods or services and the receipt of payment.

There are numerous types of credit or loans in the marketplace:

- Personal
- Consumer loans (also known as retail loans)
- Mortgage loans – commercial and residential
- Trade/supplier credit
- Bank credit facilities

Personal loans are generally made to individuals whom the creditor/lender knows socially or due to family relationships. There is typically significant social pressure to repay the loan because the debtor/borrower does not want to be known as “untrustworthy” or as someone who does not fulfill his/her obligations. Often, the loan is connected with a significant family event, such as marriage, birth, death or even illness. Personal loans are often small, with no formal “analysis” or thought given to the borrower’s capacity to repay. There is often little or no documentation of such loans. We can all think of examples of such loans.

Consumer loans are loans made by banks to individuals for a variety of purposes. They may be single purpose loans to renovate individual residences, to purchase domestic durable goods (refrigerators, furniture, etc.) or even autos. Generally, the bank requires collateral for the loan. Banks may also make available lines of credit that the individual may draw down and repay as (s) he wishes. There is typically no family connection in this kind of lending, except that a family member may recommend a bank to another family member. The bank, however, generally makes the credit decision based on credit history and income level, and documents the loan with a note and a security agreement, if appropriate, as in the case of an auto loan.

Mortgage loans may be made to individuals to purchase their residence, either a flat or a separate home, or to companies for the purchase of a building or land. An appraisal of the market value of the real estate, either a flat or commercial building, is performed by a licensed real estate appraiser, on which the amount of the loan is based. The income of the individual or company is factored into the credit decision, as well as the amount the purchaser is putting into the purchase, the “down payment.” Commercial banks typically require at least a 10-20% down payment and finance the remainder.

Therefore, if the appraised value and purchase price is 500.000, the lender will typically require a 50.000 – 100.000 down payment and thereby finance 450.000 – 400.000 of the purchase price. If the purchase price exceeds the appraised value, the lender will use the appraised value as the basis for the lending decision, not the purchase price.

Trade/supplier credit is granted or provided among businesses “in the trade,” i.e., in the industry. For example, a retailer typically purchases goods from a wholesaler “on credit.” The retailer/debtor purchases the goods and agrees to pay the wholesaler/creditor for the goods within a certain number of days, whatever period is standard for the industry. The time period may be 30 days, 45 days or more rarely 60 days. The retailer expects to sell the goods within that time period and repay the creditor from the sales proceeds.

In this type of credit arrangement, there is seldom a personal or family connection. The credit decision is not based on formal analysis but on prior satisfactory experience with the debtor/borrower and the reputation of the debtor in the trade. The transaction is typically documented with a bill for goods purchased or an agreement between the creditor and debtor. Sometimes, if the credit is significantly larger than normal, or if it is the first such credit extended to a particular borrower, a bank letter of guarantee may be required in favor of the creditor as security. This is typically called a “down payment letter of guarantee” and is often used in the contracting industry.

Finally, bank credit facilities are formal loans or lines of credit made available by banks to business enterprises large and small (corporate / commercial and SME (small and medium enterprise) lending).

Banks grant credit facilities based on formal analysis of the creditworthiness of the borrower and the capacity of the borrower to repay, and on a subjective analysis of the character of company management and its willingness to repay the loan under any circumstances. The bank must assess the likelihood that company management will cooperate with the bank in the event repayment problems arise.

Banks have entire credit departments devoted to analytical activities as part of the lending process. The credit department analysts gather not only financial information but also information on the industry and the collateral offered as security by the borrower. Finally, credit departments analyze the performance, honesty and integrity of borrower management.

Banks today also focus on company cash flow projections, especially in the case of medium and long-term credit facilities. They examine the assumptions underlying the company's projections to draw their own conclusions about the likelihood of the cash flow projections, the amount and timing. Banks emphasize cash flow because cash is the first source of loan repayment.

Bank credit facilities are always documented by formal loan agreements signed by both the bank and by a signer authorized by the borrower in an official company document. The loan agreement contains all of the pertinent information about the loan or credit facility:

- Amount
- Term
- Collateral
- Interest rate
- Repayment schedule
- Events of default
- Information requirements

Types of Credit Facilities and their Characteristics

Banks offer two basic types of credit facilities: short-term and medium or long-term loans. Short-term loans, loans of one year or less are often lines of credit, whereby the bank grants a maximum line of credit for one year, renewable after one year for another year, under which the borrower may draw and repay at will up to the maximum amount. Such lines of credit are typically granted to support working investment needs (inventory and/or accounts receivable) throughout the borrower's operating cycle and are known as revolving lines of credit because the borrower may borrow and repay to meet its requirements during the year. The interest rate is floating and interest is generally payable monthly or quarterly.

Medium or long-term loans, for periods up to 10 years, are for fixed amounts for a fixed period of time, generally at a fixed rate of interest, although floating rates of interest are also offered. The principal is generally amortized monthly and interest is paid monthly. There is no ability to borrow and repay, as there is under lines of credit. The typical purpose of these loans is to acquire fixed assets: equipment, land, buildings.

Banks also offer other types of credit-related facilities, which come under the heading of contingent liabilities on the bank's balance sheet: letters of credit and letters of guarantee.

Documentary letters of credit (L/Cs) are granted on behalf of bank customers in favor of their customers. They are also known as commercial letters of credit and support international trade activities. They are also called "sight" letters of credit because payment is made "on sight," upon presentation of shipping documents. Typically, the purchaser/importer is the bank's customer and opens an L/C in a fixed amount, secured by cash or a line of credit, in favor of the seller/exporter. The amount of the L/C is payable upon presentation to the bank of the agreed upon shipping documents by the exporter.

Deferred L/Cs is documentary letters of credit that contain a provision whereby the exporter grants the importer a due date within a fixed period of time commencing with the shipment date or when the importer's bank receives the shipping documents.

Acceptance L/Cs is L/Cs at the stage of receipt and acceptance of the shipping documents by the importer's bank. In other words, this L/Cs has been approved for payment on a certain date.

Bank letters of guarantee (L/Gs) are provided by the bank at the request of its customer in favor of a third party (the beneficiary). The L/G obligates the bank to pay a fixed amount by a specific date to the beneficiary upon demand. The L/G may be used in lieu of a bid bond or performance bond. A bid bond is often issued on

behalf of a bidder for a tender in favor of the contracting entity to support the bid, to show financial capacity. A performance bond is often required of contractors to ensure adequate performance on large projects. In some countries (in the US, e.g.) the standby letter of credit is the standard in lieu of the L/G.

Evaluating a company's ability to complete its asset conversion cycle and manage its assets investment

Objectives:

1. Identify risks that the firm may not be able to complete its ACC.
2. Determine how efficiently the company is using its asset investment to generate sales and profits.

Risk that may interrupt the acc business risks

Business Risk:

Risk inherent in a company's method of operations and the basic nature or characteristics of the business that may prevent it from converting its asset to cash

- A. Supply risks
- B. Production risks
- C. Demand risks
- D. Collection risks

Supply Risks

- Who is the company's supplier?
- What factors affect the price of the raw materials?
- Are there acceptable substitute raw materials?
- Can the supplier always obtain the raw materials?
- Are there any factors that could affect the willingness of the suppliers to obtain and sell the material?
- Will the suppliers be able to deliver the raw materials?
- Is there is there is any risk spoilage of the raw materials?

Production Risks

- Labour relations
- Quality of plant and equipment
- Management ability

Demand Risk

- What is the company's competitive advantage?
- What are the company's major products?
- Who are the company's major competitors?
- How does the company sell its products?
- What are the risks of inventory spoilage?
- Could government regulations affect the company's ability to sell its products?

- How do prevailing economic conditions affect demand for the firm's products?

Collection Risks

- Customers, who are they, and how many are there?
- Credit terms, what kind of credit terms do the company offer?
- Charge-offs and returns and allowances

Quality and efficiency as criteria for evaluating asset

- An important factor in the analysis of the company asset investment – that is the quality, or liquidity of the asset.
- Liquidity is defined as nearness to cash
- Generally, the longer a company's asset conversion cycle, the less liquid are its investments in inventory.
- Efficiency in the use of assets is another factor to consider when evaluating the company's management of its asset investment.

The Major Components of a Company's Asset Investment

- Sales returns and allowances
- Purchase commitments

Inventory Analysis:

- Inventory valuation (life and life methods)
- Quality of the inventory
- Components breakdown of the inventory (raw materials, working process, and finished goods)
- Inventory turnover & days on hand

Accounts Receivable Analysis:

- a. Credit terms
- b. Quality and concentration of customers
- c. Costs of carrying the account receivables
- d. The company's historical experience
- e. Aging schedule
- f. Turnover

Fixed Assets Analysis

- The fixed assets of a business (also referred to as plant) consist of the tangibles properties of a company that facilitate production or operation
 - (land, buildings , machinery & equipments)
- Net plant turnover = sales / average net plant
- The size of the plant and the amount of equipment any company requires will depend ultimately on the types of goods produced,
- The degree of processing (value added)
- Separate turn over ratios may be calculated for leased assets . however these assets should not be combined in the calculation of turnover ratios.

Summary Analysis of Asset Investment

It can be summarized in 3 key ratios:

1. Total asset turn over
2. Return on assets
3. Working investments to sales

- Asset Turnover Ratio (ATO)

$ATO = \text{Sales} / \text{Total Assets}$

Reflects, for every dollar invested in assets, the company generated how much in sales

- Return On Assets (ROA)

$ROA = \text{NET PROFIT AFTER SALES} / \text{TOTAL ASSETS}$

ROA: Reflects, for every dollar invested in assets, the management of the company was able to earn in net profit after tax.

- Working Investment to sales ratios

Reflects, for every dollar sales revenue, the company had to finance how much in working investments

- Risk Rating System

Risk Rating System is a tool that enables the bank to accurately identify, evaluate, measure, price and manage risk

Obligor Risk Rating System

Type of facility:

Direct & Indirect:

Type of Information

- Qualitative
- Quantitative

Qualitative:

- Management
- Sponsor's Resources
- Sponsors' Commitment to Business
- Experience with Bank
- Competitive Position
- Industry Characteristics
- Management Internal MIS
- Years In Business
- Market Position
- Auditor Classification

Quantitative:

- Assets
- Liabilities
- Net worth
- Profitability

Types of Information

- Qualitative
- Quantitative
- Type of Facility
- Type of Security

Composition of FRR

- Obligor Risk Rating
- Facility Type
- Security Type

Benefit of Facility Rating

- Evaluates Obligor RR.IN conjunction with related security
- Portfolio Management Tools
- Portfolio Migration
- Modification, update information

Type of Facility**Direct:**

- Overdraft
- Short term loan
- Long term loan
- Standby LC
- Differed LC
- Payment TEE
- LC refinance
- Leasing
- Islamic Finance

Indirect:

- Sight LC
- F/X
- Performance L/G

Type of security/supportLiquid (Short term) security

- Deposits
- GVT. Bonds
- Investment Funds
- Bank GTY
- Shares
- Precious metal
- EXPORT LC

Bill discount corporate GTY

- Support
- Personal GTY
- Internal mortgage
- Deposit title deed
- Others

Exercise:

1. Mention three Audited " Financial statements "

-
-
-

2. In " **Integrity** " Complete the missing words:

A. Lending toborrowers is riskier than lending toones

B. banks should be participates in lending to local

C. If the loan is to be guaranteed, be sure that the interest is served as well as the

3. In evaluation of risks we conceder the economic environment Mention three of those elements.

- 1.....
- 2.....
- 3.....

4. Complete the missing words:

The Threats of potential entrants includes:

- a. of scale
- b. Product
- c. Capital
- d. costs
- e. Cost independent of scale
- f. Legislation or

Summary

In this module, we learned how to:

- Identify the roles of banks
- Define financial statements
- Identify the elements affecting credit
- List the types of loans
- Explain credit facilities
- List the types of collateral
- Identify the steps to credit implementation
- Explain how to evaluate projects and develop feasibility studies