


NPTEL ONLINE CERTIFICATION COURSES

NPTEL

MANAGEMENT OF COMMERCIAL BANKING

PROF. JITENDRA MAHAKUD
DEPARTMENT OF HUMANITIES AND SOCIAL SCIENCES, IIT KHARAGPUR

Module 04: Management of Lending Activities of Commercial Banks

Lecture 31: Management of Lending Activities-I

CONCEPTS COVERED

- Types of loans
- Loan business
- Principles of lending

NPTEL

Introduction

- Bank lending is the most important asset of the bank
- Banks are expected to supply credit for all business and consumer financial needs and to price that credit reasonably
- Loans support the growth of new businesses
- Loans frequently convey information to the marketplace about a borrower's credit quality
- The lending process bears careful monitoring at all times

NPTEL Online Certification Courses
IIT Kharagpur

Types of Loans

- Commercial and Industrial Loans
- Real Estate Loans
- Financial Institution Loans
- Agriculture Loans
- Loans to Individuals
- Miscellaneous Loans
- Lease Financing Receivables

NPTEL

Factors Determining the Growth and Mix of Loans

- Characteristics of the market area
- Lender size
  - Wholesale lenders vs. retail credit
- Experience and expertise of management
- Loan policy
- Expected yield of each type of loan
- Regulation

- General rule: A lending institution should make the types of loans for which it is the most efficient producer

NPTEL Online Certification Courses
IIT Kharagpur
Copyright © 2013 The McGraw-Hill Companies, Inc. Permission required for reproduction or display.

Role of Asymmetric Information

- Information asymmetric between lender and borrower
- Relationship among asymmetric information and interest rate
- Adverse selection: Lending to high risk borrowers
- Moral hazard: Use of bank loans in high-risk activities and it arises due to less monitoring

NPTEL

Environment for Loan Business

- Business of lending: Exposed to credit risk
- Economic condition
- Exercise of the options in loan contract
- Increasing competition from other financial institutions
- Impact of competition on non-price terms of loans or tightness of loan covenants
- Loan-to-price ratio for home equity loan: amount of equity that a borrower must invest in loan
- Changes in technology: Online banking, securitization etc.

NPTEL

Principles of Lending

- **Principles of safety**
  - Timely recovery of principal and interest
  - Diversification of loans
  - Obtaining the regular status of the borrower
  - Valuation of security given by borrower
  - Charging of interest rate to maintain margin
- **Principles of Liquidity**
  - Inflows in the form of repayment of loans should match the demand of depositors as outflows
  - Minimization of gap between inflows and outflows

NPTEL

Principles of Lending Cont…

- **Principle of profitability**
  - Profitability to be maintained to honour all the obligations
- **Principle of purpose**
  - Loans only for productive purpose with a definite source of repayment
- **Principle of security**
  - Primary Security and personal security
- **Principle of marketability**
  - Security for loan should be freely marketable
- **Principle of value stability**
  - Value of collateral should be stable

NPTEL

CONCLUSION

- Lending is one of the important activities of commercial banks
- Loans are broadly divided into commercial/ industrial or retail loans
- Information asymmetric information plays a significant role in lending process
- Loan business is highly competitive
- Lending activities follow certain principles like principles of safety, liquidity, profitability, marketability, stability etc.

REFERENCES

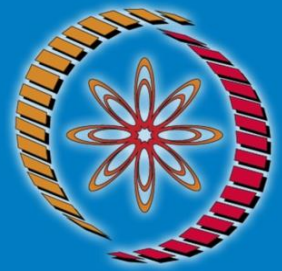
- Bank management & financial services by Rose, P. S., & Hudgins, S. C., McGraw-Hill Education, 2008.
- Commercial banking: The management of risk by Gup, Benton E., and Kolari, James W., John Wiley & Sons Incorporated, 2005.
- Management of Banking, 6e. by MacDonald, Scott. S., & Koch, Timonthy. W, Thomson, 2007

NPTEL



NPTEL

THANK YOU !




NPTEL ONLINE CERTIFICATION COURSES

NPTEL

MANAGEMENT OF COMMERCIAL BANKING

PROF. JITENDRA MAHAKUD
DEPARTMENT OF HUMANITIES AND SOCIAL SCIENCES, IIT KHARAGPUR

Module 04: Management of Lending Activities of Commercial Banks

Lecture 32: Management of Lending Activities-II

CONCEPTS COVERED

- Regulation of lending activities
- Loan policy
- Lending process

NPTEL

Regulation of Lending Activities

- The mix, quality, and yield of the loan portfolio are heavily influenced by regulation
- 40 % of the credit to priority sector
- Priority to Small and Medium Enterprises
- Credit risk exposure limit to a single borrower is 15 percent and 5 percent extra for infrastructure projects
- A bank cannot grant any loans and advances on the security of its own shares.

NPTEL Online Certification Courses
IIT Kharagpur

Regulation of Lending Activities Cont…

- Without prior approval of the Board or without the knowledge of the Board, no loans and advances should be granted to relatives of the bank's Chairman/Managing Director or other Directors, Directors (including Chairman/Managing Director) of other banks and their relatives
- Banks should not extend finance for setting up of new units consuming/producing the Ozone Depleting Substances
- Restrictions on Advances against Sensitive Commodities under Selective Credit Control

NPTEL Online Certification Courses
IIT Kharagpur

Regulation of Lending Activities Cont…

- Loan against shares, debentures and bonds may be granted to individuals to meet contingencies and personal needs or for subscribing to new or rights issues of shares / debentures / bonds or for purchase in the secondary market, against the security of shares / debentures / bonds held by the individual.
- Loans against the security of shares, debentures and bonds should not exceed the limit of Rupees ten lakhs per individual if the securities are held in physical form and Rupees twenty lakhs per individual if the securities are held in dematerialised form
- Banks should maintain a minimum margin of 50 percent of the market value of equity shares / convertible debentures held in physical form. In the case of shares / convertible debentures held in dematerialised form, a minimum margin of 25 percent should be maintained

NPTEL Online Certification Courses
IIT Kharagpur
Copyright © 2013 The McGraw-Hill Companies, Inc. Permission required for reproduction or display.

Regulation of Lending Activities Cont…

- A uniform margin of 50 per cent shall be applied on all advances / financing of IPOs / issue of guarantees on behalf of market makers. A minimum cash margin of 25 per cent (within the margin of 50%) shall be maintained in respect of guarantees issued by banks for capital market operations
- Loans/advances to any individual from banking system against security of shares, convertible bonds, convertible debentures, units of equity oriented mutual funds and PSU bonds should not exceed the limit of Rs. 10 lakh for subscribing to IPOs
- The interest rates for loans vary across the banks but it should be above the base rate. The base is determined on the basis of cost of deposits, CRR, SLR, overhead cost, return on equity.

Regulation of Lending Activities Cont…

- The guidelines vary across the type of loans e.g. industrial loan. Loans for SMEs, agricultural loans etc.
- The margin amounts vary on the basis of collateral used for the loans and it varies from time to time as per RBI guidelines
- Different guidelines for individuals, directors of the bank, employees, groups etc.

NPTEL

Establishing a Good Written Loan Policy

- Important in order to meet regulatory standards
- What should a written loan policy contain?
  - A goal statement for the entire loan portfolio
  - Specification of lending authority of each loan officer and loan committee
  - Lines of responsibility in making assignments and reporting information
  - Operating procedures for soliciting, evaluating and making loan decisions
  - Required documentation for all loans

NPTEL

Establishing a Good Written Loan Policy

- Lines of authority for maintaining and reviewing credit files
- Guidelines for taking, evaluating, and perfecting loan collateral.
- Procedures for setting loan rates and fees and the terms for repayment of loans
- A statement of quality standards applicable to all loans
- A statement of the preferred upper limit for total loans outstanding
- A description of the lending institution's principal trade area
- Procedures for detecting and working out problem loan situations.

NPTEL Online Certification Courses
IIT Kharagpur

Factors to Consider to Reduce Credit Risk in Loan Policy

- Avoid high risk loans
- Proper valuation of collateral
- Diversification of loans
- Proper documentation
- Credit limits
- Proper monitoring
- Use of instruments to transfer risk

NPTEL

Steps in the Lending Process

- Finding Prospective Loan Customers
- Evaluating a Customer's Character and Sincerity of Purpose
- Making Site Visits and Evaluating a Customer's Credit Record
- Evaluating a Prospective Customer's Financial Condition
- Assessing Possible Loan Collateral and Signing the Loan Agreement
- Monitoring Compliance with the Loan Agreement and Other Customer Service Needs

NPTEL Online Certification Courses
IIT Kharagpur

CONCLUSION

- Lending activities of commercial banks are highly regulated
- All the commercial banks prepare the loan policy on the basis of the regulation and requirements
- Commercial banks consider many factors to reduce the credit risk
- Lending process follows the systematic steps

REFERENCES

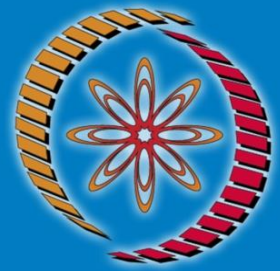
- Bank management & financial services by Rose, P. S., & Hudgins, S. C., McGraw-Hill Education, 2008.
- Commercial banking: The management of risk by Gup, Benton E., and Kolari, James W., John Wiley & Sons Incorporated, 2005.
- Management of Banking, 6e. by MacDonald, Scott. S., & Koch, Timonthy. W, Thomson, 2007
- Various publications, Reserve Bank of India.

NPTEL



NPTEL

THANK YOU !




NPTEL ONLINE CERTIFICATION COURSES

NPTEL

MANAGEMENT OF COMMERCIAL BANKING

PROF. JITENDRA MAHAKUD
DEPARTMENT OF HUMANITIES AND SOCIAL SCIENCES, IIT KHARAGPUR

Module 04: Management of Lending Activities of Commercial Banks

Lecture 33: Management of Lending Activities-III

CONCEPTS COVERED

- Ways to make loans
- Evaluation of loan request
- Structure of loan agreement

NPTEL

Ways to make loans

- Banks solicit loans
  - Though email or other modes for new customers
  - Loan officer explains about cash management and lock boxes
  - Lock boxes are mail boxed where retail customers send their payments for goods and services
- Buying loans
  - Banks buy part of loans called participations from other banks
  - The acquiring banks have pro rata shares of credit risk
  - Sales of participations can be downstream (large to small) or upstream (small to large)

NPTEL

Ways to make loans…

- **Commitments**
  - Loan commitment is an agreement between a bank and a firm to lend funds under terms that are agreed upon in writing
  - It specifies commitment fees and amount of funds to be borrowed but the cost of borrowing depends on the prevailing rates at the time of loan is made
- **Customer request loans**
  - Information bank needs
  - Eligibility of types of loans
  - Types of collateral

NPTEL

Ways to make loans…

- Loan brokers
  - Individuals or firms who act as an agent between borrower and lender
  - Some fee is involved for the broker and not in the picture once loan is made
- Overdrafts
  - Writing cheque more than the available amount (Unsecured loan)
- Refinancing
  - It is borrower's option and it happens when interest rate goes down

NPTEL Online Certification Courses
IIT Kharagpur
Copyright © 2013 The McGraw-Hill Companies, Inc. Permission required for reproduction or display.

Evaluating a Loan Request

1. **The Cs of Credit (Credit worthiness of the borrower)**
   - **Character**
     - **Personal characteristics of borrowers, honesty, specific purpose of loan and serious intent to repay the loan**
   - **Capacity**
     - **Legal authority to sign binding contract and cash flow**
   - **Cash / Capital**
     - **Financial condition of the borrower and ability to generate enough cash to repay loan**

NPTEL

Evaluating a Loan Request…

- Collateral
  - Adequate assets to support the loan
- Conditions
  - Economic conditions faced by borrower
- Control / Compliance
  - Does loan meet written loan policy and how would loan be affected by changing laws and regulations

NPTEL

Evaluating a Loan Request…

2. **Can the Loan Agreement Be Properly Structured and Documented?**
   - This requires drafting a loan agreement that meets the borrower's need for funds with a comfortable repayment schedule
     - If a major borrower gets into trouble because of an inability to service a loan, the lending institution may find itself in trouble
   - Proper accommodation of a customer may involve lending more or less money than requested over a longer or shorter period

NPTEL

Evaluating a Loan Request…

3. **Can the Lender Perfect Its Claim against the Borrower's Earnings and Any Assets That May Be Pledged as Collateral?**
   - **Reasons for Taking Collateral**
     - **If the borrower cannot pay, the pledge of collateral gives the lender the right to seize and sell those assets**
     - **It gives the lender a psychological advantage over the borrower**

NPTEL

Types of Collateral

- Accounts Receivables
- Inventory
- Real Property
- Personal Property
- Personal Guarantees

NPTEL

Structure of Loan Agreement

- Type of credit facility
- Term of the loan
- Method and timing of repayment
- Interest rates and fees to be paid
- Collaterals
- Covenants
- Borrower Guaranties or Warranties

NPTEL

CONCLUSION

- There are multiple ways commercial banks provide loans to customers
- There are many factors considered for evaluation of loan requests that include credit worthiness, willingness to pay and collateral used
- The loan agreement is properly structured having the detailed information about the loans i.e. term to maturity, interest rate etc.

REFERENCES

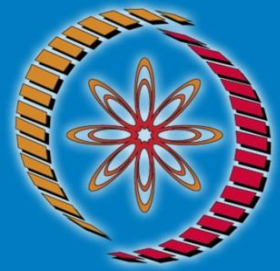
- Bank management & financial services by Rose, P. S., & Hudgins, S. C., McGraw-Hill Education, 2008.
- Commercial banking: The management of risk by Gup, Benton E., and Kolari, James W., John Wiley & Sons Incorporated, 2005.
- Management of Banking, 6e. by MacDonald, Scott. S., & Koch, Timonthy. W, Thomson, 2007

NPTEL



NPTEL

THANK YOU !




NPTEL ONLINE CERTIFICATION COURSES

NPTEL

MANAGEMENT OF COMMERCIAL BANKING

PROF. JITENDRA MAHAKUD
DEPARTMENT OF HUMANITIES AND SOCIAL SCIENCES, IIT KHARAGPUR

Module 04: Management of Lending Activities of Commercial Banks

Lecture 34: Management of Lending Activities-IV

CONCEPTS COVERED

- Charge
- Hypothecation
- Pledge
- Assignment
- Mortgage

NPTEL

Process of Creation of Charge

- The process of transferring ownership in favour of the lender over a security is called charge
- Creation of charge depends on the nature of securities
- Without charge the lender can not have possession over the security

NPTEL

Types of charges

- **Fixed Charge**
  - The identity of the securities remains same throughout life e.g. land, buildings etc.
  - The debtor retains the ownership and possession of the asset
  - Not allowed to dispose without consent of the bank till the liability remains with the bank
- **Floating Charge**
  - The identity or nature of the assets keep on changing e.g. financial assets like stocks
- **Pari Passu Charge**
  - A common charge is created on a single asset in favour of multiple creditors

NPTEL

Types of charges…

- 1st Charge
  - Assets are charged to a creditor first
- 2nd Charge
  - Asset is already charged to one bank and again created for another bank
  - Before creating 2nd charge no objection from the first charge holder should be obtained

NPTEL

Copyright © 2013 The McGraw-Hill Companies, Inc. Permission required for reproduction or display.

Modes of creating charge

- **Hypothecation**
  - It is created on movable assets such as vehicles
  - The ownership as well as possession of the security remains with the borrower
  - Bank can take possession of the securities with the consent of the borrower on default
- **Pledge**
  - Ownership remains with the borrower and possession remains with the bank
  - It is transferred to the borrower according to the payment made to the bank

NPTEL

Modes of creating charge …

- **Assignment**
  - Transfer of right on a security in favour of creditor to receive existing or future benefits.
  - The transferor of the claim is called assignor and transferee is called assignee
  - Financial assets are charged to the bank through assignment e.g. life insurance policy, fixed deposits etc.
- **Mortgage**
  - It is a transfer of interest in specific immovable property (e.g. land) for the purpose of securing payment of advances and loans

NPTEL

Short-Term Loans to Business Firms

- **Self-Liquidating Inventory Loans**
  - These loans are used to finance the purchase of inventory – raw materials or finished goods to sell
  - Such loans take advantage of the normal cash cycle inside a business firm
  - There appears to be less of a need for traditional inventory financing
    - Due to the development of just in time (JIT) and supply chain management techniques

NPTEL Online Certification Courses
IIT Kharagpur
Copyright © 2013 The McGraw-Hill Companies, Inc. Permission required for reproduction or display.

Short-Term Loans to Business Firms …

- **Working Capital Loans**
  - **Short-run credit that lasts from a few days to one year**
  - **Secured by accounts receivable or by pledges of inventory**
  - **Carry a floating interest rate**
  - **A commitment fee is charged on the unused portion of the credit line and sometimes on the entire amount of funds made available**

NPTEL Online Certification Courses
IIT Kharagpur
Copyright © 2013 The McGraw-Hill Companies, Inc. Permission required for reproduction or display.

Short-Term Loans to Business Firms …

- **Interim Construction Financing**
  - Secured short-term loan used to support the construction of homes, apartments, office buildings, shopping centers, and other permanent structures
- **Security Dealer Financing**
  - Dealers in securities need short-term financing to purchase new securities and carry their existing portfolios of securities until they are sold to customers or reach maturity

NPTEL Online Certification Courses
IIT Kharagpur
Copyright © 2013 The McGraw-Hill Companies, Inc. Permission required for reproduction or display.

Short-Term Loans to Business Firms …

- Retailer and Equipment Financing
  - Lenders support installment purchases of automobiles, home appliances, and other durable goods by financing the receivables that dealers selling these goods take on when they write installment contracts to cover customer purchases
- Asset-Based Financing
  - Credit secured by the shorter-term assets of a firm that are expected to roll over into cash in the future
- Syndicated Loans (SNCs)
  - A loan package extended to a corporation by a group of lenders

NPTEL Online Certification Courses
IIT Kharagpur
Copyright © 2013 The McGraw-Hill Companies, Inc. Permission required for reproduction or display.

Long-Term Loans to Business Firms

- Term Business Loans
  - Designed to fund longer-term business investments, such as the purchase of equipment or the construction of physical facilities, covering a period longer than one year
- Revolving Credit Financing
  - Allows a customer to borrow up to a prespecified limit, repay all or a portion of the borrowing, and reborrow as necessary
  - One of the most flexible of all business unsecured loans
  - May be short-term or long-term
  - Lenders normally charge a loan commitment fee
  - Two types: formal loan commitment and confirmed credit line

NPTEL Online Certification Courses
IIT Kharagpur
Copyright © 2013 The McGraw-Hill Companies, Inc. Permission required for reproduction or display.

Long-Term Loans to Business Firms Cont…

- **Long-Term Project Loans**
  - Credit to finance the construction of fixed assets
  - Most risky of all business loans
  - Some of the risks of project loans:
    1. Large amounts of funds are usually involved
    2. The project may be delayed by weather or shortage of materials
    3. Laws and regulations in the region where the project lies may change
    4. Interest rates may change

NPTEL Online Certification Courses
IIT Kharagpur
Copyright © 2013 The McGraw-Hill Companies, Inc. Permission required for reproduction or display.

Long-Term Loans to Business Firms …

- **Loans to Support the Acquisition of Other Business Firms – Leveraged Buyouts**
  - **Leveraged buyouts (LBOs) usually involve acquiring a controlling interest in another firm with the use of a great deal of debt (leverage) to finance the transaction**

NPTEL Online Certification Courses
IIT Kharagpur
Copyright © 2013 The McGraw-Hill Companies, Inc. Permission required for reproduction or display.

CONCLUSION

- The process of transferring ownership in favour of the lender over a security is called charge and creation of charge depends on the nature of securities
- Commercial banks provide various short-term and long-term loans to business units for different purposes

REFERENCES

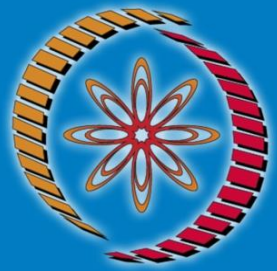
- Bank management & financial services by Rose, P. S., & Hudgins, S. C., McGraw-Hill Education, 2008.
- Commercial banking: The management of risk by Gup, Benton E., and Kolari, James W., John Wiley & Sons Incorporated, 2005.
- Management of Banking, 6e. by MacDonald, Scott. S., & Koch, Timonthy. W, Thomson, 2007
- Commercial Bank Management by Singh, K and Dutta V., McGrawHill Education, 2013.

NPTEL



NPTEL

THANK YOU !




NPTEL ONLINE CERTIFICATION COURSES

NPTEL

MANAGEMENT OF COMMERCIAL BANKING

PROF. JITENDRA MAHAKUD
DEPARTMENT OF HUMANITIES AND SOCIAL SCIENCES, IIT KHARAGPUR

Module 04: Management of Lending Activities of Commercial Banks

Lecture 35: Management of Lending Activities-V

CONCEPTS COVERED

- Analysis of Business Loan Application
- Financial Ratio Analysis: Control over Expenses
- Financial Ratio Analysis: Operating Efficiency
- Financial Ratio Analysis: Marketability of Product or Service
- Financial Ratio Analysis: Coverage

NPTEL

Why to Analyze Business Loan Applications?

- For business loans of large denomination lenders margin of error is very narrow; lending institution itself may be at risk if the loan goes bad
- Lenders must take special care, particularly with loans of large denomination due to large exposure to risk
- Important to create layers of protection around a business loan agreement to ensure return of loan principal and interest earnings by the end of loan agreement

NPTEL

Why to Analyze Business Loan Applications Cont…

- The most common sources of repayment for business loans are:
  1. The business borrower's profits or cash flow
  2. Business assets pledged as collateral behind the loan
  3. A strong balance sheet with ample amounts of marketable assets and net worth
  4. Guarantees given by the business, such as drawing on the owners' personal property to backstop a loan
- If cash flows are inadequate, lender turns to assets whose value fluctuates with production in the economy
- Need to diversify geographically and across different markets and different firms

NPTEL Online Certification Courses
IIT Kharagpur

Analyzing Business Loan Application

- Lenders credit analysis department prepares an analysis of how key figures on borrowers financial statement have changed (last 3 to 5 years)
- Percentage composition ratios , often called common size ratios, control for differences in size of firm
- Comparative analysis of ratios help determine any developing weakness in loan protection, such as decrease in assets pledged as collateral or a reduction in earning power

NPTEL Online Certification Courses
IIT Kharagpur

Analyzing Business Loan Application Cont..

Important Balance Sheet Composition Ratios	
Percentage Composition of Assets	**Percentage Composition of Total Liabilities and Net Worth**
Cash/Total assets	Accounts payable/Total liabilities and net worth (= total assets)
Marketable securities/Total assets	Notes payable/Total liabilities and net worth
Accounts receivable/Total assets	Taxes payable/Total liabilities and net worth
Inventories/Total assets	Total current liabilities/Total liabilities and net worth
Fixed assets, net of depreciation/Total assets	Long-term debt obligations/Total liabilities and net worth
Other (miscellaneous) assets/Total assets	Other liabilities/Total liabilities and net worth
	Net worth/Total liabilities and net worth

NPTEL

Analyzing Business Loan Application Cont..

Important Income Statement Composition Ratios
Percentage Composition of Total Income (gross revenues or sales)
Cost of sales/Sales
Gross profit/Sales
Labor costs (wages, salaries, and fringe benefits)/Sales
Selling, administrative, and other expenses/Sales
Depreciation expenses/Sales
Other operating expenses/Sales
Net operating profit/Sales
Interest expense on borrowed funds/Sales
Net income before taxes/Sales
Income taxes/Sales
Net income after taxes/Sales

NPTEL

Financial Ratio Analysis of a Customer's Financial Statements

- Information from balance sheets and income statements is typically supplemented by financial ratio analysis
- Critical areas of potential borrowers loan officers consider:
  1. Ability to control expenses
  2. Operating efficiency in using resources to generate sales
  3. Marketability of product line
  4. Coverage that earnings provide over financing cost
  5. Liquidity position, indicating the availability of ready cash
  6. Track record of profitability
  7. Financial leverage (or debt relative to equity capital)
  8. Contingent liabilities that may give rise to substantial claims in the future

NPTEL Online Certification Courses
IIT Kharagpur

Financial Ratio Analysis: Control over Expenses

- Barometer of the quality control of business firm's management is how carefully it controls its expenses and how well are the earnings
- Financial ratios used by credit analysts to monitor a firms expense control program include:

✓Wages and salaries/Net sales
✓Overhead expenses/Net sales
✓Depreciation expenses/Net sales
✓Interest expense on borrowed funds/Net sales
✓Interest expense on borrowed funds/Net sales
✓Cost of goods sold/Net sales
✓Selling, administrative, and other expenses/Net sales
✓Taxes/Net sales

NPTEL Online Certification Courses
IIT Kharagpur

Financial Ratio Analysis: Operating Efficiency

- Measure of the business firm's performance effectiveness
- How effectively are assets being utilized to generate sales?
- How efficiently are sales converted into cash?
- Important financial ratios here include:
  i. Annual cost of goods sold/Average inventory (or inventory turnover ratio)
  ii. Net sales/Net fixed assets
  iii. Net sales/Total assets
  iv. Net sales/Accounts and notes receivable
- Average Collection period = Accounts receivable /(Annual credit sale/360)

NPTEL Online Certification Courses
IIT Kharagpur

Financial Ratio Analysis: Marketability of Customer's Product/Service

- Repay of loan also depends on the business customer's ability to market goods, services, or skills successfully
- Lender has to assess the public acceptance of what the business customer has to sell by analyzing factors such as growth rate of sales revenue, market share, gross profit margin(GPM), and net profit margin (NPM)

$$\text{GPM} = \frac{\text{Net sales} - \text{Cost of goods sold}}{\text{Net sales}}$$

$$\text{NPM} = \frac{\text{Net income after taxes}}{\text{Net sales}}$$

NPTEL Online Certification Courses
IIT Kharagpur

Financial Ratio Analysis: Coverage Ratio

- It measures the adequacy of earnings
- Coverage refers to the protection afforded creditors based on the amount of a business customer's earnings
- The best-known coverage ratios include:

$$\text{Interest coverage} = \frac{\text{Income before interest and taxes}}{\text{Interest payments}}$$

$$\text{Coverage of interest and principal payments} = \frac{\text{Income before interest and taxes}}{\text{Interest payments} + \dfrac{\text{Principal repayments}}{1 - \text{Firm's marginal tax rate}}}$$

$$\text{Coverage of all fixed payments} = \frac{\text{Income before interest, taxes, and lease payments}}{\text{Interest payments} + \text{Lease payments}}$$

NPTEL

Financial Ratio Analysis: Liquidity Indicator

- **Reflects the borrower's ability to raise cash in timely fashion at reasonable cost, including the ability to meet loan payments when they come due**

$$\text{Current ratio} = \frac{\text{Current assets}}{\text{Current liabilities}}$$

$$\text{Acid-test ratio} = \frac{\text{Current assets} - \text{Inventory}}{\text{Current liabilities}}$$

$$\text{Net liquid assets} = \text{Current assets} - \text{Inventory} - \text{Current liabilities}$$

$$\text{Net working capital} = \text{Current assets} - \text{Current liabilities}$$

NPTEL

Financial Ratio Analysis: Liquidity Indicator Cont..

- Commercial lenders are particularly sensitive to changes in customer's liquidity position; conversion of liquid assets, including cash accounts usually fund loan repayments
- Erosion of customers liquidity position increases the risk that the lender will have to attach the customer's lesser liquid assets to recover funds; hence time consuming, costly and uncertain
- Excess liquidity has forgone opportunity cost in terms of income producing assets
- Excess liquidity also invites dishonest managers and employees to "take the money and run"

CONCLUSION

- Business loan applications are properly analyzed before providing loans
- The financial statement analysis and more particularly the financial ratios are analyzed to examine the credit worthiness of the business units.

REFERENCES

- Bank management & financial services by Rose, P. S., & Hudgins, S. C., McGraw-Hill Education, 2008.
- Commercial banking: The management of risk by Gup, Benton E., and Kolari, James W., John Wiley & Sons Incorporated, 2005.
- Management of Banking, 6e. by MacDonald, Scott. S., & Koch, Timonthy. W, Thomson, 2007

NPTEL



NPTEL

THANK YOU !