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BA4003

BANKING AND FINANCIAL SERVICES

BA4003 BANKING AND FINANCIAL SERVICES

UNIT I INTRODUCTION TO INDIAN BANKING SYSTEM AND PERFORMANCE EVALUATION 9 Overview of Indian Banking system – Structure – Functions – Key Regulations in Indian Banking sector –RBI Act, 1934/ 2006 –Banking Regulation Act, 1949– Negotiable Instruments Act 1881/ 2002 – Provisions Relating to CRR – Provision for NPA's - Overview of Financial Statements of banks – Balance Sheet – Income Statement - CAMEL

UNIT II MANAGING BANK FUNDS/ PRODUCTS & RISK MANAGEMENT 9 Capital Adequacy – Deposit and Non-deposit sources – Designing deposit schemes and pricing of deposit sources – loan management – Investment Management – Asset and Liability Management – Financial Distress –Signal to borrowers – Prediction Models – Risk Management – Interest rate – Forex – Credit market –operational and solvency risks – NPA's – Current issues on NPA's – M&A's of banks into securities market

UNIT III DEVELOPMENT IN BANKING TECHNOLOGY 9 Payment system in India – paper based – e payment –electronic banking –plastic money – e-money –forecasting of cash demand at ATM's –The Information Technology Act, 2000 in India – RBI's Financial Sector Technology vision document – security threats in e-banking & RBI's Initiative.

UNIT IV ASSET BASED FINANCIAL SERVICES 9 Introduction – Need for Financial Services – Financial Services Market in India –NBFC – RBI framework and act for NBFC – Leasing and Hire Purchase – Financial evaluation – underwriting – mutual funds

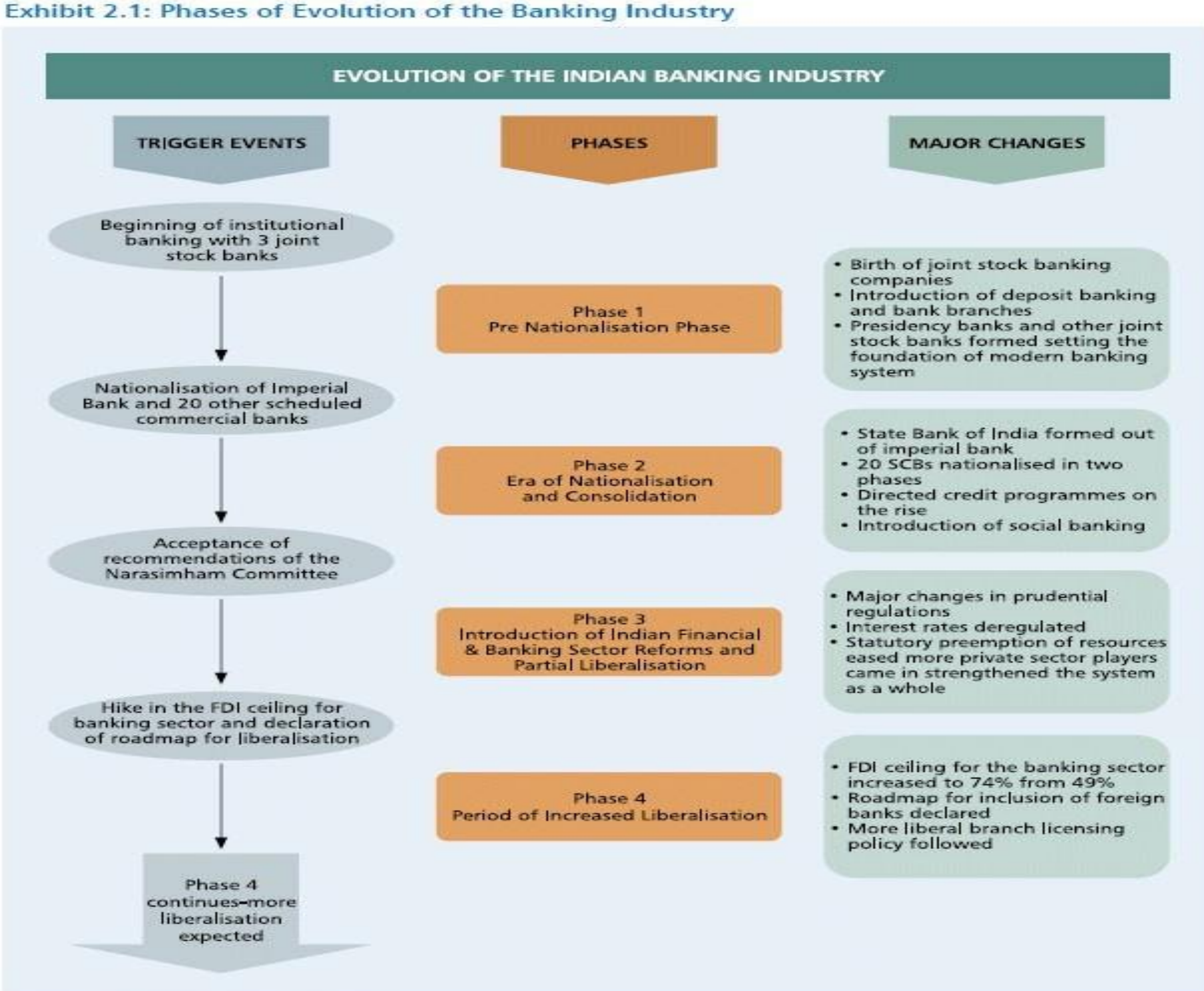
UNIT V INSURANCE AND OTHER FEE BASED FINANCIAL SERVICES 9 Insurance Act, 1938 –IRDA – Regulations – Products and services –Venture Capital Financing –Bill discounting –factoring – Merchant Banking – Role of SEBI

CHAPTER I

OVERVIEW OF INDIAN BANKING SYSTEM

EVOLUTION OF BANKING SECTOR

Exhibit 2.1: Phases of Evolution of the Banking Industry



Source: D&B Industry Research Service

- Phase I- Pre-Nationalisation Phase (prior to 1955)
- Phase II- Era of Nationalisation and Consolidation (1955-1990)
- Phase III- Introduction of Indian Financial & Banking Sector Reforms and Partial Liberalisation (1990-2004)
- Phase IV- Period of Increased Liberalisation (2004 onwards)

<u>1991-1992</u>

- Sub phases 1) 1991-92 to 1997-1998 2) 1997-98 beyond
- Balance of payment problem

<u>Narasimham committee I</u>

- There is no bar to new banks being set up in private sector.
- No treatment between public & private sector sectors.
- Asset reconstruction fund
- Recover bad debts through tribunals
- Branch licensing should be abolished

<u>Narasimham committee II</u>

- Rehabitalization of weak banks
- 2 or 3 large indian banks should be given an international character.
- Formulation of corporate strategy
- Capital adequacy
- Speed up of computerization &relationship banking
- Review the recruitment procedure

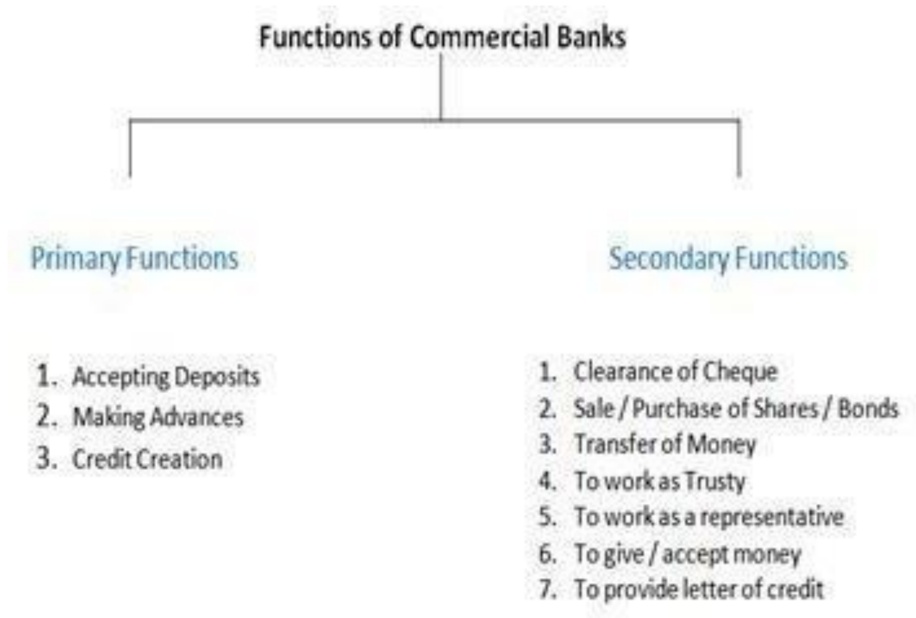
<u>Raghuram Rajan committee</u><u>(committee on financial sector reforms-2009)</u>

- Macro economic framework and financial sector development
- Broadening access of finance
- Creating more efficient and liquid market
- Creating a growth friendly & regulatory framework
- Creating a robust infrastructure for credit.

Definition of Banking

According to the Indian Banking Companies Act **,** "Banking Company is one which transacts the business of banking which means the accepting for the purpose of lending or investment of deposits money from the public repayable on demand or otherwise and withdrawable by cheque, draft, order or otherwise".

FUNCTIONS OF BANKS



The functions of a bank may broadly be divided into two parts.

- Basic or primary functions.
- Secondary functions.

Bank offers to deposit money in any of the following accounts:

Current or Demand Account(one where the amount can be withdrawn at any time by the depositor.)

Saving Account (helps in mobilization of the saving of low income people)

Fixed Deposit Account or Term Deposit Account:(which amounts are deposited for a certain fixed period of time. The deposits cannot be withdrawn before the expiry of this fixed period)

Foreign Currency Account(foreign currency saving account or foreign currency term deposit account)

Advancing Loans:

Banks grant loan in any of the following forms:

Overdraft is a short-term loan granted by commercial banks to their account holders. Under this type of loan, the customers are allowed to draw more than what they have in their current account up to a certain limit. The excess amount overdrawn is called overdraft.

Cash Credit:

Cash credit is a very common form of loan granted by commercial banks to businessmen and industrial units against the security of goods. The loan granted under this head is credited to current account opened in the name of borrower. The borrower can withdraw money through cheques according to his requirement. The interest is charged on the amount actually withdrawn by the borrower.

Loans:

Commercial banks grant loans for short and medium-term to individuals and traders against the security of movable and immovable property. The amount of loan is credited to the borrower's account. Interest is charged on the entire loan sanctioned.

Agency functions

- General utility functions
- Miscellaneous functions
- Agency Functions:
- The banks render important services as agent on behalf of their customers in return for a small commission. When banks act as agent, law of agency applies. The agency functions or services of bank are as follows:

Collection of Cheques:

- The commercial banks collect dividends, interest on investment, pension and rent of property due to the customers. When any income is collected by the bank, a credit voucher is sent to the customer for information.

Acts as trustee:

- The banks act as trustee to manage trust property as per instructions of property owners. Banks are required to follow the terms and conditions of trust deed.

Acts as an agent:

- Commercial bank sometimes acts as an agent on behalf of its customers at home or abroad in dealing with other banks or financial institutions.

Obeys standing instructions:

- Sometimes, customer may order his bank to do something on his behalf regarding the conduct of his account. This written order is called standing instruction. The bank being the agent of its customer obeys the standing instructions.

Acts as tax consultant:

➢ Commercial bank acts as tax consultant to its client. The commercial bank prepares general sales tax return, income tax return, etc. Tiles the same with tax authorities.

➢ General Utility Functions:

➢ Provides lockers facilities:

➢ Issue of traveler's cheque(customers for traveling in and outside the country.)

➢ Foreign exchange:exchange of their home currency

➢ Transfer of money:provide facilities for the transfer of money to any place within and outside the country

➢ Finances foreign trade:accepting foreign bills of exchange.

➢ Trade information:provide trade information and tender advice to its customers

➢ Modaraba Company:The commercial banks act as Modaraba and leasing companies under the provisions of Modaraba Companies Ordinance, 1980.

Purchase PTCs:

➢ Commercial banks underwrite or purchase Participation Term Certificate (PTCs), Term Finance Certificates (TFCs) and Modaraba Certificates. This helps the companies to raise their capital.

Financial standing:

➢ Commercial banks answer reference letters regarding the financial standing and business reputation of customers. Banks provide this information with great care and utmost secrecy.

➢ Commercial banks provide facilities for the collection of utility bills from general public on behalf of government bodies. This facilitates the public to pay utility bills in time.

Zakat Collection:

➢ Commercial banks collect Zakat from their account holders and deposit the same into Central Zakat Fund, according to Zakat and Usher ordinance - 1980.

Hajj services:

➢ The commercial banks provide free Hajj sendees to the intending pilgrims. Banks receive Hajj applications. Banks also facilitate to form Hajj groups. Banks make necessary arrangements for the training of intending pilgrims,

Qarz-e-Hasna:

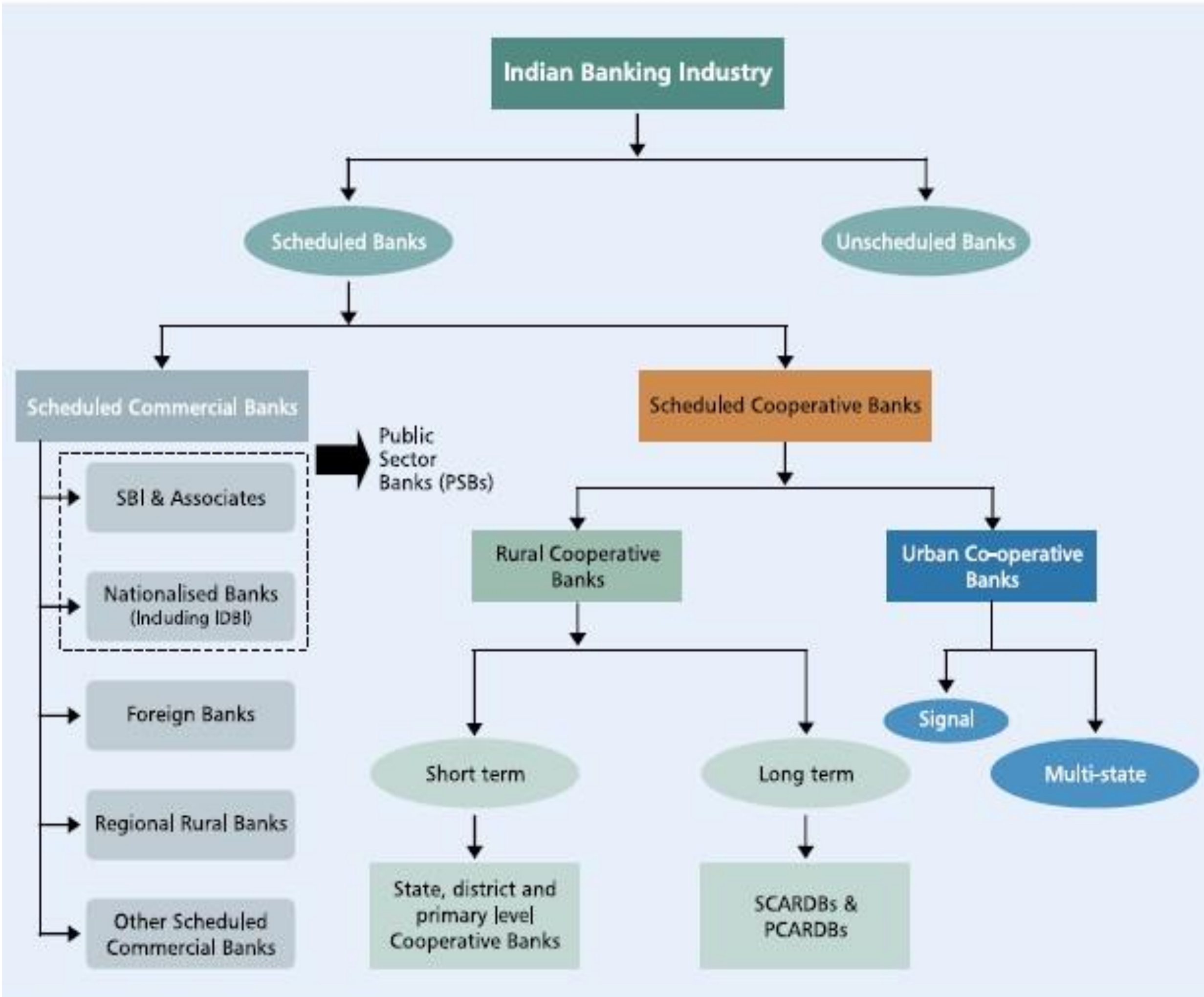
- The commercial banks provide Qarz-e-Hasna to deserving patients for medical treatment and to students for higher studies within the country and abroad. The Qarz-e-Hasna is refund Ale in easy installments,

Electronic banking and E-banking:

- Electronic banking is offering improved services to the customers as fellows:
- ATM Cards
- Credit Cards
- Electronic transfer of money

Types of banks

Exhibit 2.2: Structure of the Organised Banking Industry



Source: D&B Industry Research Service

1. Central Bank

❖ Apex controlling institution in the banking and financial system.

Functions

❖ controller of credit,

❖ banker's bank

❖ issuing currency

2. Commercial Banks

❖ Accepts deposits from the general public

❖ loans to the households, the firms and the government.

Characteristics

- ❖ Acceptance of deposits from public
- ❖ For the purpose of lending or investment
- ❖ Repayable on demand or lending or investment.
- ❖ Withdrawal by means of an instrument, whether a cheque or otherwise.

3. Development Banks

- ➢ It is considered as a hybrid institution (functions of a finance corporation and a development corporation).
- ➢ To provide technical, financial and managerial assistance for the implementation of project.
- ➢ 'Industrial Development Bank on India' (IDBI)

4. Co-operative Banks

- ➢ To provide finance to agriculture.
- ➢ They aim at developing a system of credit.

In India there are three wings of co-operative credit system namely

- ➢ Short term,
- ➢ Medium-term,
- ➢ Long term credit.

5. Specialised Banks

- ➢ Special act of parliament.
- ➢ 'National Bank for Agricultural and Rural development' (NABARD) established in 1982
- ➢ In 1990 a special bank named small industries development Bank of India (SIDBI) was established.

6. Indigenous Bankers

- ➢ To provides long term, medium term and short term loan at the higher interest rate
- ➢ These banks can be found everywhere in cities, towns, villages.

7. Rural Banking

- ➢ A set of financial institution engaged in financing of rural sector is termed as 'Rural Banking'.
- ➢ The polices of financing of these banks have been designed in such a way so that these institution can play catalyst role in the process of rural development.

8. Saving Banks

- These banks perform the useful services of collecting small savings commercial banks also run “saving bank” to mobilise the savings of men of small means.
- Different countries have different types of savings bank

viz. Mutual savings bank, Post office saving, commercial saving banks etc.

9. Export - Import Bank

- Established for the purpose of financing foreign trade.
- Medium and long-term financing.
- The Export-Import Bank of India (EXIM Bank) January 1, 1982.

10. Foreign Exchange Banks

- These banks finance mostly to the foreign trade of a country.

- They also buy and self foreign currencies and help businessmen to convert their money into any foreign currency they need.
- Over a dozen foreign exchange banks branches are working in India have their head offices in foreign countries.

KEY ACTS GOVERNING THE FUNCTIONING OF INDIAN BANKING SYSTEM

The RBI ACT 1934

- Central bank of the country
- Established in April 1935 with a share capital of Rs. 5 crores
- Recommendation-Hilton Young Commission.
- The share capital was divided into shares of Rs. 100 each fully paid .
- Reserve Bank of India was nationalized in the year 1949
- Organisation structure
- Central Board of Directors - 20 members,
- One Governor-1
- Deputy Governors-4

- one Government official from the Ministry of Finance, ten nominated Directors by the Government
- **four** nominated Directors by the Central Government to represent the four local Boards with the headquarters at Mumbai, Kolkata, Chennai and New Delhi.
- Local Boards consist of five members each Central Government appointed for a term of four years to represent territorial and economic interests and the interests of co-operative and indigenous banks.

Role of RBI

Monetary Role

a) Note issuing authority

b)banker's bank and Lender ofthe last resort

c) Banker to the Government

d) Custodian of foreignexchange reservese) Control of credit

Non Monetary Role

a)Collection and publication of data

b)regulatory and supervisory Function

c)Development and promotionfunction

CHAPTER I – PRELIMINARY

- It extends whole of india

CHAPTER II – Incorporation,management&business

- Capital - crores
- Mgt- central govt

CHAPTER IIIA : COLLECTION AND FURNISHING OF CREDIT INFORMATION:

Provisions regarding the power of the bank to collect credit information,

- nature of loans
- Advances
- Credit facilities

procedure for furnishing information and prohibited information

- credit information as may be specified in the application.
- The Bank may in respect of each application levy such fees, not exceeding

- twenty-five rupees, as it may deem fit for furnishing credit information.

Chapter IIIB: Provisions relating to non-banking institutions receiving deposits and financial institutions:

Chapter IIIC: Prohibition of acceptance of deposits by unincorporated bodies:

Chapter IIID: Regulation of transactions inderivatives, money market instruments or securities:

- Derivatives,
- Money market instruments,
- repo and securities

Chapter IV : General Provisions

- Contribution of central government to reserve funds,
- National, Rural, Industrial and housing credit,
- appointment,
- Powers and duties of auditors,
- Exemption of banks from income tax,
- Delegation of powers,
- Liquidation of the bank etc.

Chapter V Penalties:

- Penalities for any person, directors,auditor and company who ever makes a wrong statement willfully,(application,declaration, return, advertisement,book, account, document)

NEGOTIABLE INSTRUMENTS ACT 1881

Object of the Act

The main object

- to legalise the system by which instruments could pass from hand to hand by negotiation like any other goods.
- Rules of law relating to the negotiable instruments
- provide special procedure in case the obligation under the instrument was not discharged.

Preamble: Applicable extends to whole over india

- It was originally drafted in 1866 by the law commission of india

Negotiable instrument

- it is a written document which creates a rights in the favour of somebody and is freely transferable by delivery

Features

- Free transferability or easily negotiability
- Title of holder is free from all defects
- Transferee can sue in his own name with out giving notice to the debtor

Types of NI

- Recognished by status(bills of exchange,cheque)
- Recognished by customs or usage(banknotes)

Section 4. "Promissory Note"

- A 'Promissory Note' is an instrument in writing (not being a bank-note or a currency-note) containing an unconditional undertaking, signed by the maker, to pay a certain sum of money only to, or to the order of, a certain person, or to the bearer of the instrument.

Kinds of Promissory Notes

- Sec.4 recognizes three kinds of promissory notes :
- A promise to pay a certain sum of money to a certain person,
- A promise to pay a certain sum of money to the order of a certain person, and
- A promise to pay the bearer:

Section 5 : "Bill of Exchange"

- A "bill of exchange" is an instrument in writing containing an unconditional order, signed by the maker, directing a certain person to pay a certain sum of money only to, or to the order of, a certain person or to the bearer of the instrument.

Features

- A bill of exchange has the following features:
- A bill of exchange is an instrument in writing.
- It must be signed by the maker or drawer. Unsigned document will not be legally valid.
- It contains an unconditional order. There is no condition attached to it.
- The order must be to pay money and money only.
- The sum payable must be specific.

- The money must be payable to a definite person or to his order or to the bearer.

Following are Bills of Exchange

- A banker's draft
- A demand draft even if it drawn upon another office of the same bank
- An order issued by a District Board EngineeronGovernment Treasury for payment to or order of a certain person.

Section 6 : "Cheque"

- A "cheque is a bill of exchange drawn on a specified banker and not expressed to be payable otherwise than on demand and it includes the electronic image of a truncated cheque and a cheque in the electronic form.

Section 6 : "Cheque"

- Explanation I – For the purpose of this section, the expression
- " **a cheque in the electronic form**" means a cheque which contains the exact mirror image of a paper cheque, and is generated, written and signed in a secure system ensuring the minimum safety standards with the use of digital signature and asymmetric crypto system ;
- " **a truncated cheque**" means a cheque is truncated during the course of a clearing cycle, either by the clearing house or by the bank whether paying or receiving payment, immediately on generation of an electronic image for transmission, substituting the further physical movement of the cheque in writing.
- Features:
- cheque is an instrument in writing,
- containing an unconditional order,
- signed by the maker, directing a specified banker to pay, on demand, a certain sum of money only to,to the order of, a certain person or to the bearer of the instrument..
- a cheque is an order by the account holder of the bank directing his banker to pay on demand, the specified amount, to or to the order of the person named therein or to the bearer

Types of cheque

- Bearer cheque(**or bearer)**–appear on face of the cheque)

- Order cheque (or order)
- Uncrossed/open cheque(cheque is not crossed)
- Crossed cheque
- (drawing two parellel line to theface of the cheque with or without additional words like a/c payee, not negotiable etc.
- Antidated cheque
- cheque bears a date earlier than the date on which it is presented to the bank.
- Post dated cheque
- cheque bears a date which is yet to come(future date)
- Stale cheque
- cheque is presented for payment after three months from the date of cheque is called

Section 7 "Drawer" "Drawee"

- The maker of a bill of exchange or cheque is called the "drawer", the person thereby directed to pay is called the "drawee"
- Drawee in case of need
- Acceptor
- Acceptor for Honour
- Payee

Holder in due course (Sec 9)

- Holder in due course means any person, who for consideration became the possessor of a promissory note, bill of exchange or cheque if payable to the bearer,

Section 10 – Payment in Due Course

- "Payment in due course" means payment in accordance with the apparent tenor of the instrument in good faith and without negligence to any person in possession thereof under circumstances which do not afford reasonable ground for believing that he is not entitled to receive payment of the amount mentioned therein.

Negotiation

Negotiation (Sec 14)

- When a promissory note, bill of exchange or cheque is transferred to any person, so as to constitute that person the holder thereof, the instrument is said to be negotiated.

Endorsement (Sec 15)

- A cheque or bill is endorsed when the transferer puts his signature on the back or on an along with a cheque anda bills as a part of negotiation.

Preasumption(sec 118-119)

- For consideration
- As a date
- As time to acceptance
- As to transfer
- As to time of endorsement
- As to dishonour
- Modes of negotiation
- Negotiation by delivery(sec47)
- Negotiation by endorsement &delivery(sec 48)

Classess of endorsement

- blank or endorsement(sec16&54) endoser signs but does not give the name to whom wish he transfer.
- Special or full endorsement(sec 16) endoser signs and specifys the person name to whom wish he transfer.
- Partial endorsement(sec56) endoser signs and specifys the part of the amount payable.
- Restrictive endorsement(sec50) restrictions
- Facultative endorsement(rights)
- Sans endorsement(does not liable for expenses incurred by endorsee)
- Instrument without consideration(sec 43-45)
- Notice to dishonour(sec 93)
- Notice by whom(sec 95)
- Discharge

BANKING REGULATION ACT 1949

Introduction

- No separate Act for Banking in India. Till 1949,
- controlled by Indian Companies Act 1956.

- Recommendation of banking enquiry committee (inadequate capital, dishonest management, speculative business)
- A bill was introduced in parliament in March 1948.
- It was Passed in parliament in February 1949 and The Banking Regulation Act 1949 came to exist from 16 th March 1949.

Important Provisions of Act:

- Definition of Banking.
- Form of Business.
- Provision of Capital Management
- Maintenance of Liquid Assets.
- Licensing of Banks.
- Opening of New Banks.
- Provision Regarding Loans and Advances.
- Inspection of Banks.
- Powers of the Reserve Bank of India.
- Returns to Be Submitted.
- Acquisition of Business.
- Mergers/Amalgamations.
- Winding up of Banking Companies.

Definition of Banking:

Sec 5 (b) of the Act defines Banking as, "**Accepting for the purpose of lending** or investment, of deposits of money from the public, repayable on demand or other wise, and withdrawable by cheque , draft, order or otherwise."

Banking Company: Sec 5 (c) of the Act defines Banking as, "A company which transacts the business of banking in India."

Forms of business:SEC 5 (c) and 6

It consist of

Main Functions/Business

- Borrowing , raising up money& lending of money with or without security.
- Granting and issuing of letters of credit.

- Buying and selling of foreign exchange.
- Acquiring, holding, issuing on commission regarding all investments.
- Negotiating of loans and advances.

Subsidiary Functions/Business:

- Act as an agent of the government, local authority or person.
- Establish a good rapport between employees & banks.

A bank cannot carrying on trading activities. (Sec 8)

It cannot hold any immovable property except for its own use exceeding 7 years .(Sec 9)

(Sec 10) KINDS of business CANNOT BE DONE

PROVISIONS OF CAPITAL Banking

Companies Incorporated In India

- aggregate value of paid up capital reserve should be Rs 50,000.
- aggregate minimum paid capital and reserves of Rs 5,00,000, plus in respect of each place of business .
- Subject of an overall limit of Rs 10,00,000.

Incorporated OUTSIDE India:

- Aggregate minimum paid up capital and reserves of Rs 20,00,000 (Bombay or Calcutta or Both)
- Aggregate minimum paid up capital and reserves of Rs 15,00,000. Incorporated OUTSIDE India

Capital:

Ordinary shares& pay dividend

Total voting rights of all the share holders shall not exceed 1 %

Reserve Fund: Sec 17

Before declaring dividend, transfer a sum not less than 20% of its net profit

Management of banking company

Management: Sec 10 A,

a) have special knowledge or practical experience in Accountancy, agriculture , rural economy, banking, economics and law.

b)At least 2 of them have in cooperation and small scale industry.

c) they shall not have any substantial interest or connection with anyone of any company or firm.

Chairman: It should have a Director as its whole time or part time chairman of the banking company.

Maintainance of liquidity :

Statutory liquidity ratio: Sec 24,

Every banking company in India is required to maintain cash, gold, or unencumbered approved security, valued at a price not exceeding the current market price and not less than 23 % of its time and demand liabilities.

Cash Reserve: Sec 18

Every banking company should maintain 4.25% of total of its time and demand deposits in the form of cash reserves with RBI.

Powers of the Reserve Bank

- Powers of the reserve bank Election of New Directors.
- Maintaining Cash Reserves.
- Power to issue license to new banks.
- Power to cancel license.
- Power to give permission for starting new branches.
- Power of inspection.
- Power to issue directions.
- Power to control management.
- Power to advice banks.
- Power to call for information.
- Power to appoint liquidator.

Licensing of banks

- Obtain a license from the RBI before commencing the business.
- Grand license only after the detailed inspection considering so many factors.
- It should obtain prior permission from Reserve Bank of India for opening new place of business either in or abroad and also for changing the location.

Entry norms for private banks

- Initial minimum paid up capital should be 200 Crore and have to be raised to 300 Crore within 3 years of commencement of Business.
- Promoters contribution should be minimum of 40% paid up capital,
- NRI participation in banks equity shall not be exceed than 40 %.
- No large industrial house can promote a new bank.

Return filing

submit returns on the last Friday of every month or just preceding day if that day is a public holiday.

Acquisition of business (Sec 36 AE to 36 AJ)

- Recommendation of RBI
- Central government shall give a reasonable opportunity to the bank to explain their stand

Winding up of business (Section 44 A)

Rights and obligations of a banker

Rights

- Rights of general lien
- Rights to set off
- Rights of appropriation
- Rights to charge interest,levy charges

Right of Lien

The right of a creditor (Bank) to retain goods and securities owned by the debtor bailed (as security) to the bank until the loan due from the debtor is repaid is called the right of lien. But the banker can insist on lien only in the absence of an agreement to the contrary. The creditor (bank) has the right to maintain the security of the debtor but not to sell it. There are two types of lien such as :

- Particular Lien
- General Lien

Particular Lien

Particular lien is one, in that the craftsman can retain those goods on which he has spent time, effort and money until he is paid. In Particular lien the creditor doesn't have the right to retain all the properties of the debtor.

General Lien

General lien gives the banker the right to retain goods and securities delegated to him in his capacity as a banker, in the absence of a contract contradictory to the right of lien. It extends to all goods/properties placed with him as a banker by his customer which are not particularly identified for another purpose.

Cases in which lien cannot exercise :

If the goods and securities have been entrusted to the banker as a trustee or an agent

If a contract exists between the banker and the customer that is contradictory with the banker's right of general lien

A banker's lien is more than a general lien, it is an implied pledge and he has the right to sell the goods in case of default. The right of lien is granted upon the banker by the Indian Contract Act and it helps to avoid the need of a separate agreement. To be in a safe position the banker should take a letter of lien stating that the goods/ properties are entrusted as security for a loan at present and in future and that the banker can exercise his lien on them. The banker can also sell the goods if the customer doesn't make the payment (defaults).

- The banker can exercise the right of lien only on goods standing in the name of the borrower and not jointly with others.
- The banker can exercise his right of lien on securities remaining in his possession after the loan for which they were lodged is repaid by the customer only if there is no contract to the contrary.

Exception to the Right of lien :

- The banker cannot exercise the right of lien lien on valuables entrusted to the banker as a bailee or trustee.
- Right of lien is not applicable on documents deposited for a special purpose or with specific instruction that the earnings are to be utilized for a specific purpose.
- The banker's general lien is displaced by circumstances that show an implied agreement contradictory to the right of general lien.

- The banker has no right of lien on securities left with the banker negligently or unintentionally.
- The banker doesn't have the right of lien on securities deposited as a trustee in respect of his personal loan.
- The banker's right of lien extends over goods and securities handed over to him. Money deposited in the bank and credit balance in his/her account does not fall in the category of goods and securities. Therefore the banker can use his right of setoff as opposed to lien with regard to money deposited with him.
- The right can be exercised only on the customer's property and not on joint accounts the customer.
- The banker cannot have the right to exercise the lien when the debt has not matured.
- The banker cannot exercise the lien when he can exercise set off.

Right of set-off

The banker has the right to set off the accounts of its customer. This enables a debtor (Bank) to set off a debt owed to him by a creditor (customer) before the latter recovers a debt due to him from the debtor. Banks can merge two accounts in the name of the same customer and set off the debit balance in one account with the credit balance in the other. But the funds should belong to the customer.

The right of set-off can be exercised only if there is no agreement express or implied that is divergent to this right. It can be exercised only after a notice is served on the customer informing the customer that the banker is going to exercise the right of set-off. To be on the safe side bankers must take a letter of set-off from the customer authorizing the bank to exercise the right of set-off without giving him any notice.

Automatic right of set off

Sometimes the set off will happen automatically, it depends on the situation. In automatic set off there is no need of permission from the customer. The cases in which automatic set off can exercise are as follows :

- In case of the death of the customer.
- When the customer becomes insolvent.

- If a Garnishee order is issued on the customer's account by court.
- When a notice of assignment of credit balance to someone else is given by the customer to the banker.
- When a bank receives the notice of second mortgage on the securities already charged to the bank.

Conditions while exercising right of Set - Off :

- The accounts must be in the same name and same right. The account should be in the sole name of the customer
- Funds held in trust accounts are not allowed to set off.
- The right cannot be exercised in respect of future or contingent debts.
- The amount of debts must be certain and measurable.
- The banker might exercise this right at his judgment.
- The banker has the right to exercise this right before a garnishee order is issued.
- There should not be any agreement to the contrary.

Right of Appropriation

In the normal course of business, a banker accepts payments from customers. If the customers have more than one account or he/she has taken more than one loan, the customer has the right to direct his banker against which debt the payment should be appropriated/settled. If the customer does not direct the banker and there is more than one debt outstanding in his/her name, the bank can exercise its right of appropriation and apply it in payment of any debt. The banker can apply it against time barred debts also.

Right to charge interest

The banker has an implied right to charge interest on the advances granted to its customer. Bankers generally charge interest monthly, quarterly or semiannually or annually. There may be an agreement between the banker and customer in this case the manner agreed will decide how interest is to be charged.

Right to charge service charges

- Banks charge customers a particular amount if their balance is below a predetermined amount, for the usage of ATMs and withdrawals.

- Banks are free to charge these but the Reserve Bank of India expects banks to advise their customers of these charges at the time of opening an account and advise them when changes are being made.

Obligations

- Banks have an obligation to honour the cheques drawn on it if the customer has sufficient funds in his account. It is also obliged to honor cheques up to the overdraft limit of a customer.
- Banker is bound to act as per the directions given by the customer. If directions are not given the banker should act according to how he is expected to act.
- Care should be taken to make sure that the information given is general and only facts that are evident should be revealed.
- Banks are obliged to maintain secrecy of their client accounts. There are times when information may be revealed.

Overview of Financial statement of banks

OVERVIEW OF FINANCIAL STATEMENT

- Balance sheet
- Income statement

Balance sheet(banking regulation act ,1949,sec 29)

Every banking company is required to prepare with reference to that year a balance sheet & p/L account as on the last working day of the year in the form(a)&form(b) respectively set out in the third schedule .

- **New form**
- **Assets &liabilities are shown in vertical form**
- **Liabilities are shown in top line**
- **Assets are shown in bottom line**

Income statement/profit &loss account statement

- It is a statement which shows the incomes &expenses of the bank.
- It is a type of flow report, as compared to the balance sheet, which is a status report .

- It is perpared in vertical form.

<u>Focuses on</u>

- Inflows(income)
- Outflows(expenses)

Net income/profit/net earning:(revenues exceeds the expenses)

Net loss:(expenses exceeds the revenues)

Form'b' of the Third schedule of the banking regulation Act 1949 is used.

<u>Sections</u>

- Income
- Expenditure
- Profit/loss
- Appropriations

Relationship between balance sheet & income statement

Authorized capital

It is the total of the share capital which altd company is allowed to issue.it presents the upper boundary for the actually issued share capital.

Issued share capital

The total of share capital allocated to shareholders. less than authorised capital.

Subscribed capital

it is the portion of the issued capital which has been subscribed by all the investors including the public.

Called up share capital

It is the total amount of issued capital for which the shareholders are required to pay.this may be less than the subscribed capital

Paid up share capital

Is the amount of share capital paid by the shareholders. This may be less than the called up capital as payments may be in instalments.

Reserves

Capital reserves:

These are created in particular situation such as revaluation of assets,issue of shareas and debentures at premium.

Statutory reserves

Reserves(profit) appropriate for compliance of any law.

Share premium:

Amount paid by shareholders for shares in excess of their nominal value

Balance sheet and Income Statement.

Balance sheet as on 31/3/…..(Form A)

Particulars	schedule	As on 31/3/…. Current year	As on 31/3/…. previous year
Liabilities Capital Reserves &Surplus	 1 2		
Net Worth—1			
Deposits Borrowings	3 4		
TOTAL DEBT---2			
Other liabilities&provisions	5		
Total Other liabilities&provisions—3			
Total Liabilities(1+2+3)			
Assets Cash&balances with RBI balances with banks &money at call &short notice advancement &loans Investment Fixed assets Other assets	 6 7 8 9 10 11		

Total Assets			
Contingent liabilities Bills for collection	12		

P/L Account as on 31/3/…..(Form B)

Particulars	**schedule**	**As on 31/3/…. Current year**	**As on 31/3/…. previous year**
Income Interest earned Other income	 13 14		
TOTAL INCOME			
Expenditure Interest expanded Operating expenses Provisions &contingencies	 15 16		
TOTAL EXPENDITURE			
p/L Net profit/net loss			
TOTAL			
Appropriations Transfer to statutory reserves Transfer to other reserves Balance carried over to balance sheet			
TOTAL			

UNIT II SOURCES AND APPLICATION OF BANK FUNDS

CAPITAL ADEQUACY: Capital to risk (weighted) asset ratio

- A bank should have a sufficient capital to provide a stable resources to absorb any losses arising from the risks in its business
- Ratio of a bank's capital to its risk.
- **Bank for international settlements(BIS)** banks must have a primary capital base equal at least to 8% of their assets& a bank that lends 12 dollars for every dollar of its capital is within a prescribed limit

Norms

- Basel committee for bank supervision(BCBS)- framed norms(capital requirements) 1988 known as Basel Accord I
- To absorb unexpected losses or risks involved.
- Higher the risk , it would be needed to back up with capital &vice versa.

Formula

$$CAR = \frac{\text{Tier one capital} + \text{Tier two capital}}{\text{risk weighted assets}}$$

Tier one capital= (paid up capital +statutory reserves+disclosed free reserves)- (equity investments in subsidiary+ intangible assets +current & profit/loss)

Tier two capital= General loss reserves + hybrid debt capital instruments & subordinated debts.

Risk weighted assets: Risk& weight is calculated differently for each types of loan

DEPOSITS AND NON DEPOSITS SOURCES

Deposits

Meaning

It is a sum of money paid into a bank (or) building society account

Parameters to determine the fund mobilization

- Maturity
- Cost of funds

- Tax implications
- Regulatory Framework
- Market conditions

DEPOSITS

Sources of deposits

Parameters

- Type of deposit customers
- Tenure of deposits
- Cost of banks

Classification of deposits 1.Transaction deposits/payment deposits

- These deposits are repayable by the bank on demand from the depositors.
- interest bearing deposits(individual & saving a/c)
- Non interest bearing deposits(low rate of interest)

2.Term deposits:

The customers receives a stream of cash flows in the form of interest. These deposits typically the high rate of interest.

Example

USA –MMDA(Money market deposit accounts)

DDA(Demand deposit accounts)

UK- Saving deposits

Canada- term deposits,saving accounts

Non deposit sources/whole sale funding sources

Funding gap:

It is calculated as the difference between current and projected credit non deposit flows.

Shows the projected need for credit exceeding the expected deposit flows

Alternative funding sources

- Central bank funds

- Certificate on deposits(cd)
- Foreign funds
- Other money market funds

Types of non deposit sources

- Call & notice money
- External commercial borrowings(ECB)
- Export refinance

1.Call & notice money

- it is a money market instrument
- Money market is a market for short term financial assets.

Features

- Banking &all co-op banks
- Outstanding borrowing should not exceeding 100% of banks capital
- Non banking institutions cannot operate.

2.External commercial borrowings:

- Commercial loan in the form of bank loan,buyers credit,suppliers credit,fixed rate of bonds taken from non resident lenders with a minimum maturity period of 3years

Features

- Do not get approval from RBI& GOI
- Amount of maturity
- End use permitted
- Prepayment of ECB
- Security

3.Export refinancing from RBI

offer Refinancing for credit

Ex: SIDBI

Designing and Pricing Of Deposit Services

Pricing of deposit sevices

Key aspects

- Servicing costs Vs minimum balance requirements

- Deposits volumes and their cost in relation to profits
- Lending and investment avenues
- Relationship with customers
- Promotional pricing
- Product differentiation

Approaches of deposit pricing Cost
plus margin deposit pricing☹ Banks
determine deposit rate
Cost of offering services plus small profit of margin formula: operating expenses per unit of deposit service Estimated overhead expenses allocated to deposit function
Market penetration deposit pricing☹
Based on market share (or) Growth of market ,the rate is fixed
Conditional pricing - Attracive scheme,
Larger volume of amount& higher interest rate- vice versa
Upscale Target Pricing
Customers are targeted ,Ex:Doctors,managers, lawyers
Relationship pricing
Banks best customers get best pricing
Create good rapport b/w banks & customers

Designing of deposit schemes and pricing of deposit services, application of bank funds – Investments and Lending functions, Types of lending – Fund based, non-fund based, asset based – Different types of loans and their features, Major components of a typical loan policy document, Steps involved in Credit analysis, Credit delivery and administration, Pricing of loans, Customer profitability analysis.

LENDING FUNCTIONS

LENDING

- Primary function of a bank.

- Major sources of income
- Risk also involved

Some of the securities against which the banks lends are

- Commodities
- Debts
- Financial instruments
- Real estate
- Automobiles
- Consumer durable goods
- Document of title

Functions of bank lending

- To provide interest income of the bank
- It helps in promoting private sector development
- It helps to stabilize, broaden and increase the efficiency of financial markets.
- Helps to promoting & developing the various financial institutions
- To provide education aloans,housing loan etc to the people.
- To provide direct finance to agriculture which includes short,medium&long term loans

Types of lending – Fund based, non-fund based, asset based

Fund based lending

- Loans
- Cash credit
- Overdraft
- Purchase of bills of exchange

Loans

- Oldest & very popular form of lending by banks
- Loans- financial assistance is given for a specific purpose and for a fixed period
- With or without security(advance)
- Loans (demand &term loan)

- **Demand loan**(payable on demand, short term loans& granted to meet the working capital requirements of the business
- **Term loan**(repayment is spread over long period .
- Medium Term loan- (repayable 1 to 5 years)
- Long term loan-(repayable after 5 years)

Cash credit

- Banks lend money against the security of commodities and debt.
- It runs like a current account except that the money that can be withdrawn from this account is not restricted to the amount deposited in the account.
- Instead, the account holder is permitted to withdraw a certain sum called **"limit"** or **"credit facility"** in excess of the amount deposited in the account.

Advantages

- Flexibility
- Economical
- Less formalities

Disadvantages

- Over borrowings
- Division of funds
- Non utilization of funds.

Overdraft

- An arrangement where by the bank allows the customers to overdraw from its current deposit account.
- security (assets& personal)
- Charging of interest

Advantages

- Flexible
- Interest is to be paid only for the funds that people use
- Quickly arrangement
- No additional expenses for prepayment of BOD.

Disadvantages

- Administrative fees can be charged
- Necessary to maintain the current account
- Difficult in calculation

Non fund based lending

Does not commit the physical flow of funds

It can be made in two forms

- Bank guarantees
- Letter of credit

Bank guarantees

- issuing bank agreement client
- to meet the claims put forward by the client against the customer on behalf of whom guarantee is issued.
- guarantee may be oral or written.
- It is non fund based credit.

Sec 126 of Indian contract act (contract of guarantee)

A Contract to perform the promise or discharge the liability,of a third person in case of his default.

surety person who gives the guarantee

principal debtor person in respect of whose default the guarantee is given

creditor person to whom the guarantee is given is called

Advantages& Disadvantages

Letter of credit

A binding document that a buyer can request from his bank in order to guarantee that the payment for goods will be tranferred to the seller.

Domestic /inland letter of credit

Foreign letter of credit/board letter of credit

Asset based lending

- Which the asset being bought(inventory, land or machine) is used as collateral.
- Quality of the collateral

- Off balance sheet financing

<u>Asset based lender focus on</u>

- Collateral value
- Collateral audits
- Inventory turnover rates
- Orderly liquidation asset values
- Forced liquidation asset values

Forms of asset based lending

<u>Project financing</u>

The raising of funds required to finance an economically separable capital investment proposal in which the lenders mainly rely on the estimated cashflow from the project to service their loans.

Ex: highways

Advantages

- High leverage
- Tax benefits
- Borrowing capacity
- Risk limitations
- Risk spreading/joint ventures

Disadvantage

- Complexity of project financing
- Indirect credit support
- Higher transaction costs

DIFFERENT TYPES OF LOAN AND IT'S FEATURES

- **Loans for working capital**

  WC= (CA-CL)

  Investment in current assets

  Working capital gap determined by borrowers decisions

- **Loan for capital expenditure &industrial credit**

Diversifying business

Debit service coverage ratio

- **Loan for syndication**

  International financing

  2 or more banks agree to jointly to make a loan to the borrower.

- **Loan for agriculture**

  Short term loan

  Sales realization(Harvest time)

  Long term loan(investment in land,equipment etc)

  Loans are paid after the harvest

- **Loans for infrastructure – Profit finance**

  Asset based lending

  Identifying &Entering suitable contracts

  Supplementary credit agreement& Mode of credit through term loans.

- **Loans for customers(or) retail lending**

  Purchase of durable goods,education,medical care,housing &other expenses

  Repayement periods from 1-5 years

  Credit cards &Removal of default risk

  To improve profitability

- **Non fund based credit** (Non interest income) ex: LC

COMPONENTS OF A TYPICAL LOAN POLICY DOCUMENT

Major components of a typical loan policy document

- Loan objectives
- Volume &mix of loans
- Loan evaluation Procedure
- Credit administration
- Credit files
- Lending rates

Loan objectives

communicate to credit officers & other decision makers

Volume &mix of loans

Specific industries,sectors,geographic areas.

Portfolio of loans

Pricing of loans

- **Loan evaluation Procedure**

Establishment of loans

Consider bank's over all strategy

Selection of borrowers

Post sanction monitoring

- **Credit administration**

Lending activities are risky

To ensure credit decision are taken by experienced officers

Hierarchical level of banks.

- **Credit files**

Important document

Used for making decision

Continous evaluation of company

Mandatory format is used

Lending rates

Parameters

- Types of collateral bank can accept the security for the loans
- Security should cover the advances made
- Nature of margins/compensating balances
- Proper credit monitoring system is followed
- Procedure for restructuring loan
- Role of credit department in bank
- Role of recovery department in bank

- Role of legal department in bank

Steps involved in Credit analysis

Step:1 –Building the credit file

Step:2- Project & financial appraisal

Step:3- Qualitative analysis

Step:4- Due diligence

Step:5- Risk assessment

Step:6-Making the recommendations

Building the credit file

- Gathering information
- To assess the borrowers willingness
- Desire to repay the loan
- To examine the borrowers track record

Project & financial appraisal

- Past financial statement
- Cash flow statement
- Financial risk
- To find out the current financial health

Qualitative analysis

- To assess the quality of team
- Poor credit decisions have been the result of not knowing enough about the customer.

Due diligence -is an investigation of a business or person prior to signing a contract, or an act with a certain standard of care.

- Time consuming activity
- Checking the borrowers details
- Analyse the technology used by the borrowers
- Assessment of debt service capacity

RISK ASSESSMENT

- Identify andanalysis the risk
- Identify internal and external risk
- Standard pricing of loan decisions and terms of loan agreement must be considered.

Making the recommendations

- Analyze of fitness & loan policy
- Accept /reject of lending process
- Specify credit terms including loan amount, maturity,pricing repayment schedule etc

Credit delivery and administration,

Credit delivery: it involves the trade off between the perceived default risk of the credit applicant and potential returns from granting requested credit

Objective:

To determine the optimal amount of credit to deliver

Steps :

Understand the customer current transaction behaviour &attitude

Customer research to assess their economic impact

Develop an integrated channel migration plan (right initiatives at right customers)

Protect sales effectiveness

Design non branch channel

Credit administration(Preparation of loan agreement,Renewal notices are sent systemmatically&Updation of credit files)

Credit administration function

- Credit files are neatly organised
- Borrowers has registered the required insurance policy
- Borrowers should Repay the lease rent properly
- Credit facilities are disbursed only after the contractual terms&conditions
- Collateral value is regularly monitored
- Borrowers should repay the interest,principal &fees &commissions in a particular time limit

Pricing of loans

Fixed & floating rate loan

Fixed rate loan are long term debt contracts whose **interest rate** payments are **fixed** at the time the loan is made

Floating rate :the interest is fixed for a short period and when that period expires a new interest rate is fixed for the next period

Customer profitability analysis(next chapter)

Relationship based pricing

Prime or base rate is established by the bank for its most credit worthiness of customers on short term working capital loans

Cost benefit loan pricing

The bank is charging enough for a loan to fully compensate it for all the costs and risk involved

Steps

Estimate the revenue the loan will generate under variety of loan interest rates &other fees

Estimate the net amount of loanable funds

Estimate the before tax yield from the loan(revenue/ net amount of loanable funds

Cost plus pricing

Interest rate is charged for the following components:

- Cost of funds
- Cost of servicing the loan
- Risk premium
- Profit margin

Risk based pricing

A borrower with better credit will always get a lower rate,due to expected lower losses to be incurred from his account

Pricing of loans(process)

Step:1 Arrive at cost of funds

Step:2 Determine servicing cost for the customers

Step:3 Assess the default risk &enforceability of risks

Step:4 Fixing the profit margin

Arrive at cost of funds

- Loan pricing= cost of funds + desired profit margin
- It covers the variable costs.

Determine servicing cost for the customers

- Identify the full list of services used by the customers
- Assess the cost providing for the service
- Multiply with the unit cost with the extent to which such non credit services are availed.
- Cost of credit services depends on the loan size & forms a major portion of service costs.

Assess the default risk &enforceability of risks

It is a credit scoring system

Sanction of loan & analysis the risk.

E(r)= P(R)+P(D)* (R(P+Pr)/P)-1

E(r)=expected rate

P(R)=Probability of recovery

P(D)=probability of default

R=recovery rate in the event of default

P=principal amount

r= contracted rate of interest

Step:4 Fixing the profit margin

ROE=(ROA* EM)

CUSTOMER PROFITABILITY ANALYSIS.

CUSTOMER PROFITABILITY ANALYSIS

It is a loan pricing method that takes into account the lender's entire relationship with the customer when pricing the loan

Step :1

Identify all the services used by the customers (deposit services, loan availed, payment services, service relating to transfer of funds, custodial services and other fee based services.)

STEP:2

Identify the cost of providing each services.

STEP:3

Cost estimates for non credit related services can be obtained by multiplying the unit cost of each service by corresponding activity levels.

STEP:4

Major portion of costs is in respect of credit related services

STEP:5

Credit related expenses has a non cash component the allocation of default risk expenses

STEP:6

Assess the revenues generated by the relationship with the borrower.

STEP:7

Assess the fee based income generated.fees are charged on the basis of price.

STEP:8

Assess the revenue from loans.

CHAPTER 3
CREDIT MONITORNING

Meaning:

The credit monitoring in a bank is to ensure that the funds are utilized for the sanctioned purpose and at the same time complying with all sanction terms &conditions.

- To avoid the time lag and cost over runs
- warning the signals and symptoms of the sickness
- Intimate timely actions for recovery or rehabilitations

Need for credit monitoring

- Accurate & comprehensive credit reports
- Account details
- Significant events
- An Extra set of Eyes
- A drawing board for dealing with a bad or insufficient credit history
- Identify the theft protections
- Unauthorized user updates
- Project mapping & Planning
- Proof of collateral and assets
- Over all peace of mind

Effective credit monitoring system

- Understand the financial position of the borrower
- Ensure that the funds are being used for the purpose for which they were sanctioned
- Confirming credit in compliance with the sanction terms
- Continuous monitoring of the projects cash flows that they are being realized by the borrowers
- Ensuring that securities are in conformity with the terms
- Identifying the potential bad loans so that action/corrective action can be initiated by the bank in time

SIGNALS OF BORROWERS FINANCIAL SICKNESS

- Sickness at birth

The project itself has become infeasible either due to faulty assumptions or a change in environment

- Induced sickness

  caused by the management in competencies (or) willful default.

- Genuine sickness

  Where the circumstance leading to sickness are beyond the borrowers control has happened inspite of the borrowers sincere effort to avert the situations

Other signals &Guidelines to the banker know about sickness

- Warning signals can be sensed.
- Decline in production &poor turnover
- Changes in the repayment schedules
- Declining sales
- Bank should examine why the unit is not able meet its liabilities towards the banks

Warning signals:

- Continuous irregularities in cash credit
- Failure to make timely payment of installments of principal &interest on term loans
- Non submission of statements
- Downward trend in credit summations
- Steep decline in production figures
- Raising the level of inventory
- Failure to pay statutory liabilities
- Wide variations in sales/receivables levels
- Delay in payment of installment due

FINANCIAL DISTRESS PREDICTIONMODELS

Alman's Z model

- **ZETA**
- **EMS**
- **GAMBLER model**

Alman’sZ model: statistical tool & used to predict the financial distress of manufacturingcompany

Regression(use past data &predict future)

Discrimination(generating an index)

Discrimination function Z

$$Z=1.2\ X_1 + 1.4\ X_2 + 3.3\ X_3 + 0.6\ X_4 + 1.0\ X_5$$

Where

X_1 - WORKING CAPITAL/ TOTAL ASSETS(%)

X_2- RETAINED EARNING / TOTAL ASSETS(%)

X_3- EBIT/ TOTAL ASSETS(%)

X_4- MARKET VALUE OF EQUITY / BOOK VALUE OF DEBT(%)

X_5- SALES TO TOTAL ASSETS(TIME)

The firm is classified

Financial sound $Z > 2.99$

Financial distress or bankrupt if $z < 1.81$

Attributes

Operating leverage

Asset utilization

Assumptions

Firms equity is publically traded

Engaged only manufacturing activities

ZETA

Score enables banks to appraise the risks involved in firms out side the manufacturing sector. Provide warning signals (3-5 years) period to bankrptcy. Increasing score is a positive signal

Variables

Return on assets (percentage how profitable a company's assets are in generating revenue.)

ROA can be computed asset net income/total average assets

- Earning stability
- Debt services
- Cumulative profitability

- Current ratio
- Capitalization
- Size of business

EMS Model(Emerging Market scoring model)

Applied in both manufacturing&non manufacturing companies

origin from z score model

lack of credit worthiness

EM SCORE= **6.56 X_1 +3.26 X_2 +6.72 X_3 +1.05 X_4 +3.25**

Where

X_1 - WORKING CAPITAL/ TOTAL ASSETS(%)

X_2- RETAINED EARNING / TOTAL ASSETS(%)

X_3- OPERATING INCOME/ TOTAL ASSETS(%)

X_4- BOOK VALUE OF EQUITY / TOTAL ASSETS(%)

GAMBLER model

- To predict bankruptcy
- Networth(assets,liabilities) **Bankruptcy is a legal status of a person or other entity that cannot repay the debts it owes to creditors**
- Net cash flows(cash inflows&cash outflows)

REHABITALIZATION PROCESS

Banks to detect the sickness at an early stage and facilitate corrective action for revival of the firm

Steps involved in Rehabitalization process

- To formulate a viability plan for the company
- Float the debt restructuring schemes
- Detailed presentations, site visits by the lenders and establishing the future viability of the business
- Borrower issued confirmation of the terms and sanction for the scheme
- Debt restructuring services would involve a lot of compliance & legal work

Parameters for **grant relief from sickness**

- Term loans

- Cash credit accounts
- Cash losses
- Additional working capital
- Contingency assistance
- Start up expenses and margin for working capital
- Promoters contributions
- Relief and concessions from other agencies/institutions

Rehabilitation should not consider for the followings

- Deliberate non payment of dues to the bank despite of adequate cash flow and net worth
- Misrepresentation /falsification of records (or)financial statements
- Removal of securities with out banks knowledge
- Fraudulent transactions by the borrowers

Risk management

Risk(meaning)

It is a condition where there is a possibilty of an adverse deviation from a desired outcome that is expected or hoped for it.

Definition (Risk)

possibilities of adverse results flowing from any circumstances.

Risk management

It is the identification, assessment and prioritization of risks followed by co ordinated and economical application of resources to minimize,monitor and control the probability of unfortunate events.

Definition

According to Jorion,risk management is the process by which various risk exposures are identified, measuredand controlled.

Objectives of risk management

- To achieve the corporate objectives & strategy
- Provide a high quality service to customers
- Initiate action to prevent the adverse effect of risk

- Minimize the human costs of risks, where reasonably practicable
- Meet the statutory/ legal obligations
- Minimize the financial & other negative consequences of losses
- Minimize the risk associated with new development & activities
- Be able to inform decisions and make choices on possible outcomes

Risk management process

Banks to detect the sickness at an early stage and facilitate corrective action for revival of the firm

Steps involved in Rehabitalization process

- To formulate a viability plan for the company
- Float the debt restructuring schemes
- Detailed presentations, site visits by the lenders and establishing the future viability of the business
- Borrower issued confirmation of the terms and sanction for the scheme
- Debt restructuring services would involve a lot of compliance & legal work

Interest rate risk(IRR)

Meaning:

It is the exposure of a banks financial condition to adverse movements in interest rates.

Perspectives

- The earning perspectives(short term earning)
- Economic perspectives (long term earning)

Sources/types of interest rate risk

1.Repricing /Gap or mismatch risk:

Holding of assets &liabilities in off balancesheet with different principal amounts,maturity date(change in level of market interest rate)

2.Basis risk(banks have a different base rate)

composite assets& composite liabilities.

3.Embedded option risk(changes in market rate create some risk in the options)

4.Yield curve risk(movement in yield curve)

5.Price risk(assets are sold before it's maturity)- related to trading book&p/l account

6.Reinvestment risk(future cash flows are again reinvested)

7.Net interest position risk(non paying liabilities)

Effect of interest rate risk

- Earnings perspective
- Economic perspective
- Embedded losses

Internal risk measurement models.

Maturity gap analysis

- Simple tools
- Fixed rate &floating rate
- Earning at risk
- Evaluate earning exposure
- Earning at risk (EaR)

Duration GAP analysis

- Managing the economic value of banks
- Off Balance sheet
- Different weights and interest rate to the assets

Simulation methods

Assumption about future path of interest rates, shape of yield curve, changes in the business activity Pricing etc

Provide

- Current&expected periodic gaps
- Duration gap
- Balance

sheet &income statement performance measures

- Budget

- Financial reports

Liquidity risk

It is a risk that a company or bank may be unable to meet short term financial demands.this is usually occur due to the inability to convert the securities or assets to cash with out loss of capital or income in the process.

Sources

- Incorrect judgement or attitude of the bank towards timing of it's cash inflows &outflows
- Unanticipated changes in the cost of capital(coc) or availability of funds
- Abnormal behaviour of financial market under stress
- Range of assumption used in predicting cash flows
- Risk activation by secondary sources
- Break down payment in settlement system
- Macro economic imbalances

Types of liquidity risk

- Funding risk(failure to replace net outflows due to withdrawal of retail deposits&renewal of deposits)
- Time risk (non receipt of expected inflows of fund) where the borrowers fail to meet their commitments.
- Call risk(probability of loss due to redemption of bond or other debt securities by its issuer before it's maturity)
- Opportunity risk

  Bank can only grow big if their customers are also prospering

Need/features

- To prevent the business from losses
- Control over liquidity &cashflows
- Close the liquid gap through reserves
- Fair value of maturity of assets
- Analysis the actual liquidity &evaluation of risk
- To make recommendation for necessary changes
- Develop a new methodology for evaluating the deposits

- Develop and improve liquidity contingency plans under the crisis conditions
- Evaluation of assets &liability management

Forex and credit risk

It is the exposure of an institution to the potential impact of movements in foreign exchange rates.

Types Of Foreign Exchange Risk

- Translation exposure.
- Economic exposure
- Transaction exposure.

Country risk

a domestic banking institution may transform itself in to an international one when it starts lending across its borders are invests in instruments in issued by foreign business.

Types of country risk.

- Economic factors
- Political factors.
- Social community factors.
- Legal frame work.

Value at risk (VaR)

It measure the potential of economic losses

VaR corresponded to a presently of portfolio P&L

And can be expressed as potential loss from the current value of the portfolio or as the loss from the expected value at the horizon.

Procedure of measuring interest rate risk.

Step 1: recording assets liabilities

Step 2: calculating gap in each time band by netting the positions of asset, liabilities and net off balance sheet position in the time band.

Step 3: calculate cumulative gap.

Step 4: evaluating impact on earnings from interest rate.

Step 5: the exposure of interest rate risk in banking book is equal to the sum of impact on earnings from interest rate.

Step 6: comparing the interest rate risk.

Value At Risk Models /Method For Computing Value At Risk

- Historical simulation
- Monte carlo simulation
- Parametric modeling

STEPS FOR STRESS TESTING

- Step-1: Generate Scenarios`
- Step-2: Revalue portfolio.
- Step-3: Summarize results.

Market risk

- Market risk is the risk of losses due to movement in financial market variables.
- Interest rate , foreign exchange rate , security prices etc.
- Market risk is the risk of fluctuations in portfolio value because of movement in such variable.
- Adverse changes in interest rates, foreign exchange rates, commodity prices, or equity prices.
- To identify, measure, monitor, and control exposure to market risk.
- Non trading positions.

Management Of Market Risk

- Clearly defined responsibilities and authorities.
- Specialized committee set-up by the board.
- Risk taking and operational units.
- Be supported by an effective risk management information system.
- Be provided adequate resources and competent personal to perform its duties.

1 Price risk

a seller who wants to sell it in the future is thus concerned about the potential fall in the price and a reduction in the realization or profits of the transactions.

Types of price risk.

symmetrical versus unsymmetrical

movement of an asset price in either direction leads to a corresponding impact on the position value.

Absolute risk various relative risk

Absolute risk is measured with reference to the initial investment. Relative risk is measured relative to the benchmark index

Asset liquidity risk

large number of stock listed on a stock market

Credit spread risk

credit risk is the risk that yield on duration matched credit sanctity bonds and treasury bonds could move differently

Volatility risk.

volatility refers to the degree of unpredictable change in a financial variable over period of time.

Systematic risk.

Systematic risk can arise in the context of a failiure of a major and market system or institution, some times called the ‘domino effect ‘

Operational and Solvency risk

Operational risk can be summarized as human risk; it is the risk of business operations failing due to human error.

TYPES of operational risk:

PEOPLE RISK: People risks typically result from staff constraints, incompetence, dishonesty, or a corporate culture that does not cultivate risk awareness.

SYSTEM RISK: As technology has become increasingly necessary, in more and more areas of business, operational risk events due to systems failure have become an increasing concern.

EVENT RISK: Risk due to single event.

BUSINESS RISK: Business risk is the risk of loss due to unexpected changes in the competitive environment. It includes “front-office” issues such as strategy, client management, product development, & pricing and sales, and is essentially the risk that revenues will not cover costs within a given period of time.

Risk measurement process. Step:1

Communication and consult

- Assessment of risk
- Identification,analysis and evluation of risk
- Eliciting the risk information
- Managing stakeholder perceptionfor management of risk

Step: 2 Establish the context

- Objectives and goals of bank
- Needs should be considered
- Environmental factors must be considered
- Rules & regulation of the bank

Step :3 identisy the risk

- To identify the risk involved in the banks
- Identify the prospetive risks
- Nature of activity must be considered

Step :4 analyse the risk

- Combination of possible consequences/event
- Risk=consequences* likelihood
- Adopting quantitative &qualitative methods to analyse the risks

Step :5Evaluate the risk

- analyse &evaluate the risk
- to decide whether risks are acceptable or need treatment

Step:6 Treat the risks

- it is about considering optiona for treating risks that were not considered acceptable or tolerable

Step :7 Monitor & review

- monitor the effectivenessof risk management , plan,strategies,management system

Mitigation/managing the risk/methods to handling the risk

<u>Avoidance</u>:

Elimination of risk

Loss control

reducing the probability of risks & minimizes the loss

Risk retention(active retention/risk assumptions)

it is retaining the risk because it is unknown &it consider a lesser risks what actually is

Non insurance transfers

- Contract (transfering risks through contract)
- Hedging(reducing portfolio risk)
- For business risk by incorporating(limited company)

BASIC UNDERSTANDING OF NPAS

Non performing assets(NPA)

Former principal+ interest (180 days)

March 2004(default status – dues not paid for 90 days)

The securitization reconstruction of financial assets and enforcement of security interest act 2002 ,

Non performing assets as an asset or account of a borrower which has been classified by the bank or financial institutions as sub standard ,doubtful or loss assets in accordance with the directions or guidelines relating to assets classification issued by the RBI.

Calculation of NPA

To maintain NPA'S both on gross/net basis

It is expressed in term of %

$$NPA's = \frac{\text{gross or net NPA's}}{\text{Total Advances}} * 100$$

Net NPA's = gross NPAs- Provisions for NPA's

Net NPA'S are obtained from gross NPA

- Balance in interest suspense account ,interest but not received
- Claims received from credit guarantors and kept in suspense account account
- Part payment received and kept in suspense account
- Total provisions held on trend and progress of banking in india

Classification of assets

Performing assets(standard assets)

These assets (advances) which continue to generate(interest)on regular basis with out any default

Non performing assets

Sub standard assets(march 31/2005)

SSA are those assets which have been classified as NPA for a period less than or equal to 12months

Not recover the due

Doubtful assets

An assets would be classified doubtful if it remained in the substandard category for 12 months

Loss assets

These are considered ucollectable.

Factors for risein NPA'S

INTERNAL FACTORS

- Defective lending process
- Inappropriate technology
- Improper SWOT analysis
- Poor credit analysis system
- Managerial deficiencies
- Absence in regular industrial visits& Reloaning process

EXTERNAL FACTORS

- In Effective recovery tribunals
- willfull defaults
- Natural calamities
- Industrial sickness
- Lack of demand
- Change on government policies

Problems /impact of NPA'S

Impact on the bank

- do not generate any income
- Banks has to make provisions for NPA out of its profits
- Capital is blocked
- Customer confidence will low & high cost

Impact on the depositors

- Owners do not receive a market return on their capital
- Depositors do do not receive a market return on saving
- charging high Interest rate
- Misallocation of capital

MANAGEMENT OF NPA

PREVENTIVE MANAGEMENT

- Credit Assessment &risk management mechanism
- Organizational restructuring
- Reduce dependence on interest
- Potential and borderline NPA's under check

CURATIVE MANAGEMENT

- Debt recovery tribunals(DRT)
- Asset reconstruction company (ARC)

ALM

The traditional ALM programs focus on interest rate risk and liquidity risk because they represent the most prominent risks affecting the organization balance-sheet (as they require coordination between assets and liabilities).

But ALM also now seeks to broaden assignments such as foreign exchange risk and capital management. According to the Balance sheet management benchmark survey conducted in 2009 by the audit and consulting company PricewaterhouseCoopers (PwC), 51% of the 43 leading financial institutions participants look at capital management in their ALM unit.

Scope of the ALM function

Liquidity risk

The current and prospective risk arising when the bank is unable to meet its obligations as they come due without adversely affecting the bank's financial conditions. From an ALM perspective, the focus is on the funding liquidity risk of the bank, meaning its ability to meet its current and future cash-flow obligations and collateral needs, both expected and unexpected. This mission thus includes the bank liquidity's benchmark price in the market.

Interest rate risk

The risk of losses resulting from movements in interest rates and their impact on future cash-flows. Generally because a bank may have a disproportionate amount of fixed or variable rates instruments on either side of the balance-sheet. One of the primary causes are mismatches in terms of bank deposits and loans.

Currency risk management

The risk of losses resulting from movements in exchanges rates. To the extent that cash-flow assets and liabilities are denominated in different currencies.

Funding and capital management

As all the mechanism to ensure the maintenance of adequate capital on a continuous basis. It is a dynamic and ongoing process considering both short- and longer-term capital needs and is coordinated with a bank's overall strategy and planning cycles (usually a prospective time-horizon of 2 years).

Treasury and ALM

For simplification treasury management can be covered and depicted from a corporate perspective looking at the management of liquidity, funding, and financial risk. On the other hand, ALM is a discipline relevant to banks and financial institutions whose balance sheets present different challenges and who must meet regulatory standards.

ALM governance

The responsibility for ALM is often divided between the treasury and Chief Financial Officer (CFO). In smaller organizations, the ALM process can be addressed by one or two key persons (Chief Executive Officer, such as the CFO or treasurer).The vast majority of banks operate a centralised ALM model which enables oversight of the consolidated balance-sheet with lower-level ALM units focusing on business units or legal entities.

- To ensure adequate liquidity while managing the bank's spread between the interest income and interest expense
- To approve a contingency plan

- To review and approve the liquidity and funds management policy at least annually
- To link the funding policy with needs and sources via mix of liabilities or sale of assets.

CHAPTER 4

MERGERS, DIVERSIFICATION AND PERFORMANCE EVALUATION

MERGERS

Voluntary amalgamation of two firms on roughly equal terms into one new legal entity. Mergers are effected by exchange of the pre-merger stock (shares) for the stock of the new firm. Owners of each pre-merger firm continue as owners, and the resources of the merging entities are pooled for the benefit of the new entity. If the merged entities were competitors, the merger is called horizontal integration, if they were supplier or customer of one another, it is called vertical integration.

RECENT TRENDS OF MERGERS IN BANKS

- Earnings pressure increasing
- Regulartory scrutiny on the rise
- Attractiveness of federal deposit insurance corporation
- Valuation stabilising
- Investor groups looking for bank transactions

Diversification of banks

A portfolio strategy designed to reduce exposure to risk by combining a variety of investments, such as stocks, bonds, and real estate, which are unlikely to all move in the same direction. The goal of diversification is to reduce the risk in a portfolio. Volatility is limited by the fact that not all asset classes or industries or individual companies move up and down in value at the same time or at the same rate. Diversification reduces both the upside and downside potential and allows for more consistent performance under a wide range of economic conditions.

Benefits of diversification

- Lower cost of capital
- Economic gain

- Increases managerial efficiency
- Increase in market power
- Reduce earnings volatility

Securities market/capital market

According to khan it is a market for a long term funds.it focus is on financing of fixed investments in contrast to money market which is the institutional source of working capital finance.

- NSE
- BSE
- SEBI

Regulators

- Department of economic affair(DEA)
- Department of company affair(DCA)
- RBI
- SEBI

TYPES OF SECURITIES MARKET

- Primary market/new issue market
- Secondary market/ Stock exchange

Functions of SE

Trading procedure in stock exchanges

- Finding a broker
  - provide information
  - Supply investment literature
  - Availability of competent representatives
- Opening a n account with broker
- Placing the order
- Mkt order
- Limit order
- Stop loss order
- Stop order

- Cancel order/immediate order
- Discretionary order
- Open order
- Fixed price order

Other order

- Day order
- Good till cancelled (gtc)
- Not held order
- Participate but do not initiate(PNI)
- All or none order(AON)
- Fill or kill order(FOK)
- Immediate or cancel order(IOC)

Making the contract

Preparing contract note

Settlement of transactions

- Ready delivery contracts
- for ward delivery contracts

Other order

- Day order
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Making the contract

Preparing contract note

Settlement of transactions

- Ready delivery contracts
- for ward delivery contracts

Underwriting

MEANING

➢ Underwriting is an agreement entered into before the shares are brought before the public that in the events of the public not taking up the whole of them the underwriter will take an allotment of such part of the shares as the public has not applied for .

➢ TYPES OF UNDERWRITERS

Property & casually underwriters

Liability underwriters

Group Underwriters

Classification of Risk in Underwriting

- ➢ Preferred Risks
- ➢ Standard Lives
- ➢ Sub-standard Lives
- ➢ Declined Lives

Process of underwriting

- ➢ Application
- ➢ Medical Examinations
- ➢ Inspection Reports
- ➢ Medical Information Bureau
- ➢ Underwriting in the Field

MUTUAL FUND

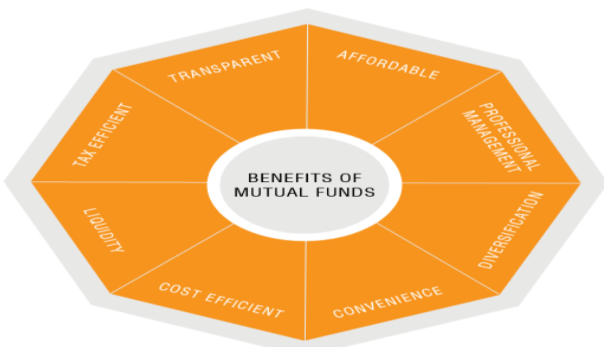
✓ A Mutual Fund is a trust that pools the savings of a number of investors who share a common financial goal.

✓ The money thus collected is then invested in capital market instruments such as shares, debentures and other securities.

✓ The income earned through these investments and the capital appreciation realised are shared by its unit holders in proportion to the number of units owned by them.

Mutual Fund Operation Flow Chart

Advantages of Mutual Funds



Disadvantages of mutual fund

- **No control over costs**: The investor pays investment management fees as long as he remains with the fund, even while the value of his investments are declining. He also pays for funds distribution charges which he would not incur in direct investments.
- **No tailor-made portfolios**: The very high net-worth individuals or large corporate investors may find this to be a constraint as they will not be able to build their own portfolio of shares, bonds and other securities.

- **Managing a portfolio of funds**: Availability of a large number of funds can actually mean too much choice for the investor. So, he may again need advice on how to select a fund to achieve his objectives.
- **Delay in redemption**: It takes 3-6 days for redemption of the units and the money to flow back into the investor's account.

TYPES OF MUTUAL FUNDSOn

the basis of Structure

Open ended Schemes

Closed ended Schemes.

OPEN ENDED SCHEMES

- Open ended Schemes are schemes which offers unit for sale without specifying any duration for redemption.
- They sell and repurchase schemes on a continuous basis.
- The main feature of such kind of scheme is liquidity

CLOSED ENDED SCHEMES

- These are the schemes in which redemption period is specified.
- Once the units are sold by mutual funds, then any transaction takes place in secondary market only i.e stock exchange.
- Price is determined by forces of market.

On the basis of growth objective

GROWTH FUND

The aim of growth funds is to provide capital appreciation over the medium to long- term. Such schemes normally invest a major part of their corpus in equities. Such funds have comparatively high risks

INCOME FUNDS

Funds that invest in medium to long-term debt instruments issued by private companies, banks, financial institutions, governments and other entities belonging to various sectors (like infrastructure companies etc.) are known as Debt / Income Funds

BALANCED FUND

These funds provide both growth and regular income as these schemes invest in debt and equity.The NAV of these schemes is less volatile as compared pure equity funds.

MONEY MARKET FUNDS

Money market / liquid funds invest in short-term (maturing within one year) interest bearing debt instruments. These securities are highly liquid and provide safety of investment, thus making money market / liquid funds the safest investment option when compared with other mutual fund types.

On the basis of Special Schemes

INDUSTRY SPECIFIC SCHEMES

Industry Specific Schemes invest only in the industries specified in the offer document. The investment of these funds is limited to specific industries like Infotech, FMCG, Pharmaceuticals etc

INDEX SCHEMES

In this schemes, the funds collected by mutual funds are invested in shares forming the Stock Exchange Index.

Example- Nifty Index Scheme of UTI Mutual Fund and Sensex Index Scheme of Tata Mutual Fund.

SECTORAL SCHEMES

Sectoral funds are those mutual funds which invest in a particular sector of the market, e.g. banking, information technology etc. Sector funds are riskier than equity diversified funds since they invest in shares belonging to a particular sector which gives them fewer diversification opportunities

OTHER SCHEMES

- Gilt Security Schemes
- Funds of Funds
- Domestic Funds
- Tax Saving Schemes.
- Insurance business

INSURANCE BUSINESS

Meaning

"The undertaking by one person to another person against loss or liability for loss in respect of a certain risk or peril to which the object of the insurance may be exposed, or to pay a sum of money or other thing of value upon the happening of a certain event and includes life insurance".

Characteristics of insurance

- Risk sharing
- Risk assessment
- Co-operation
- Payment at the time of contingency
- Larger the number, better the care
- Significance of insurance
- Protection against risk of loss
- Distribution of risk
- Specialization of labours
- Formation of capital
- Advance of loans
- Trading and foreign operations.

Performance analysis of banks

BASEL norms

- These rule written by the bank of international settlements committee of banking supervision (BCBS)
- How to assess risks, and how much capital to set aside for banks in keeping with their risk profile.
- $\text{CAR} = \dfrac{\text{tier one capital + tier two capital}}{\text{risk weighted assets}}$

Objectives

- To strength soundness and stability of banking system

- To protect depositors and promote the stability and efficiency of financial systems around the world.

Basel I Norms

- Maintain minimum capital adequacy requirement.

Basel II Norms

- banking laws and regulation.

Risk based capital(pillar I)

- The first pillar sets out minimum capital requirement.
- Measurement and risk.
- Measure operational risk and market risk.
- 2.Risk based supervision
- To help better management technique.
- Assess overall capital adequacy.
- Supervisor evaluate capital adequacy.
- Banks to operate minimum capital adequacy.

Preventing measures.

- Risk to disclosure to enforce market discipline (pillar III)
- It imposes strong incentives to banks to conduct their business in a safe , sound ,and effective manner.

Criticism of Basel II norm

- Not suit for difficult situation
- Examination or evaluation and supervisors.
- Developing countries.
- Face difficulties.

BASEL III NORMS

- To create an international standard that banking regulators can use when creating regulationabout how much capital banks need to put aside to guard against the types of financial and operational risks banks face.

- Basel III is a comprehensive set of reform measures, developed by the Basel committee on banking supervision, to strengthen the regulation, supervision and risk management of the banking sector.
- Improve the banking sectors ability to absorb shocks arising financial and economic stress whatever the sources
- Improve risk management and governance
- Strengthen banks transparency and disclosures.

The reforms target:

Micro prudential

Macro prudential..

The overall goals of basel III norms are:

- To refine the definition of bank capital
- Quantify further classes of risk
- To further improve the sensitivity of the risk measures

Measurement of operational risk:

The frame work from the committee presents three methods for calculating minimum capital charge operational risk under pillar1:

- The basic indicator approach
- The standardised approach, and
- The advanced measurement approach(AMA)
- Basic indicator approach:
- Average annual gross income (net interest income+ net non interest income)
- Fixed percentage

$$KBIA=[\sum(GI1.n *\alpha)]/$$

Advantages:

- Simple and transparent
- readily available
- Risk.
- Standardised approach:
- Annual gross income per business line

- Several indicators – size or volume of banks activities in a business line, where banks activities are divided into eight business lines:

HISTORICAL SIMULATION:

- Risk factor level
- Replacing the security
- Measure VAR

MONTE CARLO SIMULATION:

- Estimate VAR
- Revaluating the all position of portfolio
- More time consuming.

PARAMETRIC SIMULATION:

- VAR estimation directly from the standard deviation
- VaR=market price *volatility
- Volatilities and correlations are calculated directly from users specified start and end dates

Stress testing

Marketing value of a portfolio varies due to movement of market parameters such as interests rates ,market liquidity, inflation , exchange rate , stock prices , etc…….,

Techniques of stress testing

- Simple sensitivity test:-

  Short term impact of portfolio value.
- Scenario analysis:-

  Risk factors simultaneously.
- Maximum loss:-

identifying the most potentially damaging combination of moves of market risk factors

STEPS FOR STRESS TESTING

Step-1: Generate Scenarios`

Step-2: Revalue portfolio.

Step-3: Summarize results.

Ratio Analysis

It's a tool which enables the banker or lender to arrive at the following factors :

- Liquidity position
- Profitability
- Solvency
- Financial Stability
- Quality of the Management
- Safety & Security of the loans & advances to be or already been provided

Current Ratio : It is the relationship between the current assets and current liabilities of a concern.

Current Ratio = Current Assets/Current Liabilities

If the Current Assets and Current Liabilities of a concern are Rs.4,00,000 and Rs.2,00,000 respectively, then the Current Ratio will be : Rs.4,00,000/Rs.2,00,000 = 2 : 1

The ideal Current Ratio preferred by Banks is 1.33 : 1

Net Working Capital : This is worked out as surplus of Long Term Sources over Long Tern Uses, alternatively it is the difference of Current Assets and Current Liabilities.

NWC = Current Assets – Current Liabilities

ACID TEST or QUICK RATIO : It is the ratio between Quick Current Assets and Current Liabilities. The should be at least equal to 1.

Quick Current Assets : Cash/Bank Balances + Receivables upto 6 months + Quickly realizable securities such as Govt. Securities or quickly marketable/quoted shares and Bank Fixed Deposits

Acid Test or Quick Ratio = Quick Current Assets/Current Liabilities

DEBT EQUITY RATIO : It is the relationship between borrower's fund (Debt) and Owner's Capital (Equity).

Long Term Outside Liabilities / Tangible Net Worth

Liabilities of Long Term Nature

Total of Capital and Reserves & Surplus Less Intangible Assets

OPERATING PROFIT RATIO :

It is expressed as => (Operating Profit / Net Sales) x 100

Higher the ratio indicates operational efficiency

NET PROFIT RATIO :

It is expressed as => (Net Profit / Net Sales) x 100

It measures overall profitability.

4.9 CAMELS

Camels rating is a supervisory rating system originally developed in the U.S. to classify a bank's overall condition. It's applied to every bank and credit union in the U.S. (approximately 8,000 institutions) and is also implemented outside the U.S. by various banking supervisory regulators.

The ratings are assigned based on a ratio analysis of the financial statements, combined with on-site examinations made by a designated supervisory regulator. In the U.S. these supervisory regulators include the Federal Reserve, the Office of the Comptroller of the Currency, the National Credit Union Administration, and the Federal Deposit Insurance Corporation.Ratings are not released to the public but only to the top management to prevent a possible bank run on an institution which receives a CAMELS rating downgrade. Institutions with deteriorating situations and declining CAMELS ratings are subject to ever increasing supervisory scrutiny. Failed institutions are eventually resolved via a formal resolution process designed to protect retail depositors.

The components of a bank's condition that are assessed:

- **(C)**apital adequacy
- **(A)**ssets
- **(M)**anagement Capability
- **(E)**arnings
- **(L)**iquidity (also called asset liability management)
- **(S)**ensitivity (sensitivity to market risk, especially interest rate risk)
- Capital level and trend analysis;
- Compliance with risk-based net worth requirements;
- Composition of capital;

- Interest and dividend policies and practices;
- Adequacy of the Allowance for Loan and Lease Losses account;
- Quality, type, liquidity and diversification of assets, with particular reference to classified assets;
- Loan and investment concentrations;
- Growth plans;
- Volume and risk characteristics of new business initiatives;
- Ability of management to control and monitor risk, including credit and interest rate risk;
- Earnings. Good historical and current earnings performance enables a credit union to fund its growth, remain competitive, and maintain a strong capital position;
- Liquidity and funds management;
- Extent of contingent liabilities and existence of pending litigation;
- Field of membership; and
- Economic environment.

Asset Quality

- Asset quality is high loan concentrations that present undue risk to the credit union;
- The appropriateness of investment policies and practices;
- The investment risk factors when compared to capital and earnings structure; and
- The effect of fair (market) value of investments vs. book value of investments.

(M)anagement

Management is the most forward-looking indicator of condition and a key determinant of whether a credit union possesses the ability to correctly diagnose and respond to financial stress. The management component provides examiners with objective, and not purely subjective, indicators. An assessment of management is not solely dependent on the current financial condition of the credit union and will not be an average of the other component ratings.

(E)arnings

The continued viability of a credit union depends on its ability to earn an appropriate return on its assets which enables the institution to fund expansion, remain competitive, and replenish and/or increase capital.In evaluating and rating earnings, it is not enough to review past and present performance alone. Future performance is of equal or greater value, including performance under various economic conditions. Examiners evaluate "core" earnings: that is the long-run earnings ability of a credit union discounting temporary fluctuations in income and one-time items. A review for the reasonableness of the credit union's budget and underlying assumptions is appropriate for this purpose. Examiners also consider the interrelationships with other risk areas such as credit and interest rate.

L)iquidity - asset/liability management

Asset/liability management (ALM) is the process of evaluating, monitoring, and controlling balance sheet risk (interest rate risk and liquidity risk). A sound ALM process integrates strategic, profitability, and net worth planning with risk management. Examiners review (a) interest rate risk sensitivity and exposure; (b) reliance on short-term, volatile sources of funds, including any undue reliance on borrowings; (c) availability of assets readily convertible into cash; and (d) technical competence relative to ALM, including the management of interest rate risk, cash flow, and liquidity, with a particular emphasis on assuring that the potential for loss in the activities is not excessive relative to its capital. ALM covers both interest rate and liquidity risks and also encompasses strategic and reputation risks.

CHAPTER 5

HIGH TECH E-BANKING

Payment System In India

According to **BIS** "A payment system consist of instruments, banking procedures and typically interbank funds transfer that ensures and facilitate the circulation of money. In essence, it facilitates corporation, businesses and consumers to transfer funds to one other".

The **R**eserve **B**ank of **I**ndia's publication on Payment Systems in India (**2009–12**).

India has multiple payments and settlement systems.

RBI Still continues to evolve new payment methods and slowly revamping the payments and settlement capability in India.

India supports a variety of electronic payments and settlement system,

A. Gross Settlement System:

Real Time Gross Settlement(RTGS)

B. Net Settlement System:

1. ECS - Credit
2. ECS – debit
3. Credit cards and Debit cards
4. National Electronic Funds Transfer (NEFT)
5. Indo-Nepal Remittance Facility Scheme

Real Time Gross Settlement(RTGS)

- The Reserve Bank of India (India's Central Bank) maintains this payment network.
- RTGS system is a funds transfer mechanism where transfer of money takes place from one bank to another on a 'real time' and on 'gross' basis. This is the fastest possible money transfer system through the banking channel.
- Settlement in **'real time'** means payment transaction is not subjected to any waiting period. The transactions are settled as soon as they are processed.

- **'Gross settlement'** means the transaction is settled on one to one basis without bunching with any other transaction.
- Fees for RTGS vary from bank to bank.
- RTGS is a large value . Minimum value of transaction should be 2,00,000.
- Customers can access the RTGS facility between 9 am to 4:30 pm on weekdays and 9 am to 2:00 pm on Saturdays.
- The RTGS service window for customer's transactions is available from 9:00 hours to 16:30 hours on week days and from 9:00 hours to 14:00 hours on Saturdays.
- No Transaction on weekly holidays and public holidays.

Service Charge for RTGS

a) Inward transactions :

1%, no charge to be levied.

b) Outward transactions :

For transactions of 2 lakhs to 5 lakhs - not exceeding 30 per transaction, (+ Service Tax).

Above 5 lakhs -Not exceeding 55 per transaction, (+ Service Tax).

National Electronic Fund Transfer(NEFT)

The national electronic fund transfer (NEFT) system is a nation-wide system that facilitates individuals, firms and corporates to electronically transfer funds from any bank branch to any individual, firm or corporate having an account with any other bank branch in the country.

For being part of the NEFT funds transfer network, a bank branch has to be NEFT-enabled.
As at end-January 2011, 74,680 branches / offices of 101 banks in the country (out of around 82,400 bank branches) are NEFT-enabled.

Service Charges for NEFT

For transactions up to 10,000:

Not exceeding 2.50 (+ Service Tax)

For transactions above 10,000 up to 1 lakh:

Not exceeding 5 (+ Service Tax)

For transactions above 1 lakh and up to 2 lakhs:

Not exceeding 15 (+ Service Tax)

For transactions above 2 lakhs:

Not exceeding 25 (+ Service Tax)

Indo-Nepal Remittance Facility Scheme

Indo-Nepal Remittance Facility is a cross-border remittance scheme to transfer funds from India to Nepal, enabled under the NEFT Scheme.

The scheme was launched to provide a safe and cost-efficient avenue to migrant Nepalese workers in India to remit money back to their families in Nepal

A remitter can transfer funds up to 50,000 (maximum permissible amount) from any of the NEFT-enabled branches in India.The beneficiary would receive funds in Nepalese Rupees.

Inter Mobile Payment system (IMPS)

- Immediate Payment Service (IMPS) is an initiative of National Payments Corporation of India (NPCI). It is a service through which money can be transferred immediately from one account to the other account, within the same bank or accounts across other banks.
- Upon registration, both the individuals are issued an MMID(Mobile Money Identifier) Code from their respective banks.
- This is a 7 digit numeric code.
- To initiate the transaction, the sender in his mobile banking application need to enter the registered mobile number of the receiver, MMID of the receiver and amount to be transferred.
- Upon successful transaction, the money gets credited in the account of the receiver instantly.
- This facility is available 24X7 and can be used through mobile banking application.

Electronic Clearing Service (ECS Credit)

Known as “Credit-push” facility or one-to-many facility this method is used mainly for large-value or bulk payments where the receiver’s account is credited with the payment from the institution making the payment.

Such payments are made on a timely-basis like a year, half a year, etc. and used to pay salaries, dividends or commissions.

Over time it has become one of the most convenient methods of making large payments.

Electronic Clearing Services (ECS Debit)

Known as many-to-one or “debit-pull” facility this method is used mainly for small value payments from consumers/ individuals to big organizations or companies.

It eliminates the need for paper and instead makes the payment through banks/corporate or government departments.

It facilitates individual payments like telephone bills, electricity bills, online and card payments and insurance payments.

Paper based payments

- Use of paper based instruments(like cheques, drafts,) accounts for nearly 60% of the volume of total non-cash transactions in the country.
- In value terms, the share is presently around 11%.
- Paper based payments occupy an important place in the country, Reserve Bank had introduced Magnetic Ink Character Recognition(MICR).
- Technology for speeding up and bringing in efficiency in processing of cheques.

E-payment

What is E-payment ?

E-payment as defined as electronic payment is subset of an E-commerce transaction. It includes electronic payment for buying/selling or services which are offered on the internet.

Objectives of E-payment

To understand the concept of Electronic Payment System and its security services.

To bring out solution in the form of applications to uproot Electronic Payment.

To understand working of various Electronic Payment System based applications.

Principles and Recommendations

CPSS (committee on payment and settlement systems) core principles for systematically Important payment systems (SIPS)

CPSS-IOSCO Recommendations for securities settlement systems (SSS)

CPSS-IOSCO Recommendations for Central Counter Parties (CCP)

Types of E-payment system

- E-cash
- Micro payments
- Debit and credit cards
- Smart card
- Peer to payment
- B2B and B2C transactions

E-cash

It is defined as Electronic cash. It is an internet based system generated by a computer

It allows fund to be transferred items should be purchased by debit/credit card, cheque or money order.

It is more efficient and has lower transaction cost

Micro payments

A micropayment is an E-commerce transaction involving a very small sum of money in exchange for something made available online. such as application download, a service web based content etc.,

Debit card & Credit card

Debit card :-

A debit card is a plastic card that provides the card holder electronic access to his bank account to withdraw cash or pay for goods and services.

It removes the need to go to your bank to make payments it also gives you the ability to take directly cash from ATM's

Credit card:-

credit card is a card issued by a financial company giving the holder an option to borrower funds.credit card charge interest and are primarily used for short term financing. It is most used payment system given its high convenience.

Smart card :

Smart card is a plastic card in the size of credit card with an embedded microchip that can be loaded with data, used for telephone calling, electronic cash payments and other application.

It stores more information than magnetic strip card.

It contain information such as

- A/c information
- Credit card no
- Health insurance etc.,

Peer to Peer payment

It allows the transfer of electronic cash (E-cash) Via E-mail between two people who have account at E-cash enabled Bank.

Peer to peer transaction allow online financial transfers between consumers.

B2B and B2C Transactions

The fastest grossing sector of E-commerce

Payment is B2B transactions.

- These payment are much larger than B2C transactions and involve complex business accounting system

E-Payment pros & cons

Pros :

- Potential for great flexibility
- Low transaction costs
- Rapid and diverse purchase power

Cons:

- Perfect copying of transactions is possible
- Vulnerability to world wide attack
- Lack of anonymity, potential for privacy intrusion.

ELECTRONIC BANKING

Meaning

Electronic banking, also known as electronic funds transfer (EFT), is simply the use of electronic means to transfer funds directly from one account to another, rather than by check or cash.

E-CHEQUE:

Types of Electronic Currency

- Check Cards
- Smart Cards
- Digital checks

OTHER FORMS OF ELECTRONIC BANKING

- Direct Deposit
- Electronic Bill Payment
- Electronic Check Conversion
- Cash Value Stored, Etc.

objectives

- To receive complaints pertaining to unauthorized and invalid transactions leakage, tampering and theft of data and ensure that they are sufficiently and easily resolved through adequate legal and technical protection for E-banking consumers.
- To reduce risk handling of cash
- TO provide low cost and financial services
- To provide a system that delivers efficient payments linked to a bank

Advantages

- Very convenient
- unlimited service day and night
- No time constraint
- Easy to Access through PC
- Easy way of payment
- Easy transaction
- Ease of monitoring

Disadvantages

- Banking relationship
- Transaction problems
- Bank site problems
- Trust aspect

PLASTIC MONEY

Plastic money or ploymer money, made out of plastic, is a new and easier way of playing for goods and service. plastic money was introduced in the 1950s and is now an essential from of ready money which reduces the risk of handing a huge amount of cash.

Its include debits cards, ATMs, Smart card, etc…

Factors Affecting Utilization Of Plastic Money

- Modernization
- Globalization
- Quick service
- Security (less cash burden)
- Less botheration
- Add – on – facility
- Home and online shopping

Other Factors:

- Age of the customer,
- Education level of the customer,
- Monthly income of the customer,
- Technological innovation,
- Age of the bank,
- Reputation of the bank,
- Lower bank charges.

Advantages of Plastic Money

- Offer free use of funds, provided the customer to pay full balance in time.
- It is more convenient to carry than cash.
- Helps in establishing a good credit history

- Provide a convenient payment method for purchases made on the internet and over the telephone.
- Give incentive, such as reward points, thatwe can redeem.

Disadvantage Of Plastic Money

- Cost much more than other forms of credits, such as a line of credit or a personal loan, if the customer does not pay on time.
- Damage customer credits rating if payments are late.

Different Forms Of Plastic Money

ATMCARD

A Plastic card used to withdraw money from a banking institution's called automatic teller machine. Sometime this card may also be used as a debit card, but not all ATM card have this capability.

CREDIT CARD

A credit card is plastic money that is used to pay for product and services at over the 20 million locationaroundworld.

DEBITCARD

Debit card are substitutes for cash or check payment, much the same way that credit card are. However, bank only issued them when the customer have an account with them.

CHARGECARD

A Charge card is mean f obtaining a very short – term (usually around 1 month) loan for a purchase.

AMEXCARD

International visa and master card are commonly used by the travellers to bear their expenses on their tripe. Believe it or not, most of travellers financial their trip with their business credit card.

MASTERCARDWORLDWIDE

Master card worldwide is multinational corporation based in purchase, New york, united states.

SMARTCARD

A Smart card is a plastic card embedded with a computer chip that stores and transacts data between user. This data is associated with either value or information or both and stored and processed within the card's either a memory or microprocessor.

GLOBALCARD

A Very special GOLD VISA CARD with all its prestige, and additional service especially designed for people looking for peace of mind in their second home.

FORECASTING OF CASH DEMAND AT ATM

Efficient cash demand forecasting models generally can be used for detection of the outliers in ATM cash demand behaviour ; they cannot state the reason of these outliers.

Advantages of ATM

To the customer

- Provide 24*7 and 365 days a year service.
- Offer quicker and efficient service.
- Allow privacy in transactions.
- Are errors free.
- Offer of cash withdrawal to the customer.
- Offer anywhere banking facility.

To the Banks

- Is an alternative to extended banking hours.
- Alternative to opening new branches.
- Reduces operating expenses of the banks.
- Increases market penetration.

Disadvantages of ATM

- Up-front equipment acquisition cost or network participation fee.
- Set-up fee to install and network the ATM.
- Usage fee, either per transaction or an a monthly basis.
- Monthly or annual service fee for support.
- Communications charges for dial-up leased lines, or wireless data links.

CREDIT CARDS

Meaning

A Credit Card is a plastic bearing an account number assigned to a cardholder with a credit limit that can be used to purchase goods and services and to obtain cash disbursements on credit, for which a cardholder is subsequently billed by an issuer for repayment of the credit extended at once or on an installment basis.

Features of Credit Cards

- All credit cards provide cash availing facility.
- Most of the cards provide for personal accident insurance coverage.
- All the credit cards generally provide free credit period.
- Most of the cards have associate relationship with international credit card companies like diner's club, master card and visa international.
- Most of the cards provide Automated Teller Machine(ATM) facility.
- Installment credit facility is provided by many of the cards.

Advantages of Credit Cards

- Money from transactions credited into supplier's account within 2-4 days.
- No cash involved.
- Enable customers to buy expensive products immediately and make 'impluse' purchases.
- Enable customers to make a payment over the telephone or over the internet.
- Once transaction confirmed, payment to supplier guaranteed.
- Credit card holders can use card to obtain cash from a cash machine – through they pay interest on withdrawals from the movement they make the transaction.
- Credit card holders have additional protection if goods are faulty, provided each item cost over a minimum amount(normally 50 pounds).

Disadvantages

- Cost of installing and paying for an electronic terminal.
- Card holders may spend more than they can afford.
- Cost of processing the transactions.
- Interest can be high if card is not paid – off in full each month and cash withdrawals are expensive.

DEBIT CARDS

A Debit card is only accepted at outlets with electronic swipe- machines that can check and deduct amounts from the banks balance online. The banks only issue them to people if they hold an account with them.

ADVANTAGES OF DEBIT CARDS

- No need to carry cash.
- No need to make a trip to the bank every time the customer needs to withdraw money. He / She can use the card just about any where he / she goes, and can access money at an ATM machine any time of day or Night.
- No interest is paid on purchases.

DISADVANTAGES OF DEBIT CARDS

- There is no grace period to pay the bill.
- Debit card do not have as much protection as credit cards.
- Not all debit cards may be helping to build the credit score.
- Since debit cards are typically linked to bank accounts, if a debit card and PIN Number is stolen, the entire bank account could be drained of funds.

Security Threats in E-banking

- Phishing

Spyware&Adware

Viruses

Trojans

Key loggers

Phishing

Hoax e-mail claiming to be from financial institutions

Spyware and Adware

Spyware is a type of software that secretively collects user information while on the internet

Viruses

A computer virus is software that affixes itself to another program like a spreadsheet or word document

Trojans

A Trojan anti-virus software program that poses a harmless application

Unlike viruses, Trojan do no replicate themselves and do not need a host program to attach to

Key loggers

If fraudster installs a software called “key logger” on the computer or the device on which the customer in accessing online banking, the software copies to a file, every keystock typed on that PC.

RBI INITIATIVES

The initiatives taken by RBI are follows:

- Customer induced options may be provided for fixing a cap on the value and mode of transactions/beneficiaries. Additional authorization may be instead when the customer wants to exceed the cap
- Limiting the number of beneficiaries to be added per day to be considered
- System alert to be introduced for beneficiary addition
- Number of transactions per day/per beneficiary may be monitored for suspicious transactions
- Introduction of additional factor of authentication for unusual transaction to be authenticated on special request
- Bank may consider implementation of digital signature for large value payments for all customers, to start with for RTGS transactions
- IP address capture for transaction may be considered
- “adaptive Authentication” (means of providing authentication for end users without them having to know it is as work) may be considered for fraud detection.