INDIAN FINANCIAL SYSTEM AND MARKETS

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OVERVIEW OF FINANCIAL SYSTEM

Function of Financial Markets

- Perform the essential function of channeling funds from economic players that have saved surplus funds to those that have a shortage of funds
- Direct finance: borrowers borrow funds directly from lenders in financial markets by selling them securities
- Promotes economic efficiency by producing an efficient allocation of capital, which increases production
- Directly improve the well-being of consumers by allowing them to time purchases better

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Structure of Financial Markets

- Debt and Equity Markets
  - Debt instruments (maturity)
  - Equities (dividends)
- Primary and Secondary Markets
  - Investment Banks *underwrite* securities in primary markets
  - Brokers and dealers work in secondary markets

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Internationalization of Financial Markets

- **Foreign Bonds**: sold in a foreign country and denominated in that country's currency
- **Eurobond**: bond denominated in a currency other than that of the country in which it is sold
- **Eurocurrencies**: foreign currencies deposited in banks outside the home country
  - Eurodollars: U.S. dollars deposited in foreign banks outside the U.S. or in foreign branches of U.S. banks
- World Stock Markets
  - Also help finance the federal government

Financial Markets Instruments

Money market instruments

- Treasury bills
- Negotiable Banks Certificates of Deposits
- Commercial papers
- Repurchase agreements

Capital Market Instruments

- Stocks
- Mortgages
- Corporate bonds
- Government securities
- Local government bonds

Function of Financial Intermediaries: Indirect Finance

- Lower transaction costs (time and money spent in carrying out financial transactions)
  - Economies of scale
  - Liquidity services
- Reduce the exposure of investors to risk
  - Risk Sharing (Asset Transformation)
  - Diversification
- Deal with asymmetric information problems
  - Adverse Selection: try to avoid selecting the risky borrower.
    - Gather information about potential borrower.
  - (after the transaction) Moral Hazard: ensure borrower will not engage in activities that will prevent him/her to repay the loan.
    - Sign a contract with restrictive covenants.

Financial intermediaries allow "small" savers and borrowers to benefit from the existence of financial markets.

Types of Financial intermediaries

- Depository institutions
  - Commercial banks
  - Saving and loan associations and mutual saving banks
  - Credit unions
- Investment Intermediaries
  - Finance Companies
  - Mutual Funds
  - Money Market Mutual Funds
  - Investment Banks

Regulation of the Financial System

- To increase the information available to investors:
  - Reduce adverse selection and moral hazard problems
  - Reduce insider trading .
- To ensure the soundness of financial intermediaries:
  - Restrictions on entry (chartering process).
  - Disclosure of information.
  - Restrictions on Assets and Activities (control holding of risky assets).
  - Deposit Insurance (avoid bank runs).
  - Limits on Competition (mostly in the past):
    - Branching
    - Restrictions on Interest Rates

How does the financial structure promote economic efficiency?

- The bar chart in next slide shows how American businesses financed their activities using external funds (those obtained from outside the business itself) in the period 1970–2000 and compares U.S. data to those of Germany, Japan, and Canada.

Asymmetric Information: Adverse Selection and Moral Hazard

- Adverse selection occurs before the transaction
- Moral hazard arises after the transaction
- Agency theory analyses how asymmetric information problems affect economic behavior

Tools to Help Solve Adverse Selection Problems

- Private production and sale of information
  - Free-rider problem
- Government regulation to increase information
  - Not always works to solve the adverse selection problem, explains.
- Financial intermediation
  - Explains facts 3, 4, & 6.
- Collateral and net worth
  - Explains fact.

How Moral Hazard Affects the Choice Between Debt and Equity Contracts

- Called the Principal-Agent Problem
  - Principal: less information (stockholder)
  - Agent: more information (manager)
- Separation of ownership and control of the firm
  - Managers pursue personal benefits and power rather than the profitability of the firm.

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Tools to Help Solve the Principal-Agent Problem

- Monitoring (Costly State Verification)
  - Free-rider problem
- Government regulation to increase information
- Financial Intermediation
- Debt Contracts

How Moral Hazard Influences Financial Structure in Debt Markets

- Borrowers have incentives to take on projects that are riskier than the lenders would like.
  - This prevents the borrower from paying back the loan.

Tools to Help Solve Moral Hazard in Debt Contracts

- Net worth and collateral
  - Incentive compatible
- Monitoring and Enforcement of Restrictive Covenants
  - Discourage undesirable behavior
  - Encourage desirable behavior
  - Keep collateral valuable
  - Provide information
- Financial Intermediation

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Financial Development and Economic Growth

- The financial systems in developing and transition countries face several difficulties that keep them from operating efficiently
- In many developing countries, the system of property rights (the rule of law, constraints on government expropriation, absence of corruption) functions poorly, making it hard to use these two tools effectively

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Asymmetric Information and Financial Regulation

- Bank panics and the need for deposit insurance:
  - FDIC: short circuits bank failures and contagion effect.
  - Payoff method.
  - Purchase and assumption method (typically more costly for the FDIC).
- Other form of government safety net:
  - Lending from the central bank to troubled institutions (lender of last resort).

Restrictions on Asset Holdings

- Attempts to restrict financial institutions from too much risk taking
  - Bank regulations
    - Promote diversification
    - Prohibit holdings of common stock
  - Capital requirements
    - Minimum leverage ratio (for banks)
    - Basel Accord: risk-based capital requirements
    - Regulatory arbitrage

Capital Requirements

- Government-imposed capital requirements are another way of minimizing moral hazard at financial institutions
- There are two forms:
  - The first type is based on the leverage ratio, the amount of capital divided by the bank's total assets. To be classified as well capitalized, a bank's leverage ratio must exceed 5%; a lower leverage ratio, especially one below 3%, triggers increased regulatory restrictions on the bank
  - The second type is risk-based capital requirements.

Financial Supervision: Chartering and Examination

- **Chartering** (screening of proposals to open new financial institutions) to prevent adverse selection
- **Examinations** (scheduled and unscheduled) to monitor capital requirements and restrictions on asset holding to prevent moral hazard
  - Capital adequacy
  - Asset quality
  - Management
  - Earnings
  - Liquidity
  - Sensitivity to market risk
- Filing periodic ‘call reports’

Assessment of Risk Management

- Greater emphasis on evaluating soundness of management processes for controlling risk
- Trading Activities Manual of 1994 for risk management rating based on
  - Quality of oversight provided
  - Adequacy of policies and limits for all risky activities
  - Quality of the risk measurement and monitoring systems
  - Adequacy of internal controls
- Interest-rate risk limits
  - Internal policies and procedures
  - Internal management and monitoring
  - Implementation of stress testing and Value-at risk (VAR)

Disclosure Requirements

- Requirements to adhere to standard accounting principles and to disclose wide range of information
- The Basel 2 accord puts a particular emphasis on disclosure requirements
- Mark-to-market (fair-value) accounting

Macroprudential Vs. Microprudential Supervision

- Before the global financial crisis, the regulatory authorities engaged in **microprudential supervision**, which is focused on the safety and soundness of *individual* financial institutions.
- The global financial crisis has made it clear that there is a need for **macroprudential supervision**, which focuses on the safety and soundness of the financial system *in the aggregate*.

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FINANCIAL MARKETS

Functions of Stock Exchanges

Stock exchanges discharge three vital functions in the orderly growth of capital formation:

- It creates a nexus between savings and investments

  As a nexus, the stock exchanges arrange for the preliminary distribution of new issues. Their members act as brokers and underwriters.

- It acts as a market place

  As a market place, they guarantee sale-ability of securities to investors who have already invested and surety of purchase to those who desire to invest.

- It facilitates continuous price formation.

  The collective judgment of many players in the market brings about changes in security prices in small graduation, thereby evening out wide swings in the price and ensuring continuous price formation.

Functions of New Issue Market

The main function of the NIM is to facilitate the transfer of resources from the savers to the entrepreneurs. Its general function is split, up operationally into a triple service function:

- Origination
- Under-writing
- Distribution

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Underwriting is a form of institutional guarantee that the issue would be sold by eliminating the risk arising from uncertainty of public response.

Distribution: The sale of securities to the ultimate investors is known as distribution.

Floatation of Issues

The methods of flotation of issues are:

Prospectus/public issue

Under the prospectus/public issue method, issuing companies offer directly to the general public, through a prospectus, a fixed number of shares, at a stated (par/premium) price. To ensure success, issues are generally underwritten, It is, however, an expensive method and is, therefore, suitable only for larger issues

Book building

The book building method is a volume and price discovery method. The investors quote the number of securities and the price at which they wish to acquire them.

Offer for sale

The Offer for sale method involves offering/sale of shares by the existing holders (promoters) to dilute their holdings in existing companies.

Placements

Under the placement method, the entire block of securities is offered to a select group of investors. It is an inexpensive method and the success of an issue does not depend upon public response Securities can be sold through this method even at times when conditions in the market may not be favorable.

Rights issues

The existing shareholders are offered the right to subscribe to new shares in proportion to the number of shares held in the issuing company in rights issues. This method can be used only by existing companies.

Financial Instruments and Markets

- **Primary Markets**
  - Market for issuing a **new security** and distributing to saver-lenders.
  - **Investment Banks**—Information and marketing specialists for newly issued securities.
- **Secondary Markets**
  - Market where existing securities can be exchanged
    - New York Stock Exchange
    - American Stock Exchange
    - Over-the-counter (OTC) markets

Types of Corporate Stock

- **Preferred Stock**
  - Fixed dividends, priority over common stock
- **Common Stock**
  - Variable dividends, based on company's profits.
- **Convertible**
  - Preferred stock that can be converted into common stock at a stated price

Mortgages

- Debt incurred in order to buy land or building
- **Amortized**—principal and interest is gradually repaid over the life of loan
- **Fixed Rate**—Rate of interest is fixed
- **Variable-Rate**—Rate of interest varies depending on financial environment
- Cash flow for lender is uncertain
  - Interest payments may vary - variable rate mortgages
  - Home owner may prepay
  - Refinance a fixed mortgage if interest rates decline
- **Securitization**—Individual mortgages may be “pooled” and sold as a unit to reduce uncertainty.
- Mortgages may be insured by government agencies
  - Federal Housing Authority (FHA)
  - Veterans Administration (VA)

Options and Futures Contracts

- Contractual agreement between two parties to exchange an asset in the future at a stated price
- **Derivative financial instruments**
  - Derive value from underlying assets
- **Long**
  - Buyer of the contract, receive commodity in the future
- **Short**
  - Seller of the contract, provide commodity in the future
- **Speculators**
  - Gamble on price fluctuations and hope to profit
- **Hedgers**
  - Eliminate the risk of price fluctuations

The Capital Market

- Exchange **of long-term securities—in excess of one year**
- Generally used to secure long-term financing for capital investment
  - **Stock market**—Largest part of capital market and held by private and institutional investors
  - **Corporate bond market**—Held by insurance companies, pension and retirement funds
  - **Local and state government bonds**—Primarily held for tax-exempt feature
  - **Government securities**—Held by commercial banks, the Fed, individual Americans/foreigners, and dealers

The Money Market

- Exchange of **short-term instruments—less than one year**
- Highly liquid, minimal risk
- Use of a temporary surplus of funds by banks or businesses
  - **U.S. Treasury bills**—short-term debts of US government
  - **Bank Certificates of Deposits**—liabilities of issuing bank, interest bearing to corporations that hold them
  - **Commercial paper**—short-term liabilities of prime business firms and finance companies
  - **Federal Funds**—Exchange of excess/deficient reserves between banks on an overnight basis.

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Role of Financial Intermediaries

- Act as agents in transferring funds from savers-lenders to borrowers-spenders.
- Acquire funds by issuing their liabilities to public and use money to purchase financial assets
  - Earn profits on difference between interest paid and earned
  - Diversify portfolios and minimize risk
  - Lower transaction costs
  - Competition lowers interest rates—beneficial to economic growth

Economic Functions of Financial Markets

- Interactions of buyers and sellers determines price.
  - Price discovery process.
- Provides a mechanism to sell.
  - Liquidity.
- Reduces transactions costs.
  - Search costs.
  - Information costs.

Commercial Banks

- Most prominent financial institution
- Range in size from huge (BankAmerica) to small (local banks)
- Major sources of funds
  - used to be demand deposits of public
  - now rely more on “other liabilities”
  - also accept savings and time deposits
- Uses of funds
  - short-term government securities
  - long-term business loans
  - home mortgages

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Life Insurance Companies

- Insure against death
- Receive funds in form of premiums
- Use of funds is based on mortality statistics—predict when funds will be needed
- Invest in long-term securities—high yield
  – Long-term corporate bonds
  – Long-term commercial mortgages

Mutual Funds

- Stock or bond market related institutions
- Pool funds from many people
- Invest in wide variety of securities—minimize risk

Money Market Mutual Funds

- Individuals purchase shares in the fund
- Fund invests in highly liquid short-term money market instruments
  - Large-size negotiable CD's
  - Treasury bills
  - High-grade commercial paper

CAPITAL MARKET

DEFINITION OF CAPITAL MARKET

- The market where investment instruments like bonds, equities and mortgages are traded is known as the capital market.
- The primal role of this market is to make investment from investors who have surplus funds to the ones who are running a deficit.
- The capital market offers both long term and overnight funds.
- The different types of financial instruments that are traded in the capital markets are:
  - > equity instruments
  - > credit market instruments,
  - > insurance instruments,
  - > foreign exchange instruments,
  - > hybrid instruments and
  - > derivative instruments.

Nature of Capital Market

The nature of capital market is brought out by the following facts:

- It Has Two Segments
- It Deals In Long-Term Securities
- It Performs Trade-off Function
- It Creates Dispersion In Business Ownership
- It Helps In Capital Formation
- It Helps In Creating Liquidity

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Types of capital market

There are two types of capital market:

- Primary market,
- Secondary market

Primary Market

- It is that market in which shares, debentures and other securities are sold for the first time for collecting long-term capital.
- This market is concerned with new issues. Therefore, the primary market is also called NEW ISSUE MARKET.
- In this market, the flow of funds is from savers to borrowers (industries), hence, it helps directly in the capital formation of the country.
- The money collected from this market is generally used by the companies to modernize the plant, machinery and buildings, for extending business, and for setting up new business unit.

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Features of Primary Market

- It Is Related With New Issues
- It Has No Particular Place
- It Has Various Methods Of Float Capital: Following are the methods of raising capital in the primary market:
  - i) Public Issue
  - ii) Offer For Sale
  - iii) Private Placement
  - iv) Right Issue
  - **v)** Electronic-Initial Public Offer
- It comes before Secondary Market

Secondary Market

- The secondary market is that market in which the buying and selling of the previously issued securities is done.
- The transactions of the secondary market are generally done through the medium of stock exchange.
- The chief purpose of the secondary market is to create liquidity in securities.
- If an individual has bought some security and he now wants to sell it, he can do so through the medium of stock exchange to sell or purchase through the medium of stock exchange requires the services of the broker presently, their are 24 stock exchange in India.

Features of Secondary Market

- It Creates Liquidity
- It Comes After Primary Market
- It Has A Particular Place
- It Encourage New Investments

CAPITAL MARKET RISK

- Investment in long term financial instruments is accompanied by high capital market risks. Since there are two types of capital markets- the stock market and the bond market.
- So risks are present in both the market.

Risk in the Stock Market

- Stock prices keep fluctuating over a wide range unlike the bank deposits or government bonds.
- The efficient market hypothesis shows the effect of fundamental factors in changing the price of the stock market.
- The Efficient Market Hypothesis shows that all price movements are random whereas there are plenty of studies that reflect the fact that there is a specific trend in the stock market prices over a period of time.
- Research has shown that there are certain psychological factors that shape the stock market prices.
- Sometimes the market behaves illogically to any economic news.
- The stock market prices can be diverted in any direction in response to press releases, rumors and mass panic.
- The stock market prices are also subject to speculation. In the short run the stock market prices may be very volatile due to the occurrences of the fast market changing events.

Risk in the Bond Market

Capital market risk in the bond market arises due to interest rate changes. There is an inverse relationship existing between the interest rate and the price of the bond. Hence the bond prices are sensitive to the monetary policy of the country as well as economic changes.

INDIAN CAPITAL MARKET

- The Indian Capital Market is one of the oldest capital markets in Asia which evolved around 200 years ago.

Chronology of the Indian capital markets

>1830s: Trading of corporate shares and stocks in Bank and cotton Presses in Bombay.

>1850s: Sharp increase in the capital market brokers owing to the rapid development of commercial enterprise.

1860-61: Outbreak of the American Civil War and ' Share Mania ' in India.

>1894: Formation of the Hamada Shares and Stock Brokers Association.

>1908: Formation of the Calcutta Stock Exchange Association.

CAPITAL MARKET REPORT

- The Capital Market Report is prepared by the capital market analysts and is of various types.
- There are four different kinds of capital market reports: >10-K Reports,

  >10-Q Reports,

  >Form 8-K Reports,

  >the Proxy Statements .

CAPITAL MARKET INVESTMENT

- Capital market investment takes place through the bond market and the stock market.
- The capital market is basically the financial pool in which different companies as well as the government can raise long term funds.
- Capital market investment that takes place through the bond and the stock market may be elucidated in the following heads.

MONEY MARKET

Definition of Money Market

Short-term credit market: where debt securities having original maturities of 1 year or less are traded.

Money Market Characteristics

- Issued in large denominations
  - Usually $1 million or more
- Money market instruments have short maturities
  - Less than 3 months
  - Ranging from 1 day to 1 year
- Money market instruments characterized by:
  - Low liquidity
  - Default risk
- Does not occupy one particular geographic location or trading floor

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Money Market Benefits

- More efficient source of credit for largest:
  - Financial institutions
  - Nonfinancial corporations
  - Governmental bodies
- Advantages over bank borrowing
  - Banks required to hold noninterest-bearing required reserves:
    - As vault cash
    - On deposit at Fed
      - only 90-97% of banks' domestic transactions deposits can be lent out
  - Banks face regulatory constraints on:
    - size of loan they can make to one particular borrower
    - Particular types of assets they are allowed to hold on their balance sheet

Money Market Participants

- Commercial banks and savings associations
- GSEs
- The Federal Reserve
- Corporations and finance companies
- Pension funds and insurance companies
- Brokers and dealers
- MMMFs and individuals

Brokers and Dealers

- Ensure the regular functioning of the money market
- Market new issues of securities
- Repurchase securities
- Establish secondary market
- Act as intermediaries in the RP market
- Match buyers and sellers

Money Market Instruments

- Commercial paper
  - Unsecured, short-term promissory notes as alternative to:
    - Short-term bank loans
    - Other forms of borrowing
  - Primary benefit to largest & most creditworthy issuers is:
    - Cost of borrowing is lower than at a commercial bank
- Commercial paper
  - Characteristics largely defined by legislation and issuers' attempt to avoid costly disclosure requirements mandated for other types of securities
  - Expensive requirements avoided if these are met:
    - Paper issued must mature in less than 270 days
    - Paper must be issued in large denomination so that it is not typically purchased directly by public
    - Proceeds must be used to fund current transactions

Money Market Instruments (Contd.)

- Commercial paper
  - Financial companies (specifically nonbank financial companies responsible for issuing majority:
    - Domestic paper
    - Foreign paper
  - Companies choose to issue paper:
    - Through a dealer
    - Engage in direct placements
- Federal (Fed) Funds
  - When institutions anticipate insufficient reserves, they often turn to Federal (fed) funds market.
  - Here they can borrow reserves from other institutions on an overnight basis.
- Institutions with excess reserves can turn to the fed funds market to loan these reserves and earn interest.

Money Market Instruments (Contd.)

- Fed Funds
  - Fed funds are lent:
    - on an overnight basis
    - in denominations of $5 million or more
  - Fed Funds Rate:
    - Interest rate charged on overnight loans of reserves among commercial banks
- Repurchase Agreements
  - Short-term contract in which seller agrees to:
    - Sell government security to a buyer
    - Buy it back on a later date at a higher price
- Reverse Repurchase Agreements or
  Matched Sale-Purchase (MSP) Agreement
  - Repurchase agreement viewed from perspective of initial buyer
  - Short-term agreements in which:
    - Buyer buys a government security from seller
    - Agrees to sell it back on a later date at a higher price

Money Market Instruments (Contd.)

- CERTIFICATES of DEPOSIT (CDs)
  - Debt instruments issued by commercial banks with:
    - Minimum denomination of $100,000
    - Fixed interest rate
    - Return the principal at maturity
  - Debt instruments issued by commercial banks that may be:
    - Negotiable (tradable)
    - Non-negotiable (not tradable)
- Thrift CDs
  - Certificates of deposit issued by:
    - Savings associations
    - Credit unions

Money Market Instruments (Contd.)

- MONEY MARKET MUTUAL FUNDS (MMMFs)
  - Short-term investment pools use proceeds they raise from selling shares to invest in various money market instruments
  - Disintermediation
    - Reversal of financial intermediation process whereby funds are:
      - Pulled from financial intermediaries
      - Moved directly into open market instruments

Call Money Market

- It deals with one-day loans (overnight, to be precise) called call loans or call money
- Participants are mostly banks. Also called inter-bank call money market.
- The borrowing is exclusively limited to banks, who are temporarily short of funds.
- On the lending side, besides banks with excess cash and as special cases few FIs like LIC, UTI
- All others have to keep their funds in term deposits with banks to earn interest
- Call loans are generally made on a clean basis- i.e. no collateral is required
- The main function of the call money market is to redistribute the pool of day-to-day surplus funds of banks among other banks in temporary deficit of funds
- The call market helps banks earn interest and yet improve their liquidity
- It is a highly competitive and sensitive market
- It acts as a good indicator of the liquidity position

Bill Market

- Treasury Bill market- Also called the T-Bill market
  - These bills are short-term liabilities (91-day, 182-day, 364-day) of the Government of India
  - It is an IOU of the government, a promise to pay the stated amount after expiry of the stated period from the date of issue
  - They are issued at discount to the face value and at the end of maturity, the face value is paid
  - The rate of discount and the corresponding issue price are determined at each auction
- Commercial Bill market- Not as developed in India as the T-Bill market

BANKING

Indian Banking System

- Central Bank (Reserve Bank of India)
- Commercial banks
- Co-operative banks
- Banks can be classified as:
  - Scheduled (Second Schedule of RBI Act, 1934)
  - Non-Scheduled
- Scheduled banks can be classified as:
  - Public Sector Banks
  - Private Sector Banks (Old and New)
  - Foreign Banks
  - Regional Rural Banks

Indigenous Bankers

- Individual bankers like Shroffs, Seths, Sahukars, Mahajans, etc. Combine trading and other business with money lending.
- Vary in size from petty lenders to substantial Shroffs
- Act as money changers and finance internal trade through hundis (internal bills of exchange)
- Indigenous banking is usually family owned business employing own working capital
- At one point, it was estimated that IB met about 90% of the financial requirements of rural India

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Development Oriented Banking

- Historically, close association between banks and some traditional industries- cotton textiles in the west, jute textiles in the east
- Banking has not been mere acceptance of deposits and lending money to include development banking
- Lead Bank Scheme- opening bank offices in all important localities
- Providing credit for development of the district
- Mobilising savings in the district. ‘Service area approach’

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Progress of Banking in India

- Nationalisation of banks in 1969: 14 banks were nationalised
- Branch expansion: Increased from 8260 in 1969 to 68500 in 2005
- Population served per branch has come down from 64000 to 15000
- A rural branch office serves 15 to 25 villages within a radius of 16 kms
- Still only 32,180 villages out of 5 lakh have been covered
- Deposit mobilisation:
  - 1951-1971 (20 years)- 700% or 7 times
  - 1971-1991 (20 years)- 3260% or 32.6 times
  - 1991- 2006 (11 years)- 1100% or 11 times
- Expansion of bank credit: Growing at 20-30% thanks to rapid growth in industrial and agricultural output
- Development oriented banking: priority sector lending
- Diversification in banking: Banking has moved from deposit and lending to
  - Merchant banking and underwriting
  - Mutual funds
  - Retail banking
  - ATMs
  - Anywhere banking
  - Internet banking
  - Venture capital funds
  - Factoring-

Profitability of Banks

- Reforms has shifted the focus of banks from being development oriented to being commercially viable
- Prior to reforms, banks were not profitable and in fact made losses for the following reasons:
  - Declining interest income
  - Increasing cost of operations
- Declining interest income was for the following reasons:
  - High proportion of deposits impounded for CRR and SLR, earning relatively low interest rates
  - System of directed lending
  - Political interference- leading to huge NPAs
- Rising costs of operations for banks was because of several reasons: economic and political
- As per the Narasimham Committee (1991), the reasons for rising costs of banks were:
  - Uneconomic branch expansion
  - Heavy recruitment of employees
  - Growing indiscipline and inefficiency of staff due to trade union activities
  - Low productivity
- Declining interest income and rising cost of operations of banks led to low profitability in the 90s

NPA Management

- The Narasimham Committee recommendations were made, among other things, to reduce the Non-Performing Assets (NPAs) of banks
- To tackle this, the government enacted the Securitization and Reconstruction of Financial Assets and Enforcement of Security Act (SARFAESI) Act, 2002
- Enabled banks to realise their dues without intervention of courts

SARFAESI Act

- Enables setting up of Asset Management Companies to acquire NPAs of any bank or FI (SASF, ARCIL are examples)
- NPAs are acquired by issuing debentures, bonds or any other security
- As a second creditor can serve notice to the defaulting borrower to discharge his/her liabilities in 60 days
- Failing which the company can take possession of assets, takeover the management of assets and appoint any person to manage the secured assets
- Borrowers have the right to appeal to the Debts Tribunal after depositing 50% of the amount claimed by the second creditor

STOCK EXCHANGE

Private Equity and Venture Capital

- **Private Equity** is the used for the rapidly growing area of equity financing for nonpublic companies.

- Banks are generally not interested in making loans to start-up companies, especially ones:
  - with no assets (other than an idea)
  - run by fledgling entrepreneurs with no track record.

- Firms with this profile search for **venture capital (VC)**, an important part of the private equity markets

The Primary Market for Common Stock

- An IPO (and an SEO) involves several steps.
  - Company appoints *investment banking firm* to arrange financing.
  - Investment banker designs the stock issue and arranges for *fixed commitment* or *best effort underwriting*.
  - Company prepares a *prospectus* (usually with outside help) and submits it to the *Securities and Exchange Commission* (SEC) for approval. Investment banker circulates preliminary prospectus (*red herring*).
- Upon obtaining SEC approval, company finalizes prospectus.
- Underwriters place announcements (*tombstones*) in newspapers and begin selling shares.

The Secondary Market for Common Stock

- The ***bid price:***
  - The price dealers pay investors.
  - The price investors receive from dealers.
- The ***ask price:***
  - The price dealers receive from investors.
  - The price investors pay dealers.
- The difference between the bid and ask prices is called the ***bid-ask spread,*** or simply ***spread***.

The New York Stock Exchange

- The New York Stock Exchange (NYSE), popularly known as the **Big Board**, celebrated its bicentennial in 1992.
- The NYSE has occupied its current building on Wall Street since the early 1900's.
- For 200 years, the NYSE was a not-for-profit New York State corporation.
- The NYSE went public in 2006
  - (NYSE Group, Inc., ticker: NYX)
  - Naturally, NYX stock is listed on the NYSE
- In 2007, NYSE Group merged with Euronext to form NYSE Euronext, the world's largest exchange.

NYSE Seats and Trading Licenses

- Historically, the NYSE had 1,366 exchange members. These members:
  - Were said to own "seats" on the exchange.
  - Collectively owned the exchange, although professionals managed the exchange.
  - Regularly bought and sold seats (Record seat price: $3 million in 2005)
  - Seat holders could buy and sell securities on the exchange floor without paying commissions.

- In 2006, all of this changed when the NYSE went public.
  - Instead of purchasing seats, exchange members purchase trading licenses:
    - number limited to 1,500
    - In 2007, a license would set you back a cool $55,000—per year.
  - Having a license entitles the holder to buy and sell securities on the floor of the exchange.

Types of NYSE Members, I.

- The largest number of NYSE members are registered as ***commission brokers***.
- Commission brokers execute customer orders to buy and sell stocks.
- Second in number of NYSE members are ***specialists***, or ***market makers***.
- Market makers are obligated to maintain a “fair and orderly market” for the securities assigned to them.

Types of NYSE Members, II.

- When commission brokers are too busy, they may delegate some orders to ***floor brokers***, or ***two-dollar brokers***, for execution.
  - Floor brokers have become less important because of the efficient *SuperDOT system* (designated order turnaround),
  - *SuperDOT* allows orders to be transmitted electronically directly to the specialist.

- A small number of NYSE members are ***floor traders***, who independently trade for their own accounts.

Operation of the New York Stock Exchange

- The fundamental business of the NYSE is to attract and process ***order flow***.
- In 2007, the average trading volume on the NYSE was over 2 billion shares a day.
- Volume breakdown:
  - About one-third from individual investors.
  - Almost half from institutional investors.
  - The remainder represents NYSE-member trading, mostly from specialists acting as market makers.

NYSE Floor Activity

- There are a number of specialist's posts, each with a roughly figure-eight shape, on the floor of the exchange.
- At the telephone booths, commission brokers:
  - Receive customer orders.
  - Walk out to specialist's posts where the orders can be executed,
  - Return to confirm order executions, and receive new customer orders.
- Coat colors indicate the person's job or position.

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NASDAQ

- The name “NASDAQ” is derived from the acronym NASDAQ, which stands for National Association of Securities Dealers Automated Quotations system.
- NASDAQ is now a proper name in its own right.
- Introduced in 1971, the NASDAQ market is a computer network of securities dealers who disseminate timely security price quotes to NASDAQ subscribers.
- The NASDAQ has more companies listed than the NYSE.
- On most days, volume on the NASDAQ exceeds the NYSE volume.
- NASDAQ trading is almost exclusively done through dealers who buy and sell securities for their own inventories.
- Like NYSE specialists, NASDAQ dealers use their inventory as a buffer to absorb buy and sell order imbalances.
- NASDAQ is actually made up of three separate markets:
  - The Global Select Market
  - The Global Market
  - The Capital Market
- In the late 1990s, the NASDAQ system opened to **electronic communications networks (ECNs)**
- ECNs are basically websites that allow investors to trade directly with one another.

The NASDAQ System

- The NASDAQ network provides bid and ask prices as well as recent transaction information.

- The bid and ask prices for the NASDAQ represent **inside quotes.**
  - The highest bid
  - The lowest ask

- For a small fee, you can have access to “Level II” quotes.
  - Displays all bids and asks
  - Frequently displays the market maker identity

NYSE and NASDAQ Competitors

- The **third market** is an off-exchange market for securities listed on an organized exchange.
- The **fourth market** is for exchange-listed securities in which investors trade directly with one another, usually through a computer network.
- For **dually listed** stocks, regional exchanges also attract substantial trading volume.

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Stock Market Information

- The most widely followed barometer of day-to-day stock market activity is the *Dow Jones Industrial Average* (*DJIA*), or “*Dow*” for short.

- The DJIA is an index of the stock prices of 30 large companies representative of American industry.

Stock Market Indexes

- Indexes can be distinguished in four ways:
  - The market covered,
  - The types of stocks included,
  - How many stocks are included, and
  - How the index is calculated (***price-weighted***, e.g. DJIA, versus ***value-weighted***, e.g. S&P 500).
- Stocks that do not trade during a time period cause *index staleness* over that time period.
  - That is, we do not know the "true" index level if all the stock prices are not updated, i.e., fresh.
- For a **value-weighted** index (i.e., the S&P 500), companies with larger market values have higher weights.
- For a **price-weighted** index (i.e., the DJIA), higher priced stocks receive higher weights.
  - This means stock splits cause issues.
  - But, stock splits can be addressed by adjusting the index divisor.
  - Note: As of March 8, 2008, the DJIA divisor was a nice “round” 0.122834016!

Useful Internet Sites

- www.hoovers.com (information on Initial Public Offerings, or IPOs)
- www.nyse.com (website for the New York Stock Exchange)
- www.nasdaq.com (website for the NASDAQ)
- averages.dowjones.com (The Dow Jones Industrial Average)
- www.russell.com (the Russell Indexes)
- www.barra.com (reference for “value” and “growth” indexes)
- www.djindexes.com (reference for current divisor for the DIJA)
- www.standardpoors.com (website for S&P 500)
- www.nni.nikkei.co.jp (website for Japan’s Nikkei 225 index)