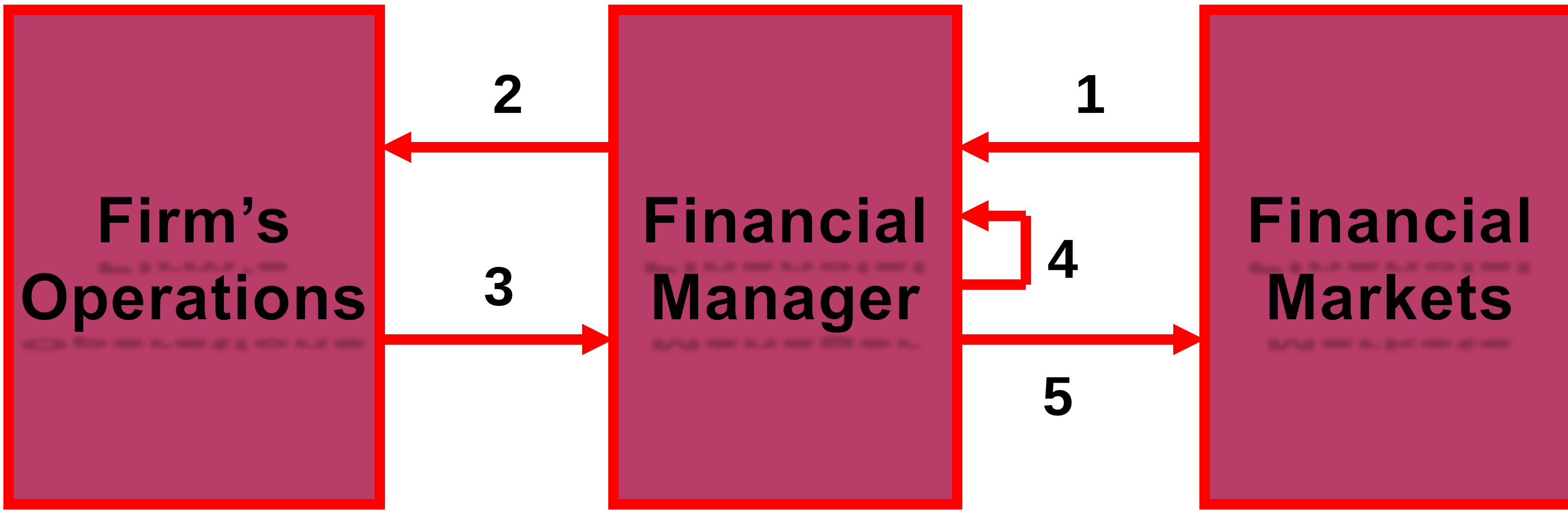
SOURCES OF CAPITAL AND FINANCIAL MARKETS

Ram Kumar Kakani

IIM Kozhikode

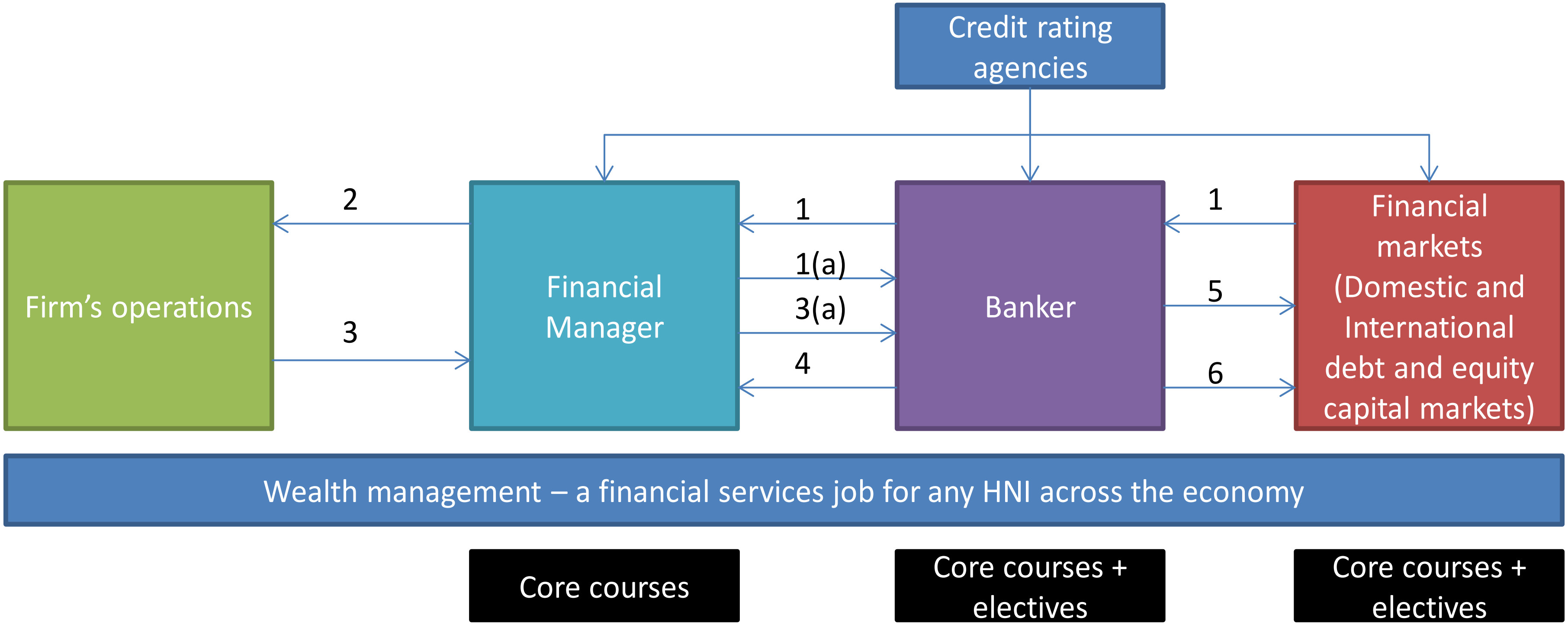
ROLE OF THE FINANCIAL MANAGER



1. Cash raised from investors
2. Cash invested in firm
3. Cash generated from operations
4. Cash reinvested
5. Cash returned to investors

MARKET DIFFERENCES …

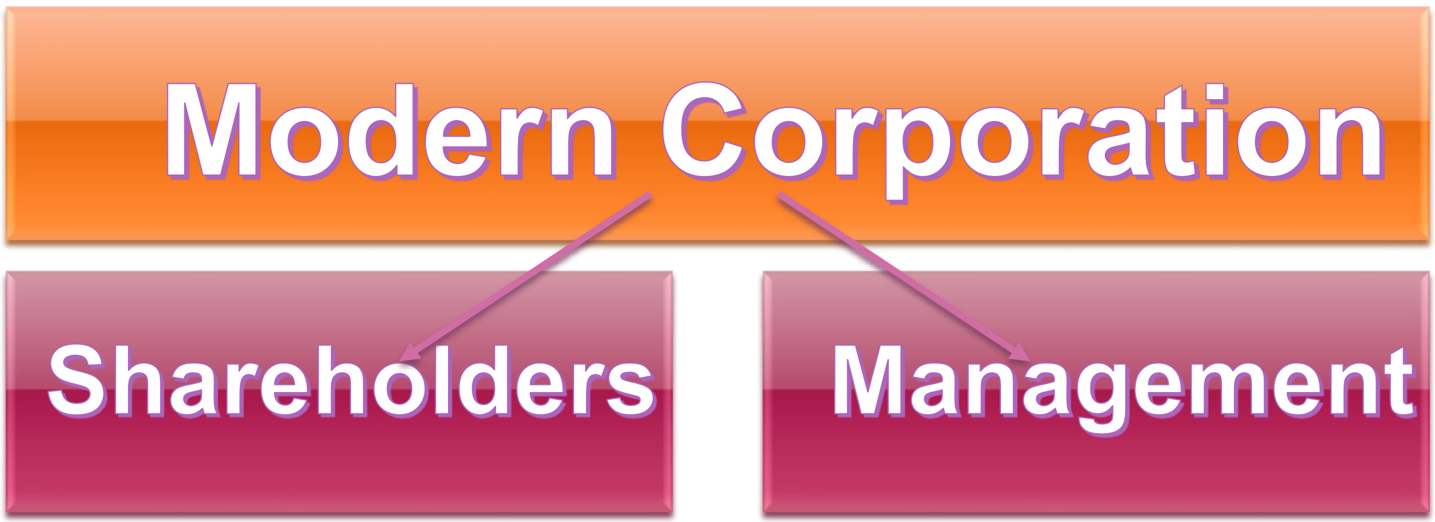
- Primary Vs Secondary
- Money-market Vs Capital-market (G-Sec. market … Equity market and Bond market)
- U.S. Vs Japanese/German markets
- Indian markets: Pre-liberalization Vs Post-liberalization



1. Bankers and financial managers raise capital for investors (from capital markets i.e. debt/ equity in INR/ US$ / foreign currency)
    1. Bankers and financial managers also engage and in hedging needs of the Firm i.e. protecting assets from devaluating due to currencies and liabilities from increasing due to increase in interest rates/ currency
    2. Bankers and financial managers also provide working capital
2. Financial managers deploy this capital in their business operations – their decision involves capital allocation
3. (a) Cash generated by the business is to be again protected by Finance Manager (cash management, regular banking)
4. Banker advises Financial Manager on deployment of cash/ M&A
5. If no opportunities, Banker advises deploying excess cash in the market
6. Banks provide research and analytics services to the market

Options also include services in wealth management and rating agencies which cater to needs to finance managers, bankers and the financial markets

AGENCY CONCEPT



There exists a SEPARATION between owners and managers.

OWNERSHIP VS MANAGEMENT

Differences in Information

- Stock prices and returns
- Issues of shares and other securities
- Dividends
- Financing

Different Objectives

- Management Vs stockholders
- Top management Vs operating management
- Stockholders Vs banks and lenders

REAL VERSUS FINANCIAL ASSETS

- Nature of Investment
  - Reduce current consumption for greater future consumption
- Real Assets
  - Used to produce goods and services: Property, plants and equipment, human capital, etc.
- Financial Assets
  - Claims on real assets or claims on real-asset income
- All financial assets (owner of the claim) are offset by a financial liability (issuer of the claim)
- When all balance sheets are aggregated, only real assets remain
- Net wealth of economy: Sum of real assets

FINANCIAL ASSETS

- Major Classes of Financial Assets or Securities
  - Fixed-income (debt) securities
    - Money market instruments
      - Bank certificate of deposit, T-bill, commercial paper, etc.
    - Debentures / Bonds
    - Preference Shares (Preferred stock)
  - Equity shares (Common stock)
    - Ownership stake in entity, residual cash flow
  - Derivative securities
    - Contract, value derived from underlying market condition

FINANCIAL MARKETS AND THE ECONOMY

- Informational Role of Financial Markets
  - Do market prices equal the fair value estimate of a security's expected future risky cash flows?
  - Can we rely on markets to allocate capital to the best uses?
    - Other mechanisms to allocate capital?
    - Advantages/disadvantages of other systems?

FINANCIAL MARKETS AND THE ECONOMY

- Consumption Timing
  - Consumption smoothes over time
  - When current basic needs are met, shift consumption through time by investing surplus

FINANCIAL MARKETS AND THE ECONOMY

- Risk Allocation
  - Investors can choose desired risk level
    - Bond vs. stock of company
    - Bank CD vs. company bond
    - Risk-and-return trade-off

FINANCIAL MARKETS AND THE ECONOMY

- Separation of Ownership and Management
    - Large size of firms requires separate principals and agents
- Mitigating Factors
    - Performance-based compensation, ESOPs
    - Boards of directors may fire managers
    - Threat of takeovers

FINANCIAL MARKETS AND THE ECONOMY

- Corporate Governance and Corporate Ethics
  - Businesses and markets require trust to operate efficiently
    - Without trust additional laws and regulations are required
    - Laws and regulations are costly
  - Governance and ethics failures cost the economy billions
    - Eroding public support and confidence

FINANCIAL MARKETS AND THE ECONOMY

- Corporate Governance and Corporate Ethics
  - Accounting scandals
    - Satyam Computer, Global Trust Bank, Bank of Rajasthan, Enron, WorldCom, Rite-Aid, HealthSouth, Global Crossing, Qwest
  - Misleading research reports
    - Harshad Mehta & Co, Ketan Parekh & Co, Citicorp, Merrill Lynch, others
  - Auditors: Watchdogs or consultants?
    - PWC India, Arthur Andersen and Enron

FINANCIAL MARKETS AND THE ECONOMY

- Corporate Governance and Corporate Ethics
  - India Clause 49 and US Sarbanes-Oxley Act:
    - Requires more independent directors on company boards
    - Requires CFO to personally verify the financial statements
    - Created new oversight board for the accounting/audit industry(?)
    - Charged board with maintaining a culture of high ethical standards(?)

THE INVESTMENT PROCESS

- Asset Allocation
  - Primary determinant of a portfolio's return
  - Percentage of fund in asset classes
    - Stocks
    - Bonds
    - Alternative assets
    - Money market securities
  - Security selection and analysis
    - Choosing specific securities within asset class

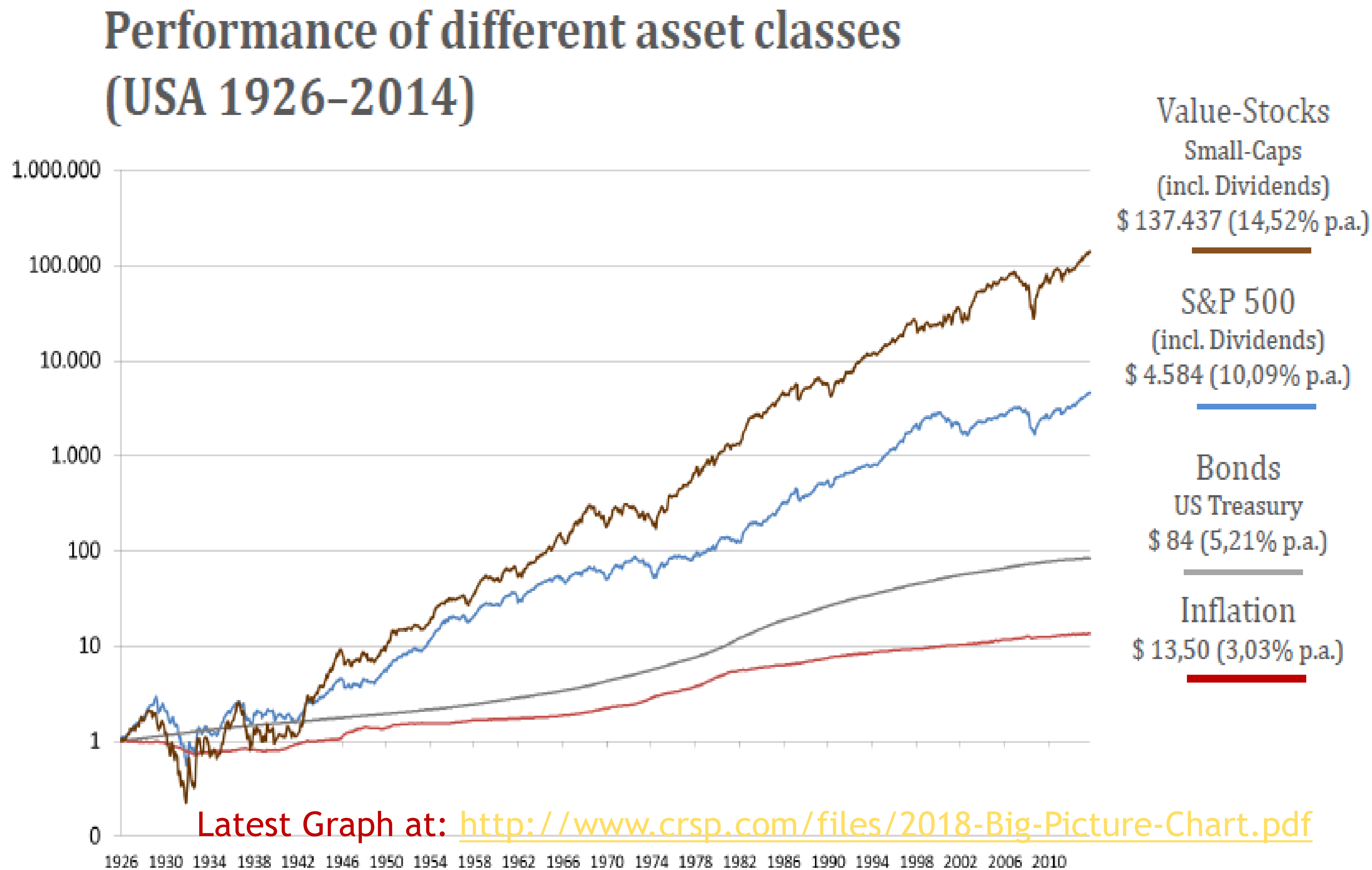
MARKETS ARE COMPETITIVE

- Risk-Return Trade-Off
  - Assets with higher expected returns have higher risk

	Average Annual Return	Minimum (1931)	Maximum (1933)
Stocks	About 12%	−46%	55%

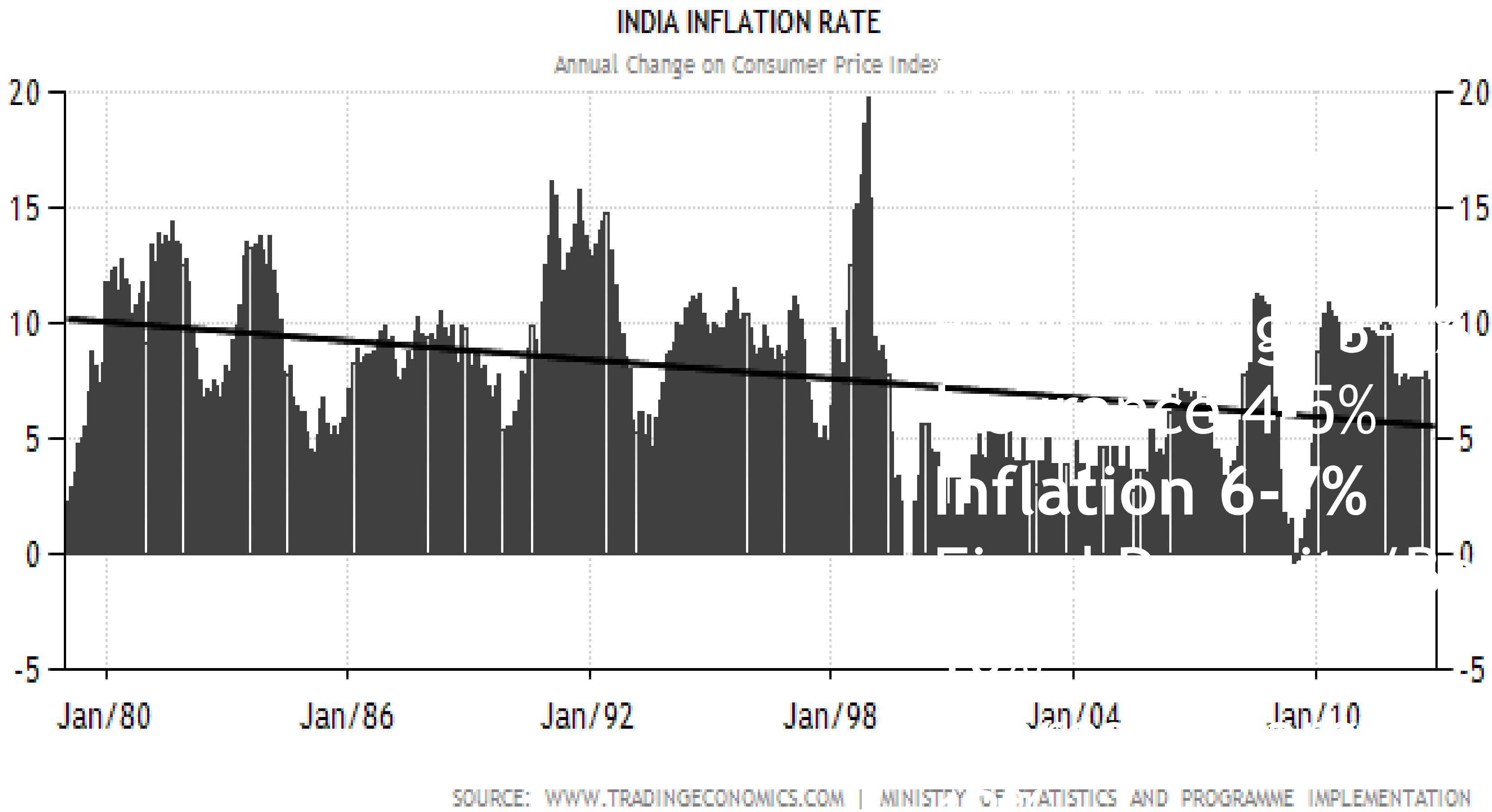
  - Bonds
    - Have lower average rates of return (under 6%)
    - Have not lost more than 13% of their value in any one year
- Risk-Return Trade-Off
  - How do we measure risk?
  - How does diversification affect risk?

INVESTMENT IN DIFFERENT TYPES OF PORTFOLIOS: 1926-2014 (YEAR END 1925 = RS. 1)



Latest Graph at: http://www.crsp.com/files/2018-Big-Picture-Chart.pdf

ANNUAL AVERAGE RETURNS IN INDIA: 1979-2018



ANNUAL AVERAGE RETURNS IN INDIA: 1979-2018

- Shares of Large Companies: 1 → 360 (38 years, 1979-2018)
- Fixed Deposits (of private companies): 1 → 41 (38 years, 1979-2018)
- Fixed Deposits of Banks: 1 → 21 (38 years, 1979-2018)
- But, try looking at the yearly rates of return in each of the cases
- The most fluctuating will be stocks i.e., stock returns vary widely over time.

MARKETS ARE COMPETITIVE

- Efficient Markets
  - Securities should be neither underpriced nor overpriced on average
  - Security prices should reflect all information available to investors
  - Choice of appropriate investment-management style based on belief in market efficiency

MARKETS ARE COMPETITIVE

- Active versus Passive Management
  - Active management (inefficient markets)
    - Finding undervalued securities (security selection)
    - Market timing (asset allocation)
  - Passive management (efficient markets)
    - No attempt to find undervalued securities
    - No attempt to time
    - Holding a diversified portfolio
      - Indexing; constructing “efficient” portfolio

THE PLAYERS

- Business Firms (net borrowers)
- Households (net savers)
- Governments (can be both borrowers and savers)
- Financial Intermediaries (connectors of borrowers and lenders)
  - Commercial banks
  - Investment companies
  - Insurance companies
  - Pension funds
  - Hedge funds

THE PLAYERS

- Investment Bankers
  - Firms that specialize in primary market transactions
  - Primary market
    - Newly issued securities offered to public
    - Investment banker typically "underwrites" issue
  - Secondary market
    - Preexisting securities traded among investors

THE PLAYERS

- Venture Capital and Private Equity
  - Venture capital
    - Investment to finance new firm
  - Private equity
    - Investments in companies not traded on stock exchange

THE FINANCIAL CRISIS OF 2008

- Changes in Housing Finance
  - Low interest rates and a stable economy created housing market boom, driving investors to find higher-yield investments
  - 1970s: Fannie Mae and Freddie Mac bundle mortgage loans into tradable pools (securitization)
  - Subprime loans: Loans above 80% of home value, no underwriting criteria, higher default risk

THE FINANCIAL CRISIS OF 2008

- Mortgage Derivatives
  - CDOs: Consolidated default risk of loans onto one class of investor, divided payment into tranches
  - Ratings agencies paid by issuers; pressured to give high ratings

THE FINANCIAL CRISIS OF 2008

- Credit Default Swaps
  - Insurance contract against the default of borrowers
  - Issuers ramped up risk to unsupportable levels
  - AIG sold $400 billion in CDS contracts

THE FINANCIAL CRISIS OF 2008

- Systemic Risk
  - Risk of breakdown in financial system — spillover effects from one market into others
  - Banks highly leveraged; assets less liquid
  - Formal exchange trading replaced by over-the-counter markets — no margin for insolvency protection

THE FINANCIAL CRISIS OF 2008

- The Shoe Drops
  - September 7, 2008: Fannie Mae and Freddie Mac put into conservatorship
  - Lehman Brothers and Merrill Lynch verged on bankruptcy
  - September 17: Government lends $85 billion to AIG
  - Money market panic freezes short-term financing market

THE FINANCIAL CRISIS OF 2008

- Dodd-Frank Reform Act
  - Called for stricter rules for bank capital, liquidity, risk management
  - Mandated increased transparency
  - Clarified regulatory system
  - Volcker Rule: Limited banks' ability to trade for own account