

Mutual Funds

Concept and characteristics

Concept

- **What is a mutual fund?**
- **Common pool of money**
 - Joint or “mutual” ownership
 - Similarity with shares of a joint stock company
 - Units are the representation of ownership
 - Mutual fund is not a company which manages individual portfolios

Players in the Financial Market

- Banks
- Term-lending Institutions
- NBFCs
- Insurance Companies

And Now

- Mutual Funds

Regulatory Environment

- **Banks – RBI**
- **Term Lending Institutions – Various Acts**
- **NBFCs – RBI**
- **Insurance Companies – IRDA**

- **Mutual Funds - SEBI**

Association of Mutual Funds in India

- **AMFI**
 - Committed to promote the MF Industry on professional & healthy lines
 - Conduct certification program for distributors & employees of Mutual Funds as prescribed by SEBI

Advantages

- **Advantages of Mutual Funds**
 - Portfolio diversification
 - Professional management
 - Reduction / diversification of risk
 - Reduction of transaction cost
 - Liquidity
 - Convenience and flexibility

Diversification

- As a risk management technique
 - Product/Sector risk
 - Market risk
- Do not put all eggs in the same basket

Disadvantages

- **Disadvantages of mutual funds**
 - No control over costs
 - No tailor-made portfolio
 - Managing a portfolio of funds

Not Exactly a Disadvantage

- SEBI regulation caps the cost involved. Competition pushes them further lower
- Multiplicity of portfolio largely satisfies the needs of most of the investor
- Availability of multiple portfolio increases choice by comparison

History of Mutual Funds in India

- **Unit trust of India (1963)**
 - First scheme US64
 - UTI the only player in the market with monopoly power
 - Huge mobilisation of funds through assured return schemes

History of Mutual Funds in India

- **Public sector mutual funds**
 - State bank of India mutual fund (1987), first non-UTI mutual fund
 - Changes in the mindset of investors

History of Mutual Funds in India

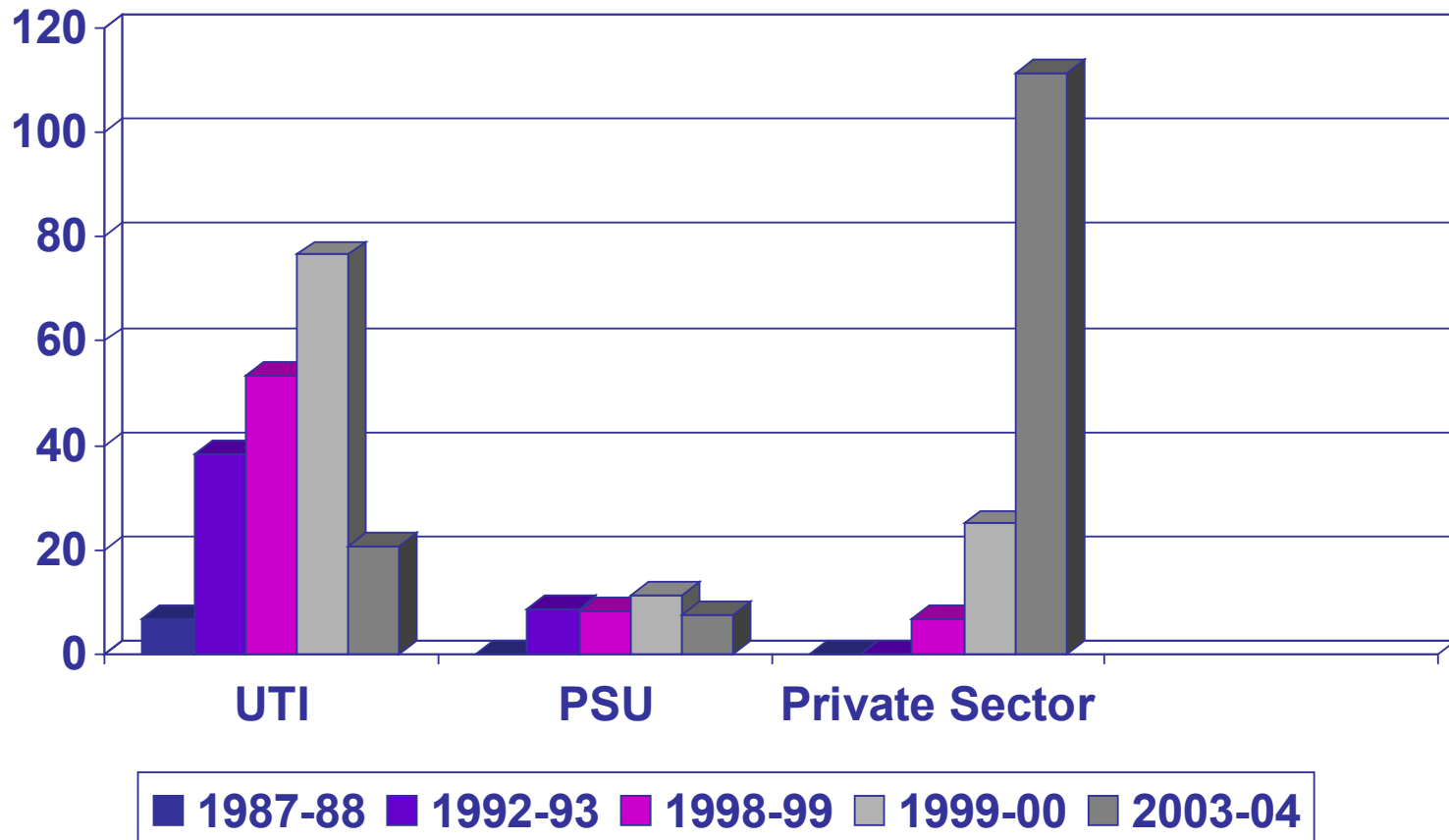
- **Private sector mutual funds**
 - Private sector funds entry in 1993
 - Foreign fund management companies form joint ventures with Indian promoters
 - More competitive products, product innovation, investment management techniques, investor service techniques etc. Come in vogue
 - Investors start becoming selective

Growth of Mutual Funds

- From a modest beginning in 1963, an AUM of Rs 6700 crores for the year 1987-88 which grew to 47,004 crore by 1992-93 (All public sector MFs)
- Entry of Private Sector in 1993 ensured the AUM growth to Rs 113,000 crores by 1999-2000 and to a current figure of Rs 139,640 crores (excluding UTI I)

Growth of Mutual Funds in India

AUM ('000 crores)



Total Net Assets of Mutual Funds

Country	Mar'03	Mar'02
USA	62,65,242	70,62,027
France	9,06,246	7,34,823
Luxembourg	8,16,446	1,29,250
Japan	2,91,261	3,10,808
Hong Kong	1,75,353	1,88,710
South Korea	1,36,258	1,29,250
India	15,758	20,613

(Figures in USD Millions)

Source: www.ici.org

History of Mutual Funds in India

- **SEBI regulation for mutual funds (1996)**
 - Regulatory authority with constitutional powers
 - Uniform standards for all mutual funds including UTI mutual fund (UTI II)
 - Investor protection through SEBI guidelines

Mutual Funds in India

- **Dec 2005**
 - Total number of Funds: 31
 - AUM (Assets Under Management):
**More than Rs 2 lac crores
(USD 45 billion)**

History of Mutual Funds in USA

- **SEC Investment Company Act 1940**
 - Regulates the organization of companies, including mutual funds, that engage primarily in investing, reinvesting, and trading in securities, and whose own securities are offered to the investing public

Mutual Funds in USA

- **Current Status (2004):**
 - 8500 MFs (68 in 1941)
 - 87.7 million individual shareholders
 - Manage assets of about USD 7.8 Trillion (USD 2.1 Billion in 1941)

Types of Funds

- **Close ended v/s open ended schemes**
 - **Close ended schemes**
 - Open only during limited period for subscription
 - Unit capital fixed, investors can buy and sell through stock exchanges where funds are listed
 - Buyback by fund house possible
 - Trading at discount / premium depending on future expectations

Fixed fund size, nav how determined

Types of Funds

- **Close ended v/s open ended funds**
 - **Open ended schemes**
 - Investors can buy and redeem units anytime
 - Transaction at NAV based prices
 - Unit capital changes with every transaction
 - Funds are allowed to stop subscriptions

Types of Funds

- **Load funds v/s no load funds**
 - **Load Funds** Load fund declared value does not include load
 - Cover expenses of advertising / distribution
 - Entry load
 - Purchase price greater than NAV
 - Deferred load
 - Charged on recurring basis to meet expenses. NAV net of these charges
 - Exit Load
 - Redemption price lesser than NAV
 - Contingent Deferred Sales Charge

Types of Funds

- **Load funds v/s no load funds**
 - **No load Funds**
 - No load at any point, entry / exit
 - NAV calculated after accounting for all expenses

Types of Funds

- **By nature of investment**
 - Equity Funds, Debt Funds, Money Market Funds
- **By investment objective**
 - Growth Funds, Value Funds, Income Funds
- **By risk profile**

Composition of Debt Funds

- These are generally instruments with a maturity of 1 year and more and consists of:
 - Government Securities (dated)
 - Municipal Bonds
 - Debentures and Bonds
 - Fixed Deposits
 - PTC (Subordinated Obligations/Debts)

Bond Market

- **Debt Security:**
 - Face value (Principal amount)
 - Coupon rate (Interest rate)
 - Fixed rate
 - Floating rate
 - Monthly, quarterly, end of the period (zero coupon)
 - Maturity (Period after which principal will be paid back)

Bond Market

- **Debt Security** (Example):
 - Face value ---- Rs 1000
 - Coupon rate (Interest rate)
 - Fixed rate ----- 10% per annum
 - Floating rate
 - Monthly, quarterly, end of the period (zero coupon) ---- payable semi annually September 30 and March 31.
 - Maturity (Period after which principal will be paid back) ---- 10 years

Bond Market

- **Debt Security** (Example):
 - Face value: Rs 1000
 - Coupon rate:
 - 10% per annum simple interest
 - payable semi annually September 30 and March 31.
 - Maturity: 10 years
 - Cash Flow: -1000, 50 every six months, 1050 at the end of 10 years

Bond Market

- **Characteristics of Debt Security:**
 - Interest rate sensitivity
 - Yield curve
 - Credit quality

Interest Rate & Bonds

- **Coupon rate is set as per interest rate prevailing at the time of issue**
- **If interest rate in the market comes down, existing bonds with higher coupons become more valuable**
 - Current yield: $\text{coupon} / \text{current price}$
 - Yield to Maturity: yield that will give the same cash flow as the bond

Interest Rate Sensitivity

- **Current Yield:**
 - Coupon rate/ Price
 - Closer to current interest rate in the market
 - Implies higher price (compared to face value) when interest rate falls

Interest Rate Sensitivity

- **Yield to Maturity (YTM):**
 - Yield calculated from the Bond's cash flow and current price
 - $$P = c1/(1+r) + c2/(1+r)^2 + \dots + (1000 + c_n)/(1+r)^n$$
 - More accurate value of yield for long term holders than current yield

Bond Yield

- **Yield depends on**
 - Market interest rate
 - Inflation
 - Economic growth (Demand for money)
 - International interest rate scenario
 - Country risk
 - Risk of the issuer (Default Risk)

Bond Yield

- **Inflation**
 - Rate of increase of Prices in an economy
 - Various indexes like:
 - CPI (Consumer Price Index]
 - WPI (Wholesale Price Index)
 - PPI (Producer Price Index)
 - Core CPI (excluding volatile food and energy prices)

Bond Yield

- **Economic Growth**
 - Rate of increase of GDP (Gross Domestic Product)
 - GDP is the total value added by all measurable economic activities (Total value of products and services sold)
 - When GDP growth is high, there is a greater demand for money and hence higher interest rates

Bond Yield

- **Risk of default**
 - Credit quality measures the ability of the borrower to pay the interest and the principal in time
 - Rating agencies like ICRA, S&P, Moodys
 - Use measures like:
 - Interest coverage ratio
 - Debt to equity ratio
 - Profit and sales growth
 - Management quality

Rating is for instruments and not companies

Bond Yield

- **Credit Quality:**
 - AAA (Highest safety)
 - AA (High safety)
 - A(Adequate safety)
 - BBB (Moderate safety)
 - BB(Inadequate safety)
 - B(Speculative)
 - C(Substantial risk)
 - D (Default)

Bond Yield

- **Credit Quality:**
 - Investors require higher interest rate from lower quality securities
 - When there is a rating upgrade, the price of the security goes up

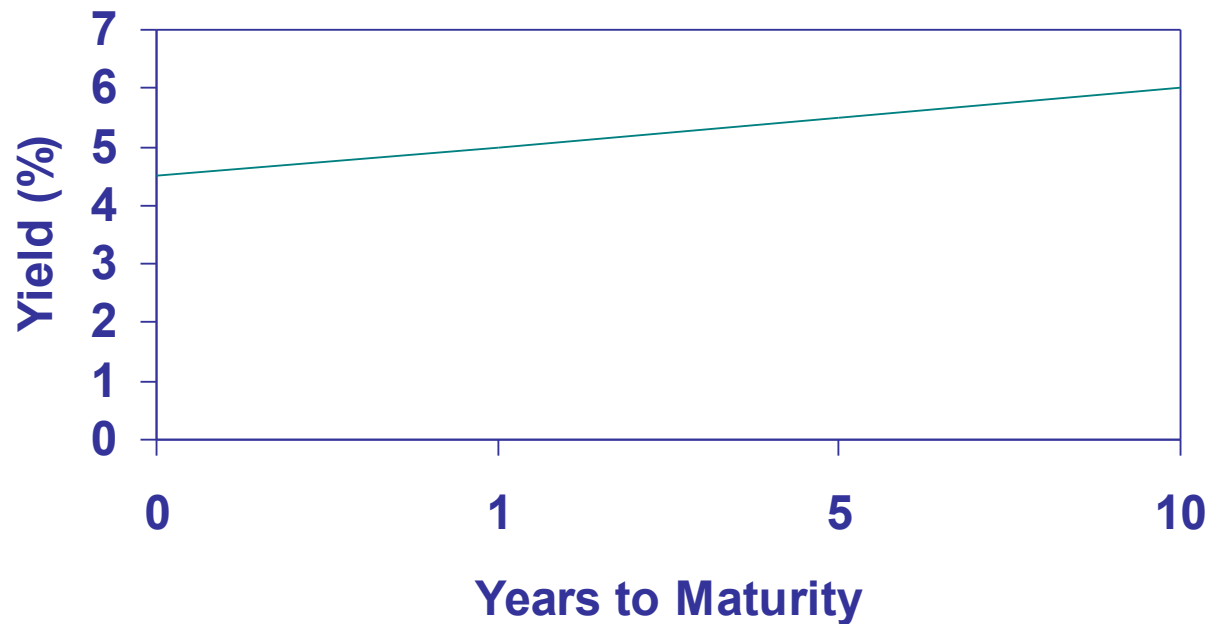
Yield Curve

- Short term borrowers are charged lower interest rate
- Long term borrowers are charged higher interest rate

More things can go wrong
over the long term

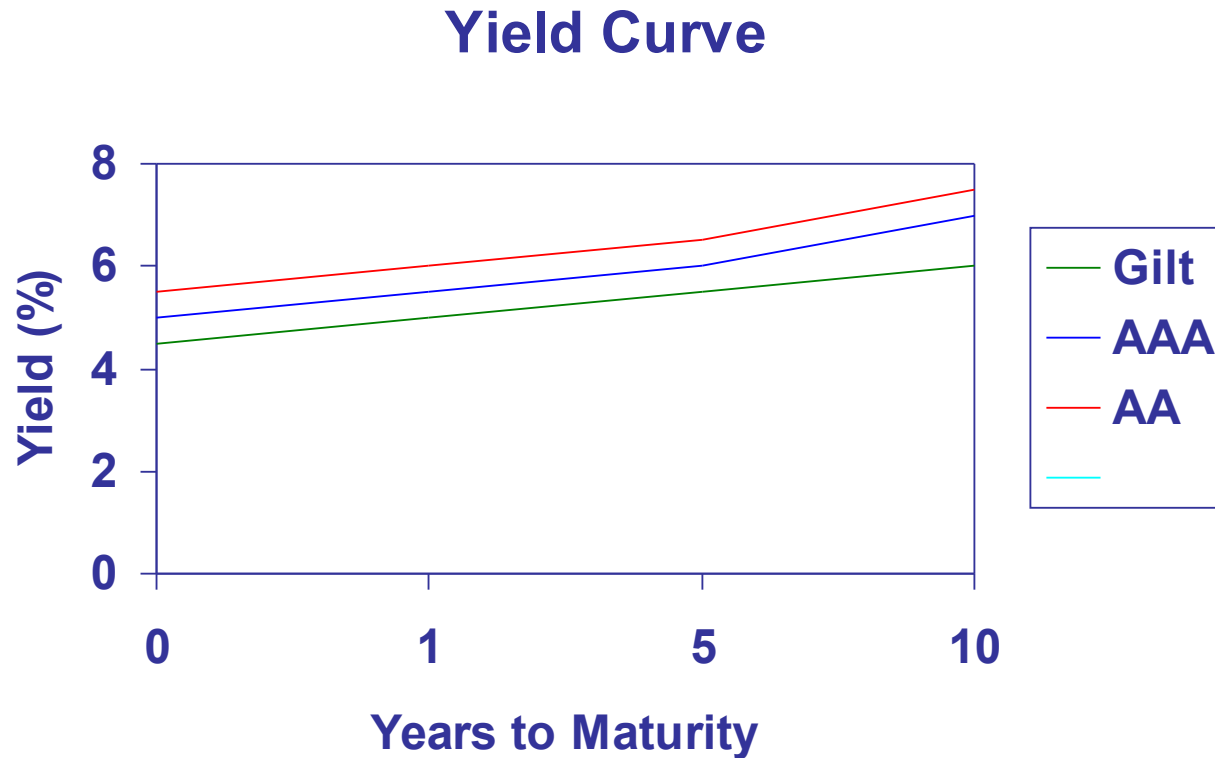
Sovereign Yield Curve

Sovereign Yield Curve



What should be the rate for reliance or IOB

Credit Quality & Yield Curve



Bond Trading In India

- **Government securities**
- **Corporate securities**
- **PTCs**

Government Bonds

- **Can be traded for yield curve**
 - When interest rate falls the value goes up
 - You continue to get higher yields on your original investments
- **Retail investors can not directly participate**
- **Minimum trading lot costs about Rs. 5 crores**

Corporate Bonds

- **Can be traded for yield curve as well as credit rating change**
 - When AA bond is upgraded to AAA, the value goes up
 - You continue to get the higher yields on the original investments
- **Difficult for individuals to trade in these instruments**

Corporate Bonds

- Bonds issued by Institutions like IDBI and Banks like ICICI are available in denominations of Rs 1000
- Infrastructure Bonds are good investments when Section 88 benefits can be availed

Replaced by sec 80C

PTC

- **Pass Through Certificate**
 - Securitised debt
 - Periodic payments are directly passed through to the holder
 - High safety due to diversity of borrowers
 - Low liquidity

Composition of Money Market Funds

- **These are typically instruments with maturities up to 1 year:**
 - Call Money
 - Treasury Bills (T Bills)
 - Commercial Papers (CP)
 - Certificate of Deposits

Attracts Stamp Duty

Types of Funds

- **Equity Funds**
 - Invest primarily in shares and equity related instruments as per stated philosophy
- **Types of equity funds**
 - Aggressive growth funds
 - Growth funds
 - Value funds
 - Index funds
 - Diversified equity funds
 - Equity income funds

Aggressive Growth Funds

- Targets maximum capital appreciation
- May adopt speculative investment strategies
- Tend to more volatile and riskier
- Invests in slightly lower rated company's stocks
- Less researched or speculative stocks

Growth Funds

- Targets capital appreciation over three to five years horizon
- Invests in companies with high earnings growth
- Investments in generally proven companies
- Less volatile than aggressive growth funds

Value Funds

- Invests in fundamentally sound companies whose shares are currently under priced
- Stocks with :
 - Low PE ratios
 - Low market to book value ratios
- Volatile on short term, but least risk in the long run

Index Funds

- Tracks the performance of specific stock market index like BSE Sensex or NSE nifty
- Invests in stock in the same proportion as that of Index
- Exposes investors to only market risk as it is a diversified portfolio

Diversified Equity Funds

- Primarily invests in equities with a small portion in liquid money market
- Seeks to reduce sector and stocks specific risks through diversification
- Lower risk than growth funds
 - **Equity Linked Savings Schemes (ELSS)**
 - Offers Tax concessions to invite investors to invest in equity market
 - **Equity Income Funds**
 - Income funds generally invest in Debt, whereas here the investment is in equities
 - Invests in stocks with high dividend yields

Speciality Funds

- **Sector Funds**
 - Invests in one industry or sector of the market
 - Un-diversified and hence higher risk than the diversified funds
- **Offshore Funds**
 - Invests in equities of one or more foreign countries
 - Would be subject to exchange control regulations and would carry exchange risk
 - Provides diversification across markets / countries

Speciality Funds

- **Small Cap Equity Funds**
 - Invests in shares of companies with lower market capitalisation
 - It may be more volatile (similar to growth or aggressive growth)
- **Option Income Funds**
 - Invests in large dividend paying companies and then sell options against stock positions
 - Ensures a stable income stream through sale of options and dividends
 - Not yet available in India

Hybrid Funds

- **Balanced Funds**
 - Comprises of debt, convertible securities and equity shares in more or less equal proportion
 - Has an objective of income with moderate capital appreciation and preservation
- **Growth and Income Funds**
 - Strikes a balance between capital appreciation and income
 - Invests in good dividend paying companies with potential for capital appreciation
 - Risk profile between income funds and pure growth funds

Hybrid Funds

- **Asset Allocation Funds**
 - Follows variable asset allocation policies
 - May invest in equity, debts, money market and non-financial assets
 - May have stable or flexible allocation policies

Types of Funds

- **Debt Funds** Focus on protecting principal
 - Invests primarily in debt instruments as per stated philosophy
- **Type of debt funds**
 - Money market funds
 - Gilt funds
 - Diversified debt funds
 - Focused debt funds
 - High Yield debt funds
 - Assured returns debt funds
 - Fixed term plans

Money Market Instruments

- **Call Money**
 - Basically an inter-bank market for overnight borrowing and lending
 - Banks are the main participants. However other institutions like LIC, MF etc can lend in the market
- **Treasury Bills (T- Bills)**
 - Short term borrowings by government (91 and 364 days)

Money Market Instruments.....

- **Commercial Papers (CP)**
 - Short term debt instruments issued by corporates. Most popular being the 90 days.
 - These are rated by agencies like Crisil, ICRA etc
 - Attracts stamp duty
- **Certificate of Deposit(CD)**
 - Short term, transferable deposit receipts issued by the bank
 - Attracts stamp duty

Gilt Securities

- These are central / state government borrowal instruments with maturity above 1 year
- As these are guaranteed by the government, has nearly no risk of default and thus are considered as gilt edged securities
- Market value fluctuates depending on interest rate scenario

Focussed Debt Funds

- Has a narrower focus like in specific instruments, sector and offshore debt funds
- Has higher risk than diversified debt funds (sometime even higher than equity funds)
- Examples include; corporate debentures and bonds, tax free infrastructure, mortgage backed bond funds etc.

Risk associated with various funds

Commodity Funds

- Invests in Commodities directly or shares of commodity companies like Hindustan Zinc or through commodities futures contracts
- Specialised funds invest in single commodity or commodity group such as edible oils, grains or metals
- Common examples include precious metal funds (in gold silver etc), industrial materials (copper, steel etc)

Types of Funds

- **Commodity Funds**
 - Steel funds
 - Food grain funds
- **Real Estate Funds**
 - Real estate capital appreciation funds
 - Real estate income funds

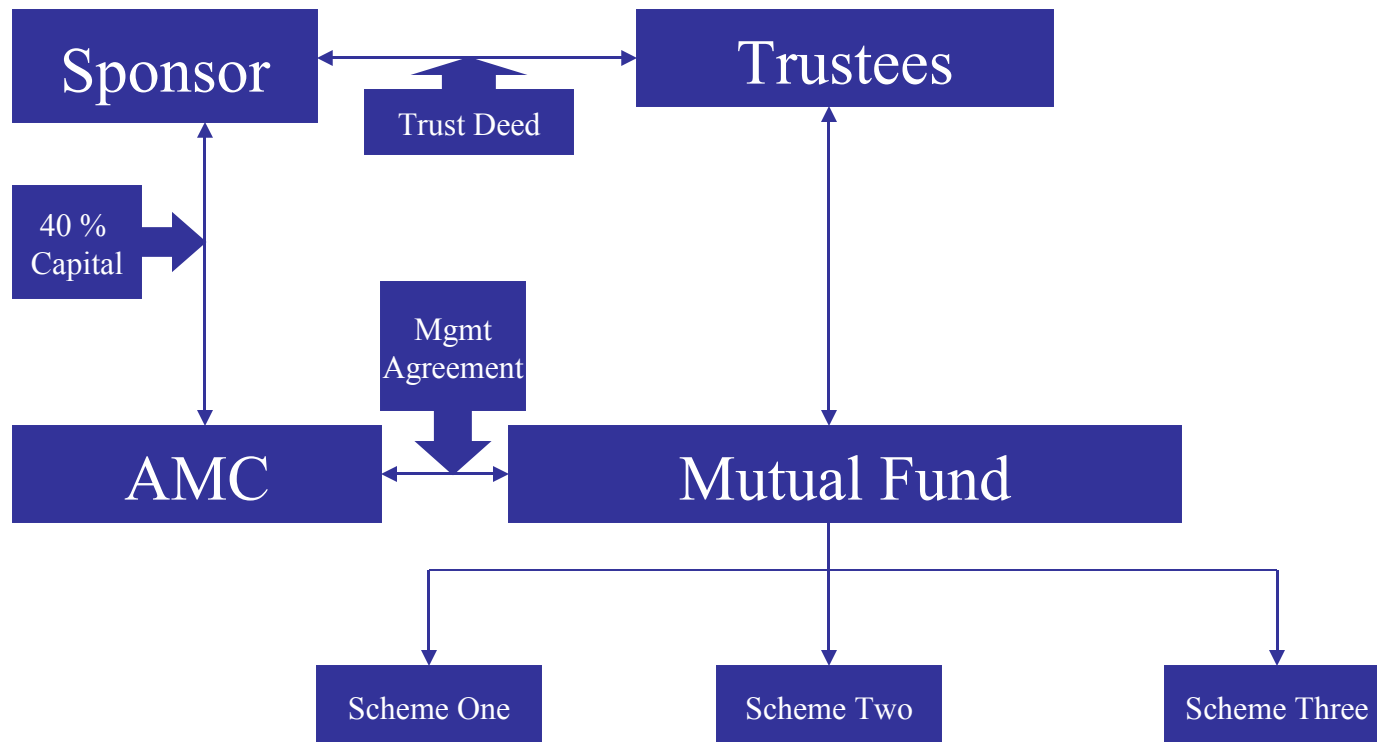
These type of funds are still to evolve in India

Let's Refresh!

Fund Structure and Constituents

Legal Structure

Structure of mutual funds in India



Legal Structure

- **Mutual Fund**
 - Formed as a trust registered under the Indian Trust Act 1882
 - Fund sponsor acts as settlor of the trust
 - No independent legal entity by itself, just a pass through vehicle
 - Formed by a trust deed that is executed by the sponsor in favour of the trustees

Legal Structure

- **Sponsor**
 - Establishes the mutual fund, equivalent of promoter of a company
 - Must own at least 40pct of the Asset Management Company
 - Must have a sound financial track record over 5 years prior to registration
 - Appoints Board of Trustees
 - Appoints Asset Management Company

Sound Financial Track Record

- Sponsor should be carrying on business in financial services for a period of not less five years
- Networth is positive in all the immediately preceding five years
- Networth in the immediately preceding year is more than the capital contribution of the sponsor in the asset management company
- The sponsor has positive PAT in three out of preceding five years including the fifth year

(As per chapter II of SEBI (Mutual Fund) Regulations, 1996)

Legal Structure

- **Trustees**
 - Form the trust that is the “Mutual Fund”
 - First level regulators for schemes of the mutual fund
 - Hold the property of the mutual fund in trust for the benefit of the investors
 - At least two thirds of the trustees should be independent
 - Approval of SEBI
 - Rights and obligations of Trustees

Appoint amc, approve scheme, dismiss amc, shortfall to be made good by amc

Legal Structure

- **Asset Management Company**
 - Formed as a private limited company under Companies Act 1956
 - Float and manage schemes in name of the trust
 - Minimum net-worth of Rs.10 crores
 - At least 50 pct of directors should be independent
 - Responsibilities and duties of AMC

Other Fund Constituents

- **Custodian and Depository**
 - Appointed by board of trustees
 - Safekeeping of physical securities and participating in clearing systems
 - Dematerialised securities held by depositories
- **Bankers**
 - Maintain bank accounts for all schemes
 - Facilitate collection and redemption

Other Fund Constituents

- **Transfer Agents / Registrars**
 - Appointed by the asset management company
Issue and redemption of units
 - Maintain records of all investors
- **Distributors**
 - Appointed by the asset management company
 - Help to distribute schemes of the mutual fund

Fund Mergers and Scheme Take-overs

- **Mergers and takeovers**
- Constitution of funds can change in many ways
 - AMC may be taken over by new sponsors
 - AMC may merge with another AMC
 - Trustees may change the AMC
 - Schemes may be taken over by new Trustees
 - Schemes of the same mutual fund may be merged
- Regulatory framework to be observed

Let's Refresh!

Legal and Regulatory Environment

Role of Regulators in India

- **SEBI**
 - Formed in 1992 by an act of parliament
 - All mutual funds registered with SEBI
 - Well regulated industry through guidelines
- **Reserve Bank of India**
 - Govern bank owned mutual funds jointly with SEBI
 - Govern participation of mutual funds in inter-bank market

Role of Regulators in India

- **Company Law Board / Department of Company Affairs / Registrar of Companies**
 - Regulate AMC as they operate under their purview
- **Stock Exchanges**
 - Regulate close ended schemes listed with them
- **Ministry of Finance**
 - Supervisor of all regulators

Role of Self Regulatory Organisations

- **Self Regulatory Organizations**
 - An organization specially empowered to regulate activities of its members Can regulate its members in limited way
 - National Stock Exchange is an SRO
- **AMFI**
 - Not an SRO
 - Formed with the objective to
 - Promote interest of investors and mutual funds
 - Set ethical, commercial and professional standards
 - Increase public awareness

Investor's Rights and Obligations

- **Investors rights** Given in offer documents
 - Right of proportionate beneficial ownership
 - Right to timely service
 - Right to information
 - Right to approve changes in fundamental attributes of schemes 75% for approving change in attributes
 - Right to wind up a scheme
 - Right to terminate the asset management company

Investor's Rights and Obligations

- **Limitations of rights of investors**
 - Cannot sue the trust because as per law they are not distinct from the trust
 - However they can sue the trustees
 - Cannot ask the AMC to meet shortfall in returns in case of non-assured schemes
 - Can sue the sponsor if returns are assured specifically in the offer document
 - Prospective investors have no rights at all

Investor's Rights and Obligations

- **Investors obligations**
 - Read the offer document
 - Understand risk factors
 - Monitor investments
 - Ask for information required
- **Redressal mechanism**
 - SEBI intervention
 - Due diligence certificate by compliance officer
 - No redressal under Companies Act

Redressal

- Fund holders are neither shareholders nor depositors in the AMC
- Investors have recourse to DCA in case fraud or other unfair practices by the directors of AMC
- **Mutual funds are probably the most highly regulated intermediary in the financial markets**

Let's Refresh!

The Offer Document

Introduction

- **Offer Document (Prospectus in USA)**
 - Issued by the asset management company
 - it is the equivalent of prospectus for issue of shares
 - Giving all details of the proposed scheme
 - Enabling the customer to make an informed investment decision

Contents of the Offer Document

- **Contents of Offer Document**
 - Summary Information (Cover Page)
 - Definitions
 - Risk Factors
 - Standard risk factors
 - Scheme specific risk factors
 - Legal and regulatory compliance
 - Financial information Balance sheet, Scheme expenses, all issues in last 3 years
 - Constitution of the mutual fund
 - Management of the fund Asset allocation, diversification policy, types of securities etc

Contents of the Offer Document

- **Contents of Offer Document**
 - Offer related information
 - Investment procedure If equity then at least 65% investment in equity required
 - Scheme's policy on dividend and transfers
 - Associate transactions
 - Borrowing policy
 - NAV and valuation Comparison with similar funds only
 - Procedure for redemption or repurchase
 - Description of accounting policies
 - Tax treatment of investments
 - Investors rights and services

Contents of the Offer Document

- **Contents of Offer Document**
 - Offer related information
 - Redressal mechanism for investor grievances
 - Penalties, pending litigation or proceedings

Fundamental attributes, investment objective, Historical Statistics, material changes in the scheme like Reconstitution of AMC, changes in key personnel, new plans in existing scheme, change in management Or controlling interest, litigations etc

The Key Information Memorandum

- **Key information memorandum**
 - Abridged version of offer document
 - Distributed with the application form
 - Carries all the key information from the prospectus

Let's Refresh!

Fund Distribution and Sales Practices

Who Can Invest

- **Who can invest in mutual funds**
 - Resident individuals
 - Indian companies
 - Indian trusts / Charitable institutions
 - Banks
 - Non-banking finance companies
 - Insurance companies
 - Provident funds
 - Non-resident Indians (Repatriable and non- repatriable)
 - Foreign Institutional Investors

Foreign Investors

- Foreign citizens / entities are not allowed to invest in mutual funds in India excepting FIIs registered with SEBI
- Recently Overseas Corporate Bodies (OCB) have been barred from investing in MF

Distribution Channels

- **Types of distribution channels**
 - All distributors and employees of distribution companies to be AMFI certified
 - Individual agents (Trusted LIC agent)
 - Distribution Companies
 - Global money managers - DP Merrill Lynch
 - National level players - Karvy Consultants
 - Regional SME businesses
 - Banks and non-banking finance companies
 - Largest mobilizers for mutual funds Preferred by most
 - Direct marketing by mutual funds

Sales Practices

- **Agent commissions**
 - Agents are paid commission for distribution of mutual funds
 - 1.50pct to 3.00pct for equity funds
 - 0.40pct to 1.25pct for debt funds
 - Maximum agency commission restricted to 6pct initial issue expenses
 - Agency commission may be paid out of entry / exit load subject to overall expense limits

Sales Practices

- **Investor servicing**
 - Understand all aspects of the schemes
 - Understand client profile in terms of
 - Age profile
 - Risk appetite
 - Income and liquidity requirements
 - Offer clients investments suitable to investors profile
 - Continuous monitoring of client's investments
 - Personalised after sales service

Sales Practices

- **SEBI's advertising code**
 - Should not be misleading
 - Dividends should be declared in Rs. / unit
 - For performance reporting
 - Annualised returns only for periods of one year and more
 - Absolute returns for periods less than one year
 - Consistency in comparison to benchmarks
 - Past performance may or may not be sustained
 - Rankings need to be explained

Sales Practices

- **Terms of appointment of agents**

No approval from SEBI is required for agents appointed by mutual funds. They are normally appointed on the following terms

- Provide customer a copy of offer document
- Customer has no recourse to agent
- Agent will sell only at public offering price
- Agent responsible for his own actions and cannot hold the fund house responsible

Sales Practices

- **AMFI code of ethics**
 - Interest of unit-holders primary
 - High service standards
 - Adequate disclosures
 - Professional selling practices
 - Fund management as per stated objective
 - Avoid conflict of interest with directors / trustees
 - Refrain from unethical market practices

Let's Refresh!

Accounting, Valuation and Taxation

Accounting

- **Net Asset Value..**

- Represents the value of each unit of the fund
- Calculated as follows
- $$\text{NAV} = \frac{\text{Net assets of the scheme}}{\text{Number of outstanding units}}$$
- Where net assets of the scheme are : on the valuation day
Market value of investments + Receivables + Other
accrued income + Other assets - Accrued
expenses - Other payables - Other liabilities

NAV Calculation

- An open ended fund issues 1000 units at its face value of Rs.10 per unit.
 - Thus the **NAV** will be $\text{Rs. } 10000 / 1000 = \text{Rs. } 10$
- Market value of investments rises to Rs. 14000 and as the units are marked to market, the balance sheet carries the investments at Rs. 14000.
 - Thus the **NAV** will be $\text{Rs. } 14000 / 1000 = \text{Rs. } 14$

NAV Calculation...

- Fund sells 200 units and gets Rs. 2800. Thus the total investment in hand will be 800 units at Rs. 14 each which is equal to Rs. 11200 (consisting of Rs. 8000 being the original portfolio cost plus Rs. 3200 being unrealised appreciation) and of course proceeds of Rs. 2800 received(which consists of Rs. 2000 of original investment and Rs. 800 of realised gains)
 - Thus the **NAV** remains at **Rs. 14**

Accounting

- **Net Asset Value..**

- Other Assets includes any income due but not received (for e.g. Dividend announced by a company)
- Other Liabilities includes expenses payable by the fund (for e.g. Management fee to AMC)
- All income and expenses have to be “accrued” upto the valuation date and included in the computation of the NAV.
- Major expense such as management fees should be accrued on a day to day basis, while others need not be accrued, if non-accrual does not affect NAV by more than 1%
- Sale or repurchase of units and sale or purchase of investment securities must be recorded within 7 days of the transaction provided the non-recording does not affect NAV by more than 2%.

Accounting

- **Net Asset Value..**

- Daily by 8pm on AMFI website for open ended schemes
- Weekly for listed close ended schemes
- Monthly / quarterly for unlisted close ended schemes
- A Fund's NAV is affected by
 - Purchase and sale of investment securities
 - Valuation of all investment securities held
 - Other assets and liabilities
 - Units sold or redeemed

Accounting

- **Pricing of units**
 - All pricing is always relative to NAV
 - Repurchase price cannot be lower than 93% of NAV (95% in case of closed-end schemes)
 - This means maximum exit load can be 7%
 - Sale price can not be higher than 107% of NAV
 - This means maximum entry load can be 7%
 - The difference between the repurchase and sale price can not be more than 7% of the sale price
 - This means that if a scheme charges entry and exit load the maximum cumulative charge can be 7%

Pricing of Units

- Please state True or False in following quotes for purchase and sale given by a MF (All NAVs at Rs. 10 and for open ended schemes)
 - Sale at Rs. 11 purchase at 10
 - Sale at Rs. 10.20, purchase at Rs. 9.50
 - Sale at Rs. 10, purchase at Rs. 9.30
 - Sale at Rs. 10.70, purchase at Rs. 9.30
 - Sale and purchase at Rs. 10

Accounting

- **Structure of fees charged by the AMC**
 - Initial issue expenses capped at 6pct of corpus collected at initial issue
 - These expenses include advertising, marketing, distribution and other expenses at initial issue
 - They cannot be recovered at the launch of the scheme but have to be amortised
 - For close ended schemes initial issue expenses amortised over life of the scheme
 - For open ended schemes initial issue expenses amortised over maximum 5 years
 - Unamortised amount to be added as other asset in calculation of NAV

Accounting

- **Structure of fees charged by the AMC**

- Investment Management & Advisory Fees @1.25% for the first Rs.100 crores of weekly net assets and thereon 1.00%
- Fees for recurring expenses excluding issue and redemption expenses but including investment management and advisory fees capped at

Average Weekly Net Asset (Rs.Crore)	Max. expenses for equity schemes (%)	Max. expenses for debt schemes (%)
First 100	2.50	2.25
Next 300	2.25	2.00
Next 300	2.00	1.75
Above 700	1.75	1.50

No load funds can charge 1% extra

Accounting

- **Disclosures and reporting requirements**
 - General Disclosures
 - Each scheme has its own annual report I.e. balance sheet, profit and loss account etc.
 - These annual reports to be audited by auditors independent of auditors of AMC
 - Within six months of close of accounting year
 - publish an advertisement giving scheme-wise annual report
 - summary to be sent to all unit-holders
 - copy to SEBI

Accounting

- **Disclosures and reporting requirements**
 - Specific Disclosures
 - Any item of expenditure more than 10 pct of total expenses to be specifically disclosed
 - Half yearly disclosure of NPA's
 - Unit-holders holding more than 25 pct of scheme to be mentioned in half yearly results
 - Annual report to state that unit-holders can request for complete annual report instead of summary

Accounting

- **Accounting policies**

- Any investment having a residual maturity of more than six months to be “marked to market”
- Unrealised appreciation can not be distributed
- Dividend received by fund should be recognised on the date the share is quoted on ex-dividend basis and not on the date of declaration.
- To calculate gain or loss on sale of investments, the average cost method must be followed to determine the cost of purchase
- Purchase sale to be recognized on the date of transaction and not settlement
- Bonus / rights to be recognized on ex-bonus / ex-rights day

Average cost Methods

- A fund buys 100 shares of A Rs. 10000 and later another 150 shares at 17000. Later it sells 100 shares for Rs. 12000.
 - Average cost of holding per share = $10000 + 17000 / (100 + 150) = \text{Rs. } 108$
 - Total holding cost of shares sold = $108 \times 100 = 10800$
 - Thus gain on sale = $12000 - 10800 = \text{Rs. } 1200$

Accounting

- **Non-performing assets**
 - An asset is non-performing if interest and or principal is not received for one quarter from receipt falling due for example
 - Interest due on 30.06.03 but not received
 - On 30.09.03 it will be considered NPA
 - Interest will be accrued till 30.09.03 in the accounts of the scheme
 - From 01.10.03 it is classified as NPA and no further interest accrual is made

Accounting

- **Non-performing assets**
 - Provisions for debt securities to be made as follows
 - 3 months after classification as NPA: 10%- 31.12.03
 - 6 months after classification as NPA: 30%- 31.03.04
 - 9 months after classification as NPA: 50%- 30.06.04
 - 12 months after classification as NPA: 75%- 30.09.04
 - 15 months after classification as NPA: 100%- 31.12.04
 - Thus NPA's are fully written off over a period of 18 months
 - If a principal repayment is due within these 18 months, then the higher of the provision or due amount is to be provided for

Accounting

- **Non-performing assets**
 - For reclassification of an NPA as a standard asset
 - If interest was in arrears, provision may be written back on receipt of interest and asset may be reclassified after six months
 - If principal was in arrears and now received
 - 50 pct of provision may be written back after six months
 - 25 pct of provision may be written back after in every subsequent quarter

Accounting

- **Non-performing assets**
 - If principal and interest are both repaid in full, the asset is reclassified as a standard asset after expiry of six months
 - If part repayment is received, the asset continues to be classified as NPA, but the provision is written back to the extent received

Accounting

- **Non-performing assets**
 - Deep discount bonds are classified as NPA if
 - Rating becomes “BB” or below
 - The company defaults on other assets
 - Net worth is fully eroded
- Reschedulement of overdue assets is possible as per guidelines provided

Event of default

Valuation

- **For declaration of NAV, securities have to be valued on a daily basis**
 - If traded on the stock exchange, it is valued at the closing price
 - If not traded the previous day, the value at which it was traded within the last 30 days is taken
 - Multiply the number of securities with the value to arrive at “mark to market” value

Valuation

- **Thinly traded equity securities**
 - An equity security is treated as thinly traded if both
 - the traded value is less than Rs.5 lakhs in a month and
 - the traded volume is less than 50,000 shares in a monthon all stock exchanges taken together
 - Stock exchanges announce list of thinly traded securities

Valuation

- **Thinly traded equity securities**
 - If a stock exchange does not provide this information, the mutual fund will do its own classification as per above criteria
- **Valuation**
 - If trading in a security is suspended upto 30 days, the last traded price is taken. If more than 30 days lapse, the AMC / Trustees decide valuation norms

Valuation

- **Non traded equity security**
 - If a security is not traded for 30 days it is classified as non traded
- **Valuation**
 - Valuation of equity instrument is on the basis of capitalization of earnings solely or in combination with its balance sheet net asset value.
 - Capitalization rate will be determined by reference to the Price or earning ratios of comparable traded securities with an appropriate discount for lower liquidity to be used

Valuation

- **Thinly traded debt securities**

- A debt security, other than GILT, is treated as thinly traded if

Benchmark security is 10 year paper

- the traded value is less than Rs.15 crores in a month on all stock exchanges taken together

- **Non traded debt securities**

- If a security is not traded for 30 days it is classified as non traded

Valuation

- **Valuation of thinly / non traded debt security**
 - Upto 182 day maturity, valued as money market instrument (cost + accrual of interest)
 - Debt instruments are to be valued on YTM basis, the capitalization factor being determined for comparable traded securities with an appropriate discount for lower liquidity.
 - Call money, bills purchases under rediscount and short term deposits with banks are to be valued at (cost+accrual).
 - Other money market instruments at yield at which they are currently traded

Taxation

- **Taxation in the hands of the fund**
 - Since a mutual fund is only a pass through vehicle, the income it earns is tax free, else it would amount to double taxation
 - However the fund is liable to pay dividend distribution tax of 13.0687% (10% + 2.5% surcharge + 2% education cess) on the dividend declared for the Debt schemes for individuals and HUF. (20% + surcharge + education cess for corporates amounting to 20.91%)
 - No dividend distribution tax on equity funds I.e. funds having more than 50pct I equity

Taxation

- **Taxation implication for investors**
 - Dividends are tax-free in the hands of the investors
 - Section 88 benefit for Equity Linked Saving Schemes @20% on a maximum investment of Rs.10,000 (Now entire amount of Rs.1lac can be invested in the ELSS under sec 80C)
 - Wealth tax not applicable as units are not considered wealth

Taxation

- **Taxation implication for investors**

- At redemption, difference in application and redemption value is treated as capital gains
- Capital gains may be invested in capital tax saving bonds of REC, NABARD, NHAI under sec 54EC
- Short term capital gains
 - If the investment is held for less than one year it leads to short term capital gains
 - Gains are added to investors income and taxed at the applicable rate for debt schemes. For equity schemes it is taxed at just 10%
 - Short term capital gains can be off-set against short-term capital loss

Taxation

- **Taxation implication for investors**
 - Long term capital gains
 - If the investment is held for more than one year it leads to long term capital gains
 - Tax-free if from equity funds (because of STT)
 - Long term capital gains are taxed at either of the two methods whichever leads to lower tax liability
 - @10pct flat on the gains made
 - @20pct of the gains made after indexation
 - Long term capital gains may be off-set against long term capital loss

Taxation

- **Taxation implication for investors**
 - Dividend stripping is not permitted
 - Investment should be held for a minimum period of three months before dividend and 9 months after dividend to avail of any short term capital loss that may arise after dividend declaration
 - For non-resident Indians
 - Dividend is tax free
 - Tax is deducted at source as follows
 - @30pct on short term capital gains
 - Plus surcharge

Taxation

- **Taxation implication for investors**
 - For foreign companies
 - Dividend is tax free
 - Tax is deducted at source as follows
 - @20pct on long term capital gains
 - @48pct on short term capital gains

Let's Refresh!

Investor Services

Applying for and Redeeming Units

- **Purchase of units**

- At investor service centers or registrars

- Application form

PAN no. if more than 50K investment

- Supporting documents

- None for resident individual investors

KYC may come soon

- Same as bank account opening for corporates

- Application form is agreement for investment

- Mode of payment

Applying for and Redeeming Units

- **Redemption of units**
 - At investor service centers or registrars
 - Redemption form
 - Mode of payment
 - Direct credit
 - Cheques
 - Redemption for non-resident Indians
 - Repatriable
 - Non-repatriable

Investment Plans and Services

- **Automatic reinvestment plan**
 - Automatic reinvestment of dividend
 - Automatic reinvestment at ex-dividend NAV
 - Benefit of compounding
- **Systematic investment plan / Automatic investment plan / Voluntary accumulation plan**
 - Periodic investments at regular intervals
 - Cultivates investment habit
 - Avoids timing the market
 - Avoids greed and fear
 - Participation in all market movements

Investment Plans and Services

- **Systematic withdrawal plan**
 - Withdrawal at regular intervals
 - Provides regular income
 - Amount withdrawn is treated as redemption
 - Different from monthly income plan
 - Redemption of principal amount, not only gains as in monthly income plans
 - Redemptions taxed as capital gains

Investment Plans and Services

- **Systematic transfer plans**
 - Periodic transfer of investments from one scheme to another Useful for introducing from debt to equity
 - Trigger may be related to date or value
 - Efficient manner of booking profits and maintaining allocation of debt and equity
 - Transfer out is treated as redemption and transfer in is treated as application
 - Tax as applicable on application and redemption

Investment Plans and Services

- **Other investor services**
 - Phone transactions - Interactive voice recognition system
 - Cheque writing facility
 - Sweep facility to bank accounts
 - Periodic statements and tax information
 - Loan against units
 - Nomination facility
 - Transfer of units through listing of close ended funds

Let's Refresh!

Investment Management

Equity Portfolio Management

- **Types of equity instruments**
 - Ordinary shares
 - Preference shares
 - Equity warrants
 - Convertible debentures
- **Derivatives**
 - Futures
 - Options

Derivatives

- **Options**

- An OPTION Contract has been defined as an agreement between 2 parties in which one grants to the other the right to buy (call option) or sell (put option) an asset under specified condition (price,time), and assumes the obligation to sell or buy it.
- Suppose you agree to sell an Option to buy 100 shares of RIL at Rs. 450 on 31 December 2004 to B. Then on 31st December, B may or may not buy from you. However you are obliged to sell if he wants to purchase.
- CALL OPTION : Right to purchase
- PUT OPTION : Right to sell

Derivatives...

- **Futures**

- A Financial FUTURE contract has been defined as “ the simultaneous right and obligation to buy or sell a standard quantity of a specific financial instrument (or commodity) at a specific future date and at a price agreed between the parties, at the time the contract was signed “. Thus it is an exchange version of traditional forward contract

Equity Portfolio Management

- **Classification of equity shares**
 - By market classification
 - Large capitalisation companies
 - Medium capitalisation companies
 - Small capitalisation companies
 - By anticipated earnings
 - Price to earnings ratio
 - Dividend yield
 - Cyclical shares
 - Growth stocks
 - Value stocks

Dividend Yield

- Dividend Yields are calculated by dividing the last full-year dividend on the stock by earliest available closing price of stock. A par value (Rs.10) acquired at Inr 100 is being quoted today at Inr 200. If the dividend received for the last FY was Inr 10, then:
 - Declared dividend is 100%
 - Dividend Yield for purchaser is 10%
 - Current Dividend Yield is 5%

Equity Portfolio Management

- **Fund management organisation structure**
 - Fund manager
 - Performs asset allocation
 - Security analyst
 - Supports the fund managers through analytical reports (Fundamental, technical and quantitative)
 - Security dealers
 - Executes actual buying and selling through brokers

Equity Portfolio Management

- **Equity Research**

- Fundamental analysis

The study of the Financial health of a particular company, by studying the past 3 to 5 years Balance sheets & Profit & Loss accounts

- Technical analysis

The study of the market movements of share price of a company or industry / sector to predict the future trend

- Quantitative analysis

The use of mathematical models for equity valuation

Equity Portfolio Management

- **Approaches to portfolio management**
 - Passive fund management (Index funds)
 - Active fund management
 - Growth investment style
 - Value investment style

Equity Portfolio Management

- **Portfolio management process**
 - Set Investment policy
 - Perform security analysis and research
 - Construct a portfolio
 - Revise the portfolio
 - Evaluate the performance of the portfolio

Debt Portfolio Management

- **Classification of debt instruments**
 - Secured v/s unsecured
 - Government security v/s corporate security
 - By maturity profile
 - Money market securities
 - Debt securities
 - Interest bearing v/s zero coupon / discounted
 - Floating coupon v/s fixed coupon

Debt Portfolio Management

- **Types of debt instruments**
 - Certificate of deposit
 - Commercial paper
 - Corporate debentures
 - Floating rate bonds
 - Government securities
 - Treasury bills
 - Bank / Financial Institution bonds
 - Public sector undertaking bonds

Debt Portfolio Management

- **Key characteristics of bonds**
 - Par value
 - Coupon
 - Maturity
 - Call or put options

Debt Portfolio Management

- **Measures of bond yields**

- Current yield

It is the yield that a bond gives if held till maturity. This is different from the coupon rate because of the price of acquisition

$$\text{Yield} = \left[\frac{\text{Coupon \%} \times \text{Par Value}}{\text{Market Rate}} \right]$$

Debt Portfolio Management

- **Measures of bond yields**
 - Yield to maturity
 - It is the total yield that an investor realises on a bond, if he gets all the coupons, and these coupons are reinvested at the same coupon rate, till maturity and the principal is received at maturity
 - Price of a bond is inversely proportionately to YTM / interest rates

Debt Portfolio Management

- **Yield calculation**

- Face value : Rs. 1000
- Coupon : 10%
- Tenure : 5 years
- Interest payment : Yearly
- Price : 1050
- Cash-flows are as under

$$1050 = \frac{100}{(1+r)^1} + \frac{100}{(1+r)^2} + \frac{100}{(1+r)^3} + \frac{100}{(1+r)^4} + \frac{(100+1000)}{(1+r)^5}$$

Solve for 'r'

$r = 8.72\%$ = Yield to maturity

Debt Portfolio Management

- **Price calculation**

- Face value : Rs. 1000
- Coupon : 10%
- Tenure : 5 years
- Interest payment : Yearly
- Yield : 8.72pct
- Cash-flows are as under

- $$\begin{array}{ccccc} 100 & 100 & 100 & 100 & (100+ 1000) \\ \text{Price} = & \frac{\quad}{(1 + 8.72\%)^1} & + \frac{\quad}{(1 + 8.72\%)^2} & + \frac{\quad}{(1 + 8.72\%)^3} & + \frac{\quad}{(1 + 8.72\%)^4} & + \frac{\quad}{(1 + .72\%)^5} \end{array}$$

Solving for price - Rs.1050

Debt Portfolio Management

- **Measures of bond yields**
 - Yield curve
 - Graph of yields of bonds of different maturities
 - Normally upward sloping because longer the maturity, greater the risk
 - Good indicator of interest rate trends

Debt Portfolio Management

- **Risks in investing in bonds**
 - Interest rate risk
 - Price of bonds are inversely proportional to interest rates
 - Reinvestment risk
 - Coupon received may not get invested at the coupon rate itself
 - Call risk
 - If bond provides a call option, the bond may get called if interest rates drop. Reinvestment will then happen at lower rates

Debt Portfolio Management

- **Risks of investing in bonds**
 - Default risk
 - Credit risk of default on repayment of interest / principal by the issuer
 - Inflation risk
 - Rise in inflation results in lower purchasing power on coupon received, making the bond lose value
 - Liquidity risk
 - Illiquidity leads to incorrect pricing and desperate sales

Debt Portfolio Management

- **Yield spreads and credit ratings**
 - G-sec refers to the risk-free return
 - Benchmark paper is 10year G-sec
 - Spread is the premium over G-sec rate paid by borrowers according to their credit risk quality
 - Credit risk is priced using the ratings of credit rating agencies
 - Higher the rating, lower the spread

Debt Portfolio Management

- **Concept of duration**

- Duration measures the sensitivity of the bond portfolio to changes in interest rates (% change in Bond price for a 1% change in yield)
- It measures the change in bond prices on a 1pct movement in interest rates
- Duration is the weighted average term to maturity of a bond
- Duration indicates how quickly the inflows (interim and maturity) on the bond in present value terms are received
- Duration of a coupon paying bond is always lower than its term to maturity
- Duration of a zero coupon bond is equal to its Maturity

Debt Portfolio Management

- **Approaches to portfolio management**
 - Buy and hold Don't fall in love with your investments
 - Interest rate risk
 - Credit risk
 - Duration management
 - Active management based on interest rate expectations

Debt Portfolio Management

- **Fund management organisation structure**
 - Fund manager
 - Performs asset allocation
 - Security dealers
 - Executes actual buying and selling through brokers
 - Interest rate forecasting unit
 - Economists who do research on interest rates
 - Risk Managers
 - Oversee risk levels attained by fund managers

Investment Policy and Restrictions

- Investment objective and philosophy is laid down by the AMC, to be followed by the fund managers
- However SEBI also lays down certain investment restriction in to -
 - Ensure diversification
 - Ensure proper investment of investors funds

Investment Policy and Restrictions

- **Portfolio diversification norms for equities**
 - Maximum equity exposure to single stock is 10pct
 - Not applicable to index funds
 - Sectoral funds will have weights of stock in that sectoral index
 - Maximum investment in unlisted equity is 10pct for close-ended schemes and 5pct for open-ended schemes
 - Investments in ADR / GDR
 - Maximum limit to all mutual funds is USD500million
 - For each mutual fund, maximum exposure is 10pct of total funds managed or USD50mn whichever is lower

Investment Policy and Restrictions

- **Portfolio diversification norms for debt**
 - For “investment grade” issuer
 - Maximum debt exposure to single issuer is 15pct
 - This may be extended to 20pct with AMC / Trustee approval
 - For “non-investment grade” issuer
 - Maximum exposure to one issuer is 10pct
 - Maximum exposure to all issuers together is 25pct

Investment Policy and Restrictions

- **Approved investment limits**
 - Equity with voting rights
 - A fund house can own a maximum of 10pct of shares carrying voting rights, under all its schemes
 - Inter-scheme investments
 - All inter-scheme investments not to exceed 5pct of net assets
 - Credit rating on debt schemes
 - At least one credit rating agency should rate paper as investment grade
 - Only delivery based purchases / sales
 - Short selling and carry forward not permitted
 - Securities to be transferred into the scheme it was purchased for

Investment Policy and Restrictions

- **Approved investment limits**
 - Temporary investment in bank deposits
 - Can only be held in scheduled commercial banks
 - No lending
 - Cannot lend money. However can lend securities
 - Unlisted or sponsor issued securities
 - Cannot buy unlisted security / private placement by associate.
 - If security is listed, maximum investment is 25pct of scheme funds
 - Inter-scheme transfer
 - To be done at market rates in line with fund philosophy
 - Derivatives
 - To be used as hedging mechanisms

Measuring and Evaluating Mutual Fund Performance

Measuring Mutual Fund Performance

- **The need of investors to measure**
 - Analyse their current investments and returns thereof
- **The need of advisor's to measure**
 - Analyse competing products and recommend accordingly
- **Choice of performance measure depends on**
 - Type of fund
 - Investment objective
 - Current market conditions

Measuring Mutual Fund Performance

- **Method - 1 - Change in NAV**

- Formula

$$\frac{\text{End NAV} - \text{Start NAV}}{\text{Start NAV}} \times \frac{12 \text{ or } 365}{\text{No. of months or days}} \times 100$$

- This method gives the annualised returns in percentage
- If annualised returns are not required, the month / day calculation is deleted. You then get absolute returns in percentage
- If annualised, suitable for investments only in growth option of all types of funds as dividend is not considered

Measuring Mutual Fund Performance

- **Method - 2 - Total return**

- **Formula**

$$\frac{[(\text{Dividend}) + (\text{End NAV} - \text{Start NAV})]}{\text{Start NAV}}$$

Start NAV

$$\frac{\frac{\text{No. of months or days}}{12 \text{ or } 365} \times 100}{100}$$

No. of months or days

- This method gives the annualised returns on percentage
 - If annualised returns are not required, the month / day calculation is deleted. You then get absolute returns in percentage
 - Overcomes shortcomings of 'change in NAV' method by taking into consideration dividends declared
 - However it does not consider the returns from reinvestment of the dividend

Measuring Mutual Fund Performance

- **Method - 3 - Return on investment**

- Formula

**

$$\frac{\text{Start NAV}}{\text{No. of months or days} \times \frac{100}{12 \text{ or } 365}}$$

Where ** is

$$\left[\left\{ \left\{ \frac{\text{Units held} + \text{Dividend}}{\text{Ex-dividend NAV}} \right\} \times \text{End NAV} \right\} - \text{Start NAV} \right]$$

Measuring Mutual Fund Performance

- **Method - 3 - Return on investment..**
 - This method gives the annualised returns in percentage
 - If annualised returns are not required, the month / day calculation is deleted. You then get absolute returns in percentage
 - Overcomes shortcomings of “Change in NAV” and “Total Return” methods by taking into consideration dividends declared and their reinvestment
 - Comprehensive method suitable for all investments
 - This method is used by mutual fund tracking agencies

Measuring Performance

- **Other Concepts**

- Cumulative Return

- This is the total return over a long period of time e.g. 100pct return over 10 years of investment

- Average Annualised Compounded Return (AACR)

- This is the return per year earned on a cumulative basis. In the above example the AACR is not 10pct but 7.2pct

- Formula for converting cumulative return to average annualised compounded return

$$\text{Maturity Amount} = \text{Principal} \times \left(1 + \frac{\text{AACR}}{100} \right)^n$$

If you solve for above example, the AACR is 7.2pct

Measuring Performance

- **Useful tips**
 - Consider the effect of loads
 - Compare similar time periods
 - For less than one year period calculate returns on absolute basis except for money market funds
 - For a period of one year and more calculate returns on annualised basis
 - Returns since inception

Measuring Performance

- **Other concepts**

- Expense Ratio
 - Total expenses to average net assets
 - Total expenses does not include brokerage paid on fund's transactions
 - Indicates the expenses the fund is incurring
 - Is a function of fund size, and limits are as set by SEBI
- Income Ratio
 - Net investment income to average net assets
 - Helps evaluating debt funds

Measuring Mutual Fund Performance

- **Other concepts..**
 - Portfolio turnover rate
 - Indicates the amount of and number of times securities are bought and sold by a fund
 - 100pct turnover implies entire portfolio was sold and bought during the period
 - Useful for equity funds
 - Transaction costs
 - These include brokerage, stamp duty, registrar and custodian fees and dealer spreads
 - They have limited application for comparison

Measuring Mutual Fund Performance..

- **Other concepts..**
 - Fund size
 - Small funds are easier to manage and change
 - Large funds bring economies of scale on expense ratios
 - Cash holdings
 - Large cash holdings indicate idle funds
 - Large cash holdings also help as hedge mechanisms
 - Borrowing by mutual funds
 - Only allowed for meeting liquidity requirements
 - Maximum six months
 - Maximum 20 pct of net assets

Evaluating Fund Performance..

- Measuring mutual fund performance refers to calculating returns while evaluating performance refers to comparing it with other funds / benchmark
- **Evaluation with benchmarks**
 - Index Funds
 - Comparison to base index Tracking Error
 - Equity Funds
 - Comparison to Nifty / Sensex / BSE 100 / BSE 200
 - Debt Funds
 - Money market funds (CRISIL Liquid Fund Index)
 - Short-term funds (CRISIL Short-term Bond Fund Index)
 - Debt funds (CRISIL Bond Fund Index)

Evaluating Fund Performance..

- **Evaluation with peer group**

Following criteria must be considered when selecting peer group for evaluation

Can not compare apple with oranges

- Similar investment objectives and risk profiles
 - Debt cannot be compared to equity
 - Value funds cannot be compared to balanced funds
- Portfolio composition
 - High yield debt funds cannot be compared to GILT funds
- Comparison has to be made over the same period of average annualised return on a pre / post tax basis

Tracking Mutual Fund Performance

- Tracking fund performance is a regular full time activity of professional organisations like CRISIL, Value research, Credence etc.
- Requires a lot of data compilation and analysis
- Most distributors and mutual fund houses out-source this activity

Websites and newspapers are good source

Let's Refresh!

Thank You!