

# Investment Management

## 2017 Admission

**Submitted By;**

Shafeekha Chungath

Assistant Professor

CPA College of Global Studies

## **BACHELOR OF BUSINESS ADMINISTRATION**

### **BBV B11 INVESTMENT MANAGEMENT**

**Time: 5 Hours per week Credits: 4**

#### **Objectives:**

- To give an overall idea about different investment avenues available in financial markets and prepare them with basic skills and knowledge to manage investment.

#### **Module I**

Investment, meaning- investment and speculation- investment objectives process- avenues- financial and non financial investment. Corporate investment-return and risk—systematic and unsystematic risks- measurement of risk-Approaches to investment analysis-fundamental analysis - technical analysis—modern portfolio theory (Basic knowledge only expected)

15 hours

#### **Module II**

Capital market - meaning, structure and functions - capital market instruments - shares, debentures and bonds.- stock exchanges- role and functions - NSE , BSE - trading mechanism - online trading - script less trading and depository system – SEBI- role and functions.

20 Hours

#### **Module III**

Mutual funds- meaning and definition- Concept of open end and close ended fund - equity, index, diversified, large cap, mid cap funds, sector fund - Benefits and limitations of MF investment - Roll and objectives of AMFI

12 Hours

#### **Module IV**

Introductions to Exchange Traded Funds – salient features – Market making by Authorised Participants – Creation Units – Portfolio deposit and cash components - Mutual Fund Vs ETFs – Relative Advantages.

10 Hours

## **Module V**

Derivatives—concepts and meaning, features, classification of derivatives— options and features—kinds of options and features—index and currency feature. (General idea is only expected)

10 Hours

### **References:**

1. Donald E. Fisher and Ronald J. Jordan, —Securities Analysis and Portfolio Management||, Prentice Hall, New Delhi.
2. S. Kevin: Security analysis and portfolio Management
3. Sourain, Harry, —Investment Management||, Prentice Hall of India.
4. Francis and Archer, —Portfolio Management ||, Prentice Hall of India.
5. Gupta L.C.: Stock Exchange Trading in India; Society for Capital Market Research and Development, Delhi.
6. Machi Raju, H.R.: Working of Stock Exchanges in India, Wiley Eastern Ltd, New Delhi.

## INVESTMENT

### MODULE 1

“Investment is sacrifice of certain present value for some uncertain future value”

--- *Sharpe* ---

#### AVENUES OF INVESTMENT

1. NON-FINANCIAL OR REAL INVESTMENTS
  - Real estate
  - Bullion(gold, precious stones)
  - Art
2. FINANCIAL INVESTMENTS
  - Debts
  - Equities
  - Mutual funds
3. NON-SECURITIZED FINANCIAL INVESTMENTS
  - Bank deposits, post office deposits...

#### CHARACTERISTICS OF INVESTMENT

1. Expected return
2. Risk
3. Liquidity or marketability
4. Tax consideration

#### INVESTMENT ALTERNATIVES

- Cash and deposits
- Fixed income securities
- Shares
- Investment trusts
- Properties
- Derivatives
- Commodities
- Life insurance
- Annuities

#### INVESTMENT OBJECTIVES

- Safety
- Rate of return

$$RR = \frac{\text{annual income} + (\text{ending price} - \text{purchasing price})}{\text{purchasing price}}$$

- Growth of capital
- Risk
- Marketability or liquidity
- Tax benefits
- Convenience

### INVESTMENT PROCESS

1. Defining an investment objective
2. Analyzing securities
3. Constructing a portfolio to minimize risk
4. Evaluating the performance of the portfolio
5. Revising the portfolio

### NEED AND BENEFITS OF INVESTMENT MANAGEMENT

- Income
- Capital appreciation
- Highly regulated
- Tax advantage
- Collateral
- Confidentiality
- Flexibility

### INVESTMENT AND SPECULATION & INVESTMENT AND GAMBLING

INVESTMENT	SPECULATION
------------	-------------

<ul style="list-style-type: none"> <li>• Long holding period of at least 1 year.</li> <li>• Moderate risk</li> <li>• Moderate return</li> <li>• Careful evaluation and fundamental factors are the basis for decision</li> </ul>	<ul style="list-style-type: none"> <li>• Very short holding period of a few days or months</li> <li>• High risk</li> <li>• High return at high exposure</li> <li>• Decision based on hearsay, tips and market psychology</li> </ul>
<b>INVESTMENT</b>	<b>GAMBLING</b>
<ul style="list-style-type: none"> <li><input type="checkbox"/> Sufficient research has been conducted <ul style="list-style-type: none"> <li>• Systematic approach is being taken</li> <li>• Emotions play no role</li> <li>• Not an entertainment</li> <li>• Ownership of something tangible is involved</li> <li>• A net positive economic effect results</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Little or no research has been conducted <ul style="list-style-type: none"> <li>• An unsystematic approach is being taken</li> <li>• Mainly as an entertainment</li> <li>• Emotions such as greed, fear play a role</li> <li>• Ownership of something tangible is not involved</li> <li>• No net economic effect results.</li> </ul> </li> </ul>

## RETURN AND RISK

Return is the benefit associated with an investment. Two kinds of return are:

- Normal income in the form of dividend and interest
- Capital gain

### Expected return

It is the weighted average of all possible returns multiplied by their respective probabilities

$$\bar{X} = \sum_{i=1}^n X_i P_i$$

**Eg:-**

An investment provides a return of 10%, 20%, 30% & 40% with probabilities 25%, 15%, 30% & 30%.

Calculate expected return.

**Solution:**

Possible returns X <sub>1</sub>	Probability P <sub>1</sub>	X <sub>1</sub> P <sub>1</sub>
10	0.25	2.50
20	0.30	6.00
30	0.15	4.50
40	0.30	12.00
		$\Sigma X_1 P_1 = 25.00$

Thus expected return in this case is 25%

**RISK** Risk is the quantifiable likelihood of loss or less than expected return.

Types of investment risks

1. SYSTEMATIC RISK
2. UNSYSTEMATIC RISK

SOURCES OF RISK

- Market risk
- Interest rate risk
- Purchasing power /inflation risk
- Regulation risk

- Business risk
- Reinvestment risk
- International risk
- Liquidity risk

### Diversification

It is the strategy that can help to reduce risks.

### Measurement of risk

- Standard deviation
- Coefficient of variation
- Measurement of systematic risk
- Beta

It is a statistical measure to calculate systematic risk. The beta factor of the market as a whole is 1.0. it indicate the sensitivity of the return on shares with the return on market.

- ✓ Beta >1 – aggressive shares
- ✓ Beta <1 – defensive shares
- ✓ Beta = 1 - neutral shares

Two statistical method to calculate beta are:

- Correlation method

$$\beta = \frac{r_{tm}\sigma_t\sigma_m}{\sigma_m^2}$$

Where;  $\beta$  = beta of an investment in shares

$r_{tm}$  = correlation coefficient of the return on the shares with return on the market

$\sigma_t$  = SD of return of stock  $\sigma_m$  =

SD of return of market index

$\sigma_m^2$  = variance of the return on the market

- Regression method

$$\alpha = Y - \beta X$$

$$\beta = \frac{n \sum xy - (\sum x)(\sum y)}{n \sum x^2 - (\sum x)^2}$$

## Capital Asset Pricing Model (CAPM)

CAPM describes the relationship between risk and expected return and that is used in pricing of risky securities.

The uses of CAPM includes:

- To establish the correct equilibrium market price of company shares
- To establish the cost of a company's equity , taking account of the business and financial risk characteristics of the company's investment.

$$\bar{r}_i = r_f + \beta(r_m - r_f)$$

Where,  $r_f$  = Risk free rate

$r_m$  = market return

$\beta_i$  = beta of the

security

## The Arbitrage Pricing Model:

CAPM is a one year model and not suitable for project more than one year. APM is a model that developed out of CAPM and considers various numbers of independent factors which may affect the share price.

## Security Market Line

The graphical representation of CAPM is called security market line (SML)

## INVESTMENT ANALYSIS

There are two types of investment analysis, namely:

1. Fundamental Analysis
2. Technical Analysis

### 1, Fundamental analysis

It involves assessing the short medium and long range prospects.

Two approaches are:

- Top – down forecasting approach( E-I-C)

- Bottom – up forecasting approach(C-I-E)

### STEPS IN FUNDAMENTAL ANALYSIS

1. Economic(macro-economic) analysis
  - Agricultural growth
  - Industrial growth
  - Type of economy
  - Business cycle
  - GDP
  - Savings and investments
  - Interest rates
  - Inflation
  - Govt. budget
  - Political stability
  - Infrastructure facilities
2. Industry analysis
  - Product or services
  - Estimating growth
  - Industry life cycle
  - Raw materials and other inputs
  - Production cost and profit
  - Competitive forces
  - Cyclical industries
  - Capacity utilization
  - Nature of demand
  - Govt. policy
  - Labour and other industrial policy
  - Management 3. Company analysis
  - Business plan
  - Market share
  - Growth of sales
  - Competitive edge
  - Management
  - Financial analysis

### Tools of fundamental analysis

- Earning per share

$$\text{EPS} = \text{Net earnings} / \text{outstanding shares}$$

- Price to earning ratio (P/E ratio)  $P/E \text{ ratio} = \text{stock price}/\text{EPS}$
- Projected earning growth  
 $\text{PEG} = \text{current price}/\text{EPS}$   
 $\text{PEG} = P/E /(\text{projected growth in earnings})$
- Price to sales ratio  
 $P/S = \text{stock price} / \text{sales price per share}$
- Price to Book ratio  
 $P/B = \text{share price}/\text{book value per share}$
- Dividend payout ratio  
 $\text{DPS} = \text{Dividends per share}/\text{EPS}$   
 $\text{Dividend yield} = \text{annual dividend per share} / \text{stocks price per share}$
- Book value  
 $\text{Book value} = \text{assets} - \text{liabilities}$
- Return on equity  
 $\text{ROE} = \text{net income} / \text{book value}$

### Advantages of fundamental analysis

- long – term trends
- identification of value
- understanding about business
- knowing company Criticisms of FA
- Defective practices
- Unscientific process
- Time consuming
- Industry or company specific
- Subjectivity  $\square$  Analyst bias

### 2. Technical analysis

It is the forecasting of future financial price movements based on an examination of past price movements.

Assumptions:

1. Price discounts everything
2. Prices move in trends
3. History tends to repeat

### Price fields

- Open
- High
- Low
- Close
- Volume
- Open interest
- Bid
- Ask

### Advantages of technical analysis

- Focus on price
- Supply , demand and price action
- Support/resistance
- Pictorial price history
- Assist with entry points

### Criticisms of TA

- Bias of analyst
- Open to many interpretations
- Late exercise
- Absence of well defined levels
- Lack of uniformity

### The difference between FA&TA

- Charts vs financial statements
- Time horizon
- Trading vs investing

### Methods and tools used in technical analysis

1. Stock charts
  - Line charts
  - Bar charts
  - Candlestick charts\
2. Trends
  - Uptrend line
  - Down trend line

### Patterns and indicators

These have developed that focus on critical examination of charts.

Patterns analysis:

1. Cup and handle



2. Head and shoulders



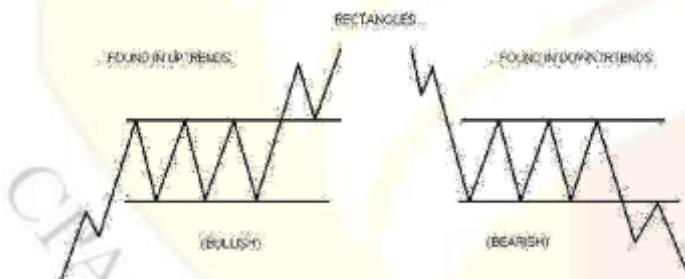


art by MetaStock Copyright © 2006 Investopedia.co

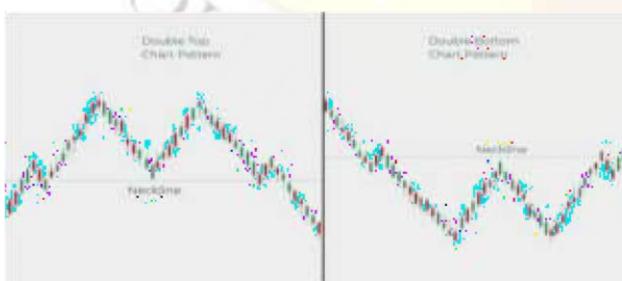
### 3. Triangles



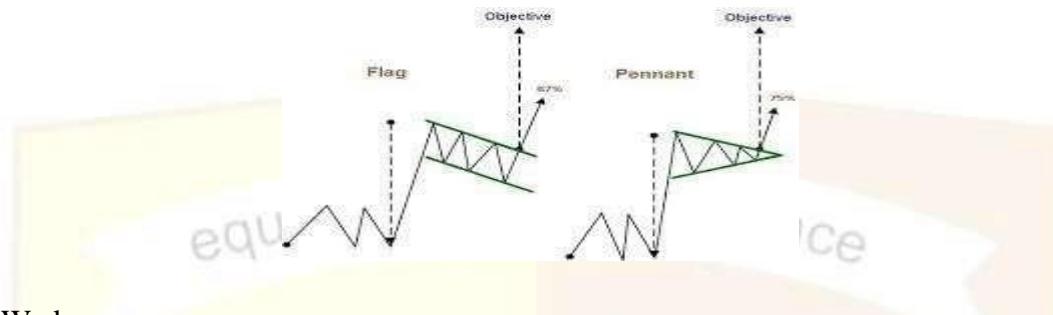
### 4. Rectangles



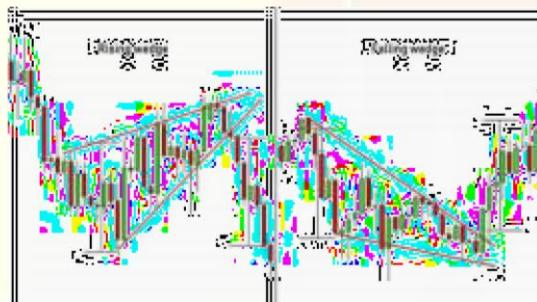
### 5. Double top double bottom



## 6. Flags and pennants



## 7. Wedge



Support level and resistance level

- Support level is the level that technical analyst believes a stock price will not fall below
- Resistance level is the level technical analyst believes that a stock price will not go beyond a particular level

## Indicator analysis/quantitative analysis

### 1. Moving averages

- Simple moving averages
- Exponential moving averages

$$\text{EMA} = (\text{Current closing price} - \text{previous EMA}) \times \text{factor} + \text{previous EMA}$$

Factor =  $2/n+1$

### 2. Oscillators Market indicators

1. Advance-decline line
2. The relative strength index

$$\text{RSI} = 100 \left[ \frac{100}{1 + \text{RS}} \right]$$

$$\text{RS} = (\text{avg. gain per day}) / (\text{avg. loss per day})$$

3. The money flow index

$$\text{Average} = \text{daily high} + \text{daily low} + \text{close}$$

$$\text{Money flow} = \text{average price} \times \text{day's volume}$$

4. Momentum or rate of change  
 $M = \text{current closing price} - \text{old closing price}$
5. Trading index(TRIN)

TRIN=Advancing issues/declining issues

Advancing volume/declining volume

6. Bullish percent index/BPI
7. Oscillators

## MODERN PORTFOLIO THEORY

Also known as:

MPT/Portfolio theory/portfolio management theory/Markowitz theory

Assumptions:

- Investors are rational and behave in a manner as to maximize their utility with a given level of income and money.
- Investors have free access to fair and correct information on the returns and risk.
- The markets are efficient and absorbs the information quickly and perfectly.
- Investors are risk averse and try to minimize risk and maximize return.
- Investors base decisions on expected returns and variance or standard deviation of these returns from the mean.
- Investors prefer higher or lower returns for a given level of risk.

## **CAPITAL MARKET**

### **MODULE 2**

Capital markets are financial markets where long term or medium term debt or equity backed securities are bought and sold.

#### **Structure of capital market**

Classification on the basis of nature of instrument

- Primary market
- Secondary market

Classification on the basis of types of institution involved

- Govt. securities market
- Industrial securities market
- Development financial institutions
- Financial intermediaries

#### **Basis of Difference between primary and secondary market**

- ❖ Nature of securities
- ❖ Function
- ❖ Participants
- ❖ Listing requirements
- ❖ Determination of prices

#### **Objectives and functions of capital market**

- ❖ Mobilization of savings
- ❖ Encouragement to savings
- ❖ Encouragement to investment
- ❖ Capital formation
- ❖ Provision of investment avenues
- ❖ Speed up economic growth and development
- ❖ Proper regulation of funds
- ❖ Service provision
- ❖ Continuous availability of funds
- ❖ Promotes economic growth
- ❖ Stability in security prices

## Money market VS capital market

MONEY MARKET	CAPITAL MARKET
<input type="checkbox"/> Related to short-term funds	<input type="checkbox"/> Related to medium and long-term funds
<input type="checkbox"/> Individual players cannot invest	<input type="checkbox"/> Anybody can make investment through a broker
<input type="checkbox"/> Deals with securities like treasury bills, commercial paper, trade bills, deposit certificates etc.	<input type="checkbox"/> Deals in shares, debentures, bonds and govt. securities
<input type="checkbox"/> Participants are RBI, commercial banks, non-banking financial companies, etc.	<input type="checkbox"/> Participants are stock brokers, underwriters, mutual funds, financial institutions, and individual investors.
<input type="checkbox"/> Associated with high risk and high return	<input type="checkbox"/> Comparatively less risk and less return
<input type="checkbox"/> Deals are transacted through phones or any other electronic system	<input type="checkbox"/> Trading is through recognized stock exchanges
<input type="checkbox"/> Regulated by Reserve Bank of India	<input type="checkbox"/> Regulated by Securities Exchange Board of India

## CAPITAL MARKET INSTRUMENTS

### 1. Equities

Types of shares/equities are:

- i. Common stock or equity share
  - Sweat equity
  - Right shares
  - Bonus shares
  - Cumulative or non-cumulative
  - Redeemable and non-redeemable
  - Participating or non-participating preference shares
  - Convertible preference shares
  - Cumulative Convertible preference shares(CCPS)

### 2. Debenture

- Bearer debentures
- Registered debentures

- Secured debentures
- Unsecured or naked debenture
- Redeemable debenture
- Perpetual debentures
- Convertible debentures

3. Bonds

- Zero coupon bond
- Deep discount bond
- Convertible bond
- Public sector undertakings(PSU) Bonds
- Bonds of public financial institutions

## STOCK EXCHANGES

It is the place where stock, shares and securities bought and sold.

### Functions of stock exchange

- ✓ Mobilization of savings and capital formation
- ✓ Provides ready and continuous market
- ✓ Canalization of funds
- ✓ Provides information about prices and sales
- ✓ Provide safety to dealing and investment
- ✓ Raises standard of performance of companies
- ✓ Barometer of economic and business condition ✓ Better allocation of funds

### Advantages of stock exchanges

- a) To the companies
- b) To the investors
- c) To the society

### Stock exchanges in India

1. National Stock Exchanges (NSE)
2. Bombay Stock Exchanges(BSE)
3. Over The Counter Exchange of India(OTCEI)

### Trading and operational mechanism

1. Process Selection of broker
2. Agreement with broker
3. Placing an order

Different kinds of orders are:

- Day order
- Good till cancelled(GTC)
- Good till date(GTD)
- Immediate or cancel order(IOC) or Fill or Kill(FOK)
- Limit Price Order
- Market Price Order
- Stop Loss Price Order
- Disclosed Quantity

4. Execution of the order
5. Issue of contract note
6. Settlement

### ONLINE TRADING

Procedure to be followed by a client for online trading are as follows:

1. The client has to enter stock code and other parameters such as quantity and price on the place order window.
2. If he is satisfied with the order, he can place the order by clicking the „send” option.
3. Then client receives an order confirmation message with order number and value of the order. The order will be executed within 10 seconds.
4. After the execution of the order , the broker asks transfer of funds by the investor to his account. Then stock are credited or debited as the case may be, in the Demat account.

### SCRIPTLESS TRADING

It is a term used to describe a procedure of trading in shares, where actual shares are not traded but shares are traded in electronic forms, the share traded being adjusted by accounting by an organization known as depository.

### DEMATERIALISATION

Dematerialization or DEMAT is a process to convert the securities held in physical form into electronic form or to directly allot securities in electronic record form.

### Benefits of a DEMAT Account

- It is useful for electronic trade
- No stamp duty
- Eliminate risks
- Good security
- High liquidity

- Speedy transfer
- No postal charges\
- Facility for freezing
- Facility to pledge
- Investors preference

### REMATERIALISATION

It is the term used to convert electronic holdings back to certificates.

### DEPOSITORIES

Two depositories in India are:

1. National Securities Depository Limited (NSDL)
2. Central Depository Services India Limited(CSDL)

### FUNCTIONS

1. Dematerialization
2. Rematerialisation
3. Account transfer
4. Pledge and hypothecation
5. Linkage with the clearing system
6. Corporate actions

### SECURITIES AND EXCHANGE BOARD OF INDIA(SEBI)

#### Functions

1. Protection of investors" interest.
2. Regulate and control stock exchanges
3. Regulate the functioning of intermediaries
4. Register and regulate the working of stock exchanges
5. Promote self-regulatory organization of intermediaries
6. Regulates mergers, takeovers and acquisitions
7. Prohibit fraudulent and unfair practices of intermediaries
8. Issue guidelines to companies regarding capital issue
9. Conduct inspection, inquiries& audits of stock exchanges
10. Restrict insider trading

### ROLE OF SEBI

1. Power to make rules for controlling stock exchanges
2. To provide license to dealers and brokers

3. To stop fraud in capital market
4. To control the merge, acquisition, and takeover of the companies
5. To audit the performance of stock market
6. To make new rules on carry-forward transactions
7. To create relationship with ICAI
8. Introduction of derivative contracts on volatility index
9. To require report of portfolio management activities
10. To educate investors



## **MODULE 3**

### **MUTUAL FUNDS**

A mutual fund is a professionally managed type of collective investment scheme that pools money from many investors and invests it in stocks, bonds, short-term money market instruments and other securities.

#### **HISTORY OF MUTUAL FUNDS**

1. Establishment and growth of Unit Trust of India-1964-87
2. Entry of public sector funds-1987-1993
3. Emergence of private sector funds-1993-96
4. Growth and SEBI Regulation 1996-2004
5. Growth and consolidation-2004 onwards

#### **Types of return**

1. Capital appreciation
2. Dividend distribution

#### **Classification of mutual fund schemes**

1. Open-end funds
2. Closed-end funds
3. Interval funds
4. Growth funds
5. Income funds
6. Balanced funds
7. Stock mutual funds
8. Bond mutual funds
9. Money market funds
10. International mutual funds
11. Tax saving schemes
12. Index schemes
13. Small-cap, mid-cap/ and large-cap funds
14. Sectoral fund

15. Domestic funds
16. Off –shore funds
17. Equity-linked saving schemes(ELSS)
18. Gilt fund
19. Systematic investment plan-SIP

#### Advantages of mutual funds

- Diversification Benefits
- Low Transaction Costs
- Availability of Various Schemes
- Professional Management
- Liquidity
- Returns
- Flexibility
- Well Regulated

#### Disadvantages of Mutual funds

- No Insurance
- Dilution
- Fees and Expenses
- Poor Performance
- Loss of Control
- Trading Limitations
- Inefficiency of Cash Reserves
- Different types

#### Entities in mutual funds

1. Sponsor
2. Mutual fund
3. Trustees
4. Asset management company
5. Custodian
6. Transfer agents

#### Mutual fund in India

The mutual fund industry in India started in 1963 with the formation of Unit Trust of India (UTI) at the initiative of the Reserve Bank of India (RBI) and the Government of India. The objective then was to attract small investors and introduce them to market investments.

## Major mutual fund companies in india

- ABN AMRO Mutual fund
- Birla Sun Life mutual fund
- BOB Mutual Fund
- HDFC Mutual Fund
- HSBC Mutual Fund
- ING Vysya Mutual Fund
- Prudential ICICI Mutual Fund
- Sahara Mutual Fund
- SBI Mutual Fund
- Tata Mutual Fund
- Kotak Mahindra Mutual Fund
- UTI Mutual Fund
- Reliance Mutual Fund
- Standard Chartered Mutual Fund
- Franklin Templeton India Mutual Fund
- Morgan Stanley Mutual Fund
- Escorts Mutual Fund
- Alliance Capital Mutual Fund
- Bench Mark Mutual Fund
- Canbank Mutual Fund
- Chola Mutual Fund
- LIC Mutual Fund
- GIC Mutual Fund

## Association of Mutual Fund in India (AMFI)

The Association of Mutual Funds in India is an industry standards organisation in India in the mutual funds sector. It was formed in 1995 .AMFI is a nodal association of mutual funds across India. AMFI provides useful knowledge and insights regarding mutual funds and investments.

## Role and objectives of AMFI

1. AMFI maintains high professional and ethical standards in all areas of the industry.
2. It also recommends and promotes the top class business practices and codes of conduct which is followed by members and related people engaged in the activities of mutual fund and asset management.
3. AMFI interacts with SEBI and work according to the guidelines of SEBI.
4. AMFI do represent the govt. of India ,RBI and other related bodies on matters relating to the mutual fund industry.

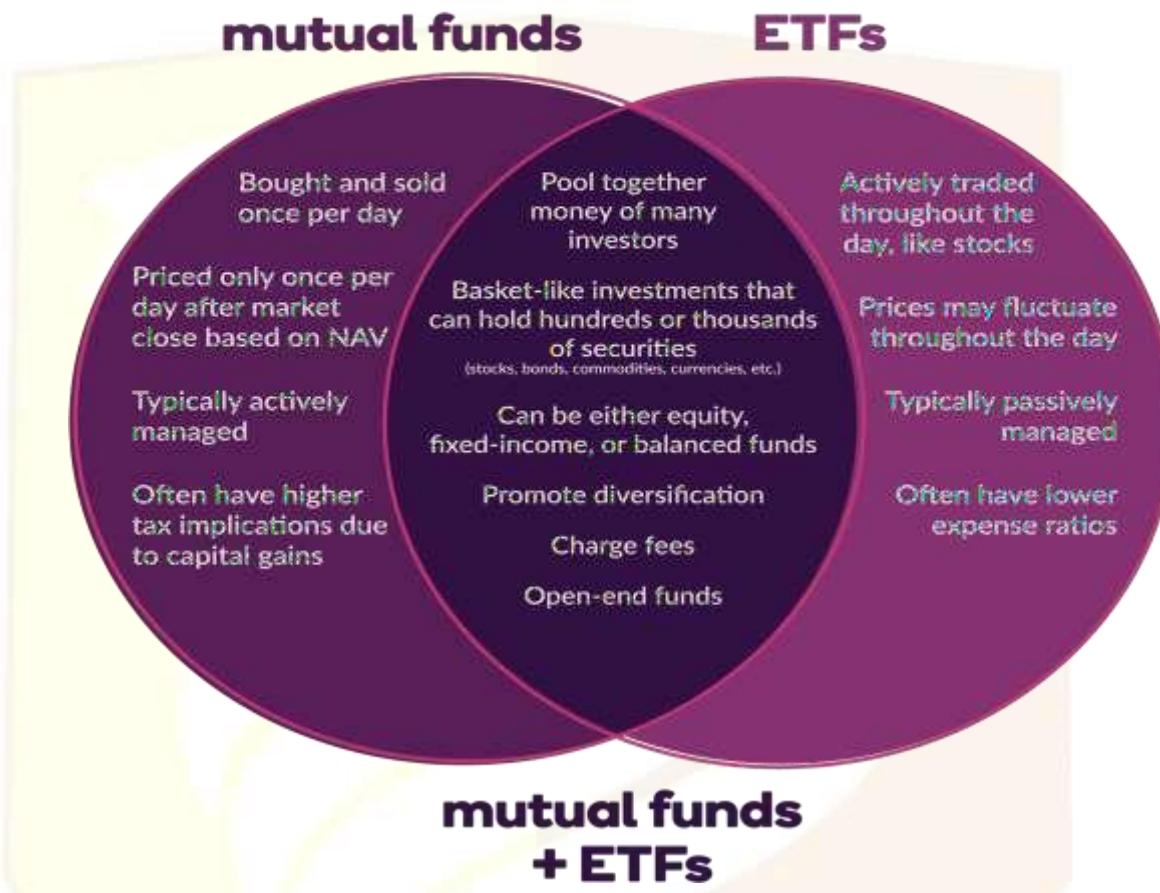
5. It develops a team of well qualified and trained agent distributors.
6. AMFI undertakes all India awareness program for investors in order to promote proper understanding of the concept and working of mutual funds.
7. AMFI also disseminate information on mutual fund industry and undertake studies and research either directly or in association with other bodies.

## **MODULE 4**

### **EXCHANGE TRADED FUNDS**

- ETFs are a type of financial instruments.
- It is a unique investment tool that combines the features of both mutual funds and individual stocks.
- It is an investment pool that holds a specific set of underlying assets.

# similarities and differences of mutual funds and ETFs.



## Features of ETF

- Tax efficiency
- Transparency
- Flexibility
- Greater exposure
- Trade at or near NAV
- Lower ownership cost
- Diversification
- Liquidity
- Easy trading

- Fees and commission
- Options

### Types of ETFs

1. Passively managed
2. Actively managed
3. Equity funds
4. Fixed- income funds
5. Commodity funds
6. Currency funds
7. Real estate funds
8. Speciality funds

### Advantages of ETF

- Convenience in buying and selling
- Offer intraday purchase and sale
- Trading close to NAV
- Low cost of distribution
- Protection to long-term investors
- Flexibility
- Exchange with underlying securities ETF v/s MUTUAL FUNDS

	Exchange-Traded Funds	Mutual Funds
<b>Bought and Sold</b>	On an exchange throughout the day	Through mutual fund companies
<b>Sales Charges</b>	None, though ordinary brokerage commissions apply	May have sales loads, purchases and/or redemption fees
<b>Minimum Investments</b>	None, an investor can buy one share	May have high minimum investments
<b>Expense Ratios</b>	Traditionally low	Dependent on management styles
<b>Liquidity Trading</b>	Intraday: <ul style="list-style-type: none"> <li>○ Ability to trade intraday</li> <li>○ Special trading orders are possible</li> </ul>	End of the day: <ul style="list-style-type: none"> <li>○ Trades only executed once per day</li> <li>○ Special trading not possible</li> <li>○ Trading frequency restricted</li> </ul>
<b>Consequences of Purchases and Sales</b>	Purchases and sales of shares on the secondary market generally:	Purchases and redemptions of a large number of shares can:
<b>Security Prices</b>	<ul style="list-style-type: none"> <li>○ Do not affect security prices</li> </ul>	<ul style="list-style-type: none"> <li>○ Impact the underlying security prices as the fund buys and sells shares</li> <li>○ Impact the fund's NAV and returns</li> </ul>
<b>Tax Implications</b>	<ul style="list-style-type: none"> <li>○ Do not impact tax efficiency</li> <li>○ Do not trigger capital gains or losses on the underlying securities</li> </ul>	<ul style="list-style-type: none"> <li>○ Trigger capital gains or losses on the underlying securities</li> <li>○ Affect the fund's tax efficiency</li> </ul>
<b>Transparency</b>	Fund holding published daily	Fund holdings typically published quarterly
<b>Portfolio Investments</b>	Assets are typically fully invested as there is no need to hold cash aside for redemptions	Mutual funds typically hold at least 5% of their assets in cash in order to handle day-to-day redemptions

### Creation units

- Set of shares or securities that makes up one unit of a fund held by the trust that underlines an ETF.
- a large block of **ETF units** called a "**Creation Unit**"
- Creation units can vary in size; with most containing between 25,000 and 600,000 ETF shares each. They can be paid for either through receiving cash or in-kind shares for the transaction.

## Market making by authorized participants

- Authorized participants are typically large institutional organization.
- An authorized participant is an organization that has the right to create and redeem shares of an exchange traded fund (ETF). They provide a large portion of the liquidity in the ETF market by obtaining the underlying assets required to create the shares of an ETF.

## The role of authorized participants

- AP acquires the securities that the ETF wants to hold.
- They deliver shares to the ETF provider. And the provider gives equally valued creation units. Etc.

## How ETF works?

- ETF don't sell shares directly to investors, instead ETF sponsors issues creation units. □ These creation units are bought by an authorized participant.
- The authorized participants then split up these creation units into ETF shares. □ And then sells them on a secondary market.

## Portfolio deposit and cash components

- The creation of unit is made up of two components namely portfolio deposit and cash components.
- Portfolio deposit consists of basket of shares that makes up an index and cash components, which is the difference between the applicable NAV and the market value of the portfolio deposit.
- Cash components mainly arise due to transaction cost, rounding of shares and involvement of incidental expenses.
- The deposit securities and cash component together constitute the port "portfolio Deposit"

## The creation/ Redemption process

- Creation: The creation of ETF officially begins with an authorized participant, also referred to as a market maker or specialist.
- Redemption: To redeem shares, an authorized participant buys a large block of ETFs, forwards them to the custodial banks and receives an equivalent basket of individual stock.
- Two ways of disposing an ETF:
  - Redeem the ETF , by submitting the shares to the ETF fund in exchange for the underlying asset.
  - Sell the ETF on secondary market.

### Arbitrage:

- ETF provides opportunity for arbitrage.
- If ETF shares are trading at a discount to underlying securities, ie, price lower than the NAV, then the arbitrageurs buy ETF shares on the open market. Then they form creation unit, redeem the creation unit to the custodial bank, receive the underlying securities, and sell them for profit.
- If the ETF shares are trading at a premium to underlying securities, ie, price higher than the NAV, arbitrageurs will buy the underlying securities on the open market. Redeem them for creation units, and sell the ETF shares for profit.

### ETF Investment strategies

1. Core Holding
2. Asset Allocation
3. Diversification
4. Hedging
5. Cash Management
6. Tax-Loss Harvesting
7. Completion Strategies
8. Portfolio Transition

## **MODULE 5**

### **DERIVATIVES**

According to the Securities Contract Regulation Act,(1956) the term “derivative” includes:

- (i) A security derived from a debt instrument, share, loan, whether secured or unsecured, risk instrument or contract for differences or any other form of security;
- (ii) A contract which derives its value from the prices, or index of prices, of underlying Securities.

#### **Uses of Derivatives**

- Management of risk
- Efficiency in trading
- Speculation
- Price discovery
- Price stabilization function.

#### **Features of Derivatives**

- Derivatives are of Futures, Forwards, Options and Swaps.
- The underlying asset can be foreign exchanges, equity, commodities markets or financial bearing assets.
- All transactions are takes place in future specific dates.
- Since derivatives have standardized terms due to which it has low counter party risk and low transaction costs.
- When value of underlying asset change, the value of derivatives also change.

#### **Types of Derivative Contracts**

##### **1. Forward Contracts**

- These are promises to deliver an asset at a pre- determined date in future at a predetermined price.

#### **Features of forward contracts**

- They are bilateral contracts and hence exposed to counter-party risk.
- Each contract is custom designed, and hence is unique in terms of contract size, expiration date and the asset type and quality.
- The contract price is generally not available in public domain.
- On the expiration date, the contract has to be settled by delivery of the asset.
- If the party wishes to reverse the contract, it has to compulsorily go to the same counterparty, which often results in high prices being charged.

## 2. Futures Contracts:

□ A futures contract is an agreement between two parties to buy or sell an asset at a certain time in future at a certain price. These are basically exchange traded, standardized contracts. The standardized items in a futures contract are:

- Quantity of the underlying
- Quality of the underlying
- The date and the month of delivery
- The units of price quotation and minimum price change
- Location of settlement

### Distinction between Futures and Forwards

Futures	Forwards
Trade on an organized exchange	OTC in nature
Standardized contract terms	Customized contract terms
More liquid	Less liquid
Requires margin payments	No margin payment
Follows daily settlement	Settlement happens at end of period

## 3. Options Contracts

□ Options give the buyer (holder) a right but not an obligation to buy or sell an asset in future.

There are two basic types of options, call options and put options.

- Call option: It gives the holder the right but not the obligation to buy an asset by a certain date for a certain price.
- Put option: It gives the holder the right but not the obligation to sell an asset by a certain date for a certain price.

### Index futures and options

A futures or options contract based on a set of underlying securities is called a 'Index Futures or Index Options Contract'.

### Currency future

A currency future, also FX future or foreign exchange future, is a futures contract to exchange one currency for another at a specified date in the future at a price (exchange rate) that is fixed on the purchase date.

## 4. Swaps

□ Swaps are private agreements between two parties to exchange cash flows in the future according to a prearranged formula. They can be regarded as portfolios of forward contracts.

The two commonly used swaps are:

- Interest rate swaps
- Currency swaps
- Commodity swaps

- . Equity swaps

### Participants in a Derivative Market

1. Hedgers

These are investors with a present or anticipated exposure to the underlying asset which is subject to price risks.

2. Speculators

These are individuals who take a view on the future direction of the markets.

3. Arbitrageurs

They take positions in financial markets to earn riskless profits.