

STUDY NOTES FOR NISM – INVESTMENT ADVISER LEVEL 2 – SERIES XB (10B)

Version August 2019

Prepared By

<https://nism.modelexam.in>

Scan the following QR code for NISM Investment Adviser Exams Training Videos



YouTube Training Video Link

https://www.youtube.com/watch?v=IhTfaFoV90&list=PLCZvkZJiAVK5Iby4knMRT_gjErsy3npKq

nism.modelexam.in provides basic information, study material & online model exams to help you succeed in NISM exams. (NISM – National Institute of Securities Markets – A SEBI Institute).

Both Premium (Paid) & Demo (Free) Versions are available in the website.

HARDCOPY / SOFTCOPY of the tests will NOT be provided

Modelexam website provides ONLINE Mock Test for the following exams.

<https://nism.modelexam.in> – NISM Mock Tests

<https://irda.modelexam.in> – Insurance Exams Mock Tests

<https://iibf.modelexam.in> – JAIIB, CAIIB, IIBF Certificate Exams Mock Tests

<https://fp.modelexam.in> – Financial Planning Exams Mock Tests

<https://neet.modelexam.in> – (Medical Entrance) NEET Exam Mock Tests

<https://ugc.modelexam.in> – UGC NET / SLET Exams Mock Tests

<https://gate.modelexam.in> – GATE Exams Mock Tests
<https://icsi.modelexam.in> – CS Foundation Exam mock tests
<https://clat.modelexam.in> – Common Law Admission Mock Test
<https://ssc.modelexam.in> – CGL -Staff Selection Commission Exam Mock Tests
<https://tnpsc.modelexam.in> – TNPSC Exam Mock Tests
<https://ese.modelexam.in> – Engineering Service Exam Mock Tests
<https://ibps.modelexam.in> – Bank Entrance Exam Mock Tests
<https://rrb.modelexam.in> – Railway Recruitment Exam Mock Tests
<https://tet.modelexam.in> – Teacher Eligibility Test - Mock Tests
<https://upsc.modelexam.in> – UPSC Exam (IAS,IPS) Mock Tests

YouTube videos – Topic wise

1. [Capital Market Legislations - SEBI, SCRA, DP, COMPANIES ACT](#)
2. [Capital Market - Primary & Secondary Markets](#)
3. [Secondary Market - Segments](#)
4. [Securities Market - Functions](#)
5. [Primary Market - IPO Grading](#)
6. [Primary Market - Issue Pricing](#)
7. [Primary Market Issues - Allotment Basis](#)
8. [Primary Market Issues - Types of Investors](#)
9. [New Category of Equity Mutual Funds Explained](#)
10. [Insurance Concepts - Principle of indemnity](#)
11. [Insurance - Uberrima Fides - Utmost Good Faith](#)
12. [Insurance - Principle of Insurable Interest](#)
13. [Insurance - Paid Up Value - Formula & Calculation](#)
14. [Prevention of Money Laundering Act 2002 - Part 1](#)
15. [Prevention of Money Laundering Act 2002 - Part 2](#)
16. [Put Option Explained with an Example in 2 minutes](#)
17. [Call Option Explained with an Example in 5 minutes](#)
18. [What is the difference between Hedging, Speculation and Arbitraging ?](#)
19. [What is a Mutual Fund?](#)
20. [Terminologies used in Mutual Fund Industry](#)
21. [Open and Closed end funds](#)
22. [Types of Equity Funds](#)
23. [Types of Debt Mutual Funds](#)
24. [Types of Hybrid Schemes, Balanced Schemes](#)
25. [Tax Saving Scheme - ELSS](#)
26. [Gold Exchange Traded Fund](#)
27. [Passive Funds and Fixed Maturity Plans](#)
28. [Index Funds](#)
29. [Tracking Error - Index Funds](#)
30. [Product Labeling - Riskometer](#)
31. [Mutual Fund Structure and Constituents](#)

32. [Dividend Distribution Tax](#)
33. [Grandfather Clause introduced in Budget and Taxation changes](#)
34. [Capital Gain Tax](#)
35. [Calculation of Long term capital gain tax using Indexation](#)
36. [Tax Deducted at Source and Securities Transaction Tax](#)
37. [Cut off timing - NAV](#)
38. [Liquid Funds Cut off timing](#)
39. [Liquid Funds - Redemption](#)
40. [Who can Invest in Mutual Funds?](#)
41. [Micro SIP and PAN Exempt Cases](#)
42. [Risk Adjusted Performance - Sharpe Ratio](#)
43. [Risk Adjusted Performance - Treynor ratio and Alpha](#)
44. [Mutual Fund Offer Document](#)
45. [Statement of Additional Information](#)
46. [NAV, Sale Price, Repurchase Price](#)
47. [NAV Calculation - Part1](#)
48. [NAV Calculation - Part2](#)
49. [Asset Allocation, Strategic Asset Allocation](#)
50. [Fixed and Flexible Asset Allocation](#)
51. [SIP and STP](#)
52. [SWP, Dividend Payout, Dividend Reinvestment and Growth Options](#)
53. [Systematic Risk and Unsystematic Risk](#)
54. [Beta - measure of Market risk](#)
55. [Upfront Commission, Trail Commission, Transaction Charges](#)

NISM-Series-X-B: Investment Adviser (Level 2) Certification Examination – IACE 2

Assessment Structure: 68 Questions. 2 hours. 25% negative marks for wrong answers. 60% required to pass. Validity for the certificate is 3 years.

8 Case Studies. Each Case Study has 4 Questions. Each Question carries 2 marks.

8 X 4 = 32 Questions X 2 marks = 64 marks

36 One mark Questions. Total marks = 100

Primary market offerings are subject to SEBI Issue of Capital and Disclosure Requirements (ICDR) Regulations, 2009 and the provisions of the Companies Act, 2013 and the Companies Act, 1956. Primary market refers to the market where equity shares of a company are issued for the first time to raise resources for the company through IPO or Private Placement

Qualified institutional buyers (QIBs) → Foreign Portfolio Investors (FPIs), MF, banks and financial institutions, pension funds, insurance funds

HNI or non-institutional buyers (NIBs) invest more than Rs 2 lakhs; Retail individual investors (including eligible NRIs and HUFs in the name of Karta) invest upto Rs 2 lakhs in an issue.

Private placement - securities are issued to a defined group of investors. Private placement made by a listed company is called a preferential allotment. Preferential allotment made to Qualified Institutional Buyers (QIB) is called a Qualified Institutional Placement.

An offer for sale is where shares held by existing investors are offered to public Shareholders. An offer for sale does not increase or decrease the share capital of the company.

All investors who bid at the cut-off price or higher are successful bidders and are allotted shares. Retail investors can bid at 'cut-off' price at the time of making the application

A fixed price public issue is open for subscription for 3 to 10 working days while an issue following a book building process is open between 3 to 7 days. Issuers may also choose to allot securities not exceeding 15% of the issue size to an identified stabilizing agent under a green shoe option.

Limit order where the investor specifies the maximum price at which they are willing to buy or the minimum price at which they are willing to sell. A 'market order' - to buy or sell at the best price currently available in the market. An 'immediate or cancelled' (IOC) order is executed immediately or cancelled and a 'good till cancelled' (GTC) order remains in the system for execution till it is cancelled by the investor. 'Stop loss' order to limit the loss in a buy or sell trade by specifying a price.

Institutional and TT segments settle in T+2 days, on a trade for trade basis. This means every trade has to be settled and positions will not be netted. On settlement day, if there are any shortages in securities delivered by a member, the member is debited for these securities at valuation price. This is called valuation debit. Valuation price for a stock is calculated as the closing price of the stock on the trading day immediately preceding the pay-in day.

Narrow Bell Weathers - few large listed shares. S&P Sensex , Nifty 50 and SX40.

Broad Indices - S&P BSE 500: was designed to reflect the changing pattern of the economy and that of the market. It represents nearly 93% of the total market capitalization on BSE. S&P BSE 500 covers all 20 major industries of the economy.

Nifty 200 reflects the performance of the top 200 companies (free float market capitalization.)

Market turnover indicates how much of activity took place on a business day in the market as a whole and in each stock.

Top gainers and losers - Data on stocks that gained the most or lost the most in percentage terms
52-week high or low -A new price level on the upside or on the downside in the last 52 weeks.

Settlement cycle for rolling settlements on the NSE.

	Activity	Day
Trading	Rolling Settlement Trading	T
Clearing	Custodial Confirmation	T+1 working days
	Delivery Generation	T+1 Working days
Settlement	Securities and Funds pay in	T+2 working days
	Securities and Funds pay out	T+2 working days
	Valuation Debit	T+2 working days
Post Settlement	Auction	T+2 working days
	Auction Settlement	T+3 working days
	Bad Delivery Reporting	T+4 working days
	Rectified bad delivery pay-in and pay-out	T+6 working days
	Re-bad delivery reporting and pickup	T+8 working days
	Close out of re-bad delivery and funds pay-in & pay-out	T+9 working days.

Circuit Breakers - abnormal price movement in an index, the exchange can suspend trading. This is called hitting the circuit breaker. Index-based market wide circuit breakers are set either way of 10%, 15% and 20%.

Trigger limit	Trigger time	Market halt duration	Pre-open call auction session post market halt
10%	Before 1 p.m.	45 minutes	15 minutes
	At or after 1 p.m. upto 2.30 p.m.	15 minutes	15 minutes
	After or after 2.30 p.m.	No halt	Not applicable
15%	Before 1 p.m.	1 hour 45 minutes	15 minutes
	At or after 1 p.m. before 2 p.m.	45 minutes	15 minutes
	On or after 2 p.m.	Rest of the Day	Not applicable
20%	Any Time	Rest of the Day	Not applicable

Daily price bands on 2%, 5% or 10% either way on securities as specified by the exchange.

No price bands are applicable on scrips on which derivatives products are available.

In order to prevent members from entering orders at non-genuine prices in such securities, the exchange may fix operating range of 10% for such securities.

Scrips included in indices on which derivatives products are available will also have appropriate price bands of up to 20%.

Price bands of 20% either way on all remaining scrips.

Historical or trailing P/Es are computed by taking the current price divided by the sum of the EPS for the last four quarters. **Forward or leading P/Es** are computed by taking the current stock price divided by the sum of the EPS estimates for the next four quarters. P/E ratio is a reflection of the market's optimism or pessimism concerning a company's growth prospects.

P/E has to be seen in the light of Company growth rates in the past and how they are likely to be in future, the industry to which the company belongs

$$PEG \text{ Ratio} = \frac{\frac{\text{Price}}{\text{Earning}} \left(\frac{P}{E}\right) \text{ Ratio}}{\text{Earnings Per SHare (EPS) Growth}}$$

(EPS is calculated as Profit after tax (PAT) / Number of outstanding common shares of the company)

$$\frac{\text{Price}}{\text{Book}} \text{ Value Ratio} = \frac{\text{Stock Price Per Share}}{\text{Shareholders' Equity per Share}}$$

The book value per share is calculated by dividing the reported shareholders' equity by the number of common shares outstanding

If the factors to consider are economic (E), industry (I) and company (C) factors, beginning at company-specific factors and moving up to the macro factors that impact the performance of the company is called the **bottom-up approach**.

Scanning the macro economic scenario and then identifying industries to choose from and zeroing in on companies, is the **top-down approach**.

Technical analysis involves studying the price and volume patterns of a stock.

The history of past prices provides indications of the underlying trend and its direction. The **volume of trading** that accompanies price movements provides important inputs on the underlying strength of the trend.

A **resistance level** is one where buying interest has waned, leading to **peaking of prices**; a **support level** is one where selling interest has saturated, leading to a **bottoming of prices**.

A series of such support and resistance points can be used to draw **trend lines**. Trend lines indicate overall direction of prices and any deviation away from trend is watched for a trend reversal. A moving average is a mechanical trend line drawn to see how prices behave compared to a historical average. Crossovers of moving averages provide technical clues.

Technical analysts also look for broad market indicators such as **advance-decline ratio**. In a bullish market number of shares advancing in price is higher than those that close lower than their earlier prices.

Discretionary PMS - portfolio manager manages the portfolio in alignment with the investor's requirement or a **non-discretionary PMS** - the portfolio manager will provide advice and information to the investor who will themselves take the decisions on investment choices and timing of the investment

Money Market Instruments - These are issued with a tenor of less than 365 days. Treasury bills issued for 91-day, 182-day and 364-day tenor. Certificates of deposits usually issued for a 90-day tenor. Commercial paper usually issued for a 90-day tenor. Collateralised borrowing and lending obligations (CBLO) with 1 to 14-day tenor.

Short- Term Instruments - These instruments have a residual tenor less than 365 days. Government securities and corporate bonds with less than one year to maturity. Floating rate bonds with less than one year to next interest reset. Securitised paper with less than one year average maturity.

Collateralised Borrowing and Lending Obligation - CBLO

CBLO is a short-term instrument used to lend or borrow for periods ranging from overnight to one year against the collateral of eligible debt securities (mostly G-Secs and T-bills).

A CBLO is like a standardized repo transaction in which coupon rates depend only on the demand and supply of funds among market participants. Participants are assigned borrowing limits on the basis of securities deposited with the Clearing Corporation of India (CCIL). CCIL acts as counterparty to both sides on a CBLO deal and its system matches borrowing and lending orders. CBLOs – for participants without access to the call money market. Mutual funds are among the biggest lenders in the CBLO segment.

Overnight call markets are available only to banks and primary dealers. Mutual funds prefer CBLOs where lending is fully secured against collateral of government securities. The fund, if required, liquidates its position before maturity in the highly liquid CBLO market. **Rates in CBLO markets are closely aligned to repo rates; and slightly lower than call rates.**

A mutual fund's holding in short-term deposits of banks cannot exceed 15% of its net assets. This can be raised to 20% with the approval of the trustees. The regulation also restrict the holding of the mutual fund in deposits of any one bank to 10% of its net assets and prohibits any holding in the deposits of a bank that has invested in the scheme.

Commercial Papers (CPs) are issued to meet the short term funding needs of companies, primary dealers and financial institutions. They can be issued for maturities between a minimum of 7 days and a maximum of one year from the date of issue, but the 90-day CP is most commonly issued. Issuers must obtain a credit rating for the issue of CP and the rating must not be below an 'A3' rating, according to the rating symbols prescribed by SEBI.

Inflation Indexed Bonds (IIB) is a category of government securities issued by the RBI which provides inflation protected returns to the investors. These bonds have a **fixed real coupon rate** which is applied to the **inflation adjusted principal** on each interest payment date. The **Wholesale Price Index (WPI)** is the inflation measure that is considered for the calculation of the index ratio for these bonds.

Inflation Indexed National Savings Securities (IINSS) are inflation indexed bonds with a tenor of **10 years** that are indexed to the **Consumer Price Index (CPI)**. They are available for investment by retail investors including individuals, Hindu Undivided Family and charitable institutions, among others. The interest rate on these securities will have two parts: a fixed rate of **1.5% per annum and the inflation rate**. The inflation rate will be based on the CPI. Investors can buy the bonds from authorized banks or the Stock Holding Corporation of India. Bonds will be issued in the form of entry in the Bond Ledger Account and a certificate of holding will be issued. Minimum investment - Rs.5000 and maximum Rs.10 lakh per annum. Transferability only to the nominees. Pre-mature redemption is allowed and the bonds can be used as collateral.

Government Securities - Each Primary Dealer is also required to competitively bid for at least 3% of the auction amount. PSU bonds can be further classified into taxable and tax-free bonds. Tax free bonds are mainly issued by PSUs in the infrastructure sector

Bond - The rate, at which the cash flows of a bond are discounted, is called the **yield**. If we discount the cash flows by a higher yield, the value of the bond will reduce. If we discount by a lower yield, the value will move up. Value of the bond and its yield are inversely related. The change in price of a bond, for a change in yield, is a function of the bond's modified duration

Modified Duration = Duration / (1+y/k)

Where y is the yield of the bond and k is the number of coupon periods in a year. Using modified duration we can estimate the price sensitivity of a bond.

Derivatives - A futures contract refers to the purchase of an underlying for delivery on a future date. A futures contract enables a buyer or a seller to buy or sell a stock, commodity or interest rate, for delivery on a future date.

Trading cycle of Derivatives: 3-month trading cycle - the near month (one), the next month (two) and the far month (three)

Expiry Day: Last Thursday of the expiry month. If the last Thursday is a trading holiday, then the expiry day is the previous trading day. All contracts in India have a **price step of 5 paisa**.

The daily settlement price is the weighted average price of all trades in the futures contract in the last 30 minutes of trading. On the settlement day, the final settlement price at which all outstanding positions in a futures contract will be squared off is calculated as the weighted average price of trades in the last 30 minutes of trading in the relevant underlying stock or index in the cash market. The difference between the spot and the futures price thus adjusts to the market rates of interest, for the period between spot and futures delivery. This interest is called as 'carry cost'. The carry cost is not a risk-free rate or a fixed interest rate, but a market-driven rate that is driven by the risk assumed by the lenders to the trading position.

The difference between the spot price and the futures price is called **basis**. If futures trade at a level higher than spot prices, the basis is positive.

An option is an option to buy or sell a security or an underlying on a future date, at a pre-determined price (called the exercise price or strike price). The buyer pays a premium to the seller, for buying the option. The option can be exercised by the buyer on a later date.

If the exercise date of the option is pre-determined and set as the date on which the option will expire, such an option is called a **European option**.

If the option can be exercised at any point of time before the expiry date, such an option is called an **American option**.

An option to buy a security is a call option; an option to sell a security is called a put option.

The seller of the option is called the writer of the option. The buyer is the investor in the option.

Pay-off: Bull Spread

Buying a call option at strike price A and selling a call option at strike price B or

Buying a put option at strike price A and selling a put option at strike price B

Investors are of the view that the market may not fall, but still likes to cap the downside risk.

Pay-off: Bear Spread

Selling a call option at strike price A and buying a call option at strike price B or

Selling a put option at strike price A and buying a put option at strike price B.

Investor is of the view that the market may not rise, but still likes to cap the downside risk.

Open interest (OI) shows the volume of open positions that have not been squared up. It indicates the trading activity in a contract and flow of money into the market. **Higher OI** connotes **higher liquidity** and lower transaction cost.

An increase in open interest in a situation of rising prices confirms an upward movement while a decrease in OI accompanied by a decrease in prices indicates a falling market. An increase or decrease in prices while OI remains flat indicates a likely trend reversal.

Put-call ratio (PCR) is computed by dividing the number of puts (contracts) by the number of calls (contracts). Since the strike price of options is exchange-determined, the number of calls is indicative of buying interest and puts the selling interest. If calls are more than puts, the market is **bullish**, and the **PCR is less than 1**. As the markets move down, PCR increases, indicating bearishness. PCR is used as a contrarian indicator by traders. PCR close to 0.9 or more indicates a very high level of bearishness, and traders may be willing to take contrarian bets that the market would bottom out. Very low PCR at 0.6 or less indicates a high level of bullishness and can be interpreted as an overbought market.

Rollover is the process of carrying over a futures position from one contract period to the next. This is done by closing the existing position and entering into a similar position for the next series. A high rollover percentage is taken as an indicator of the strength in the market sentiment. Rollover data combined with the cost of carry is used as an indicator of market direction. **High rollover with increasing cost of carry is bullish while high rollover with the declining cost of carry or the basis turning negative is a bearish indicator.**

Foreign exchange transactions – Foreign Exchange Management Act, 1999.

Authorized dealers are market makers who give **buy & sell quotes** for different currency pairs.

Full Fledged Money Changers are authorized to purchase foreign exchange from resident and non-residents visiting India and to sell foreign exchange for specific purposes such as private visits and business visits up to the limit fixed by RBI.

EURINR 71.8627 reads as a price of INR 71.8627 for one unit of Euro. The **Euro is the base currency and the rupee is the quotation currency** in this example.

A bank has quoted USDINR 65.5200/65.5225. An entity seeking to buy dollars will look at the ask price of the market maker, which is 65.5225. This is the price at which the bank is willing to sell dollars. To sell dollars the quote to check is bid price of the bank at 65.5200. Banks also publish a standard rate for the day called the card rate that is used for small value transactions.

The date of settlement of a spot transaction is called **spot value date** and is different from the trade date. The **trade date** is the date on which the terms of the transaction, such as currency, price, amount and value date are agreed upon by the parties to the transaction. Typically, the value date

is two business days after the trade date. The buying and selling legs of the transaction may be settled in different centres. In the event that either centre is closed on T+2, then the next business day when both centres are open will be fixed as the value date for the transaction.

If the settlement is done on the trade date itself, the derived rate is called the ‘cash’ rate. If it is settled the next day after trade date, the rate is called ‘tom’ rate.

Authorized dealers (Category I) are allowed to sell call and put options to resident Indians with foreign currency exposure to hedge the position. A call option gives the buyer of the option the right to buy the currency at a strike price defined at the time of entering into the contract.

Persons expecting a foreign currency inflow can protect the value by buying put options.

Spot price: The price at which the underlying asset trades in the spot market.

Futures price: The current price of the specified futures contract

Contract cycle: The period over which a contract trades. The currency futures contracts on the SEBI recognized exchanges have one-month, two-month, and three-month up to twelve-month expiry cycles. These exchanges will have 12 contracts outstanding at any given point in time.

Value Date/Final Settlement Date: The last business day of the month will be termed as the Value date / Final Settlement date of each contract. The last business day would be taken to be the same as that for Inter-bank Settlements in Mumbai. The rules for Interbank Settlements, including those for ‘known holidays’ and ‘subsequently declared holiday’ would be those as laid down by Foreign Exchange Dealers’ Association of India (FEDAI).

Expiry date: Also called Last Trading Day, it is the day on which trading ceases in the contract; and is two working days prior to the final settlement date.

Contract size: The amount of asset that has to be delivered under one contract. Also called as lot size. In the case of USDINR it is USD 1000; EURINR it is EUR 1000; GBPINR it is GBP 1000 and in case of JPYINR it is JPY 100,000.

Initial margin: The amount that must be deposited in the margin account at the time a futures contract is first entered into is known as initial margin.

Marking-to-market: In the futures market, at the end of each trading day, the margin account is adjusted to reflect the investor's gain or loss depending upon the futures closing price.

$$F = S + (RINR - RUSD) * S$$

This concept of difference between future exchange rate and spot exchange rate being approximately equal to the difference in domestic and foreign interest rate is called the “Interest rate parity”.

$$F = S \times (1 + RQC \times \text{Period}) / (1 + RBC \times \text{Period})$$

The formula is generalized for other currency pair and is given below:

$$F = S + (S \times (RQC - RBC) \times \text{Period})$$

In any currency pair, future value of a currency with high interest rate is at a discount (in relation to spot price) to the currency with low interest rate. Factors that affect the value of a currency in the foreign exchange market include the gross domestic product (GDP) growth rate, balance of payment situation, deficit situation, inflation, interest rate scenario, policies related to inflow and outflow of foreign capital.

Contract specification: USDINR, EURINR, GBPINR and JAYINR Currency Derivatives	
Underlying	Foreign currency as base currency and INR as quoting currency
Market timing	9:00 AM to 5:00 PM
Contract Size	USD 1000 (for USDINR), EUR 1000 (for EURINR), GBP 1000 (for GBPINR) and JPY 100,000 (for JPYINR)
Tick Size	Re. 0.0025
Quotation	The contract would be quoted in Rupee terms. However, outstanding position would be in USD, EUR, GBP and JPY terms for USDINR, EURINR, GBPINR and JPYINR contracts respectively.
Available contracts	Maximum of 12 calendar months from current calendar month. New contract will be introduced following the Expiry of current month contract.

Settlement date	Last working day of the month (Subject to holiday calendars) at 12 noon
Last trading day (or Expiry day)	12.30 p.m. on the day that is two working days prior to the settlement date
Settlement Basis	Daily mark to market settlement will be on a T+1 basis and final settlement will be cash settled on T+2 basis
Daily settlement price	Daily mark to settlement price will be announced by the exchange, based on volume-weighted average price in the last half an hour of trading, or a theoretical price if there is no trading in the last half hour
Settlement	Cash settled in INR

Final settlement price	The reference rate fixed by RBI on last trading day or expiry day.
Final Settlement Day	Last working day (excluding Saturdays) of the expiry month. The last working day will be the same as that for Interbank settlements in Mumbai. The rules for Interbank Settlements, including those for 'known holidays' and 'subsequently declared holiday would be those as laid down by FEDAI.

Opening a Tier II account with the National Pension System (NPS) requires a PAN card. In the case of mutual funds, shares and bonds, demat account, post office savings bank accounts and most company deposits a purchase application can be made by a maximum of 3 joint holders. In others, such as a fixed deposit with a bank or the senior citizens savings scheme and the NSC, there can be a maximum of two holders. A National Pension Scheme (NPS) account is held in the sole name of the subscriber.

Section 114 B of the Income Tax Rules lists the transactions that mandatorily require the PAN to be quoted. PAN is not available, then a declaration in form 60/61 giving details of the transaction has to be provided.

Depositories Act was passed in 1996 allow companies and investors to issue, hold and transact in securities through a depository. Two depositories - NSDL & CDSL. The securities can be dematerialised at the time of issue or subsequently. SEBI Regulations requires all public issues whose size is in excess of Rs. 10 crores to be issued only in dematerialised form.

Securities eligible for dematerialisation: Shares, scrips, stocks, bonds, debentures, debenture stock or other marketable security of any incorporated company or other body corporate. Units of a mutual fund, rights under a collective investment scheme, venture capital funds, certificates of deposit, commercial paper, money market instruments, government securities and unlisted securities.

The DRFs are required to be stored for at least a period of 5 years.

To be valid the PoA must be:

Typed on a non-judicial stamp paper.

Stamped according to the rules applicable in the state in which it is executed.

Signed by the grantor on all pages.

Signed by the grantor and the holder of the power of attorney on the last page.

Notarised by a notary public. This requirement varies among different product producers and intermediaries. For example, some mutual funds may require the PoA to be notarized, while a PoA to operate a demat account needs to notarized only if the depository participant so requires.

The Portfolio Investment (NRI) Scheme (PINS) is a scheme of the Reserve Bank of India (RBI) and is mandatory for Non Resident Indians (NRIs) and Persons of Indian Origin (PIOs) who like to purchase and sell shares and convertible debentures of Indian companies on a recognised stock exchange in India. All purchase and sale transactions in listed securities of NRIs is routed through their PINS account held with a designated bank, which maintains and reports to RBI as required, the investments made by NRIs. Only an NRI/PIO can open a PINS account. An NRI/PIO can have

only one PINS account (One NRE (PIS) account for investment on repatriation basis and one NRO (PIS) account for investment on non-repatriation basis) at a given point of time.

NRIs cannot purchase more than 5% of the paid-up capital of a company on both repatriation and non-repatriation basis subject to an overall limit of 10% by all NRIs. The purchase of debentures of each series of an Indian company shall not exceed 5% for each individual within an overall limit of 10% for all NRIs. Investors in the NPS have to use form S2 prescribed by the CRA to record the change in address in their account

Savings Ratio = Savings per year/Annual Income

Savings to Income ratio = Total Savings/Annual Income.

This ratio measures the preparedness to meet long term goals such as retirement. The current value of the investments and assets, after accounting for any outstanding loans taken to acquire the same, is taken to compute the total savings. Self-occupied home is typically not included when calculating the savings level. A suitable savings to income ratio in the early 40s is at least 3 times the annual income. This means that the annual savings rate, or the annual savings relative to income, has to be stepped up as income levels go up, so that the savings can be built to a level that is suitable to the age and stage in life.

Expenses Ratio = Annual Recurring Expenses / Annual Income.

Expenses Ratio = 1 – Savings Ratio.

1 – Expenses Ratio = Savings Ratio

Non-recurring expenses are kept out of the expense ratio. A low expense ratio and high savings ratio is desirable for an individual's financial security and stability.

A conservative approach would be to exclude personal jewellery, one residential house that the investor's family stays in, and any other form of asset meant for personal use (e.g. car) while estimating assets available to meet goals and financial needs

Total Liabilities / Total Assets. = Leverage Ratio

Total assets – Total liabilities. = Networth

Net Worth / Total Assets = Solvency Ratio

1 – Leverage Ratio = Solvency Ratio

1-Solvency Ratio = Leverage Ratio

Liquid assets are those assets that can be easily converted into cash at short notice to meet expenses or emergencies. Liquid assets include money in savings bank account, fixed deposits that mature within 6 months, investment in short-term debt schemes of mutual funds and such other short-term assets.

Liquidity ratio = Liquid Assets/Monthly Expenses measures how well the household is equipped to meet its expenses from its short-term assets. A ratio of at least 4 to 6 indicates a comfortable level for the household to meet its expenses for 4 to 6 months, even if there was a loss or decline in regular income. Another liquidity ratio that is tracked is the **Liquid assets to Networth ratio**. A higher proportion of financial assets is preferred especially as goals are closer to realisation and there is a need for income or funds to meet the goals.

Debt to income ratio is an indicator of the individual's ability to manage current obligations given the available income and a parameter used by lenders to determine eligibility for additional loans. It is calculated as **Monthly Debt Servicing Commitment ÷ Monthly Income**. A useful thumb rule is to ensure at least 20% goes into investments / retirement savings and loan servicing does not exceed 40% of income.

Risk profiling is an approach to understand the risk appetite of investors.

Strategic Asset Allocation is allocation aligned to the financial goals of the individual. It considers the returns required from the portfolio to achieve the goals, given the time horizon available for the corpus to be created and the risk profile of the individual

Tactical Asset Allocation is the decision that comes out of calls on the likely behaviour of the market. An investor who decides to go overweight on equities i.e. take higher exposure to equities, because of expectations of buoyancy in industry and share markets, is taking a tactical asset allocation call.

Riders in Insurance:

Double sum assured rider - Provides twice the amount insured in case of death

Critical illness - Provides a payout on diagnosis of a life-threatening illness.

Accident or disability - periodic payout if temporarily disabled, for a limited period of time.

Waiver of premium - disability or loss of income that makes it difficult to pay the premium.

Guaranteed insurability - enhancing the insurance cover without further medical examination

In goal specific planning, each financial goal is looked at in isolation, and a dedicated investment plan is made to realise the financial goal. Comprehensive financial planning takes a consolidated view of all the financial goals of the person. Accordingly, the investment plan too is a consolidated one – not a separate plan for each goal.

Inflation refers to a general rise in prices of goods and services. Inflation reduces the purchasing power of money. The nominal value or return of an investment is the pre-inflation absolute value or return. Once adjusted for inflation, it is known as a real value or return. Inflation risk is the possibility of erosion in the real value of an investment.

Real return = ((1+nominal return) / (1+inflation rate)) - 1

Returns from investments such as equity, real estate or gold adjust better to inflation. The increase in their value over time tends to move in line with or higher than inflation rates.

The standard deviation is the average deviation of actual returns from the average return over a time period. The higher the standard deviation, the greater the dispersion of returns around the average, and so the higher the risk associated with the investment. Standard deviation is a measure of the total risk of an investment. Total risk consists of two parts i.e. systematic risk and unsystematic risk. The part that affects the entire system is known as systematic risk, and the part that can be diversified away is known as un-systematic risk. Systematic risk refers to those risks that are applicable to the entire financial market or a wide range of investments. It is caused due to factors that affect the entire market and are not specific to a particular company or industry. Changes in government policy, inflation, interest rates, external factors, exchange rate movements, wars or natural calamities are some common systematic factors. Unsystematic risk is the type of uncertainty that is specific to the company or industry, an investor invests in. Unsystematic risk can be reduced through diversification. If a portfolio is well diversified, then unsystematic risk is very small and systematic risk forms the most important component of risk in investment.

Beta measures the systematic risk in a stock by measuring the volatility in the price of a stock relative to the overall market:

The market index is assumed to have a beta of 1.

Stocks with a beta greater than one are likely to be riskier than the market.

Stocks with beta less than one are less risky than the market.

A **high beta** is associated with **riskier growth stocks**. Equity stocks that move up quickly when the economy is doing well and decline rapidly during periods of low economic growth are known as **cyclical stocks**. A **low beta** is associated with **defensive stocks**. Defensive stocks belong to companies that are relatively insulated from economic cycles. Consumption of items of daily use

and medicines is not likely to be affected by market cycles, but remain steady. Stocks from consumer goods, drugs and pharmaceuticals, health care sectors tend to feature low systematic risk.

Risk premium measures the difference between the return of a risky asset and the risk-free rate of return. Investing across asset classes provides the benefit of diversifying risk. The fundamental principle in constructing a portfolio is to enhance the benefits of diversification.

Correlation is a statistical measure of the extent of co – movement exhibited in the return of two asset classes. Correlation between two asset class return series ranges from -1 to +1.

A correlation of -1 means that they move exactly in opposite directions. Investing equally in both brings risk to zero.

A correlation of +1 means that they move exactly in the same directions. Investing equally in both does not modify the risk of the portfolio at all.

The formula for portfolio risk or variance for a portfolio of two assets ‘a’ and ‘b’ is

$$w_a^2 \sigma_a^2 + w_b^2 \sigma_b^2 + 2w_a w_b \sigma_a \sigma_b \rho_{ab}$$

Where σ is the risk for each individual asset a and b, and ρ is the correlation between the two assets a, b. Portfolio risk in terms of standard deviation can be calculated as the square root of the variance.

Risk profiling is an exercise that determines the level of risk that an investor can take. It is an assessment of an investor’s risk tolerance. Financial risk tolerance depends upon risk capacity and risk attitude

Core and Satellite Portfolios - The core-satellite strategy is a method of portfolio construction that allows investors to focus on long term financial goals while minimizing volatility, costs and taxes. The core portfolio is geared to meet the long-term goals and strategic needs of an investor. It should form at least 60-70% of the portfolio. The core should ideally consist of passive investments that track major market indices, such as index funds, diversified equity funds and large-cap funds, Short-term debt funds and income funds

The satellite portfolio should include actively managed investments. These investments are tactical in nature and form a smaller part of the total asset allocation of the investor. long-term gilt funds, Sector specific funds.

Investors seeking low-risk diversified exposure would choose the equity fund.

Investors seeking a higher risk diversified exposure would choose the small and midcap fund.

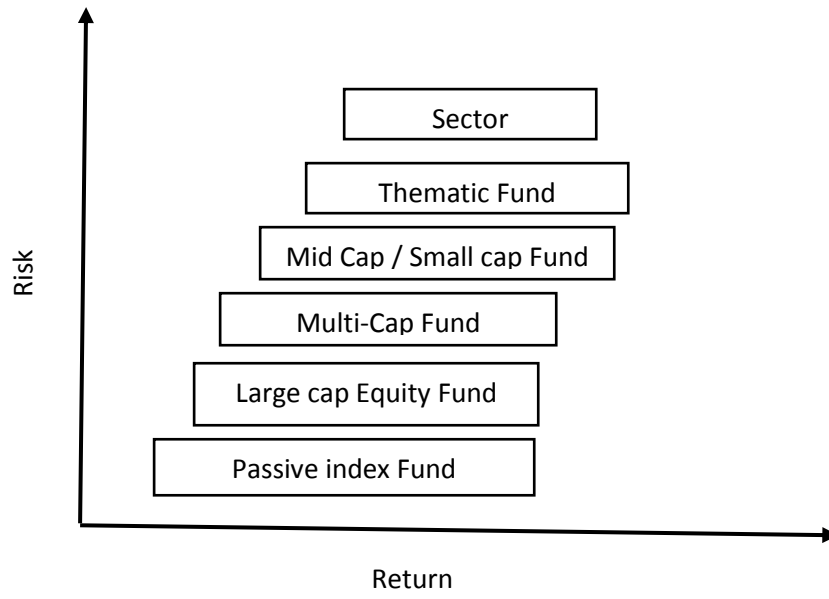
Investors seeking a concentrated focus to large cap would choose the Focus-25 fund.

Investors seeking a diversified exposure to large cap stocks would choose the Top-100 fund.

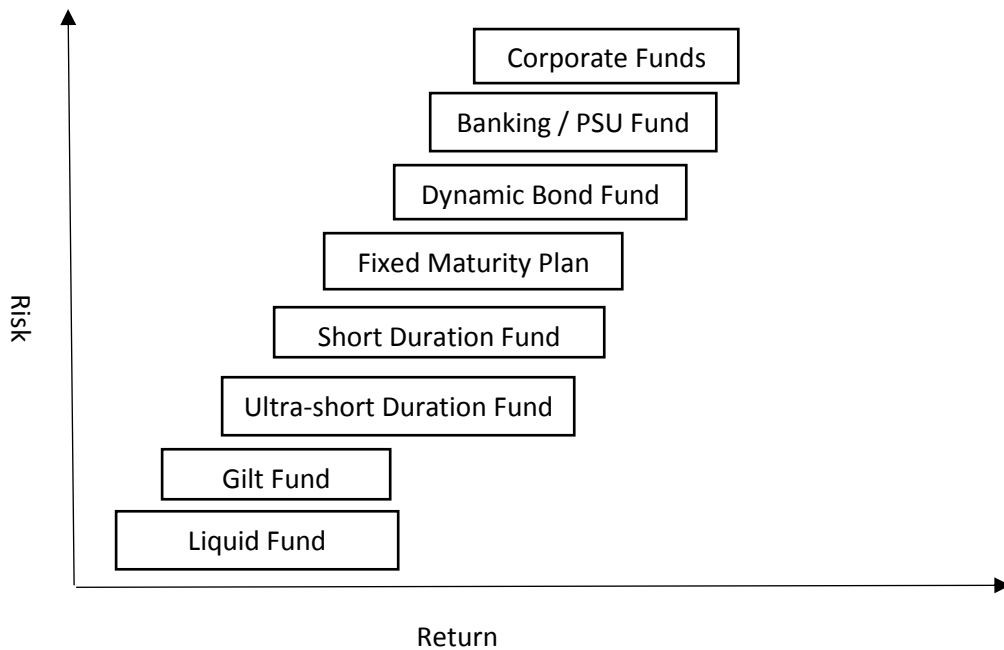
Passive strategies replicate an index. Their return is similar to the underlying index. They also feature low expense ratios. **Actively managed** funds attempt to do better than the underlying index. They adopt security selection and timing strategies to achieve this and charge a higher fee.

Investment in Equity Linked Savings Schemes (ELSS) to the extent of Rs. 1.5 lakh in a year enjoys a tax deduction under Section 80C of the Income Tax Act. Investors can buy the units to claim tax deduction at any time of the financial year. Investment in both, the open and closed end ELSS is subject to a 3-year lock-in.

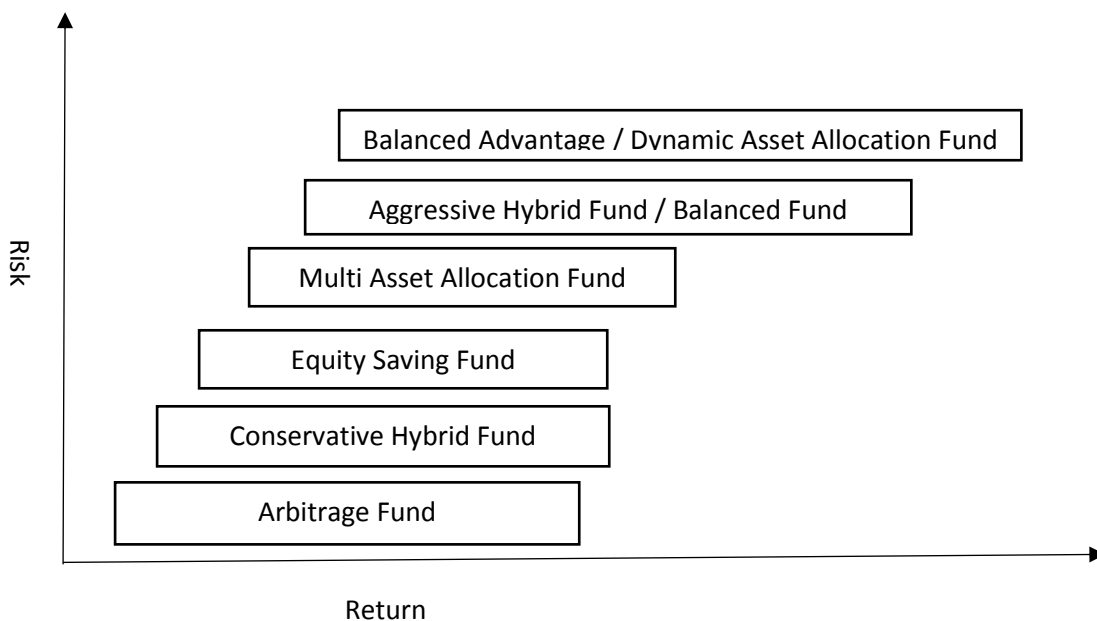
Risk-Return Hierarchy of Equity Funds



Risk-Return Hierarchy of Debt Funds



Risk-Return Hierarchy of Hybrid Funds



Real Estate MF invest in real estate either in the form of physical property or in the form of securities of companies engaged in the real estate business. SEBI’s regulations require that at least 35% of the portfolio should be held in physical assets. Eligible Securities - mortgage-backed securities and debt issuances of companies engaged in real estate projects. Minimum 75% of the net assets of the scheme shall be in physical assets & such securities.

Risk-Adjusted Return

Sharpe Ratio = (Return of the fund – Risk-free Rate) / Standard Deviation of the fund

Treynor Ratio = (Return of the fund – Risk free Rate) / Portfolio Beta

The Sharpe ratio compares the excess return a fund makes over and above a risk-free rate, with its risk as measured by the standard deviation. The Treynor ratio is a measurement of the returns

earned in excess of that which could have been earned on a risk-free investment per each unit of risk measured by its beta coefficient.

The Government Securities Fund has a very high average maturity, as it seeks to take advantage of an expected cut in interest rates. The interest rate risk is high in a fund with higher average maturity

Gross Domestic Product (GDP) is the final value of all goods and services produced by a country in a given time period. Rate of growth in GDP is a widely used measure of economic growth. GDP can be computed in nominal (at current prices) or real terms (at constant prices). Nominal GDP includes the impact of inflation. Real GDP is computed using prices prevailing in the base year. It is customary to report GDP numbers and growth rates in real terms.

GDP computation values goods and services at their **market prices** and not cost.

Products and services having intermediate uses are not counted. The **value of the final product** includes the values of these intermediate goods.

GDP refers to **output produced in the country**, irrespective of the ownership of the factors of production. For example, the production of a foreign unit in India is included in India's GDP.

GDP growth is represented as a **real rate**.

GDP is measured on a **time scale**, usually on a year to year basis.

Gross National Product (GNP) measures the final value of all goods and services produced by domestically owned entities, even if such production happens abroad.

Index of Industrial Production IIP measures changes in industrial activity with reference to a base year (currently 2004-05). The CSO releases monthly estimates of IIP, as well as YoY and year-to-date growth numbers with a 6-week lag. The IIP measures growth in 22 industry groups classified as industrial sectors and use-based sectors. Mining, manufacturing and electricity are industry sectors; basic goods, capital goods, intermediate goods and consumer goods are used based sectors. IIP is a lead indicator of corporate earnings. IIP numbers measure production and this translates into sales and revenues for companies with a lag. An increase in revenues and margins would encourage investment growth in the sector. Growth in IIP and revenues of index companies show a positive correlation. This is due to the intuitive relationship between growth in nominal GDP (for which IIP is a proxy) and growth in corporate earnings.

Aggregate demand = Private consumption expenditure (C) + Government spending (G) + Investments (I) + Net exports (Exports – Imports) (NX)

This technique of measuring GDP is called the **expenditure method**. It provides a widely used and easily understood disaggregation of economic output.

Private consumption is the amount spent on goods and services by consumers. Government spending is the amount spent by the government on goods and services. Investment is the amount invested in creating fixed capital and inventories. This is also known as gross capital formation. Investment creates assets that increase the economy's ability to produce output in the future. Thus it is critical to GDP growth. Exports are goods produced locally but consumed abroad; imports are goods produced abroad but consumed locally. The difference is net exports.

Current Account Deficit - The current account balance is the difference between total exports and total imports of goods and services. The difference between exports and imports of goods is known as trade balance. Both current and trade account balances are expressed in terms of percentage to GDP, as well as in currency terms. A CAD means that the country is importing more from the rest of the world than it exports to it, so it is a net debtor of foreign currency.

Headline inflation refers to the change in the value of all goods in the basket.

Core inflation excludes food and fuel items, because the prices of these items tend to be more volatile, and thus create 'noise' in the headline inflation number. The Wholesale Price Index (WPI) and Consumer Price Index (CPI) are computed from actual price data, while the GDP deflator is statistically derived as the difference between the nominal and real GDP growth rates.

Wholesale price index (WPI) is computed on a monthly basis, using the wholesale prices of a basket of 697 goods. Consumer price index (CPI) is a retail index, computed on a monthly basis, with a basket representing retail household consumption.

Demand-pull inflation - High growth in aggregate demand can lead to price increases if supply cannot keep up with demand, a situation referred to as "overheating". Such inflation can be reduced through policy actions by reducing money flows in the economy for example, reducing bank credit (through interest rate hike) or reducing purchasing power (through higher tax rates).

Cost-push inflation - rise in prices of raw materials or labour lead to inflation. The inability of capacity and productivity to keep pace with demand can also cause inflation. The usual government reaction is to augment supplies by allowing imports or reducing exports.

Money Supply Indicators

The monetary stock in the economy is made up of the following:

- (a) Currency in circulation
- (b) Deposits with RBI
- (c) Demand deposits
- (d) Time deposits

Reserve Money (M0) is computed as (a) + (b). Reserve money therefore refers to the base money in cash and near cash.

Narrow Money (M1) excludes cash with banks and deposits with RBI from reserve money and includes demand deposits.

Broad Money (M3) is narrow money + time deposits.

Behavioral Biases in Investment Decision Making

Optimism or Confidence Bias: Investors cultivate a belief that they have the ability to outperform the market based on some investing successes. Investors will continue to make their decisions based on what they feel is right than on objective information.

Familiarity Bias: This bias leads investors to choose what they are comfortable with. This may be asset classes they are familiar with, stocks or sectors that they have greater information about and so on. It leads to concentrated portfolios. Since other opportunities are avoided, the portfolio is likely to be underperforming.

Anchoring: Investors hold on to some information that may no longer be relevant, and make their decisions based on that. New information is labelled as incorrect or irrelevant and ignored in the decision making process.

Loss Aversion: The fear of losses leads to inaction. Holding on to losing stocks, avoiding riskier asset classes like equity when there is a lot of information and discussion going around on market volatility is manifestations of this bias.

Herd Mentality: This bias is an outcome of uncertainty and a belief that others may have better information, which leads investors to follow the investment choices that others make.

Recency Bias: The impact of recent events on decision making can be very strong. This applies equally to positive and negative experiences.

Choice Paralysis: The availability of too many options for investment can lead to a situation of not wanting to evaluate and make the decision. Too much of information also leads to a similar outcome on taking action.

SEBI (Investment Advisers) Regulations 2013 - investment advice given through newspaper, magazines, any electronic or broadcasting or telecommunications medium, which is widely available to the public shall not be considered as investment advice for the purpose of these regulations.

Investment advisers which are body corporate shall have a net worth of not less than twenty five lakh rupees.

Investment advisers who are individuals or partnership firms shall have net tangible assets of value not less than rupees one lakh:

The certificate of registration granted under these regulations shall be valid for a period of five years from the date of its issue.

1) An investment adviser shall maintain the following records,-

- a. Know Your Client records of the client;
- b. Risk profiling and risk assessment of the client;
- c. Suitability assessment of the advice being provided;
- d. Copies of agreements with clients, if any;
- e. Investment advice provided, whether written or oral;
- f. Rationale for arriving at investment advice, duly signed and dated;
- g. A register or record containing list of the clients, the date of advice, nature of the advice, the products/securities in which advice was rendered and fee, if any charged for such advice.

2) All records shall be maintained either in physical or electronic form and preserved for a minimum period of five years: Provided that where records are required to be duly signed and are maintained in electronic form, such records shall be digitally signed.

3) An investment adviser shall conduct yearly audit in respect of compliance with these regulations from a member of Institute of Chartered Accountants of India or Institute of Company Secretaries of India. An investment adviser which is a body corporate or a partnership firm shall appoint a compliance officer.

Investors having a grievance related to a transaction in a stock exchange can approach the **Investor Services Centre (ISC)** of the stock exchange. For mutual fund investments, the Board of Trustees of the mutual fund can be approached, if the investor finds that queries are not resolved by the asset management company.

SEBI Complaints Redress System (SCORES) offers an online facility (www.sebi.gov.in) for investors to file their complaints against any listed company (issue or transfer of securities or non-payment of dividend) or intermediary registered with SEBI.

The following complaints are not addressed in SCORES:

Complaints that are incomplete or not specific

Allegations without supporting documents

Offering suggestions or seeking guidance/explanation

Seeking explanation for non-trading of shares or illiquidity of shares

Not satisfied with trading price of the shares of the companies

Non-listing of shares of private offer

Disputes arising out of private agreement with companies/intermediaries

Further, SEBI does not deal with the following complaints:

Complaints against unlisted/delisted/wound up/liquidated/sick companies

Complaints that are sub-judice

Complaints falling under the purview of other regulatory bodies.

Reserve Bank of India has set up the Banking Codes and Standards Board of India (BCSBI) as an independent autonomous watchdog to ensure that customers get fair treatment in their dealings with Banks.

IRDA also offers the facility of online registration of policy holders' complaints through its **Integrated Grievance Management System (IGMS)**. Once a complaint is registered through the IGMS it is forwarded to the concerned insurer. If the complaint is made other than through the IGMS, the same will be forwarded to the insurer for resolution. IRDA's regulations require a complaint to be resolved within 15 days. If the complainant is not satisfied with the resolution provided by the insurer, they can approach the Insurance Ombudsman for relief. The ombudsman will pass an award within one month after considering both sides of the case and giving an opportunity to the insurance company to settle the issue. If the insurance buyer is not happy with the decision of the ombudsman, then the normal judicial process through courts as well as under the Consumer Protection Act, 1986 is available.

Reserve Bank of India has set up the Banking Codes and Standards Board of India (BCSBI) as an independent autonomous watchdog to ensure that customers get fair treatment in their dealings with Banks. The BCSBI has published the "Code of Banks' Commitments to Customers" which sets minimum standards of banking practice and benchmarks in customer service for banks to follow.

The Banking Ombudsman is a person appointed by the RBI to address the complaints of banking customers related to the services offered by banks. They also hear complaints related to credit cards issued by banks and Non-banking Finance Companies (NBFC). Disputes related to interest charged or credited, penalty or fees charged, disputes related to ATM cards, debit cards and credit cards, issues of refusing a loan without valid reasons and others may also be referred to the ombudsman. If the grievance has been directly addressed to the concerned bank but the individual has not received a satisfactory resolution within one month, then they can approach the Banking Ombudsman.

A complaint relating to the non-repayment of deposits or payment of interest by an NBFC should be registered with the Company Law Board (CLB) or the Consumer forum.

Category I Alternative Investment Fund which invests in start-up or early stage ventures or social ventures or SMEs or infrastructure or other sectors or areas which the government or regulators consider as socially or economically desirable and shall include venture capital funds, SME Funds, social venture funds, infrastructure funds and such other Alternative Investment Funds as may be specified

Category II Alternative Investment Fund which does not fall in Category I and III and which does not undertake leverage or borrowing other than to meet day-to-day operational requirements and as permitted in these regulations

Category III Alternative Investment Fund which employs diverse or complex trading strategies and may employ leverage including through investment in listed or unlisted derivatives.

Each scheme of the Alternative Investment Fund shall have corpus of at least twenty crore rupees; investors who are employees or directors of the Alternative Investment Fund or employees or directors of the Manager, the minimum value of investment shall be twenty five lakh rupees. The Manager or Sponsor shall have a continuing interest in the Alternative Investment Fund of not less than two and half percent of the corpus or five crore rupees, whichever is lower.

Category III Alternative Investment Fund, the continuing interest shall be not less than five percent of the corpus or ten crore rupees, whichever is lower.

No scheme of the Alternative Investment Fund shall have more than one thousand investors

Units of close ended Alternative Investment Fund may be listed on stock exchange subject to a minimum tradable lot of one crore rupees.

Investor Grievance Resolution Panel (IGRP) - The IGRP gives an opportunity to both parties to present their case and tries to broker a settlement. If that fails then the complainant has the option to seek arbitration in the matter.

All the best