



Mutual Funds (Advanced) Module



NATIONAL STOCK EXCHANGE OF INDIA LIMITED

Test Details:

Sr. No.	Name of Module	Fees (Rs.)	Test Duration (in minutes)	No. of Questions	Maximum Marks	Pass Marks (%)	Certificate Validity
1	Financial Markets: A Beginners' Module *	1500	120	60	100	50	5
2	Mutual Funds : A Beginners' Module	1500	120	60	100	50	5
3	Currency Derivatives: A Beginner's Module	1500	120	60	100	50	5
4	Equity Derivatives: A Beginner's Module	1500	120	60	100	50	5
5	Interest Rate Derivatives: A Beginner's Module	1500	120	60	100	50	5
6	Commercial Banking in India: A Beginner's Module	1500	120	60	100	50	5
7	Securities Market (Basic) Module	1500	105	60	100	60	5
8	Capital Market (Dealers) Module *	1500	105	60	100	50	5
9	Derivatives Market (Dealers) Module *	1500	120	60	100	60	3
10	FIMMDA-NSE Debt Market (Basic) Module	1500	120	60	100	60	5
11	Investment Analysis and Portfolio Management Module	1500	120	60	100	60	5
12	Fundamental Analysis Module	1500	120	60	100	60	5
13	Securities Market (Advanced) Module	1500	120	60	100	60	5
14	Mutual Fund (Advanced) Module	1500	120	60	100	60	5
15	Banking Sector Module	1500	120	60	100	60	5
16	Insurance Module	1500	120	60	100	60	5
17	Macroeconomics for Financial Markets Module	1500	120	60	100	60	5
18	NISM-Series-I: Currency Derivatives Certification Examination	1000	120	60	100	60	3
19	NISM-Series-II-A: Registrars to an Issue and Share Transfer Agents - Corporate Certification Examination	1000	120	100	100	50	3
20	NISM-Series-II-B: Registrars to an Issue and Share Transfer Agents - Mutual Fund Certification Examination	1000	120	100	100	50	3
21	NISM-Series-IV: Interest Rate Derivatives Certification Examination	1000	120	100	100	60	3
22	NISM-Series-V-A: Mutual Fund Distributors Certification Examination *	1000	120	100	100	50	3
23	NISM-Series-VI: Depository Operations Certification Examination	1000	120	100	100	60	3
24	NISM-Series-VII: Securities Operations and Risk Management Certification Examination	1000	120	100	100	50	3
25	Certified Personal Financial Advisor (CPFA) Examination	4000	120	80	100	60	3
26	NSDL-Depository Operations Module	1500	75	60	100	60 #	5
27	Commodities Market Module	1800	120	60	100	50	3
28	Surveillance in Stock Exchanges Module	1500	120	50	100	60	5
29	Corporate Governance Module	1500	90	100	100	60	5
30	Compliance Officers (Brokers) Module	1500	120	60	100	60	5
31	Compliance Officers (Corporates) Module	1500	120	60	100	60	5
	Information Security Auditors Module (Part-1)	2250	120	90	100	60	2
32	Information Security Auditors Module (Part-2)	2250	120	90	100	60	2
33	Options Trading Strategies Module	1500	120	60	100	60	5
34	FPSB India Exam 1 to 4**	2000 per exam	120	75	140	60	NA
35	Examination 5/Advanced Financial Planning **	5000	240	30	100	50	NA
36	Equity Research Module ##	1500	120	65	100	55	2
37	Issue Management Module ##	1500	120	80	100	55	2
38	Market Risk Module ##	1500	120	50	100	55	2
39	Financial Modeling Module ###	1000	150	50	75	50	NA

* Candidates have the option to take the tests in English, Gujarati or Hindi languages.

Candidates securing 80% or more marks in NSDL-Depository Operations Module ONLY will be certified as 'Trainers'.

** Following are the modules of Financial Planning Standards Board India (Certified Financial Planner Certification)

- FPSB India Exam 1 to 4 i.e. (i) Risk Analysis & Insurance Planning (ii) Retirement Planning & Employee Benefits (iii) Investment Planning and (iv) Tax Planning & Estate Planning
- Examination 5/Advanced Financial Planning

Modules of Initiatives Learning India Pvt. Ltd. (FLIP)

Module of IMS Proschool

The curriculum for each of the modules (except Modules of Financial Planning Standards Board India, Initiatives Learning India Pvt. Ltd. and IMS Proschool) is available on our website: www.nseindia.com > Education > Certifications.

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Note: Candidates are advised to refer to NSE's website: www.nseindia.com, click on 'Education' link and then go to 'Updates & Announcements' link, regarding revisions/updates in NCFM modules or launch of new modules, if any.

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Acronyms

AD	Authorised Dealer
ADR	American Depository Receipt
AMC	Asset Management Company
AMFI	Association of Mutual Funds in India
AUM	Assets Under Management
CAGR	Compounded Annual Growth Rate
DDT	Dividend Distribution Tax
DP	Depository Participant
DTAA	Double Taxation Avoidance Agreement
EC	European Commission
ETF	Exchange Traded Fund
FATF	Financial Action Task Force
FCNR	Foreign Currency Non-Resident account
FEDAI	Foreign Exchange Dealers Association of India
FII	Foreign Institutional Investor
FMP	Fixed Maturity Plan
FoF	Fund of Funds
GCC	Gulf Co-operation Council
GDR	Global Depository Receipt
IOSCO	International Organization of Securities Commission
IPO	Initial Public Offer
KIM	Key Information Memorandum
KYC	Know Your Client
LBMA	London Bullion Market Association
MFSS	Mutual Fund Service System
MIP	Monthly Income Plan
MMOU	Multilateral Memorandum of Understanding
MTM	Marked to Market
NAV	Net Asset Value
NFO	New Fund Offering
NPA	Non-Performing Assets
NRE	Non-Resident External account
NRI	Non-Resident Indian
NRO	Non-Resident Ordinary account

NSE	National Stock Exchange
PE	Private Equity
PIO	Person of Indian Origin
PIPE	Private Investment in Public Equity
PMS	Portfolio Management Scheme
PoA	Power of Attorney
PoA	Points of Acceptance
QFI	Qualified Foreign Investor
REIT	Real Estate Investment Trusts
RTA	Registrar & Transfer Agent
SAI	Statement of Additional Information
SEBI	Securities & Exchange Board of India
SID	Scheme Information Document
SIP	Systematic Investment Plan
SPV	Special Purpose Vehicle
STP	Systematic Transfer Plan
STT	Securities Transaction Tax
SWP	Systematic Withdrawal Plan
TM	Trading Member
UCR	Unit Confirmation Receipt
VCF	Venture Capital Funds

Chapter 1 : Mutual Funds in Perspective

1.1 Mutual Funds

Mutual Funds are a vehicle for retail and institutional investors to benefit from the capital markets. They offer different kinds of schemes to cater to various types of investors, retail, companies and institutions. Mutual fund schemes are offered to investors for the first time through a New Fund Offering (NFO). Thereafter, close-ended schemes stop receiving money from investors, though these can be bought on the stock exchange(s) where they are listed. Open-ended schemes sell and re-purchase their units on an ongoing basis.

Know Your Client (KYC) process is centralised in the mutual fund industry. Therefore, the investor needs to complete the formalities only once with the designated KYC service provider. The KYC confirmation thus obtained is valid for investment with any mutual fund.

A feature of mutual fund schemes is the low minimum investment amount - as low as Rs. 1,000 for some schemes. This makes it possible for small investors to invest. The expense ratio (which is not more than 2.5% in many schemes, especially liquid and index funds and goes below 0.05% in some schemes) being low also helps in making mutual funds a good instrument for building wealth over the long term.

Mutual funds are closely regulated by the Securities & Exchange Board of India (SEBI). The applicable regulation is the SEBI (Mutual Fund) Regulations, 1996.

Under the regulations, the Board of Trustees perform an important role in protecting the interests of investors in mutual fund schemes. Another protective feature is the checks and balances in the mutual fund system. For instance, while the Asset Management Company (AMC) handles the investment management activity, the actual custody of the investments is with an independent custodian. Investor records are mostly maintained by the registrar and transfer agents (RTAs), who offer their services to multiple mutual funds. In some cases, the AMC itself maintains the investor records.

SEBI also regulates the investments that mutual fund schemes can make. For instance, commodities other than gold are not permitted. Even within the permissible investments, SEBI has prescribed limits for different kinds of schemes.

Rigorous standards of disclosure and transparency make sure that investors get a complete view of their investments on a regular basis. Consolidated Account Statements, mandated by SEBI, ensure that the investor's investments across various mutual funds in the industry are consolidated into a single monthly statement. Even those investors who do not transact, receive their statement of accounts every 6 months.

1.2 Portfolio Management Schemes (PMS)

PMS is an investment facility offered by financial intermediaries generally to high networth investors. There is no concept of a NFO. The PMS provider keeps receiving money from investors. Unlike mutual funds, which maintain their investment portfolio at the scheme level, the PMS provider maintains a separate portfolio for each investor.

An investor who chooses to operate multiple PMS accounts will need to go through a separate KYC process with each intermediary. Each will provide a separate statement of the investor's account in their own format. The facility of Consolidated Account Statement is not available.

SEBI has set the minimum investment limits under PMS (Rs. 5 lakh presently). Many PMS providers operate with much higher minimum investment requirements.

The cost structure for PMS, which is left to the PMS provider, can be quite high. Besides a percentage on the assets under management, the investor may also have to share a part of the gains on the PMS portfolio; the losses are however borne entirely by the investor.

PMS have an unconstrained range of investments to choose from. The limits, if any, would be as mentioned in the PMS agreement executed between the provider and the client.

PMS are regulated by SEBI, under the SEBI (Portfolio Managers) Regulations, 1993. However, since this investment avenue is meant only for the high networth investors, the mutual fund type of rigorous standards of disclosure and transparency are not applicable. The protective structures of board of trustees, custodian etc. is also not available. Investors therefore have to take up a major share of the responsibility to protect their interests.

1.3 Hedge Funds

These are a more risky variant of mutual funds which have become quite popular internationally. Like PMS, hedge funds too are aimed at high networth investors. They operate with high fee structures and are less closely monitored by the regulatory authorities.

From a fund management perspective, the risk in hedge funds is higher on account of the following features:

- Borrowings

Normal mutual funds accept money from unit-holders to fund their investments. Hedge funds invest a mix of unit-holders' funds (which are in the nature of capital) and borrowed funds (loans).

Unlike capital, borrowed funds have a fixed capital servicing requirement. Even if the investments are at a loss, loan has to be serviced. However, if investments earn

a return better than the cost of borrowed funds, the excess helps in boosting the returns for the unit-holders. The following example illustrates how borrowing can be a double-edged sword for the fund.

Scenarios->		A	B	C
a.	Unit-holders' Funds (Rs. Cr.)	1,000	100	100
b.	Borrowings (Rs. Cr.)	0	900	900
c.	Total Investment (Rs. Cr.) [a+b]	1,000	1,000	1,000
d.	Return on Investment (%)	15%	15%	5%
e.	Return on Inv. (Rs. Cr.) [c X d]	150	150	50
f.	Interest on loan (%)		7%	7%
g.	Interest on Loan (Rs. Cr.) [b X f]	0	63	63
h.	Unit-holders' Profits (Rs.Cr.) [e-g]	150	87	-13
i.	Profit for Unit-holders (%) [h ÷ a]	15%	87%	-13%

The 15% return in the market was boosted through leverage of 9 times to 87% return for unit holders in a good market; in a bad market the same leverage dragged the unit-holders' return down to -13%.

The borrowing is often in a currency that is different from the currency in which the investments are denominated. If the borrowing currency becomes stronger, then that adds to the losses in the fund.

- Risky investment styles

Hedge funds take extreme positions in the market, including short-selling of investments.

In a normal long position, the investor buys a share at say, Rs. 15. The worst case is that the investor loses the entire amount invested. The maximum loss is Rs. 15 per share.

Suppose that the investor has short-sold a share at Rs. 15. There is a profit if the share price goes down. However, if the share price goes up, to say, Rs. 20, the loss would be Rs. 5 per share. A higher share price of say, Rs. 50 would entail a higher loss of Rs. 35 per share. Thus, higher the share price more would be the loss. Since there is no limit to how high a share price can go, the losses in a short selling transaction are unlimited.

Under SEBI's mutual fund regulations, mutual funds are not permitted to borrow to invest. Borrowing is permitted only for investor servicing (dividend or re-purchases). Further, the borrowing is limited to 20% of the net assets, and cannot be for more than 6 months at a time. Similarly, mutual funds are not permitted to indulge in short-selling transactions.

Such stringent provisions have ensured that retail investors are protected from this risky investment vehicle.

1.4 Venture Capital Funds & Private Equity Funds

These funds largely invest in unlisted companies. Venture capital funds invest at an earlier stage in the investee companies' life than the private equity funds. Thus, they take a higher level of project risk and have a longer investment horizon (3 - 5 years).

Venture Capital Funds are governed by the SEBI (Venture Capital) Regulations, 1996. Under these regulations, they can mobilise money only through a private placement. Investors can be Indians, NRIs or foreigners. Every investor has to invest a minimum of Rs. 5 lakh in the fund.

Unlike mutual funds, which accept money from investors upfront, venture capital funds and private equity funds only accept firm commitments (a commitment to invest) initially. A part of the firm commitment may be accepted in money. The balance moneys are called from the investors, as and when the fund sees investment opportunities.

Firm commitments worth Rs. 5 crore have to be arranged from investors, before the venture capital fund commences operations. At least two-thirds of the investible funds should be invested in unlisted equity and equity related instruments. Not more than one-third can be invested in the following forms:

- Subscription to Initial Public Offer (IPO) of a company whose shares are to be listed
- Debt of a company where the fund has already invested in equity
- Preferential allotment of a listed company, subject to lock in period of 1 year
- Special Purpose Vehicles (SPV) created by a fund for facilitating or promoting investments
- Equity shares or equity-linked instruments of financially weak or sick companies.

Venture capital funds may invest in India or abroad. However, not more than 25% of the corpus can be invested in a single undertaking.

Venture capital funds are not permitted to invest in Non-banking Financial Services, Gold Financing (other than for jewellery) and any other industry not permitted under the industrial policy of the country. They can also not invest in companies where the owners or managers of the fund have more than 15% stake.

Just as investors bring money into the fund in stages, the fund returns money to investors in stages, as and when some investments are sold. On maturity of the fund, the unsold investments may be distributed to the investors in the proportion of their stake in the fund.

Private equity funds typically have a shorter investment horizon of 1 - 3 years. While their focus is on unlisted companies, they do invest in listed companies too. Such deals, called in Private Investment in Public Equity (PIPE) are increasing in India.

Points to remember

- Mutual Funds are a vehicle for retail investors to benefit from the capital market. They offer different kinds of schemes to cater to various types of investors.
- Mutual fund schemes are offered to investors, for the first time, through a New Fund Offering (NFO). Thereafter, close-ended schemes stop receiving money from investors. Open-ended schemes offer to sell and re-purchase their units on an ongoing basis.
- Know Your Client (KYC) process is centralised in the mutual fund industry.
- Mutual funds are closely regulated by the Securities & Exchange Board of India (SEBI). The applicable regulation is SEBI (Mutual Fund) Regulations, 1996.
- A protective feature of mutual funds are the checks and balances in the system :
 - Trustees are responsible for protecting the interests of investors in mutual fund schemes.
 - Asset Management Company (AMC) handles the investment management activity.
 - Custody of the investments is with an independent custodian.
 - Investor records are mostly maintained by registrar and transfer agents (RTAs). In some cases, the AMC itself maintains the investor records.
- Portfolio Management Scheme (PMS) is an investment facility offered by financial intermediaries generally to high networth investors.
- Unlike mutual funds, which maintain their investment portfolio at the scheme level, the PMS provider maintains a separate portfolio for each investor.
- SEBI has set the minimum investment limit under PMS at Rs. 5 lakh presently. Many PMS providers operate with much higher minimum investment requirements.
- The cost structure for PMS, which is left to the PMS provider, can be quite high. Besides a percentage on the assets under management, the investor may also have to share a part of the gains on the PMS portfolio; the losses are however borne entirely by the investor.
- PMS have an unconstrained range of investments to choose from.
- PMS are regulated by SEBI, under the SEBI (Portfolio Managers) Regulations, 1993.
- Hedge funds are a more risky variant of mutual funds which have become quite popular internationally.
- Like PMS, hedge funds too are aimed at high networth investors. They operate with high fee structures and are less closely monitored by the regulatory authorities.
- Risk in a hedge fund is built through borrowings or risky investment styles, including short-selling of securities.

- Under SEBI's mutual fund regulations, mutual funds are not permitted to borrow to invest. Borrowing is permitted only for investor servicing (dividend or re-purchases). Further, the borrowing is limited to 20% of the net assets and cannot be for more than 6 months at a time. Similarly, mutual funds are not permitted to indulge in short-selling transactions.
- Venture Capital Funds (VCF) and Private Equity (PE) Funds largely invest in unlisted companies. VCFs invest at an earlier stage in the investee companies' life than the PE funds. Thus, they take a higher level of project risk and have a longer investment horizon (3 - 5 years).
- VCF are governed by the SEBI (Venture Capital) Regulations, 1996. Under these regulations, they can mobilise money only through a private placement.
- Investors in VCF can be Indians, NRIs or foreigners. Every investor has to invest a minimum of Rs. 5 lakh in the fund.
- Unlike mutual funds, which accept money from investors upfront, VCF and PE funds only accept firm commitments (a commitment to invest) initially.
- Firm commitments worth Rs. 5 crore have to be arranged from investors, before the venture capital fund commences operations.
- At least two-thirds of the investible funds in a VCF should be invested in unlisted equity and equity related instruments.
- Not more than one-thirds of the investible funds in a VCF can be invested as subscription to Initial Public Offer (IPO) of a company whose shares are to be listed; debt of a company where the fund has already invested in equity; preferential allotment of a listed company, subject to lock in period of 1 year; Special Purpose Vehicles (SPV) created by a fund for facilitating or promoting investments; and equity shares or equity-linked instruments of financially weak or sick companies.
- VCF may invest in India or abroad. However, not more than 25% of the corpus can be invested in a single undertaking.
- VCF are not permitted to invest in Non-banking Financial Services, Gold Financing (other than for jewellery) and any other industry not permitted under the industrial policy of the country.
- VCF can also not invest in companies where the owners or managers of the fund have more than 15% stake.
- Private equity funds typically have a shorter investment horizon of 1 - 3 years.
- While PE Funds focus on unlisted companies, they do invest in listed companies too. Such deals, called in Private Investment in Public Equity (PIPE) are increasing in India.

Chapter 2 : Investments by Mutual Fund Schemes

SEBI (Mutual Funds) Regulations, 1996 has laid down the limits to investment by mutual fund schemes. Some of these are discussed below.

2.1 Equity

- A scheme cannot invest more than 10% of its assets in a single company's shares or share-related instruments. However, sector funds can have a higher investment in a single company, as provided in their Scheme Information Document.

Index funds invest as per the index they track. In the index construction, a single company may have a weightage higher than 10%. In such cases, the higher single company investment limit would be applicable.

The 10% limit is applicable when the scheme invests. Breach of the limit on account of subsequent market movements is permitted. For example, a scheme with net assets of Rs. 100 crores may have invested Rs. 10 crores in a single company, XYZ.

Later, on account of market movements, the net assets of the scheme increase to Rs. 102 crores, while the value of the investment in XYZ company goes up to Rs. 11 crores. XYZ company now represents $\text{Rs. 11 crores} \div \text{Rs. 102 crores}$ i.e. 10.78%. The scheme is not obliged to sell any shares of XYZ company to fall within the 10% limit. However, fresh purchases of XYZ company's shares would need to be suspended, until the investment value goes below 10% of the scheme's net assets.

- Mutual funds are meant to invest, primarily in listed securities. Therefore, investment in unlisted shares is restricted as follows:
 - Open-ended schemes: 5% of Net Assets
 - Close-ended schemes: 10% of Net Assets
- Unlisted securities or securities issued through private placement by an associate or a group company of the sponsor are not a permissible investment.
- Mutual fund schemes cannot invest more than 25% of their net assets in listed securities of group companies of the sponsor of the Asset Management Company.
- All the schemes of a mutual fund put together cannot control more than 10% of the voting rights of any company.
- Mutual fund schemes cannot charge management fees on their investment in other mutual fund schemes (of the same asset management company or other asset management companies). Such investment is also subject to a cap of 5% of the net assets of the fund. This is not applicable to fund of funds schemes.

- Inter-scheme transfers of investments can only be at market value.
- If any scheme of a mutual fund has invested in a company or its associates, which together hold more than 5% of the net assets of any mutual fund scheme of that asset management company, then that needs to be disclosed.
- Investments and disinvestments are to be contracted directly in the name of the concerned scheme. Transactions cannot be contracted in a general account and distributed across schemes later.
- Carry forward transactions are not permitted. But mutual funds can trade in derivatives.
- Mutual funds are permitted to lend securities in accordance with SEBI's Stock Lending Scheme.

2.2 Debt

- Mutual fund schemes can invest in debt securities, but they cannot give loans.
- A scheme cannot invest more than 15% of its net assets in debt instruments issued by a single issuer. If prior approval of the boards of the Asset Management Company and the Trustees is taken, then the limit can go up to 20%. If the paper is unrated, or rated below investment grade, then a lower limit of 10% is applicable.

These limits are exempted for money market securities and government securities. However, the exemption is not available for debt securities that are issued by public bodies / institutions such as electricity boards, municipal corporations, state transport corporations, etc. guaranteed by either state or central government.

- Investment in unrated paper and paper below investment grade is subject to an overall cap of 25% of net assets of the scheme.
- Liquid funds can only invest in money market securities of upto 91 days maturity.
- The following regulations are applicable for investment in short term deposits:
 - "Short term" means not more than 91 days
 - The deposits can only be placed in scheduled banks
 - The deposits are to be held in the name of the specific scheme
 - Not more than 15% of the net assets of the scheme can be placed in such short term deposits. With the permission of trustees, the limit can go up to 20%
 - Short term deposits with associate and sponsor scheduled commercial banks together cannot exceed 20% of the total short term deposits placed the mutual fund

- Not more than 10% of the net assets are to be placed in short term deposits of any one scheduled bank including its subsidiaries
- The funds are not to be placed with a bank that has invested in that scheme
- The Asset Management Company cannot charge investment management and advisory fee on such deposits placed by liquid and debt funds
- Transactions in government securities are to be settled in demat form only
- Inter-scheme transfers are to be effected at market value only
- Unlisted securities or securities issued through private placement by an associate or a group company of the sponsor are not a permissible investment.
- Mutual fund schemes cannot invest more than 25% of their net assets in listed securities of group companies of the sponsor of the Asset Management Company.

2.3 Derivatives

Mutual Funds are permitted to invest in financial derivatives traded in the stock exchange, subject to disclosures in the Scheme Information Document. The permitted derivatives include stock futures, stock options, index futures, index options and interest rate futures.

They can also enter into forward rate agreements and interest rate swaps (for hedging) with banks, primary dealers (PDs) and financial institutions (FIs). Exposure to a single counter-party cannot however exceed 10% of net assets of the scheme.

Mutual funds can also invest in derivatives traded on exchanges abroad, for hedging and portfolio balancing with the underlying as securities.

The following limits have been stipulated by SEBI:

- Gross exposure through debt, equity and derivatives cannot exceed 100% of the net assets of the scheme.
- The exposure in derivative transactions is calculated as follows:
 - Long Futures - Futures Price x Lot Size x Number of Contracts
 - Short Futures - Futures Price x Lot Size x Number of Contracts
 - Option Bought - Option Premium Paid x Lot Size x Number of Contracts

Mutual funds are not permitted to sell options or buy securities with embedded written options.

- In the exposure calculations, positions that are in the nature of a hedge are excluded.

- Hedging positions are the derivative positions that reduce possible losses on an existing position in securities. These are excluded from the limits till the existing position remains.
- Hedging positions taken for existing derivative positions are not excluded from the limits.
- Any derivative instrument used to hedge should have the same underlying security as the existing position being hedged.
- The quantity of underlying associated with the derivative position taken for hedging purposes should not exceed the quantity of the existing position against which the hedge has been taken.
- The total exposure related to option premium paid cannot exceed 20% of the net assets of the scheme.
- Within the SEBI limits, the Board of Trustees can stipulate limits. The limits on investment in derivatives need to be disclosed in the Scheme Information Document.
- The AMC has to put in place, adequate risk containment measures, as may be stipulated by the Trustees.

2.4 Gold

Gold ETFs invest primarily in gold and gold-related instruments. Gold-related instruments are defined to mean instruments that have gold as the underlying, and specified by SEBI.

If the gold acquired by the gold exchange traded fund scheme is not in the form of standard bars, it is to be assayed and converted into standard bars which comply with the good delivery norms of the London Bullion Market Association (LBMA).

Until the funds are deployed in gold, the fund may invest in short term deposits with scheduled commercial banks.

The fund may also maintain liquidity, as disclosed in the offer document, to meet repurchase / redemption requirements.

2.5 Real Estate

Real estate mutual funds are permitted to invest in direct real estate assets, as well as real estate securities.

Direct investment in real estate has to be in cities with population over a million. Construction has to be complete and the asset should be usable. Project under construction is not a permitted investment. Similarly, investment cannot be made in vacant land, agricultural land, deserted property or land reserved or attached by the government or any authority.

The real estate asset should have valid title deeds, be legally transferable and free from encumbrances, and not be the subject matter of any litigation.

The following SEBI limits are applicable:

- At least 75% of the net assets is to be invested in direct real estate, mortgage backed securities and equity shares or debentures of companies engaged in dealing in real estate assets or in undertaking real estate development projects.
- At least 35% has to be invested in direct real estate.
- The combined investment of all the schemes of a mutual fund:
 - In a single city cannot exceed 30% of the net assets
 - In a single real estate project cannot exceed 15% of the net assets
 - Cannot exceed 25% of the issued capital of any unlisted company.
- No real estate mutual fund scheme can invest more than 15% of its net assets in equity shares or debentures of any unlisted company.
- A real estate mutual fund scheme is not permitted to invest more than 25% of its net assets in listed securities of its sponsor or associate or group company.
- Real estate mutual funds are not permitted to invest in:
 - Unlisted security of its sponsor or associate or group company.
 - Listed security by way of private placement by its sponsor or associate or group company.
- Real estate mutual funds are not permitted to engage in lending or housing finance activity.
- Real estate mutual funds cannot invest in real estate which was owned by its sponsor or AMC or associates during last 5 years, or in which any of these parties enjoy tenancy or lease rights.
- The lease or rental arrangement on the real estate assets cannot go beyond the maturity of the scheme.
- Not more than 25% of the rental of a scheme can come from real estate assets let out to its sponsor, or associates or group. The lease would need to be at market rates.
- Real estate assets cannot be transferred between schemes.

2.6 International Investments

Indian mutual fund schemes are permitted to take exposure to the following international investments:

- American Depositary Receipts (ADRs) and Global Depositary Receipts (GDRs) issued by Indian or foreign companies
- Equity of overseas companies listed on recognized stock exchanges overseas
- Initial and follow on public offerings for listing at recognized stock exchanges overseas
- Government securities issued by countries that are rated not below investment grade
- Foreign debt securities (short term as well as long term with rating not below investment grade by accredited/ registered credit rating agencies) in countries whose currencies are fully convertible
- Money Market Instruments rated not below investment grade
- Repos in form of investment, where the counterparty is rated investment grade or above. However, borrowing of funds through repos is not allowed
- Derivatives traded on recognized stock exchanges overseas only for hedging and portfolio balancing with securities as the underlying
- Short term deposits with banks overseas where the issuer is rated not below investment grade
- Units / securities issued by overseas mutual funds or unit trusts, registered with overseas regulators, that invest in:
 - The above securities; or
 - Real estate investment trusts (REITs) listed on recognized stock exchanges overseas
 - Unlisted overseas securities not more than 10% of the scheme's net assets.

The mutual fund needs to appoint a dedicated Fund Manager for overseas investments (other than for investment in units / mutual funds / unit trusts).

The mutual fund industry is permitted to invest up to USD 1bn, in overseas ETFs that invest in securities. A single mutual fund cannot invest more than USD 50mn.

Points to remember

- A scheme cannot invest more than 10% of its assets in a single company's shares or share-related instruments. Exceptions are sector funds and index funds. The 10% limit is applicable when the scheme invests.
- Investment in unlisted shares is restricted as follows:
 - Open-end schemes: 5% of Net Assets
 - Close-ended schemes: 10% of Net Assets

- Unlisted securities or securities issued through private placement by an associate or a group company of the sponsor are not a permissible investment.
- Mutual fund schemes cannot invest more than 25% of their net assets in listed securities of group companies of the sponsor of the Asset Management Company.
- All the schemes of a mutual fund put together cannot control more than 10% of the voting power of any company.
- Mutual fund schemes cannot charge management fees on their investment in other mutual fund schemes (of the same asset management company or other asset management companies). Such investment is also subject to a cap of 5% of net assets of the fund. This is not applicable to fund of funds schemes.
- Inter-scheme transfers of investments can only be at market value.
- If any scheme of a mutual fund has invested in a company or its associates, which together hold more than 5% of the net assets of any mutual fund scheme of that asset management company, then that needs to be disclosed.
- Investment and disinvestment are to be contracted directly in the name of the concerned scheme. Transaction cannot be contracted in a general account and distributed across schemes later.
- Carry forward transactions are not permitted. But mutual funds can buy derivatives. Writing of options is not permitted, though the fund can buy options.
- Mutual funds are permitted to lend securities in accordance with SEBI's Stock Lending Scheme.
- Mutual fund schemes can invest in debt securities, but they cannot give loans.
- A scheme cannot invest more than 15% of its net assets in debt instruments issued by a single issuer. If prior approval of the boards of the Asset Management Company and the Trustees is taken, then the limit can go up to 20%. If the paper is unrated, or rated below investment grade, then a lower limit of 10% is applicable.
- These limits are exempted for money market securities and government securities. However, the exemption is not available for debt securities that are issued by public bodies / institutions such as electricity boards, municipal corporations, state transport corporations, etc. guaranteed by either state or central government.
- Investment in unrated paper and paper below investment grade is subject to an overall cap of 25% of net assets of the scheme.
- Liquid funds can only invest in money market securities of upto 91 days maturity.

- Short term deposits by mutual funds are governed by the following conditions:
 - Not more than 15% of the net assets of the scheme can be placed in short term deposits. With the permission of trustees, the limit can go up to 20%
 - Short term deposits with associate and sponsor scheduled commercial banks together cannot exceed 20% of the total short term deposits placed the mutual fund
 - Not more than 10% of the net assets are to be placed in short term deposits of any one scheduled bank including its subsidiaries
 - The funds are not to be placed with a bank that has invested in that scheme
 - The Asset Management Company cannot charge investment management and advisory fee on such deposits placed by liquid and debt funds
- Transactions in government securities are to be settled in demat form only
- Inter-scheme transfers are to be effected at market value only
- Unlisted securities or securities issued through private placement by an associate or a group company of the sponsor are not a permissible investment.
- Mutual fund schemes cannot invest more than 25% of their net assets in listed securities of group companies of the sponsor of the Asset Management Company.
- Mutual Funds are permitted to invest in financial derivatives traded in the stock exchange, subject to disclosures in the Scheme Information Document. The following limits have been stipulated by SEBI:
 - Gross exposure through debt, equity and derivatives cannot exceed 100% of the net assets of the scheme. The exposure in derivative transactions is calculated as follows:
 - Long Future - Futures Price x Lot Size x Number of Contracts
 - Short Future - Futures Price x Lot Size x Number of Contracts
 - Option Bought - Option Premium Paid x Lot Size x Number of Contracts

In the exposure calculations, positions that are in the nature of a hedge are excluded.

- Mutual funds are not permitted to sell options or buy securities with embedded written options.
- The total exposure related to option premium paid cannot exceed 20% of the net assets of the scheme.
- Gold ETFs invest primarily in gold and gold-related instruments. Gold-related instruments are defined to mean instruments that have gold as the underlying, and specified by SEBI.

- Gold acquired by the gold exchange traded fund scheme that is not in the form of standard bars, is to be assayed and converted into standard bars, which comply with the good delivery norms of the London Bullion Market Association (LBMA).
- Until the funds are deployed in gold, the fund may invest in short term deposits with scheduled commercial banks.
- The fund may also maintain liquidity, as disclosed in the offer document, to meet re-purchase / redemption requirements.
- Real estate mutual funds are permitted to invest in direct real estate assets, as well as real estate securities.
- Direct investment in real estate has to be in cities with population over a million.
- Construction has to be complete and the asset should be usable. Project under construction is not a permitted investment.
- Similarly, investment cannot be made in vacant land, agricultural land, deserted property or land reserved or attached by the government or any authority.
- At least 75% of the net assets is to be invested in direct real estate, mortgage backed securities and equity shares or debentures of companies engaged in dealing in real estate assets or in undertaking real estate development projects.
- At least 35% has to be invested in direct real estate.
- The combined investment of all the schemes of a mutual fund:
 - In a single city cannot exceed 30% of the net assets
 - In a single real estate project cannot exceed 15% of the net assets
 - Cannot exceed 25% of the issued capital of any unlisted company.
- No real estate mutual fund scheme can invest more than 15% of its net assets in equity shares or debentures of any unlisted company.
- A real estate mutual fund scheme is not permitted to invest more than 25% of its net assets in listed securities of its sponsor or associate or group company.
- Real estate mutual funds are not permitted to invest in:
 - Unlisted security of its sponsor or associate or group company.
 - Listed security by way of private placement by its sponsor or associate or group company.
- Real estate mutual funds are not permitted to engage in lending or housing finance activity.

- Real estate mutual funds cannot invest in real estate which was owned by its sponsor or AMC or associates during last 5 years, or in which any of these parties enjoy tenancy or lease rights.
- The lease or rental arrangement on the real estate assets cannot go beyond the maturity of the scheme.
- Not more than 25% of the rental of a scheme can come from real estate assets let out to its sponsor, or associates or group. The lease would need to be at market rates.
- Real estate assets cannot be transferred between schemes.
- Indian mutual funds are permitted to invest in ADRs, GDRs and Government securities issued by countries that are rated not below investment grade.
- They can also invest in foreign debt securities (short term as well as long term with rating not below investment grade by accredited/ registered credit rating agencies) in countries whose currencies are fully convertible, and in international mutual funds and REITs.
- The mutual fund industry is permitted to invest up to USD 1bn, in overseas ETFs that invest in securities. A single mutual fund cannot invest more than USD 50mn.

Chapter 3 : Valuation of Investments by Mutual Fund Schemes

The investments of mutual fund schemes need to be marked to market (MTM) in order to determine the realistic value of each unit of the scheme. SEBI has laid down detailed rules regarding MTM valuation of the investment portfolio of schemes.

3.1 Equity

3.1.1 Traded Securities

The securities are valued at the last quoted closing price on the stock exchange.

- When the securities are traded on more than one recognised stock exchange, the securities are valued at the last quoted closing price on the stock exchange where the security is principally traded. The asset management company selects the appropriate stock exchange, but the reasons for the selection should be recorded in writing.

It is permissible for all scrips being valued at the prices quoted on the stock exchange where a majority in value of the investments are principally traded.

Once a stock exchange has been selected for valuation of a particular security, reasons for change of the exchange have to be recorded in writing by the asset management company.

- When on a particular valuation day, a security has not been traded on the selected stock exchange, the value at which it is traded on another stock exchange can be used.
- When a security is not traded on any stock exchange on a particular valuation day, the value at which it was traded on the selected stock exchange or any other stock exchange, on the earliest previous day can be used, provided the last traded date is not more than 30 days prior to the valuation date.

3.1.2 Non-Traded / Thinly Traded / Unlisted Equities

If a security is not traded on any stock exchange for a period of 30 days prior to the valuation date, the scrip is treated as 'non-traded' scrip.

An equity share, convertible debenture, equity warrant, etc. is considered as thinly traded if, across all stock exchanges, it trades less than Rs. 5 lakh in value and 50,000 shares in volume, during the preceding calendar month.

Non-traded and thinly traded securities are valued "in-good faith" by the asset management company as per appropriate valuation methods based on the principles approved by the

Board of the asset management company. The formula for such valuation in good-faith is as follows:

- Calculate the Net Worth per share of the company, based on latest available balance sheet.

Net Worth per share = [Share Capital+ Reserves (excluding Revaluation Reserves) - Miscellaneous expenditure and Debit Balance in Profit and Loss Account] / Number of Paid up Shares.

- Calculate the Earnings per share of the company as per the latest audited annual accounts.
- Assess the average capitalization rate (P/E ratio) for the industry based upon either BSE or NSE data. This is to be consistently followed.

The industry average P/E ratio has to be discounted by 75 per cent i.e. only 25 per cent of the industry average P/E is to be considered for the valuation of the company's share.

The EPS of the company multiplied by the discounted industry average P/E is the capitalised earning value per share of the company.

- Calculate the average of Net Worth per share and Capitalised earning value per share of the company. This has to be further discounted by 10 per cent for illiquidity so as to arrive at the fair value per share.
- If the EPS is negative, EPS value for that year is taken as zero for arriving at capitalised earning.
- If the latest Balance Sheet of the company is not available within nine months from the close of the year, unless the accounting year is changed, the shares of such companies have to be valued at zero.
- If an individual security accounts for more than 5 per cent of the total assets of the scheme, an independent valuer has to be appointed for the valuation of the said security.

Unlisted equities are valued in good faith on the basis of a similar formula. However, the discount for illiquidity is 15%. Further, with the approval of trustees, the unlisted equities may be valued lower than the formula-based value.

Aggregate value of "illiquid securities" under a scheme, which are defined as non-traded, thinly traded and unlisted equity shares, cannot exceed 15 per cent of the total assets of the scheme. Illiquid securities held above 15 per cent of the total assets have to be assigned zero value.

3.1.3 Warrants

Warrants to subscribe for shares attached to instruments, are valued at the value of the share which would be obtained on exercise of the warrant as reduced by the amount which would be payable on exercise of the warrant.

3.1.4 Rights

Until they are traded, the value of "rights" shares are calculated as: V_r

$$= n/m \times (P_{XR} - P_{RP})$$

Where

V_r = Value of rights

n = No. of rights offered

m = No. of original shares held

P_{XR} = Ex-rights price

P_{RP} = Rights Offer Price

If the rights are not treated paripassu with the existing shares, suitable adjustment has to be made to the value of rights.

Where it is decided not to subscribe for the rights but to renounce them and renunciations are being traded, the rights can be valued at the renunciation value.

3.2 Debt

3.2.1 Money market and debt securities with residual maturity of upto 91 days

Such securities, including floating rate securities, are to be valued at the weighted average price at which they are traded on the particular valuation day.

When these securities are not traded on a particular valuation day they are to be valued on amortization basis.

Floating rate securities with floor and caps on coupon rate, and residual maturity of upto 91 days are valued on amortization basis taking the coupon rate as floor.

3.2.2 Money market and debt securities with residual maturity of over 91 days

Such securities, including floating rate securities, are to be valued at the weighted average price at which they are traded on the particular valuation day.

When these securities are not traded on a particular valuation day they are to be valued on Yield to Maturity (YTM) basis. This is done at benchmark yield/ matrix of spread over risk free benchmark yield obtained from agency(ies) entrusted for the said purpose by AMFI.

The applicable YTM is determined as follows:

- Based on yield on government securities, risk-free benchmark yields are calculated. Government securities are grouped into "duration buckets" of 0.25-0.5 year, 0.5-1 year, 1-2 years, 2-3 years, 3-4 years, 4-5 years, 5-6 years, and 6 years and above for this purpose. Thereafter, volume-weighted yield is calculated for each bucket.
- The risk-free benchmark yield is to be set at least every week. If there is any significant movement in prices of Government Securities on account of any event impacting interest rates on any day such as a change in the Reserve Bank of India (RBI) policies, the benchmark has to be reset to reflect the change in market conditions.
- Credit spreads are to be calculated based on trades (minimum trade value Rs. 1 crore) of corporate debentures/bonds of different ratings. Credit spread is the Corporate YTM for each credit rating, minus the risk-free yield.
- All trades in the stock exchange during the fortnight prior to the benchmark date are to be used in building the volume-weighted corporate YTM and spread matrices (for the same duration buckets for various credit ratings). The most conservative publicly available credit rating is to be used.
- Where there are no secondary trades on the stock exchange in a particular rating category and no primary market issuances during the fortnight under consideration, then trades on the stock exchange during the 30 day period prior to the benchmark date can be considered for computing the average YTM for such rating category.
- In each rating category, all outliers are removed for smoothening the YTM matrix.
- In the event of lack of trades in the secondary market and the primary market the gaps in the matrix are filled by extrapolation. If the spreads cannot be extrapolated for the reason of practicality, the gaps in the matrix are filled by carrying the spreads from the last matrix.
- The benchmark risk free yield plus the applicable credit spread would be the YTM used for valuing the non-traded rated corporate paper. This is to be marked-up/marked-down to account for the illiquidity risk, promoter background, finance company risk and the issuer class risk, as follows:
 - Discretionary mark up of upto 100 basis points for securities of duration up to 2 years;
 - Discretionary mark up of upto 75 basis points for securities of duration more than 2 years;
 - Discretionary mark down of up to 50 basis points for securities of duration up to 2 years;

- Discretionary mark down of up to 25 basis points for securities of duration more than 2 years.
- The fund manager has to give an internal credit rating for paper that does not have a public external credit rating. Over and above the discretionary mark down mentioned earlier, a further 50 basis point discretionary mark down is to be used for the valuation of such securities.
- Securities embedded with call option are valued at the lower of the value as obtained by valuing the security to final maturity and valuing the security to call option. In case there are multiple call options, the lowest value obtained by valuing to the various call dates and valuing to the maturity date is to be taken as the value of the instrument.
- Securities with put option are valued at the higher of the value as obtained by valuing the security to final maturity and valuing the security to put option. In case there are multiple put options, the highest value obtained by valuing to the various put dates and valuing to the maturity date is to be taken as the value of the instruments.
- Securities with both Put and Call option on the same day are deemed to mature on the Put/Call day and valued accordingly.
- Government securities are valued at prices for government securities released by an agency suggested by AMFI.

3.2.3 Provisioning for Non-Performing Assets (NPA)

An 'asset' is classified as NPA if the interest and/or principal amount have not been received or remained outstanding for one quarter from the day such income and/or instalment was due. If the due date for interest is 30.06.2011 and it is not received upto 30.09.2011, it will be classified as NPA from 01.10.2011.

After the expiry of the 1st quarter from the date the income was due, interest accrual on the asset has to be stopped. In the earlier example, accrual will continue till 30.09.2011. From 01.10.2011, the scheme has to stop accruing interest.

On classification of the asset as NPA, interest accrued and recognized in the books of accounts, but due for more than a quarter, has to be provided for. In the example, interest accrued upto 30.06.2011 and outstanding on 30.09.2011 has to be fully provided for on 01.10.2011.

Besides the value of the asset has to be provided for as per the following schedule (or earlier, but not later):

- 10 percent of the book value of the asset has to be provided for after 6 months past due date of interest i.e. 3 months from the date of classification of the asset as NPA i.e. 01.01.2012.

- 20 percent of the book value of the asset has to be provided for after 9 months past due date of interest i.e. 6 months from the date of classification of the asset as NPA i.e. 01.04.2012.
- 20 percent of the book value of the asset has to be provided for after 12 months past due date of interest i.e. 9 months from the date of classification of the asset as NPA i.e. 01.07.2012.
- 25 percent of the book value of the asset has to be provided for after 15 months past due date of interest i.e. 12 months from the date of classification of the asset as NPA i.e. 01.10.2012.
- 25 percent of the book value of the asset has to be provided for after 18 months past due date of interest i.e. 15 months from the date of classification of the asset as NPA i.e. 01.01.2013.

Thus, 18 months past the due date of income or 15 months from the date of classification of the 'asset' as an NPA, the asset will be fully provided for.

If any instalment is due during the period of interest default, the amount of provision will be the instalment amount or the above provision amount, whichever is higher.

Investments in Deep Discount Bonds are classified as NPAs, if any two of the following conditions are satisfied:

- If the rating of the Bond comes down to Grade 'BB' (or its equivalent) or below.
- If the company is defaulting in its commitments in respect of other assets, if available.
- Net worth is fully eroded.

Provision should be made as per the earlier mentioned norms as soon as the asset is classified as NPA. Full provision is to be made if the rating comes down to Grade 'D' (or its equivalent).

The provisioning norms are applicable for both secured and unsecured debt instruments.

In the case of close-ended schemes, faster provisioning has to be done, so that the asset is fully written off before the closure of the scheme.

3.2.4 Re-classification of Non-Performing Assets (NPA)

- If the company has fully cleared all the arrears of interest, the interest provisions can be written back in full.
- The asset will be reclassified as performing on clearance of all interest arrears and if the debt is regularly serviced over the next two quarters.
- In case the company has fully cleared all the arrears of interest, the interest not credited on accrual basis can be credited at the time of receipt.

- The provision made for the principal amount can be written back as follows:
 - 100% of the asset provided for in the books will be written back at the end of the 2nd quarter, if the provision of principal was made due to default in interest only.
 - 50% of the asset provided for in the books will be written back at the end of the 2nd quarter and 25% after every subsequent quarter, if both instalment and interest payment were in default earlier.
- An asset is reclassified as 'standard asset' only when both, the overdue interest and overdue instalments are paid in full and there is satisfactory performance for a subsequent period of 6 months.

3.2.5 Provisioning & Re-classification in case of Re-scheduling

If a company defaults in payment of either interest or principal amount, and the mutual fund has accepted a rescheduling of the obligations, the following norms are applicable:

- If it is a first rescheduling, and only payment of interest is in default, the classification of the asset as NPA will be continued and existing provisions shall not be written back. After two quarters of regular servicing of the debt, it can be classified as 'performing asset' and the interest provided can be written back.
- If the rescheduling is done due to default in interest and principal amount, the asset will continue as NPA for a period of 4 quarters. If the asset is regularly serviced during these 4 quarters, the asset can be classified as 'performing asset'. Thereafter, all the interest provided till such date can be written back.
- If the rescheduling is done for a second / third time or thereafter, the characteristics of NPA will be continued until it is regularly serviced for eight quarters. Thereafter, it can be reclassified as 'performing asset' and interest provided for can be written back.

3.3 Gold

The gold held by a gold exchange traded fund scheme has to be valued at the AM fixing price of LBMA in US dollars per troy ounce for gold having a fineness of 995.0 parts per thousand. Where the gold held by a gold exchange traded fund scheme has a greater fineness, the relevant LBMA prices of AM fixing is taken as the reference price.

Further, the following adjustments are made for the valuation:

- Conversion to metric measure as per standard conversion rates
- Conversion of US dollars into Indian rupees as per the RBI reference rate declared by the Foreign Exchange Dealers Association of India (FEDAI)

- Addition of transportation and other charges that may be normally incurred in transporting the gold from London to the place where it is actually stored on behalf of the mutual fund
- Addition of notional customs duty and other applicable taxes and levies that may be normally incurred in transporting the gold from London to the place where it is actually stored on behalf of the mutual fund

The adjustment for transportation and customs duty can be made on the basis of a notional premium that is usually charged for delivery of gold to the place where it is stored on behalf of the mutual fund.

3.4 Real Estate

The real estate assets held by a real estate mutual fund scheme are to be valued -

- (a) at cost price on the date of their acquisition; and
- (b) at fair price on every ninetieth day from the day of their purchase.

“Cost” includes purchase price and any other directly attributable expenditure such as professional fees for legal services, registration expenses and asset transfer taxes.

If the payment for a real estate asset is deferred, its cost is the cash price equivalent. A real estate mutual fund scheme has to recognise the difference between this amount and the total payments, as interest expense over the period of credit.

A real estate mutual fund scheme is required to use the services of two independent and approved valuers having recent experience in the category of real estate asset being valued and use the lower of the two valuations.

“Fair value” means the amount for which an asset can be exchanged between knowledgeable parties in an arm’s length transaction and certified by the real estate valuer.

“Real estate valuer” means a qualified valuer of real estate assets who has been accredited by a credit rating agency registered with SEBI.

“Knowledgeable” means that both the buyer and the seller are reasonably informed about the nature and characteristics of the real estate asset, its actual and potential uses, and market conditions at the balance sheet date.

The net asset value of every real estate mutual fund scheme is to be calculated and declared at the close of each business day on the basis of the most current valuation of the real estate assets held by the scheme and accrued income thereon, if any.

Where a portion of the real estate asset is held to earn rentals or for capital appreciation, and if the portions can be sold or leased separately, the real estate mutual fund scheme has to account for the portions separately.

The fair value of real estate asset should not reflect future capital expenditure that will improve or enhance the asset. Similarly, it cannot reflect the related future benefits from the future expenditure.

If any security purchased by a mutual fund does not fall within the current framework of valuation of securities, it has to report immediately to AMFI regarding the same. Further, at the time of investment, it has to ensure that the total exposure in such securities does not exceed 5% of the total AUM of the scheme.

AMFI is to ensure that valuation agencies cover such securities in the valuation framework within six weeks from the date of receipt of such intimation from the mutual fund. Until then, the mutual fund can value such securities using their proprietary model which has been approved by their independent trustees and the statutory auditors.

AMCs have to ensure that similar securities held under its various schemes are valued consistently.

Points to remember

- Traded securities are valued at the last quoted closing price on the stock exchange where the security is principally traded.
- When a security is not traded on any stock exchange on a particular valuation day, the value at which it was traded on the selected stock exchange or any other stock exchange, on the earliest previous day can be used, provided the last traded date is not more than 30 days prior to the valuation date. If a security is not traded on any stock exchange for a period of 30 days prior to the valuation date, the scrip is treated as 'non-traded' scrip.
- An equity share, convertible debenture, equity warrant, etc. is considered as thinly traded if, across all stock exchanges, it trades less than Rs. 5 lakh in value and 50,000 shares in volume, during the preceding calendar month.
- Non-traded and thinly traded securities are valued "in-good faith" by the asset management company as per appropriate valuation methods based on the principles approved by the Board of the asset management company.
- Unlisted equities are valued in good faith on the basis of a similar formula. However, the discount for illiquidity is 15%.
- If an individual security accounts for more than 5 per cent of the total assets of the scheme, an independent valuer has to be appointed for the valuation of the said security.

- Aggregate value of “illiquid securities” under a scheme, which are defined as non-traded, thinly traded and unlisted equity shares, cannot exceed 15 per cent of the total assets of the scheme. Illiquid securities held above 15 per cent of the total assets have to be assigned zero value.
- Warrants to subscribe for shares attached to instruments, are valued at the value of the share which would be obtained on exercise of the warrant as reduced by the amount which would be payable on exercise of the warrant.
- Where it is decided not to subscribe for the rights but to renounce them and renunciations are being traded, the rights can be valued at the renunciation value.
- Money market and debt securities with residual maturity of upto 91 days, including floating rate securities, are to be valued at the weighted average price at which they are traded on the particular valuation day. When these securities are not traded on a particular valuation day they are to be valued on amortization basis.
- Money market and debt securities with residual maturity of over 91 days, including floating rate securities, are to be valued at the weighted average price at which they are traded on the particular valuation day. When these securities are not traded on a particular valuation day they are to be valued on Yield to Maturity (YTM) basis.
- YTM is calculated on the basis of benchmark yield/ matrix of spread over risk free benchmark yield obtained from agency(ies) entrusted for the said purpose by AMFI.
- For determining the YTM, Government securities are grouped into “duration buckets” of 0.25-0.5 year, 0.5-1 year, 1-2 years, 2-3 years, 3-4 years, 4-5 years, 5-6 years, and 6 years and above.
- The risk-free benchmark yield is to be set at least every week - more frequently, if there is a significant change in market conditions.
- Credit spread is the Corporate YTM for each credit rating, minus the risk-free yield.
- The benchmark risk free yield plus the applicable credit spread, has to be marked-up/ marked-down to account for the illiquidity risk, promoter background, finance company risk and the issuer class risk, as follows:
 - Discretionary mark up of upto 100 basis points for securities of duration up to 2 years;
 - Discretionary mark up of upto 75 basis points for securities of duration more than 2 years;
 - Discretionary mark down of up to 50 basis points for securities of duration up to 2 years;

- Discretionary mark down of up to 25 basis points for securities of duration more than 2 years.
- The fund manager has to give an internal credit rating for paper that does not have a public external credit rating. Over and above the discretionary mark down mentioned earlier, a further 50 basis point discretionary mark down is to be used for the valuation of such securities.
- Securities embedded with call option are valued at the lower of the value as obtained by valuing the security to final maturity and valuing the security to call option.
- Securities with put option are valued at the higher of the value as obtained by valuing the security to final maturity and valuing the security to put option.
- Government securities are valued at prices for government securities released by an agency suggested by AMFI.
- An 'asset' is classified as NPA if the interest and/or principal amount have not been received or remained outstanding for one quarter from the day such income and/or instalment was due.
- After the expiry of the 1st quarter from the date the income was due, interest accrual on the asset has to be stopped.
- On classification of the asset as NPA, interest accrued and recognized in the books of accounts, but due for more than a quarter, has to be provided for.
- Besides the value of the asset has to be provided for as per the following schedule (or earlier, but not later):
 - 10 per cent of the book value of the asset has to be provided for after 6 months past due date of interest i.e. 3 months from the date of classification of the asset as NPA.
 - 20 per cent of the book value of the asset has to be provided for after 9 months past due date of interest i.e. 6 months from the date of classification of the asset as NPA.
 - 20 per cent of the book value of the asset has to be provided for after 12 months past due date of interest i.e. 9 months from the date of classification of the asset as NPA.
 - 25 per cent of the book value of the asset has to be provided for after 15 months past due date of interest i.e. 12 months from the date of classification of the asset as NPA.
 - 25 per cent of the book value of the asset has to be provided for after 18 months past due date of interest i.e. 15 months from the date of classification of the asset as NPA.

- If any instalment is due during the period of interest default, the amount of provision will be the instalment amount or the above provision amount, whichever is higher.
- Investments in Deep Discount Bonds are classified as NPAs, if any two of the following conditions are satisfied:
 - If the rating of the Bond comes down to Grade 'BB' (or its equivalent) or below.
 - If the company is defaulting in its commitments in respect of other assets, if available.
 - Net worth is fully eroded.
- In the case of close-ended schemes, faster provisioning has to be done, so that the asset is fully written off before the closure of the scheme.
- If the company has fully cleared all the arrears of interest, the interest provisions can be written back in full.
- The asset will be reclassified as performing on clearance of all interest arrears and if the debt is regularly serviced over the next two quarters.
- In case the company has fully cleared all the arrears of interest, the interest not credited on accrual basis can be credited at the time of receipt.
- The provision made for the principal amount can be written back as follows:
 - 100% of the asset provided for in the books will be written back at the end of the 2nd quarter, if the provision of principal was made due to default in interest only.
 - 50% of the asset provided for in the books will be written back at the end of the 2nd quarter and 25% after every subsequent quarter, if both instalment and interest payment were in default earlier.
- An asset is reclassified as 'standard asset' only when both, the overdue interest and overdue instalments are paid in full and there is satisfactory performance for a subsequent period of 6 months.
- The gold held by a gold exchange traded fund scheme has to be valued at the AM fixing price of LBMA in US dollars per troy ounce for gold having a fineness of 995.0 parts per thousand. Further, the following adjustments are made for the valuation:
 - Conversion to metric measure as per standard conversion rates
 - Conversion of US dollars into Indian rupees as per the RBI reference rate declared by the Foreign Exchange Dealers Association of India (FEDAI)
 - Addition of transportation and other charges that may be normally incurred in transporting the gold from London to the place where it is actually stored on behalf of the mutual fund

- Addition of notional customs duty and other applicable taxes and levies that may be normally incurred in transporting the gold from London to the place where it is actually stored on behalf of the mutual fund
- The real estate assets held by a real estate mutual fund scheme are to be valued -
 - at cost price on the date of their acquisition; and
 - at fair price on every ninetieth day from the day of their purchase.
- A real estate mutual fund scheme is required to use the services of two independent and approved valuers having recent experience in the category of real estate asset being valued and use the lower of the two valuations.
- The net asset value of every real estate mutual fund scheme is to be calculated and declared at the close of each business day on the basis of the most current valuation of the real estate assets held by the scheme and accrued income thereon, if any.
- Where a portion of the real estate asset is held to earn rentals or for capital appreciation, and if the portions can be sold or leased separately, the real estate mutual fund scheme has to account for the portions separately.
- The fair value of real estate asset should not reflect future capital expenditure that will improve or enhance the asset. Similarly, it cannot reflect the related future benefits from the future expenditure.
- If any security purchased by a mutual fund does not fall within the current framework of valuation of securities, it has to report immediately to AMFI regarding the same. Further, at the time of investment, it has to ensure that the total exposure in such securities does not exceed 5% of the total AUM of the scheme.
- AMFI is to ensure that valuation agencies cover such securities in the valuation framework within six weeks from the date of receipt of such intimation from the mutual fund. Until then, the mutual fund can value such securities using their proprietary model which has been approved by their independent trustees and the statutory auditors.

Chapter 4 : Mutual Fund Accounting

Returns to the investors depend on the performance of the scheme. NAV is a measure of performance that investors track closely.

Besides affecting the price at which close-ended schemes' units trade on the stock exchange, NAV is the basis on which open-end schemes sell units to investors and re-purchase units from investors on an ongoing basis.

If NAV is inflated (through excessively aggressive accounting), and knowledgeable investors re-purchase their units at such higher price, the investors who continue in the scheme lose out. Examples of aggressive accounting are:

- Valuing investments higher than their realisable value
- Not providing for expenses (or losses) that have been incurred in the scheme
- Recognising income (or profits) that do not really belong to the scheme.

On the other hand, if NAV is deflated [through excessively conservative accounting practices such as under-valuing investments, making excessive provisions for expenses (or losses) or under-reporting income or profits], investors who re-purchase their units get a raw deal, while the investors who continue get undue benefits.

Considering these dynamics, SEBI has imposed strict norms regarding valuation of securities and provisioning for NPA. These were discussed in the previous chapter. Some other aspects of accounting that affect the NAV, or the price at which investors transact with the scheme, are discussed in this Chapter.

4.1 Accounting for Income, Gains & Losses from Investments

- Interest income is accrued on debt securities every day. The scheme may have invested in a 12% debenture where interest is payable semi-annually on June 30th and December 31st each year. Although interest would be received in the scheme twice a year, the scheme will keep accruing one day's interest income each day, including on Sundays and holidays. Such regular accretion of interest income ensures a gradual change in the NAV during the year.
- There is a time lag between the day a company declares a dividend on its equity shares, and the time when it is actually received in the scheme. Between the announcement of dividend and the actual receipt of dividend, the stock exchange specifies an ex-dividend date. All investors who buy their shares before that date are entitled to receive dividend on those shares. From the ex-dividend date, any investor who buys shares of the company will not be entitled to that dividend.

Under SEBI regulations, a scheme is to recognise the dividend as its income on the day the shares become ex-dividend on the stock exchange.

- On account of the MTM valuation discussed in the previous chapter, the scheme will keep showing capital gains (if the market goes up) or capital losses (if the market goes down), for every day when the NAV is calculated. Although the gains or losses are realised only when the scheme sells these investments, MTM valuation ensures that the NAV reflects the realisable value of those investments. Daily gains push up the NAV, while the daily losses pull down the NAV.

4.2 Accounting for Expenses

- The limits to investment advisory fees and other expenses for different kinds of schemes were discussed in NCFM's Workbook titled Securities Market (Advanced) Module. For example, the SEBI limit to management fees is 1.25% on net assets upto Rs. 100 crore.

Suppose a scheme had net assets of Rs. 100 crore on a day, and the scheme information document mentions management fees of 1.25%.

Expenses (and losses) bring down the NAV. Income (and profit) pushes up the NAV. Consider a situation, where the scheme charges the entire 1.25% management fee at the end of the year, based on average net assets during the year. With such accounting, the NAV will be inflated all through the year (on account of under provision of expenses), and suddenly on one day, the NAV will be pulled down by 1.25%.

In order to avoid such anomalies, SEBI has stipulated that the expense needs to be accrued proportionately, every day or week when the NAV is calculated. In the above example, 1.25% on Rs. 100 crores translates to annual management fee of Rs. 1.25 crore, which is equivalent to Rs. 34,247 per day. A provision for management fees for that day will be made for this amount, thus ensuring that the NAV is not inflated. Daily provision of such management fees, based on the net assets each day, ensures that there is no sudden decline in NAV on this account.

Although the provision may be made every day, the actual payment of the management fee by the scheme to the Asset Management Scheme will happen at frequencies mutually agreed upon and mentioned in the contract.

- Similarly, other recurring expenses would be provided for regularly, through a separate expense provision account. Actual expenses will be charged to the account as per bills received from various service providers.

4.3 Determining the NAV

Net assets represent the unit-holders' funds in the scheme. If all the scheme's assets are realised, and the scheme's dues other than to unit-holders are paid out, what remains is the net assets of the scheme. This amount, divided by the number of units, is the Net Asset Value (NAV) per unit.

The concept can be easily understood, considering the balance sheet of a scheme viz. listing of its assets and liabilities.

Suppose a close-ended scheme mobilised Rs. 100 crore during its NFO. It would have issued 10 crore units of Rs. 10 each. The money would be in the bank. The scheme's balance sheet would read as follows:

Liabilities	Rs. Cr.	Assets	Rs. Cr.
Unit Capital (10 crore units of Rs. 10 each)	100.00	Balance in Bank	100.00
Total Liabilities	100.00	Total Assets	100.00

NAV of the scheme at this stage would be Rs. 100 crore ÷ 10 crore units i.e. Rs. 10 per unit.

The scheme invests Rs. 80 crore in equity shares. The market value of the investments is Rs. 80.25 crore at the end of the day. The idle funds of the scheme have been kept in the bank to earn interest at 8% p.a. As per the Scheme Information Document, investment advisory fee is chargeable at 1.25% p.a.; other recurring expense limit is 1.25% p.a.

Let us build the scheme's profit & loss account.

	Rs. Cr.
Income	
Interest accrued on bank deposit [Rs. 100 cr X 8% X 1 day ÷ 365 days]	0.022
Expenses	
Recurring Expenses [Rs. 100 cr X 1.25% X 1 day ÷ 365 days]*	0.003
Investment Advisory Fees [Rs. 100 cr X 1.25% X 1 day ÷ 365 days]*	0.003
Profit before Unrealised Gains [Income minus Expenses]	0.016
Unrealised Gains [Rs. 80.25 crore minus Rs. 80.00 crore]	0.250
Profits of the Scheme	0.266

* Technically, these would be calculated on the closing value of net assets. For simplicity, the numbers are work out on the basis of the previous day's closing value of net assets.

The balance sheet of the scheme would read as follows:

Liabilities	Rs. Cr.	Assets	Rs. Cr.
Unit Capital (10 crore units of Rs. 10 each)	100.000	Balance in Bank [Rs. 100 crore minus Rs. 80 crore]	20.000
Profit before Unrealised Gains	0.016	Interest accrued in bank	0.022
Unrealised Gains	0.250	Investments at market price	80.250
Sundry Creditors:			
Investment Advisory Fees payable	0.003		
Other expenses payable	0.003		
Total Liabilities	100.272	Total Assets	100.272

Net assets of the scheme are Total Assets minus Dues to outsiders (Sundry creditors) i.e. Rs. 100.272 crore minus Rs. 0.006 crore = Rs. 100.266 crore.

The NAV of the scheme is Rs. 100.266 crore ÷ 10 crore units i.e. Rs. 10.0266 per unit. This comprises 3 elements:

- Par value of Rs. 10.0000
- Realised profit (profit before unrealised gain) of Rs. 0.0016
- Unrealised gains of Rs. 0.0250

Suppose the scheme had sold for Rs. 10.10 crore, investments that cost Rs. 10 crore. The realised profit is now higher by Rs. 0.10 crore. It will go up to Rs. 0.116 crore.

The revised value of investments at market price would be Rs. 80.25 minus Rs. 10.10 crore i.e. Rs. 70.15 crore.

The cost of these investments is Rs. 80 crore minus Rs. 10 crore i.e. Rs. 70 crore. Thus, the unrealised gains is Rs. 70.15 crore minus Rs. 70 crore i.e. 0.15 crore.

If there were no other transactions / accruals / changes in market, the revised balance sheet would be as follows:

Liabilities	Rs. Cr.	Assets	Rs. Cr.
Unit Capital (10 crore units of Rs. 10 each)	100.000	Balance in Bank	20.000
Realised Profit	0.116	Interest accrued in bank	0.022
Unrealised Gains	0.150	Investments at market price	70.150
Sundry Creditors:		Sundry debtors (recoverable on sale of investments)	10.100
Investment Advisory Fees payable	0.003		
Other expenses payable	0.003		
Total Liabilities	100.272	Total Assets	100.272

Net assets of the scheme continue to be Rs. 100.272 crore minus Rs. 0.006 crore = Rs. 100.266 crore.

The NAV of the scheme continues at Rs. 100.266 crore \div 10 crore units i.e. Rs. 10.0266 per unit.

Since appreciation in the value of the investments sold was already booked as an unrealised gain earlier, the sale of investments did not change the NAV. However, the composition of that NAV changed as follows:

- Par value of Rs. 10.0000
- Realised profit (profit before unrealised gain) of Rs. 0.0116
- Unrealised gains of Rs. 0.0150

At a per unit level, unrealised gains reduced and realised gains increased by Rs. 0.01 each.

4.4 Accounting for Load

- In a close-ended scheme, investors buy or sell units in the stock exchange. The investors will incur brokerage and other transaction costs. These are payable to the broker / exchange / tax authorities. But nothing is payable to the scheme, as load or otherwise. As far as the scheme is concerned, the units change hands - the unit-holder's name changes - but the transaction does not affect the balance sheet of the scheme or the NAV.
- An open-ended scheme sells its units to investors through a "sale" transaction; they take back the units through a "re-purchase" transaction. These transactions are routed through the bank account of the scheme. Therefore, the balance sheet of the scheme is affected.

Suppose the scheme discussed earlier was an open-end scheme. If unit-holders bought 10,00,000 new units at the NAV viz. Rs. 10.0266, they would have paid Rs. 100,26,600 to the scheme. This would go into the scheme.

Out of this amount, Rs. 1 crore (10,00,000 new units X par value of Rs. 10 each) would go into the unit capital.

Part of the balance amount, that represents realised profit (10,00,000 new units X Rs. 0.0116 i.e. Rs. 0.001) would go into an account called Equalisation Reserve.

The balance amount, which represents unrealised gains (10,00,000 new units X Rs. 0.0150 i.e. Rs. 0.0015 - rounded below to Rs. 0.002), would go into an account called Unit Premium Reserve.

The revised balance sheet, holding all other aspects constant, is as follows:

Liabilities	Rs. Cr.	Assets	Rs. Cr.
Unit Capital (10.1 crore units of Rs. 10 each)	101.000	Balance in Bank	21.003
Unit Premium Reserve	0.002	Interest accrued in bank	0.022
Equalisation Reserve	0.001		
Realised Profit	0.116	Investments at market price	70.150
Unrealised Gains	0.150	Sundry debtors (recoverable on sale of investments)	10.100
Sundry Creditors:			
Investment Advisory Fees payable	0.003		
Other expenses payable	0.003		
Total Liabilities	101.275	Total Assets	101.275

Net assets of the scheme are Rs. 101.275 crore minus Rs. 0.006 crore = Rs. 101.269 crore.

The NAV of the scheme is Rs. 101.269 crore ÷ 10.1 crore units. It continues to be Rs. 10.0266 per unit.

The sale of new units at NAV changes the balance sheet of the scheme, but it does not affect the NAV. Similarly, it can be seen that re-purchase of units at NAV changes the balance sheet of the scheme, but not the NAV.

- When units are sold to investors at higher than NAV, the difference is called entry load. In the above example, if units were sold at entry load of 1%, then the sale price would be Rs. 10.0266 + 1% i.e. Rs. 10.1269. The entry load of Rs. 0.1003 would go into a separate account, from which the asset management company can meet various selling expenses for the scheme. It does not affect the unit premium reserve or equalisation reserve. Therefore, NAV of the scheme remains at Rs. 10.0266 per unit. SEBI has put an end to the practice of charging an entry load.
- When units are re-purchased from investors at below NAV, the difference is called exit load. In the above example, if units were re-purchased with an exit load of 1%, then the re-purchase price would be Rs. 10.0266 minus 1% i.e. Rs. 9.9263. The exit load of Rs. 0.1003 again goes into a separate account, from which the asset management company can meet various selling expenses for the scheme. It does not affect the unit premium reserve or equalisation reserve. Therefore, NAV of the scheme remains at Rs. 10.0266 per unit.

Exit load is permitted by SEBI. It has however mandated that any exit load above 1% would not be available for the asset management company to meet expenses. It has to be written back to the scheme for the benefit of investors. To that extent, NAV can increase, if the scheme levies an exit load higher than 1%.

4.5 Distributable Reserves

Distributable reserves represent the amount that is available for schemes to declare a dividend.

The earlier example illustrates how appreciation in the market can push up NAV, although the scheme may not have sold any investments. Therefore, part of the NAV, which is represented by unrealised gains, is a paper profit. It will become real, only when investments are sold. Distributing such paper profits as dividend would not be appropriate. Therefore, SEBI has stipulated that unrealised gains are not available for distribution as dividend.

The earlier example also illustrates how the amount in unit premium reserve, is recovered from the investors when new units are sold to them. It is not a direct consequence of the investment activity of the scheme. Therefore, SEBI has clarified that unit premium reserve too is not available for distribution as dividend.

Thus, the amount that is available for dividend distribution (distributable reserve) is restricted to the amounts lying in realised profits and equalisation reserve. Normally, towards the end of every financial year, the scheme transfers the realised profits to the equalisation reserve.

Points to remember

- Besides affecting the price at which close-ended schemes' units trade in the stock exchange, NAV is the basis on which open-end schemes sell units to investors and re-purchase units from investors on an ongoing basis.
- If NAV is inflated (through excessively aggressive accounting), and knowledgeable investors re-purchase their units at such higher price, the investors who continue in the scheme lose out.
- If NAV is deflated [through excessively conservative accounting practices such as under-valuing investments, making excessive provisions for expenses (or losses) or under-reporting income or profits], investors who re-purchase their units get a raw deal, while the investors who continue get undue benefits.
- Interest income is accrued on debt securities every day.
- Mutual fund schemes have to recognise the dividend as income on the day the shares become ex-dividend in the stock exchange.
- Although the gains or losses are realised only when the scheme sells these investments, MTM valuation ensures that the NAV reflects the realisable value of those investments.
- Expenses (and losses) bring down the NAV. Income (and profit) pushes up the NAV.

- SEBI has stipulated that the expense needs to be accrued proportionately, every day or week when the NAV is calculated.
- Net assets represent the unit-holders' funds in the scheme. This amount, divided by the number of units, is the Net Asset Value (NAV) per unit.
- An open-ended scheme sells its units to investors through a "sale" transaction; they take back the units through a "re-purchase" transaction.
- When an open-ended scheme sells new units, part of the sale price that represents realised profit would go into an account called Equalisation Reserve. The part that represents unrealised gains, would go into an account called Unit Premium Reserve.
- The sale / re-purchase of units by open-ended schemes change the balance sheet of the scheme, but do not affect the scheme's NAV.
- When units are sold to investors at higher than NAV, the difference is called entry load. SEBI has put an end to the practice of charging an entry load.
- When units are re-purchased from investors at below NAV, the difference is called exit load. Exit load is permitted by SEBI. It has however mandated that any exit load above 1% would not be available for the asset management company to meet expenses. It has to be written back to the scheme for the benefit of investors.
- Distributable reserves represent the amount that is available for schemes to declare a dividend.
- SEBI has stipulated that unit premium reserve and unrealised gains are not available for distribution as dividend.

Chapter 5 : Novel Portfolio Structures in Mutual Fund Schemes

The investor in any mutual fund scheme is buying into a portfolio of securities. The upsides and downsides on that portfolio, and the expenses of running the scheme belong to the investors.

In general, the fund manager has unfettered right to select securities for the scheme, subject to limits that have been set in the scheme information document, and certain prudential limits on holding of securities. These limits were discussed in Chapter [2].

Mutual funds come out with variations from the normal portfolio structure, to cater to unique customer needs. Some of these are discussed below.

5.1 Index Funds

Every mutual fund scheme has to disclose its benchmark - a standard against which the scheme's performance can be compared. For instance, diversified equity funds use S&P CNX Nifty as a benchmark. Equity schemes that propose to go beyond large cap companies can opt for S&P CNX 500. CNX Midcap 100 can be considered for equity schemes that invest mainly in mid cap companies. Similarly, there are sectoral indices for sector funds and debt indices for debt funds.

Fund managers who operate on the mandate of "beating the benchmark" are said to run active schemes or managed schemes. They seek to perform better than the benchmark. Comparison of mutual performance with that of its benchmark is called relative performance of schemes. Parameters for such quantitative evaluation of schemes are discussed in Chapter [6].

The danger with active management is that the fund manager can also get beaten by the benchmark. The fund manager seeks to beat the benchmark through superior stock selection. But if the investment portfolio fares poorly, as compared to the benchmark, then the relative performance suffers.

Active management also calls for higher investment in stock analysis. This is passed on to the actively managed schemes through higher investment advisory fees.

Some investors are satisfied with the benchmark returns. However, buying all the shares that go into the benchmark, in the same proportion as in the benchmark, requires large investment. Retail investors may not be able to do this.

Alternatively, the investor can buy futures contracts on the benchmark. For instance, Nifty Futures. But here again, the investment requirement is high. Further, futures are typically

short term products of upto 3 months maturity. A long term investor will need to keep rolling over (close out the near month contract and buy the next month contract) the futures contract at the end of its expiry.

Index schemes make it convenient for investors to take the benchmark exposure by investing small amounts. For instance, the minimum investment amount is as low as Rs. 1,000 in some schemes. With such a low investment outlay, the investor is effectively getting exposure to a basket of 50 stocks that represent the S&P CNX Nifty.

The index scheme maintains a portfolio that mirrors the index. That is how they ensure that the performance of the index gets translated into the scheme. As will be seen in the next chapter, index schemes have a Beta of 1.

Index schemes are also called passive schemes, because the fund manager does not do stock selection. The stocks and their weightage in the scheme, depend on the composition of the index that the scheme is replicating. This kind of investment behaviour is cheaper for the mutual fund scheme to administer. Therefore, the investor in the passive scheme also benefits through lower investment advisory fees.

5.2 Exchange Traded Funds (ETFs)

Despite its best efforts, the index scheme performance may not be perfectly in line with the index. The gap in the performance between the index scheme and the index is called 'tracking error'. This is caused by several factors:

- Timing differences

As discussed in NCFM's Workbook titled Securities Market (Advanced) Module, the NAV at which investors are allotted units, depends on the time stamp on the investor's application and timing of receipt of funds. For example, an investor whose application is received before 3 p.m. is allotted units at the closing NAV of the application date.

Although the units would have been allotted on the basis of the same day's NAV, the scheme itself will receive funds only after a couple of days. By the time the scheme receives funds and invests, the market may have changed. If the market goes higher at the time of investment, then the scheme performance suffers.

- Liquidity

The S&P CNX Nifty only comprises 50 stocks. The scheme however invests in the 50 stocks, plus money in the bank. The liquidity needs of the scheme determine the money it keeps in the bank. This portfolio difference from the Nifty causes a gap between the scheme performance and index performance.

- Costs

The index fund will charge investment advisory fees, albeit lower than in actively managed schemes. Similarly, there are other costs like registrar fees, trustee fees, brokerage etc.

Even if the mutual fund scheme somehow managed a perfect mirroring of the index, its performance will be lower than the index on account of the cost and fees.

Another weakness of index schemes is that all the investors investing up to the cut-off time will get units at the same NAV. There is no difference between a 10 am investor, a 12 noon investor or a 2 pm investor. The market however changes every micro second.

An investor, who is buying index schemes that are close-ended, may find its price in the exchange changing in line with the market. But then, investors cannot be sure that they will be able to trade. Liquidity is better for open-ended schemes, where investors can offer their units for re-purchase or buy new units, any day, at NAV-based prices.

Exchange Traded Funds started as passive funds (investing as per an index), though active ETFs have been launched abroad. In India, we only have passive ETFs. When the scheme is launched, its connection with the index is announced. For instance, 500 ETF units = 1 unit of S&P CNX Nifty.

ETFs are open-ended funds that can be bought at prices, which vary during the day, and operate with low tracking error. They achieve this combination of features through their unique structure as follows:

- ETFs receive funds from investors only during the NFO. These are invested by the date the scheme goes open and declares its NAV. Post-NFO, the scheme does not receive funds from investors, thus avoiding the investment timing problems normally associated with index funds.
- Being open-ended, they need to sell new units on a daily basis. Post-NFO, the ETF only sells units against securities. Therefore, an investor who wants to buy ETF units after the NFO needs to offer the requisite Nifty securities, in the same proportion as the index.
- Similarly, the scheme fulfils the need of daily re-purchase of its units, by releasing the requisite Nifty securities. An investor who offers his units for re-purchase will receive Nifty securities in the same proportion as the index - not funds. Therefore, the scheme does not need to maintain liquid funds. This eliminates another reason for the tracking error found in index schemes.

Smaller investors do not have the transaction size to receive and give the requisite Nifty securities. The mutual fund lists the ETF units in the stock exchange, and appoints identified brokers as 'market makers' to facilitate the transactions of small investors.

The market maker gives a two-way quote for the ETF units. Thus, investors know at what price they can buy or sell the ETF units. As with any securities transaction in the stock exchange, the ETF units are bought and sold by the market maker against funds. The broker will also charge a brokerage for the transaction.

Such the market makers' transactions with the investors do not go through the books of the scheme, the scheme does not run into the timing differences and liquidity needs that normal open-ended index funds face.

In order to trade in the above manner, the investor needs to have a demat account and trading account with the broker.

Since the ratio between each unit and the index is frozen, the units are expected to trade in the exchange on the basis of that intrinsic value. There are however occasions when, on account of ignorance or lack of liquidity, ETFs are traded at prices that are significantly different from their intrinsic value. Buying ETF units at higher than their intrinsic worth is not advisable.

5.3 Arbitrage Funds

In an arbitrage, the investor takes opposite positions in two transactions. The net effect is that no new position is created, but a spread is earned on the difference between the two transactions.

For instance, shares of a company may be bought in the cash market, and futures (with underlying as the same number of shares on the same company) are sold. The cash and futures positions balance each other.

Normally, the futures price would be higher than the cash price. The difference in prices is the riskless profit earned from the arbitrage. The difference tends to capture the cost of funds for the period of the contract, though at times it may be higher or lower than the funding cost. In periods of extreme volatility, the futures price can be much higher than the cash price for the same underlying.

Arbitrage funds focus on such arbitrage transactions. The returns are closer to liquid funds, which capture the short term funding cost in the market. It can be higher in volatile market conditions.

As will be seen in Chapter 11, equity funds are more tax efficient than debt funds. The interesting aspect of arbitrage funds is that the return profile is closer to a debt fund. On account of the compensating positions taken, the market risk is negligible - lesser than in a normal debt fund. Yet, they offer the tax efficiency of equity funds, because the positions taken are in the equity market.

5.4 Monthly Income Plans (MIP)

Monthly Income Plans maintain a portfolio that is debt-oriented. Equity component is as low as 15-20%. The high debt component, with its daily interest accrual, balances the volatility risks on the low equity component. The nature of equity and debt investments made is also safer in MIP. With such a portfolio structure, the MIP hopes to pay a monthly income to investors.

Mutual fund schemes offer income to investors through declaration of dividend. As discussed in the previous chapter, dividend can only be declared if the scheme has distributable reserves. There are occasions where on account of significant decreases in MTM valuation, the scheme will not have the distributable reserves to distribute a dividend. Portfolio losses may be higher than the income accrual. In such cases, the scheme cannot declare a dividend. Therefore, investor needs to be clear that there is no guarantee regarding the monthly income.

The MIP portfolio, with low allocation to equity, is appropriate for most risk averse investors. They need to take exposure to equity to protect themselves against inflation. The MIP portfolio with its relatively low NAV volatility is appropriate for such investors.

However, MIP is not appropriate for investors who depend on the monthly income to meet their regular expenses. Such investors should rely on safer investments (like Post Office Monthly Income Scheme) that assure a monthly income to meet their monthly expenses.

5.5 Fixed Maturity Plans (FMP)

A major risk in debt investments is the price risk arising out of changes in yields in the market. As discussed in the next chapter, Weighted Average Maturity and Modified Duration are measures of this risk.

This price risk is a market phenomenon. Until maturity, debt securities trade in the market at prices that fluctuate with interest rates. However, on maturity, the issuer redeems the instrument at the agreed value. The redemption amount, which is paid by the issuer, is not a function of the market. The only uncertainty is the one created by credit risk. Will the issuer be able to pay the redemption amount?

Thus, on maturity of a debt instrument, the market risk is no longer a factor. A scheme that invests all its moneys for the same maturity as the scheme's own maturity will thus be able to eliminate the market risk on maturity. FMPs are structured in this manner.

FMPs are close-ended scheme. Their Scheme Information Document will not only mention the maturity of the scheme, but also the credit rating of the instruments it will invest in.

Suppose, an FMP is offered for 3 years, and it proposes to invest in only AAA securities. If

AAA companies are paying 9% on 3-year securities, and the expense ratio of the scheme is indicated to be 0.5%, then the investor can expect a return of 9% minus 0.5% i.e. 8.5% from the 3-year FMP. This is not a guaranteed return, but an indicative return that the investor can expect.

The point to note is that until maturity, the scheme has a market risk. Therefore its NAV can fluctuate. An FMP investor selling the units before maturity can earn a return higher or lower than the indicative return.

5.6 Capital Protection Oriented Schemes

Like MIPs and other hybrid funds, Capital Protection Oriented Schemes too, invest in a mix of debt and equity securities. However, the investment philosophy here is different. The portfolio of capital protection oriented schemes is structured to ensure that the investor at least gets back the capital invested.

These schemes are offered as close-ended schemes. Suppose a capital protection oriented scheme of 7 years is offered to investors. If yields on government securities of the same maturity are 8%, then Rs. 58.35 invested today in government securities will grow to Rs. 100 in 7 years.

The mutual fund scheme will therefore allocate 58.35% of the amount collected from investors, to government securities. Sovereign securities do not have a credit risk - and market risk too is eliminated by matching the scheme's maturity with its investment maturity. Thus, the scheme is in a position to assure investors that they will at least get their capital back at the end of 7 years.

The remaining 41.65% of the investor's money is invested in risky investments like equity. In the worst case, these investments lose their entire value. In such an eventuality, the investor will get only the capital back (through redemption of underlying government securities).

Realistically, the risky investments too will have some realisable value. Thus, the investor gets the capital back, with some additional return.

Such schemes are suitable for investors who want to take some exposure to equity, but without any risk of losing the principal invested.

Points to remember

- Every mutual fund scheme has to disclose its benchmark - a standard against which the scheme's performance can be compared.
- Fund managers who operate on the mandate of "beating the benchmark" are said to run active schemes or managed schemes. They seek to perform better than the benchmark.

- Comparison of mutual performance with that of its benchmark is called relative performance of schemes.
- The index scheme maintains a portfolio that mirrors the index. Index schemes have a Beta of 1.
- Index schemes are also called passive schemes, because the fund manager does not do stock selection. The investor in a passive scheme benefits through lower investment advisory fees.
- The gap in the performance between the index scheme and the index is called 'tracking error'. It is caused by
 - Timing differences
 - Liquidity
 - Cost
- Exchange Traded Funds started as passive funds (investing as per an index), though active ETFs have been launched abroad. In India, we only have passive ETFs.
- When the scheme is launched, its connection with the index is announced. For instance, 500 ETF units = 1 unit of S&P CNX Nifty.
- ETFs are open-ended funds that can be bought at prices, which vary during the day, and operate with low tracking error.
- ETFs receive funds from investors only during the NFO. Post-NFO, the scheme does not receive funds from investors, thus avoiding the investment timing problems normally associated with index funds.
- Post-NFO, the ETF only sells units against securities. Therefore, an investor who wants to buy ETF units after the NFO needs to offer the requisite Nifty securities, in the same proportion as the index.
- Similarly, the scheme fulfils the need of daily re-purchase of its units, by releasing the requisite Nifty securities. An investor who offers his units for re-purchase will receive Nifty securities in the same proportion as the index - not funds. Therefore, the scheme does not need to maintain liquid funds. This eliminates another reason for the tracking error found in index schemes.
- The mutual fund lists the ETF units in the stock exchange, and appoints identified brokers as 'market makers' to facilitate the transactions of small investors. The market maker gives a two-way quote for the ETF units.
- Such the market makers' transactions with the investors do not go through the books of the scheme, the scheme does not run into the timing differences and liquidity needs that

normal open-ended index funds face. In order to trade in this manner, the investor needs to have a demat account and trading account with the broker.

- The returns in a arbitrage fund are closer to liquid funds, which capture the short term funding cost in the market. It can be higher in volatile market conditions.
- Although arbitrage funds have the returns profile of a debt fund, and are low in risk, they are taxed as equity funds.
- Monthly Income Plans maintain a portfolio that is debt-oriented. Equity component is as low as 15-20%.
- There are occasions where on account of significant decreases in MTM valuation, the scheme will not have the distributable reserves to distribute a dividend. Therefore, investor needs to be clear that there is no guarantee regarding the monthly income.
- FMP invests all its moneys for the same maturity as the scheme's own maturity. Thus, price risk is eliminated on maturity.
- FMP is a close-ended scheme. Return is not guaranteed, but investor can operate with an indicative yield based on yields in the market and the expense ratio of the scheme.
- An FMP investor selling the units before maturity can earn a return higher or lower than the indicative return.
- Capital Protection Oriented Schemes invest in a mix of debt and equity securities. They are offered as close-ended schemes.

Chapter 6 : Quantitative Evaluation of Mutual Fund Schemes

This chapter takes a more detailed view into the quantitative evaluation of mutual fund schemes.

6.1 Returns

6.1.1 XIRR

Dividend payments in a scheme depend on profits. Some debt schemes do declare dividend daily or weekly. These are exceptions to the general rule that unlike debt, mutual funds cannot work with pre-specified dividend payment dates.

Calculating returns with irregular dividend payment dates becomes easier using the XIRR function in Spreadsheet (in MS Excel, Open Office etc.).

Suppose an investor bought 1,000 units in the dividend payout option of a scheme, on January 15, 2011, when the NAV was Rs. 14 per unit. On July 1, 2011 the scheme distributed a dividend of Rs. 2 per unit. Another dividend of Rs. 1.50 per unit was distributed on December 10, 2011. The investor exited the scheme on February 1, 2012, when the NAV was Rs. 15 per unit. The applicable exit load was 1%.

The re-purchase price is Rs. 15 minus 1% i.e. Rs. 14.85 per unit. Having bought the units at Rs. 14 per unit, a capital gain of Rs. 0.85 per unit is earned. The investor has also received dividend twice during the investment holding period. The cash flows and compounded return can be calculated as shown in Table 6.1:

(The cash flows are shown from the investor's point of view. Therefore, purchase is shown as negative cash flow; dividend and re-purchase are positive cash flows)

Table 6.1

Calculation of Return using XIRR Function

B8 f_x =XIRR(E3:E6,A3:A6)					
	A	B	C	D	E
1					
2	Date	Transaction	No. of Units	Rate (Rs.)	Value (Rs.)
3	15-Jan-11	Units purchased by investor	1,000	14.00	-14,000
4	01-Jul-11	Dividend	1,000	2.00	2,000
5	10-Dec-11	Dividend	1,000	1.50	1,500
6	01-Feb-12	Units sold by investor	1,000	14.85	14,850
7					
8	XIRR		32.34%		
9					

Suppose the investor bought another 500 units on September 15, 2011 at Rs. 13 per unit. The investor sold only 1,000 units on February 1, 2012. The revised calculation is shown in Table 6.2.

(The second dividend is earned on 1,500 units.

The balance 500 units that the investor holds on February 1, 2012 is also shown at its realisable value, net of exit load)

Table 6.2

Calculation of Return with Additional Purchase using XIRR Function

B18 =XIRR(E11:E16,A11:A16)					
	A	B	C	D	E
9					
10	Date	Transaction	No. of Units	Rate (Rs.)	Value (Rs.)
11	15-Jan-11	Units purchased by investor	1,000	14.00	-14,000
12	01-Jul-11	Dividend	1,000	2.00	2,000
13	15-Sep-11	Additional Units purchased by investor	500	13.00	-6,500
14	10-Dec-11	Dividend	1,500	1.50	2,250
15	01-Feb-12	Units sold by investor	1,000	14.85	14,850
16	01-Feb-12	Units retained by investor	500	14.85	7,425
17					
18	XIRR		38.58%		
19					

6.1.2 Dividend Re-investment (CAGR)

XIRR is an easy approach to calculating returns. Indeed, it is widely used in the market. A weakness of the XIRR function is that it assumes that the dividend receipts would have been re-invested at the same XIRR rate. This is a questionable assumption.

SEBI has therefore stipulated that returns should be calculated assuming that the dividends have been re-invested in the same scheme at the Ex-dividend NAV i.e. the NAV after every dividend payment. As will be appreciated, after every dividend payment, the NAV goes down.

The calculation therefore calls for the ex-dividend NAV after each dividend distribution. Suppose it was Rs. 12.50 per unit on July 1, 2011 and Rs. 13.594 per unit on December 10, 2011.

On the original 1,000 units, the investor received dividend of Rs. 2 per unit i.e. Rs. 2,000 on July 1, 2011.

Based on re-investment of dividend, the additional units the investor would have on July 1, 2011 would be Rs. 2,000 ÷ Rs. 12.50 i.e. 160 units.

The second dividend would therefore be received on the original 1,000 units plus the additional 160 units i.e. 1,160 units. At Rs. 1.50 per unit, the total dividend amounts to Rs. 1,740.

The dividend re-investment would yield Rs. 1,740 ÷ Rs. 13.594 i.e. 128 new units.

The total units thus becomes 1,160 + 128 i.e. 1,288. At Rs. 14.85 per unit, this would be valued at Rs. 19,127 on February 1, 2012, as compared to the original investment of Rs. 14,000 on January 15, 2011. The investment holding period is 382 days.

The compounded annual growth rate (CAGR) can be calculated as follows:

$$\text{CAGR} = 100 \times \{(I_2 \div I_1)^{(1 \div r)}\} - 1$$

$$\text{i.e. } 100 \times \{(19,127 \div 14,000)^{(365 \div 382)}\} - 1$$

$$\text{i.e. } 34.74\%$$

The detailed cash flows are shown in Table 6.3

Table 6.3

Calculation of Return using CAGR

B30 $f_x = (E26/(-E21))^{(365/C28)} - 1$					
	A	B	C	D	E
19					
20	Date	Transaction	No. of Units	Rate (Rs.)	Value (Rs.)
21	15-Jan-11	Units purchased by investor	1,000	14.000	-14,000
22	01-Jul-11	Dividend	1,000	2.000	2,000
23	01-Jul-11	Dividend re-invested	160	12.500	-2,000
24	10-Dec-11	Dividend	1,160	1.500	1,740
25	10-Dec-11	Dividend re-invested	128	13.594	-1,740
26	01-Feb-12	Units sold by investor	1,288	14.850	19,127
27					
28	Investment holding period		382 days		
29					
30	CAGR	34.74%			
31					

The requirement of finding out the dividend rate and the ex-dividend NAV after each dividend and accordingly determining the additional units make the calculation cumbersome. Therefore, the CAGR calculation is more commonly used in statutory communication, such as Scheme Information Document, Performance advertisements etc. In other situations, market intermediaries use the XIRR.

Another variation is to apply the CAGR on the growth option of the scheme. Since no dividend is declared in the growth option, the cumbersome dividend re-investment calculations are avoided.

6.1.3 Compounding of Periodic Returns

The above calculations cover a period of more than a year, but the NAV of only 4 days have been used. Intermediate NAVs have been ignored. Researchers often work with NAVs at periodic intervals - daily, weekly, monthly etc. The periodic returns are then averaged and compounded, as shown in Table 6.4.

The periodic return from January 15, 2011 to February 15, 2011 is $100 \times (\text{Rs. } 13.75 - \text{Rs. } 13.50) \div \text{Rs. } 13.50$ i.e. 1.85%. Similarly, periodic returns have been calculated for the following months.

The average of the periodic returns is 1.05%. Since each period is of 1 month, this average too is a monthly return. This can be compounded using the formula $(1 + \text{monthly return})^{12} - 1$ to give the annual return of 13.36%.

Table 6.4

Calculation of Compounded Return from Monthly Returns

C50					f_x	$= (1 + C47)^{12} - 1$
	A	B		C	D	
31						
32	Date	NAV		Periodic Return		
33	15-Jan-11	13.50				
34	15-Feb-11	13.75		1.85%		
35	15-Mar-11	13.50		-1.82%		
36	15-Apr-11	13.60		0.74%		
37	15-May-11	13.65		0.37%		
38	15-Jun-11	13.75		0.73%		
39	15-Jul-11	13.25		-3.64%		
40	15-Aug-11	13.00		-1.89%		
41	15-Sep-11	13.40		3.08%		
42	15-Oct-11	13.75		2.61%		
43	15-Nov-11	14.00		1.82%		
44	15-Dec-11	14.50		3.57%		
45	15-Jan-12	15.25		5.17%		
46						
47	Average of Periodic Returns			1.05% per month		
48		Formula used:			=AVERAGE(C34:C45)	
49						
50	Compounded Return			13.36% per annum		

The formula for compounding of periodic returns varies depending on the period. For instance, while working with weekly returns, the compounding formula would be $(1 + \text{Weekly Return})^{52} - 1$, since there are 52 weeks in the year.

6.2 Risk

Some commonly used measures of risk are as follows:

6.2.1 Standard Deviation

Standard deviation measures the extent to which the scheme returns deviate from its own past standards. This can be easily calculated using the Spreadsheet function 'STDEV' as shown in Table 6.5. The standard deviation, based on monthly returns is 2.53%. This needs to be compounded to its annual equivalent, by multiplying it by the square root of 12. (If the periodic returns were weekly, the multiplication factor would be square root of 52).

Thus, the annualised standard deviation is 8.78%.

Table 6.5

Calculation of Standard Deviation

C70 fx =C67*SQRT(12)				
	A	B	C	D
51				
52	Date	NAV	Periodic Return	
53	15-Jan-11	13.50		
54	15-Feb-11	13.75	1.85%	
55	15-Mar-11	13.50	-1.82%	
56	15-Apr-11	13.60	0.74%	
57	15-May-11	13.65	0.37%	
58	15-Jun-11	13.75	0.73%	
59	15-Jul-11	13.25	-3.64%	
60	15-Aug-11	13.00	-1.89%	
61	15-Sep-11	13.40	3.08%	
62	15-Oct-11	13.75	2.61%	
63	15-Nov-11	14.00	1.82%	
64	15-Dec-11	14.50	3.57%	
65	15-Jan-12	15.25	5.17%	
66				
67	Standard Deviation of Periodic Returns		2.53%	
68		Formula used: =STDEV(C54:C65)		
69				
70	Annualised Standard Deviation		8.78%	

This is to be compared with other schemes of the same type e.g. diversified equity funds, liquid funds etc.

A high standard deviation would mean that the scheme deviates more from its past standard i.e it is more risky.

6.2.2 Beta

An alternate approach to measure equity risk is based on Capital Assets Pricing Model (CAPM), discussed in NCFM's workbook titled Securities Market (Advanced) Module. We saw that there are two risks in investing in equity:

- Systematic risk (β) is inherent to equity investments e.g. the risk arising out of political turbulence, inflation etc. It would affect all equities, and therefore cannot be avoided.
- Non-systematic risk is unique to a company e.g. risk that a key pharma compound will not be approved, or the risk that a high performing CEO leaves the company. Non-systematic risk can be minimized by holding a diversified portfolio of investments.

Since investors can diversify away their non-systematic risks, they have to be compensated only for systematic risk.

Calculation of beta calls for information on the value of the market index on each of the days for which the NAV information is used. A diversified index like S&P CNX Nifty has to be used.

Based on the value of Nifty on each of those days, the periodic returns can be calculated, as was done for the scheme returns. Thereafter, the 'slope' function can be used in Spreadsheet. The details are shown in Table 6.6.

Table 6.6

Calculation of Beta

I86		fx		=SLOPE(G73:G84,I73:I84)		
	E	F	G	H	I	J
	Date	NAV	Periodic Scheme Return	Nifty	Periodic Nifty Return	
71						
72	15-Jan-11	13.50		5000		
73	15-Feb-11	13.75	1.85%	5100	2.00%	
74	15-Mar-11	13.50	-1.82%	5010	-1.76%	
75	15-Apr-11	13.60	0.74%	5050	0.80%	
76	15-May-11	13.65	0.37%	5070	0.40%	
77	15-Jun-11	13.75	0.73%	5100	0.59%	
78	15-Jul-11	13.25	-3.64%	4900	-3.92%	
79	15-Aug-11	13.00	-1.89%	4810	-1.84%	
80	15-Sep-11	13.40	3.08%	4960	3.12%	
81	15-Oct-11	13.75	2.61%	5090	2.62%	
82	15-Nov-11	14.00	1.82%	5180	1.77%	
83	15-Dec-11	14.50	3.57%	5360	3.47%	
84	15-Jan-12	15.25	5.17%	5640	5.22%	
85						
86	Beta				0.98	
87						

The Beta is 0.98 is close to 1. This means that the scheme returns are closely aligned with that of the Nifty.

If the beta is more than 1, it means that the scheme is more risky than the market. A value of beta that is less than 1 would mean that the scheme is less risky than the market.

Since index schemes mirror the portfolio of their benchmark index, their risks are expected to be similar. Therefore, beta of an index scheme would be close to 1, as seen in the above example.

6.2.3 Weighted Average Maturity

Fixed rate debt instruments have a price risk. When interest rates in the market go up, the debt instruments already issued, based on the erstwhile lower interest rates, lose value. Similarly, when interest rates in the market go down fixed rate debt instruments gain value.

The extent of such depreciation or appreciation of fixed rate debt instruments in response to changes in yields in the market, is influenced by the tenor of the instruments. Instruments that have a longer maturity are more volatile than those with shorter maturity.

Therefore, the weighted average maturity of the portfolio of a mutual fund scheme becomes an indicator of the scheme's price risk. Higher the weighted average maturity, more the scheme's NAV is likely to fluctuate in response to changes in market yields.

The calculation of weighted average maturity is illustrated in Table 6.7 for a scheme with debt portfolio of Rs. 255 crore. The weighted column is calculated as Tenor X Proportion for each row.

Table 6.7

Calculation of Weighted Average Maturity

F96 fx =F94/365						
	B	C	D	E	F	G
	Security	Tenor (days)	Value (Rs. Cr.)	Proportion	Weighted Average	
88						
89	Security 1	70	25	9.8%	6.863	
90	Security 2	100	15	5.9%	5.882	
91	Security 3	125	75	29.4%	36.765	
92	Security 4	800	90	35.3%	282.353	
93	Security 5	400	50	19.6%	78.431	
94	Total		255	100.0%	410.294 days	
95						
96	Weighted Average Maturity				1.124 Years	
97						

A liquid fund would have its investments in securities of upto 91 days. Therefore, its weighted average maturity would be less than 0.25 years.

6.2.4 Modified Duration

While maturity influences the price risk in a debt security, a more scientific approach would be to consider its modified duration.

Suppose the modified duration is to be calculated as of January 15, 2012, for a security that offers a coupon of 11% p.a., payable half-yearly, until it matures on January 25, 2014. The security is currently traded in the market at an yield of 11.5%.

The modified duration can be calculated using the MDURATION function in Spreadsheet. This is shown in Table 6.8.

Table 6.8

Calculation of Modified Duration of a Debt Security

C108		fx		=MDURATION(C98,C100,C	
	B		C		D
97					
98	Settlement Date		15-Jan-12		
99					
100	Maturity Date		25-Jan-14		
101					
102	Coupon		11%		
103					
104	Yield		11.50%		
105					
106	Frequency		2.00		
107					
108	Modified Duration		1.68212822		
109					

The implication is that if the yields in the market were to change by 1%, this debt security is likely to change in value by 1.68%.

If the coupon payments were quarterly, the frequency would be shown as 4; annual coupon payment would mean frequency of 1.

In this manner, the modified duration can be calculated for every debt security in the scheme's portfolio. Thereafter, the modified duration for the scheme can be calculated, as shown in Table 6.9.

Table 6.9

Calculation of Modified Duration for Scheme

F116 fx =SUM(F111:F115)					
	B	C	D	E	F
109					
110	Security	Modified Duration	Value (Rs. Cr.)	Proportion	Weighted Average
111	Security 1	0.15	25	9.8%	0.015
112	Security 2	0.18	15	5.9%	0.011
113	Security 3	0.22	75	29.4%	0.065
114	Security 4	1.68	90	35.3%	0.593
115	Security 5	0.91	50	19.6%	0.178
116	Total		255	100.0%	0.861
117					

Higher the modified duration, more sensitive the NAV of a scheme is, to changes in yields in the market.

6.3 Risk Adjusted Returns

Having determined the risk and return, there are various frameworks through which a combined view of the two can be taken for better investment decisions. Some of these are:

6.3.1 Sharpe Ratio

In the example considered in Table 6.4, the compounded return was 13.36%. The annualised standard deviation was calculated to be 8.78% in Table 6.5. Let us say that a risk-free return of 7% would have been possible, if the same money was invested in government bonds.

Thus, by investing in the scheme, the investor earned a return that was higher by 13.36% minus 7% i.e. 6.36%. This is his risk premium, a premium earned for the risk taken.

If the risk premium of 6.36% is divided by the standard deviation of 8.78%, we get a value of 0.72, which is the Sharpe Ratio (Table 6.10)

Table 6.10

Calculation of Sharpe Ratio for Scheme

D127		f_x	=D123/D125	
	B	C	D	E
118				
119	Scheme Return	a	13.36%	
120				
121	Risk-free Return	b	7.00%	
122				
123	Risk Premium	c = a - b	6.36%	
124				
125	Annualised SD of Scheme Returns	d	8.78%	
126				
127	Sharpe Ratio	c ÷ d	0.72	
128				

This indicates that for every unit of risk taken (as measured by standard deviation), the investor earned a return of 0.72%. This is the Sharpe Ratio.

In a comparison of two schemes of the same type, the one with the higher Sharpe Ratio is considered to have delivered superior risk-adjusted returns.

Sharpe Ratio can be used for debt schemes as well as equity schemes.

6.3.2 Sortino Ratio

Standard deviation is calculated on the basis that both positive and negative moves are a risk. A view can be taken that only the negative returns are a risk. Accordingly, the downside deviation can be calculated as the standard deviation of only the negative returns in Table 6.5. This works out to 1.03%. Multiplied by the square root of 12, the annualised downward deviation is calculated to be 3.57%.

The Sortino Ratio is the Risk Premium calculated earlier, divided by the annualised downward deviation i.e. $6.36\% \div 3.57\% = 1.78$.

Within a category of schemes (applicable for both debt and equity schemes), the scheme with the higher Sortino Ratio is viewed as offering a better risk-adjusted return.

6.3.3 Treynor Ratio

The Treynor Ratio is the Risk Premium calculated earlier, divided by the Beta, which was calculated to be 0.98 in Table 6.6. It thus works out to $6.36\% \div 0.98 = 6.47\%$.

As in the case of the previous ratios, a higher Treynor Ratio is indicative of better risk-adjusted return. However, this ratio should ideally be used only for diversified equity portfolios.

6.3.4 Jensen's Alpha

Alpha is a measure of the fund manager's performance.

In the process of managing a non-index scheme, the fund manager may take a risk (as measured by beta) that is different from the market risk; the scheme returns too are likely to be different from the market.

Logically, if the fund manager took a higher risk than the market, he ought to deliver a return that is higher than the market. Alpha compares the return which ought to have been generated (for the risk taken) by the scheme with the return that was actually generated. The difference between the two is out-performance (if actual return is higher) or under-performance (if actual return is lower).

Alpha can be positive or negative. It is calculated using the INTERCEPT function in Spreadsheet, as shown in Table 6.11.

Between two fund managers of competing diversified equity schemes, the one with higher alpha is considered to have delivered better risk adjusted returns.

Table 6.11

Calculation of Jensen's Alpha for Scheme

K144		fx =INTERCEPT(I131:I142,K131:K142)					
	G	H	I	J	K	L	M
128							
	Date	NAV	Periodic Scheme Return	Nifty	Periodic Nifty Return		
129							
130	15-Jan-11	13.50		5000			
131	15-Feb-11	13.75	1.85%	5100	2.00%		
132	15-Mar-11	13.50	-1.82%	5010	-1.76%		
133	15-Apr-11	13.60	0.74%	5050	0.80%		
134	15-May-11	13.65	0.37%	5070	0.40%		
135	15-Jun-11	13.75	0.73%	5100	0.59%		
136	15-Jul-11	13.25	-3.64%	4900	-3.92%		
137	15-Aug-11	13.00	-1.89%	4810	-1.84%		
138	15-Sep-11	13.40	3.08%	4960	3.12%		
139	15-Oct-11	13.75	2.61%	5090	2.62%		
140	15-Nov-11	14.00	1.82%	5180	1.77%		
141	15-Dec-11	14.50	3.57%	5360	3.47%		
142	15-Jan-12	15.25	5.17%	5640	5.22%		
143							
144	Jensen's Alpha				0.03%		
145							

The fund manager of this scheme has demonstrated a minor out-performance of 0.03%.

Points to remember

- Unlike debt, mutual funds cannot work with pre-specified dividend payment dates. Calculating returns with irregular dividend payment dates becomes easier using the XIRR function in Spreadsheet.
- A weakness of the XIRR function is that it assumes that the dividend receipts would have been re-invested at the same XIRR rate. This is a questionable assumption.

SEBI has therefore stipulated that returns should be calculated assuming that the dividends have been re-invested in the same scheme at the Ex-dividend NAV i.e. the NAV after every dividend payment.
- Therefore, at the first stage, one considers the increase in units based on re-investment of dividends at the ex-dividend NAV (including re-investment of higher dividend on account of any earlier re-invested dividends). Based on this, the closing wealth of the investor can be considered. The initial investment is also known. CAGR can be calculated using the compound interest formula.
- The requirement of finding out the dividend rate and the ex-dividend NAV after each dividend and accordingly determining the additional units make the calculation cumbersome. Therefore, the CAGR calculation is more commonly used in statutory communication, such as Scheme Information Document, Performance advertisements etc. In other situations, market intermediaries use the XIRR.
- An alternative is to apply the CAGR on the growth option of the scheme. Since no dividend is declared in the growth option, the cumbersome dividend re-investment calculations are avoided.
- Researchers often work with NAVs at periodic intervals - daily, weekly, monthly etc. The periodic returns are then averaged and compounded.
- The commonly used measures of risk are standard deviation, beta, weighted average maturity and duration.
- Standard deviation is calculated using the STDEV function in Spreadsheet. This calculated value based on periodic returns needs to be multiplied by the square root of the number of periods that represent a year. The result is the annualised standard deviation.
- Standard deviation can be used for equity schemes as well as debt schemes. Higher the standard deviation, most risky the scheme.
- Systematic risk (β) is inherent to equity investments e.g. the risk arising out of political turbulence, inflation etc. It would affect all equities, and therefore cannot be avoided.
- Non-systematic risk is unique to a company e.g. risk that a key pharma compound will not be approved, or the risk that a high performing CEO leaves the company.

- Non-systematic risk can be minimized by holding a diversified portfolio of investments.
- Beta is a measure of systematic risk. It is calculated by applying the SLOPE function in Spreadsheet. The data points are the periodic returns on the scheme and the market.
- Beta is ideally used only for diversified equity schemes. Higher the beta, more risky the scheme.
- Fixed rate debt instruments have a price risk. When interest rates in the market go down fixed rate debt instruments gain value, and vice versa. Instruments that have a longer maturity are more volatile than those with shorter maturity.
- While maturity influences the price risk in a debt security, a more scientific approach would be to consider its modified duration. It is calculated using the MDURATION function in Spreadsheet.
- Higher the modified duration, more sensitive the NAV of a scheme is, to changes in yields in the market.
- Risk premium in a scheme is the return earned on the scheme, minus the risk-free return.
- Sharpe Ratio is the risk premium in a scheme divided by its standard deviation. Higher the Sharpe Ratio of a scheme, better the risk-reward ratio offered by that scheme.
- Standard deviation is calculated on the basis that both positive and negative moves are a risk. A view can be taken that only the negative returns are a risk. Accordingly, the downside deviation can be calculated as the standard deviation of only the negative returns.
- The Sortino Ratio is the Risk Premium divided by the annualised downward deviation.
- Treynor Ratio is the risk premium in a scheme divided by its beta. Higher the Treynor Ratio of a scheme, better the risk-reward ratio offered by that scheme.
- Alpha compares the return which ought to have been generated (for the risk taken) by the scheme with the return that was actually generated. The difference between the two is out-performance (if actual return is higher) or under-performance (if actual return is lower).
- Alpha can be positive or negative. It is calculated using the INTERCEPT function in Spreadsheet.
- Risk adjusted return comparisons should be made between schemes of the same category. It would be wrong to compare one scheme of one type with another scheme of a different type.

Chapter 7 : Cut-off Time Regulations & Time Stamping

When an investor buys or sells shares in the secondary market, there is no financial implication on the company whose shares are being traded or its other shareholders. However, subscription to and re-purchase of units of a mutual fund scheme, affect the financials of the scheme; these transactions therefore affect the scheme's other investors. As discussed in Chapter 4:

- If investors are permitted to subscribe to new units of a scheme at a price lower than their intrinsic value, then the prior investors lose out.
- Similarly, if investors are able to offer their units for re-purchase at a price higher than their intrinsic value, the investors who continue in the scheme are cheated.
- If investors subscribe to or re-purchase units at their intrinsic value, then neither the prior investors nor the continuing investors are adversely affected.

The intrinsic value of the units of a scheme, as seen in Chapter [4], is its NAV. The NAV however keeps changing. The schemes declare their NAV every day.

- Allowing an investor to invest at yesterday's NAV, if the market has gone up today, is again unfair.
- Similarly, it would be unfair to allow an investor to offer his units for re-purchase at yesterday's NAV, after the investor has seen a decline in the market today.

Therefore, the day whose NAV the investor gets - the day of the transaction, or a preceding or succeeding day - too is material. A few operational factors compound the problem:

- The scheme may receive a cheque for subscription to new units on Day T. But the money will be received in the scheme's bank accounts only on Day T+1 or Day T+2. By then, the market may change.
- Banks may credit the money into the account as of a "value date". But the funds may be available for investment by the scheme, only on the following day.
- Unscrupulous investors may bounce their subscription cheque if they see the market going down after the application for subscription has been sent.

Considering all these dynamics, SEBI has mandated detailed regulations on the applicable NAV for investors' transactions with various types of schemes in different situations. The applicable NAV depends on whether or not the investor's application for subscription / re-purchase was received before the specified "cut-off" timing. This is applicable to all mutual funds. It is to be uniformly applied to all investors. The only exceptions are:

- International funds
- Transactions in Mutual Fund units undertaken on a recognized Stock Exchange

Mutual Funds have to ensure that each payment instrument for subscription or purchase of units is deposited in a bank expeditiously by utilization of the appropriate banking facility. AMCs have to compensate any loss occasioned to any investor or to the scheme and/or plan on account of non-compliance.

Mutual Funds need to calculate NAV for each calendar day for their liquid fund schemes and plans.

7.1 Cut off Timing

7.1.1 Liquid Schemes & Plans - Subscriptions

The following NAVs are to be applied:

- Where the application is received upto 2.00 p.m. on a day and funds are available for utilization before the cut-off time without availing any credit facility, whether, intra-day or otherwise - the closing NAV of the day immediately preceding the day of receipt of application;
- Where the application is received after 2.00 p.m. on a day and funds are available for utilization on the same day without availing any credit facility, whether, intra-day or otherwise - the closing NAV of the day immediately preceding the next business day; and
- Irrespective of the time of receipt of application, where the funds are not available for utilization before the cut-off time without availing any credit facility, whether, intra-day or otherwise - the closing NAV of the day immediately preceding the day on which the funds are available for utilization.

“Business Day” does not include a day on which the money markets are closed or otherwise not accessible.

For allotment of units in respect of purchase in liquid schemes, it has to be ensured that:

- Application is received before the applicable cut-off time.
- Funds for the entire amount of subscription/purchase as per the application are credited to the bank account of the respective liquid schemes before the cut-off time.
- The funds are available for utilization before the cut-off time without availing any credit facility whether intra-day or otherwise, by the respective liquid schemes.

For allotment of units in respect of switch-in to liquid schemes from other schemes, it has to be ensured that:

- Application for switch-in is received before the applicable cut-off time.

- Funds for the entire amount of subscription/purchase as per the switch-in request are credited to the bank account of the respective switch-in liquid schemes before the cut-off time.
- The funds are available for utilization before the cut-off time without availing any credit facility whether intra-day or otherwise, by the respective switch-in schemes.

7.1.2 Liquid Schemes & Plans - Re-Purchases

The following NAVs are to be applied:

- Where the application is received up to 3.00 pm - the closing NAV of day immediately preceding the next business day; and
- Where the application is received after 3.00 pm - the closing NAV of the next business day.

7.1.3 Other than Liquid Schemes & Plans - Subscriptions

The following NAVs are to be applied:

- Where the application is received up to 3.00 pm with a local cheque or demand draft payable at par at the place where it is received - closing NAV of the day on which the application is received;
- Where the application is received after 3.00 pm with a local cheque or demand draft payable at par at the place where it is received - closing NAV of the next business day; and
- Where the application is received with an outstation cheque or demand draft which is not payable on par at the place where it is received - closing NAV of day on which the cheque or demand draft is credited.

In respect of purchase of units in Income/ Debt oriented schemes (other than liquid fund schemes and plans) with amount equal to or more than Rs. 1 crore, irrespective of the time of receipt of application, the closing NAV of the day on which the funds are available for utilization is applicable.

For allotment of units in respect of purchase in income/debt oriented mutual fund schemes/ plans other than liquid schemes, it has to be ensured that:

- Application is received before the applicable cut-off time (3 pm).
- Funds for the entire amount of subscription/purchase as per the application are credited to the bank account of the respective schemes before the cutoff time (3 pm).
- The funds are available for utilization before the cut-off time (3 pm) without availing any credit facility whether intra-day or otherwise, by the respective scheme.

For allotment of units in respect of switch-in to income/debt oriented mutual fund schemes/ plans other than liquid schemes from other schemes, it has to be ensured that:

- Application for switch-in is received before the applicable cut-off time.
- Funds for the entire amount of subscription/purchase as per the switch-in request are credited to the bank account of the respective switch-in income/debt oriented mutual fund schemes/plans before the cut-off time.
- The funds are available for utilization before the cut-off time without availing any credit facility whether intra-day or otherwise, by the respective switch-in income/debt oriented mutual fund schemes/plans.

7.1.4 Other than Liquid Schemes & Plans - Re-purchases

The following NAVs are to be applied:

- Where the application is received up to 3.00 pm - closing NAV of the day on which the application is received; and
- An application received after 3.00 pm - closing NAV of the next business day.

7.2 Official Points of Acceptance (PoA)

In order to ensure transparency in capturing the timing, SEBI has mandated official points of acceptance for receipt of these applications. Application from investors are to be received by mutual funds only at the official points of acceptance, addresses of which have to be disclosed in the SID and on Mutual Funds' websites.

The Official PoA are typically offices of the AMC and RTA. Offices of the DP can also be an Official PoA for re-purchase transactions. Offices of stock exchange brokers can be Official PoA for transactions routed through the stock exchange.

7.3 Time Stamping Requirements

- For every machine, running serial number has to be stamped from the first number to the last number as per its capacity before repetition of the cycle.
- Every application for purchase is to be stamped on the face and the corresponding payment instrument is to be stamped on the back indicating the date and time of receipt and the running serial number. The application and payment instrument should contain the same serial number.
- Every application for redemption has to be stamped on the face and on the investor's acknowledgment copy (or twice on the application if no acknowledgment is issued) indicating the date and time of receipt and running serial number.
- Different applications can not be bunched together with the same serial number.

- Blank papers should not be time stamped. Genuine errors, if any, are to be recorded with reasons and the corresponding applications requests are to be preserved.
- The time stamping machine should have a tamper proof seal and the ability to open the seal for maintenance or repairs must be limited to vendors or nominated persons of the mutual fund, to be entered in a proper record.
- Breakage of seal and/or breakdown of the time stamping process has to be duly recorded and reported to the Trustees.
- Every effort should be made to ensure uninterrupted functioning of the time stamping machine.

In case of breakdown, the mutual funds have to take prompt action to rectify the situation. During the breakdown period, mutual funds need to adopt an alternative time stamping method that has already been approved by the Board of the AMC and the Trustee(s).

An audit trail should be available to check and ensure the accuracy of the time stamping process during the said period.

- Any alternate mode of application that does not have any physical or electronic trail needs to be converted into a physical piece of information and time stamped in accordance with the time stamping guidelines.
- Mutual Funds need to maintain and preserve all applications/ requests, duly time stamped, at least for a period of eight years. They should be able to produce them as and when required by SEBI or auditors appointed by SEBI.

Points to remember

- If investors are permitted to subscribe to new units of a scheme at a price lower than their intrinsic value, then the prior investors lose out.
- Similarly, if investors are able to offer their units for re-purchase at a price higher than their intrinsic value, the investors who continue in the scheme are cheated.
- If investors subscribe to or re-purchase units at their intrinsic value, then neither the prior investors nor the continuing investors are adversely affected.
- The applicable NAV for a transaction depends on whether or not the investor's application for subscription / re-purchase was received before the specified "cut-off" timing. This is applicable to all mutual funds. It is to be uniformly applied to all investors. The only exceptions are:
 - o International funds
 - o Transactions in mutual fund units undertaken on a recognized Stock Exchange

- Where the application is received in a liquid scheme by 2.00 p.m. and funds are available for utilization before the cut-off time on the same day, units will be allotted based on the closing NAV of the day immediately preceding the day of receipt of application.
- Where the application is received in a liquid scheme after 2.00 p.m. and funds are available for utilization on the same day units are allotted based on the closing NAV of the day immediately preceding the next business day.
- Irrespective of the time of receipt of application in a liquid scheme, where the funds are not available for utilization before the cut-off time, units are allotted at the closing NAV of the day immediately preceding the day on which the funds are available for utilization.
- Where re-purchase application is received up to 3.00 pm, it is effected at the closing NAV of day immediately preceding the next business day.
- Where re-purchase application is received after 3.00 pm, it is effected at the closing NAV of the next business day.
- Where the application is received in a non-liquid scheme up to 3.00 pm with a local cheque or demand draft payable at par at the place where it is received, units are allotted at the closing NAV of the day on which the application is received.
- Where the application is received in a non-liquid scheme after 3.00 pm with a local cheque or demand draft payable at par at the place where it is received, units are allotted at the closing NAV of the next business day.
- In respect of purchase of units in Income/ Debt oriented schemes (other than liquid fund schemes and plans) with amount equal to or more than Rs. 1 crore, irrespective of the time of receipt of application, units are allotted at the closing NAV of the day on which the funds are available for utilization.
- Where re-purchase application is received for a non-liquid scheme up to 3.00 pm, it is effected at the closing NAV of the day on which the application is received.
- If re-purchase application is received for a non-liquid scheme after 3.00 pm, it is effected at the closing NAV of the next business day.
- In order to ensure transparency in capturing the timing, SEBI has mandated official points of acceptance for receipt of these applications.
- The Official PoA are typically offices of the AMC and RTA. Offices of the DP can also be an Official PoA for re-purchase transactions. Offices of stock exchange brokers can be Official PoA for transactions routed through the stock exchange.
- Mutual Funds need to maintain and preserve all applications/ requests, duly time stamped, at least for a period of eight years.

Chapter 8 : Investment in Mutual Funds through NSE

National Stock Exchange (NSE) offers a low-cost distribution reach across the country. Therefore, the role of brokers in mutual fund distribution has been increasing. The involvement of NSE brokers in different contexts is discussed below.

8.1 Listed Schemes

Under SEBI regulations, close-ended schemes are to be mandatorily listed. This is equally applicable for debt and equity schemes. The only exception is Equity Linked Savings Schemes (ELSS) schemes, which are not listed during the first three years after NFO. This is because investors in ELSS are not permitted to sell their units for three years.

The difference in transactions between open-end and close-ended schemes is important to understand:

- Acquisition of Units by the Unit-holder
 - In an open-end scheme, the units are newly created by the scheme. This is called a “sale” transaction. It happens at the NAV.
 - In a close-ended scheme, the pre-existing units change hands. It happens at a price that is discovered in the stock exchange.
- Extinguishment of Unit-holding
 - In an open-end scheme, the unit-holder offers his units for “re-purchase”. This is effected at the NAV less Exit Load (if applicable). On re-purchase, the units are cancelled.

The exit load, in percentage terms, is frozen when the unit-holder acquires the units. It may be different for different investors. For the same investor, the percentage may be different for various unit holdings in the same scheme, depending on when they were acquired.

Suppose an investor acquired 100 units of a scheme at Rs. 12 per unit on January 1, 2010 when the applicable exit load was 1%. 50 units were redeemed on June 6, 2011, when NAV was Rs. 15; balance was redeemed on October 5, 2011, when NAV was Rs. 17.

- The redemption price on June 6, 2011 for this investor would be Rs. 15 less 1% i.e. Rs. 14.85 per unit. The exit load is Rs. 0.15 per unit.
- The redemption price on October 5, 2011 for the same investor for the units (that were bought on the same day as the previous lot of units) would be

Rs. 17 less 1% i.e. Rs. 16.83 per unit. The exit load is Rs. 0.17 per unit. To clarify, the exit load is frozen in percentage terms, and is applied on the NAV on the re-purchase date.

- On the same day, another investor may have offered units for re-purchase. Suppose these units were acquired on a date other than January 1, 2010. On the acquisition date, the applicable exit load was 0.20%. The re-purchase price for this investor would be Rs. 17 less 0.20% i.e. Rs. 16.966 per unit.
- In a close-ended scheme, the unit-holder sells the units to some counter-party at a price that is determined in the stock exchange. The units continue to exist. Only the name of the unit-holder changes in the scheme records.

Listed schemes (typically, close-ended) are traded through NSE's trading system, like any other securities. Buyers and sellers enter their orders through their respective Trading Members (TM). The system matches orders based on price and time priority. If a match is found, a trade is generated. The TM earns a brokerage as per the terms of the contract with the client.

NSE's Mutual Fund Service System (MFSS, discussed below) facilitates order collection (sale and re-purchase) for open-end schemes.

8.2 Exchange Traded Funds (ETFs)

Like any share or close-ended scheme, ETFs are listed on the exchange. Therefore, Trading Members at the NSE can help clients buy and sell ETFs as part of their normal services.

Besides, market makers in ETF can benefit from two other streams of income:

- The buy-sell spread arising out the market making operations. If the market maker buys units from investors at Rs. 50.00 per unit, and sells units to investors at Rs. 50.60 per unit, a spread of Rs. 0.60 is earned for every unit so traded.
- Large investors subscribing to the ETF directly with the scheme, or offering their units for re-purchase to the scheme, will need to give or receive index securities in the same proportion as the index. There is scope to earn a brokerage, when these investors buy or sell index securities as part of the subscription or re-purchase.

Each ETF unit is defined to be equivalent to a certain proportion of the underlying index. For example, 100 ETF Units = 1 Nifty. In that case, if the Nifty is at 6,000, then the intrinsic value of each ETF Unit is Rs. 60.

Since large investors may choose to transact directly with the scheme, the trading volumes in the exchange can get low in the case of some ETFs. Low liquidity disrupts the price discovery mechanism, on account of which the ETF units may trade at a price that is not

in synch with its intrinsic value. The risk involved in buying ETF units at prices higher than its intrinsic worth needs to be recognised; so also, selling ETF units at prices lower than its intrinsic worth may lead to opportunity loss.

8.3 Mutual Fund Service System (MFSS)

NSE launched India's first Mutual Fund Service System (MFSS) on November 30, 2009. Using NEAT MFSS, an investor can subscribe or redeem units of a mutual fund scheme, through eligible members of NSE.

Trading members of NSE who are ARN holders, and who have passed the Mutual Fund Distributor certification examination of National Institute of Securities Market (NISM Series VA MFD) are eligible to participate in NEAT MFSS. They are called participants.

NEAT MFSS is open for trading between 9 a.m. and 3 p.m. on all business days of the capital market segment. Participants can make the service available for their registered clients.

Participants need to open a separate Bank account with any of the Clearing Banks identified by the Clearing Corporation. This will be the designated bank account for transactions under MFSS. Pay-in of funds for subscription is to be done through the designated bank accounts on T+1 basis, as per time lines specified by the Clearing Corporation.

Participants can choose between Physical mode and depository mode while capturing subscription / redemption requests on the MFSS. Securities settlement is effected through the RTA (if physical mode) or through the Depository (if Demat mode).

The steps in the transactions are as follows:

8.3.1 Subscription (Physical mode)

o T-Day activities

- Investor has to submit the following documents/details along with clear funds to the Participant:

- Completed and Signed respective scheme Application Form ▪

Copy of PAN Card of first holder

- Copy of PAN Card of each additional holder in case of joint investment /either or survivor basis
 - Copy of KYC acknowledgement of all holders
 - Copy of Guardian's PAN Card in case investment is on behalf of minor ▪

Folio No. in case the subscription is an additional purchase.

- The Participant verifies the application for mandatory details including PAN details and KYC compliant acknowledgment issued by CVL.
- After completing the verification, Participant enters the subscription order on the MFSS front-end system with the option of 'Physical' settlement.
 - The folio No (if available) is captured on the MFSS front-end.
 - The MFSS identifies each scheme uniquely in terms of Symbol & Series. ▪

Subscription orders are created in terms of Amount.

 - Once the order is created, system generates a unique confirmation No. for the order.
- The investor receives a confirmation slip from the Participant. It contains unique confirmation number and date and time stamp of order entry generated from the MFSS system. Till the Participant provides allotment details to the investor, the order confirmation slip is proof of the transaction.
 - On allotment, the investor will receive Statement of Account from the RTA directly.
- The Participant writes the unique confirmation number on the physical documents and delivers the same at any of the RTA /AMC offices as may be intimated from time to time.
- Exchange validates the transactions on T day evening with the RTA, and any discrepancy in the transaction details is informed to the Participant on the same day evening.
- The Clearing Corporation provides the Participants with funds obligation report end of day for all the valid transactions.
- T+1 Day activities
 - The Clearing Corporation of the Exchange debits the designated clearing bank account of the Participants for the required funds obligation on T+1 morning.
 - In case of shortage, the concerned Participant is provided an opportunity to identify transactions and provide details of the transactions for which payments have been received and transactions for which payments have not been received.
 - The fund collected from the bank account of the Participant is compared with the details provided by the Participant on the payment received status.
 - If the funds collected from the bank account of the Participant covers the details of the payments received as provided by the Participant, the same is further processed.

- Wherever the funds collected from the bank account falls short of the amount indicated in the details provided by the Participant, the details are considered defective and are not further processed. In such cases, the funds collected, if any, are returned to the designated bank account of the Participant.
- The Exchange / Clearing Corporation takes appropriate action including penalty on participants who fail to fulfil their funds obligation as required.
- The Exchange notifies RTA for all such defective transactions and rejections due to non-payment of funds.
- The RTA reverses such transactions for respective Participants. Transactions for other Participants who have fulfilled their funds obligations are processed by the RTA.
- The RTA intimates the allotment details for accepted transactions including folio numbers.
- Allotment information is provided to the Participants so that they can provide allotment details to the investor.

8.3.2 Subscription (Demat mode)

o T-Day activities

- The order is placed like a normal secondary market activity. The investor provides the depository account details along with PAN details to the Participant. KYC performed by DP is considered compliance with applicable requirements.
- Participant enters the subscription order on the MFSS front-end system with the option of 'Depository' settlement.
 - MFSS identifies each scheme uniquely in terms of Symbol & Series. ▪
 Subscription orders are created in terms of Amount.
 - Once the order is created, system generates a unique confirmation number for the order.
- The investor receives a confirmation slip from the Participant. It contains unique confirmation number and date and time stamp of order entry, generated from the MFSS system. Till the Participant provides allotment details to the investor, the order confirmation slip is proof of the transaction.
 - Demat statement given by depository participant is deemed to be adequate compliance of the requirement of Statement of Account.
- Exchange validates the transactions on T day evening with the RTA as well as the depository. Any discrepancy in the transaction details is informed to the Participant on the same day evening.

- The Clearing Corporation provides the Participants with funds obligation report end of day for all valid transactions.
- o T+1 Day activities
 - The Clearing Corporation of the Exchange debits the designated clearing bank account of the Participants for the required funds obligation on T+1 morning.
 - In case of shortage, the concerned Participant is provided an opportunity to identify transactions and provide details of the transactions for which payments have been received and transactions for which payments have not been received.
 - The fund collected from the bank account of the Participant is compared with the details provided by the Participant on the payment received status.
 - If the funds collected from the bank account of the Participant covers the details of the payments received as provided by the Participant, the same is further processed.
 - Wherever the funds collected from the bank account falls short of the amount indicated in the details provided by the Participant, the details are considered defective and are not further processed. In such cases, the funds collected, if any, are returned to the designated bank account of the Participant.
 - The Exchange / Clearing Corporation takes appropriate action including penalty on participants who fail to fulfil their funds obligation as required.
 - The Exchange notifies RTA for all such defective transactions and rejections due to non-payment of funds.
 - The RTA reverses such transactions for respective Participants. Transactions for other Participants who have fulfilled their funds obligations are processed by the RTA.
 - The RTA intimates the allotment details for the accepted transactions including folio numbers.
 - Allotment information is provided to the Participants so that they can provide allotment details to the investor.
 - RTA credits the units to the pool account of the Participant, who will credit the depository account of the investor if payment has been received.

8.3.3 Redemption (Physical Mode)

- o T-Day activities
 - Investor has to submit the following documents/details to the Participant:
 - Completed and Signed redemption request, stating the folio number.
 - Copy of PAN Card of first holder

- Copy of PAN Card of each additional holder in case of joint investment
- Copy or allotment statement / holding statement/ SOA displaying the scheme holdings to be redeemed
- Copy of Guardians PAN Card in case investment is on behalf of minor
- The Participant verifies the application for mandatory details, investor identity and verifies the signature on the application against the PAN signature of the signatory
- After completing the application verification, the Participant enters the redemption order on the MFSS system with the option of 'Physical' settlement.
 - The MFSS identifies each scheme uniquely in terms of Symbol & Series.
 - For physical orders the folio No is captured on the MFSS front-end.
 - Redemption orders are created either in terms of Amount or Quantity for physical settlement.
 - Once the order is created system generates a unique confirmation No. for the order.
- The investor receives a confirmation slip from the Participant. It contains unique confirmation number generated from the MFSS front-end system. This is proof of the transaction for the investor till the redemption proceeds are received from the registrar.
- The Participant writes the unique confirmation number on the physical documents and delivers the same at any of the RTA /AMC offices as may be intimated from time to time.
- Exchange validates the transactions on T day evening with the RTA and any discrepancy in the transaction details in terms of folio number etc. is informed to the Participant on the same day evening.
- o T+1 Day activities
 - RTA carries out the redemption processing at its end and provides final redemption information to the Exchange on T+1.
 - The file contains information about valid and rejected redemption orders.
 - For successful redemptions, the file contains the redemption NAV, units redeemed, redemption amount, STT (if any).
 - Redemption information is provided to the Participants through files so that they can provide Redemption details to the investor.
 - The redemption proceeds are directly sent by RTA through appropriate payment mode such as direct credit, NEFT or cheque as decided by AMC from time to time, as per the bank account details recorded with the RTA.

- It is the primary responsibility of the Participant to ensure completeness of the documents including filling up of the all Key fields by the investor before accepting the same for processing.
- It is also the responsibility of the Participant to ensure identity and authentication of signature affixed based on the original PAN shown at the time of accepting the redemption application form. In case of joint holding, this is to be ensured by the Participant for all holders.
- In case the subscription application form has not reached to the RTA, the redemption request for such subscription will not be taken by the RTA and shall be rejected.

8.3.4 Redemption (Demat Mode)

o T-Day activities

- Investor places order for redemption as currently followed for secondary market activities. The investor provides their depository account details along with PAN details to the Participant. The investor also provides their Depository Participant with Depository instruction slip (a copy of which is to be provided to the participant at the time of placing the redemption request) with relevant units to be credited to Clearing Corporation pool account same day before 4.30 p.m.
- The Participant enters the redemption order on the MFSS system with the option of 'Demat' settlement.
 - The MFSS identifies each scheme uniquely in terms of Symbol & Series. ▪
 Redemption orders are created only in quantity.
 - Once the order is created system generates a unique confirmation No. for the order.
- The investor receives a confirmation slip from the Participant. It contains unique confirmation number generated from the MFSS front-end system. This is proof of the transaction for the investor till the redemption proceeds are received from the registrar.
- Exchange validates the transactions on T day evening with the RTA and any discrepancy in the transaction details in terms of DP Id etc.is informed to the Participant on the same day evening.
- Subsequent to the validation, Clearing Corporation will provide valid orders to depository to validate the delivery instructions (DIS) received from the investor and accept units received if they are equal to the valid transactions. The units thus received will be credited to the beneficiary account of the AMC(s) by the Clearing Corporation.

- For all units received through the depository system as above, the Exchange will inform the RTA same day with details of the addresses and bank mandate as captured on the depository system.
- o T+1 Day activities
 - RTA carries out the redemption processing at its end and provides final redemption information to the Exchange on T+1.
 - The file contains information about valid and rejected redemption orders.
 - For successful redemptions, the file contains the redemption NAV, units redeemed, redemption amount, STT (if any).
 - Redemption information is provided to the Participants through files so that they can provide Redemption details to the investor.
 - The redemption proceeds are directly sent by RTA through appropriate payment mode such as direct credit, NEFT or cheque as decided by AMC from time to time, as per the bank account details recorded with the depository.
 - The units will be extinguished by the RTA from the beneficiary account of the AMC(s)

a) The typical MFSS calendar is as follows:

Activity	Timings
T day	
Order capture for subscription and redemption on the MFSS	9.00 a.m. - 3.00 p.m
Subscription and redemption Order status report and Final funds obligation statement	5.30 p.m.
T+1 day	
Pay-in of funds	8.30 a.m.
Payment received and payment not received indication by Participants to Clearing Corporation	9.30 a.m.
Allotment and redemption information from RTA	2.00 p.m.
Credit in the depository account of the investor	End of day process at Depository
Redemption credit in the investor bank account/cheque dispatch	As per the current Mutual fund time lines adhered to by the RTA
In case of any dispute between the Participant and the investor arising out of the MFSS, the Exchange provides support for speedy redressal of the dispute through the Investor Grievance Cell.	

Points to remember

- Under SEBI regulations, close-ended schemes are to be mandatorily listed. This is equally applicable for debt and equity schemes. The only exception is ELSS schemes, which are not listed during the first three years after NFO.

- In an open-end scheme, the units are newly created by the scheme. This is called a “sale” transaction. It happens at the NAV.
- In a close-ended scheme, the pre-existing units change hands. It happens at a price that is discovered in the stock exchange.
- In an open-end scheme, the unit-holder offers his units for “re-purchase”. This is effected at the NAV less Exit Load (if applicable). On re-purchase, the units are cancelled.
- In a close-ended scheme, the unit-holder sells the units to some counter-party at a price that is determined in the stock exchange. The units continue to exist. Only the name of the unit-holder changes in the scheme records.
- Listed schemes (typically, close-ended) are traded through NSE’s trading system (National Exchange for Automated Trading), like any share. Buyers and sellers enter their orders through their respective Trading Members (TM). The system matches orders based on price and time priority. If a match is found, a trade is generated. The TM earns a brokerage as per the terms of the contract with the client.
- NSE’s Mutual Fund Service System (MFSS) facilitates order collection (sale and re-purchase) for open-end schemes.
- Like any share or close-ended scheme, ETFs are listed in the exchange. Therefore, TM in the NSE can help clients buy and sell ETFs as part of their normal services.
- Trading members of NSE who are ARN holders, and who have passed the Mutual Fund Distributor certification examination of National Institute of Securities Market (NISM Series VA MFD) are eligible to participate in NEAT MFSS.
- NEAT MFSS is open for trading between 9 a.m. and 3 p.m. on all business days of the capital market segment. Securities settlement is effected through the RTA (if physical mode) or through the Depository (if Demat mode).
- In case of any dispute between the Participant and the investor arising out of the MFSS, the Exchange provides support for speedy redressal of the dispute through the Investor Grievance Cell.

Chapter 9 : Non-Resident Investment in Indian MF Schemes

Non-Resident Indians (NRI) and Persons of Indian Origin (PIO) have been allowed to invest in Indian mutual fund schemes for long. Foreign Institutional Investors (FIIs) registered with SEBI too are permitted to invest. The FIIs can open a sub-account to facilitate investment by other non-residents.

In his budget speech in February 2011, the Hon. Finance Minister made the following announcement:

“Currently, only FIIs and sub-accounts registered with the SEBI and NRIs are allowed to invest in mutual fund schemes. To liberalise the portfolio investment route, it has been decided to permit SEBI registered Mutual Funds to accept subscriptions from foreign investors who meet the KYC requirements for equity schemes. This would enable Indian Mutual Funds to have direct access to foreign investors and widen the class of foreign investors in Indian equity market.”

In August 2011, SEBI, in consultation with the RBI, came out with the operating guidelines for such direct investment by foreigners in Indian mutual fund schemes.

The provisions regarding investment operations by different kinds of non-residents are as follows:

9.1 Investment by NRIs / PIOs

Mutual funds have general permission to offer units of Indian mutual fund schemes to NRIs / PIOs.

NRI is an Indian citizen or a foreign citizen of Indian origin (other than a citizen of Pakistan or Bangladesh) who stays abroad for employment, or for carrying on business or vocation or under circumstances indicating an intention to stay abroad for an uncertain duration. A person is deemed to be of Indian origin if he/she or either of his/her parents or any of his / her grandparents were born in undivided India.

No special permissions are required from RBI for NRIs / PIOs to invest or redeem the investments. However, the investor would need to comply with the KYC requirements. KYC compliant NRIs / PIOs may invest through either of the following routes:

9.1.1 Repatriable basis

The investment needs to be in convertible currency. The NRI / PIO can invest through an inward remittance through normal banking channels, or by debit to Non-Resident External (NRE) or Foreign Currency Non-Resident account of the investor.

The re-purchase proceeds as well as dividends can be repatriated abroad.

9.1.2 Non-Repatriable basis

The investment does not need to be in convertible currency. Normally, the investment happens through debit to Non-Resident Ordinary (NRO) account of the investor.

The re-purchase proceeds cannot be repatriated. However, dividends can be repatriated abroad.

The non-resident can execute a power of attorney (PoA) in favour of a resident, to make it convenient to handle the paper work. The PoA would need to be notarized. Further, the granter (the non-resident granting the power) and the attorney (the resident to whom the power is being given) need to comply with KYC requirements.

Most mutual funds also provide the facility of investing online. To avail of this, the investor will need an internet-enabled bank account.

9.2 Investment by Foreign Institutional Investors

FII means an institution established or incorporated outside India, which proposes to make investments in Indian securities and is registered with SEBI.

Pension Funds, Mutual Funds, Investment Trusts, Insurance or reinsurance companies, Banks, Endowments, University Funds, Foundations, Charitable Trusts or Charitable Societies based abroad are permitted to register as FIIs with SEBI.

Asset Management Companies, Institutional Portfolio Managers, Trustees and Power of Attorney Holders proposing to invest on behalf of broad-based funds too are eligible to register as FII.

Broad Based Fund means a fund established or incorporated outside India, which has at least twenty investors with no single individual investor holding more than 10% shares or units of the fund.

The institution has to apply for FII registration with SEBI, which will forward one copy of the application to RBI. On receipt of RBI consent, and subject to SEBI-registration, the FII can open a foreign currency denominated as well as rupee denominated bank account in India. It will also have to tie up with a domestic custodian.

SEBI-registered FIIs are permitted to invest, on repatriable basis, in units of mutual funds, securities in primary and secondary markets including shares, debentures and warrants of companies, dated Government Securities, derivatives traded on a recognized stock exchange and Commercial Papers.

9.3 Investment by Qualified Foreign Investors

Foreign investors other than NRIs / PIOs and FIIs, who fulfil the norms for direct investment in Indian mutual fund schemes, are termed Qualified Foreign Investors (QFIs). They are allowed to invest in both debt and equity schemes.

QFI is defined to mean a person (not resident in India), who is resident in a country that is compliant with Financial Action Task Force (FATF) standards, and that is a signatory to International Organization of Securities Commission's (IOSCO's) Multilateral Memorandum of Understanding (MMOU).

"Person" under Section 2(31) of the Income Tax Act, 1961 includes:

- (i) an individual,
 - (ii) a Hindu undivided family,
 - (iii) a company,
 - (iv) a firm,
 - (v) an association of persons or a body of individuals, whether incorporated or not,
 - (vi) a local authority, and
 - (vii) every artificial juridical person, not falling within any of the preceding sub-clauses.
- Under the Income Tax Act, 1961 an individual is said to be "resident in India" for any previous year if he:

- (a) is in India in that year for a period or periods amounting in all to one hundred and eighty-two days or more; or
- (b) having within the four years preceding that year been in India for a period or periods amounting in all to three hundred and sixty-five days or more, is in India for a period or periods amounting in all to sixty days or more in that year.

A company is said to be resident in India in any previous year, if-

- (i) it is an Indian company; or
- (ii) during that year, the control and management of its affairs is situated wholly in India.

A Hindu undivided family, firm or other association of persons is said to be resident in India in any previous year in every case except where during that year the control and management of its affairs is situated wholly outside India.

"Resident" in a country, other than India, means resident as per the direct tax laws of that country.

The FATF (www.fatf-gafi.org) is an inter-governmental body whose purpose is the development and promotion of national and international policies to combat money laundering and terrorist financing. It is a 'policy-making body' that works to generate the necessary political will to bring about legislative and regulatory reforms in these areas.

The FATF has 36 members, including 2 regional organisations - European Commission (EC) and Gulf Co-operation Council (GCC). The full list of members is as follows:

Argentina	Greece	Norway
Australia	GCC	Portugal
Austria	Hong Kong, China	Republic of Korea
Belgium	Iceland	Russian Federation
Brazil	India	Singapore
Canada	Ireland	South Africa
China	Italy	Spain
Denmark	Japan	Sweden
European Commission	Kingdom of Netherlands	Switzerland
Finland	Luxembourg	Turkey
France	Netherlands	United Kingdom
Germany	New Zealand	United States

The IOSCO's objectives are:

- to cooperate in developing, implementing and promoting adherence to internationally recognised and consistent standards of regulation, oversight and enforcement in order to protect investors, maintain fair, efficient and transparent markets, and seek to address systemic risks;
- to enhance investor protection and promote investor confidence in the integrity of securities markets, through strengthened information exchange and cooperation in enforcement against misconduct and in supervision of markets and market intermediaries; and
- to exchange information at both global and regional levels on their respective experiences in order to assist the development of markets, strengthen market infrastructure and implement appropriate regulation.

IOSCO's website (www.iosco.org) features a list of its 115 ordinary members (including SEBI), 11 associate members (including India's Forward Markets Commission) and 75 affiliate members (including NSE). Their MMOU sets an international benchmark for crossborder co-operation critical to combating violations of securities and derivatives laws. The website has a list of 80 signatories to the MMOU, including India's SEBI.

MFs have to ensure that QFIs meet the KYC requirements as per the FATF standards, Prevention of Money Laundering Act, 2002(PMLA) rules and regulations made there under, and SEBI circulars issued in this regard before accepting subscriptions from QFIs. They also have to deduct tax, as applicable, from the redemption proceeds of QFIs.

The investment ceiling applicable is as follows:

- Total overall ceiling of US \$10 billion for investment by QFIs in equity schemes
- Total overall ceiling of US \$3 billion (within the existing ceiling of USD 25 billion for FII investment in corporate bonds issued by infrastructure companies) for investments by QFIs in debt schemes which invest in infrastructure debt of minimum residual maturity of 5 years.

For this purpose, the definition of infrastructure under the RBI's ECB guidelines would be applicable.

- Once the QFI investment reaches US\$ 8 billion in equity schemes and US\$2.5 billion in debt schemes, the remaining limit is proposed to be auctioned by SEBI through a bidding process.

QFI investment is permitted through two routes as follows:

9.3.1 Direct Route (Demat)

- Three parties are envisaged in this route - the QFI, qualified DP and the MF.
- A SEBI-registered DP has to fulfill the following conditions to become a qualified DP:
 - Paid up capital of Rs.50 crore or more
 - Be either a clearing bank or clearing member of any of the clearing corporations
 - Have appropriate arrangements for receipt and remittance of money with a designated Authorised Dealer (AD) Category - I bank
 - Demonstrate that it has systems and procedures to comply with the FATF Standards, PMLA and SEBI circulars issued from time to time
 - Obtain prior approval of SEBI before commencing the activities relating to accepting MF subscription from QFIs
- Qualified DP shall open a demat account for the QFI only after ensuring compliance with all the requirements as per the PMLA, FATF standards and SEBI circulars.
- A QFI is permitted to open only one demat account with any one of the qualified DPs. It shall subscribe and redeem through that DP only.
- For the purpose of account opening, MF can rely on the KYC done by DPs. It has to obtain the relevant records of KYC/ other documents from the DP. Further, the MF has

to comply with PMLA, FATF standards and SEBI circulars issued in this regard from time to time on an ongoing basis.

- The qualified DP needs to open a separate single rupee pool bank account with a designated AD Category -I bank, exclusively for the purpose of investments by QFIs in India.
- The subscription process is as follows:
 - The QFI places the order, mentioning the name of the scheme/MF, with its DP and remits foreign inward remittance through normal banking channel in any permitted currency (freely convertible), directly to the single rupee pool bank account of the DP maintained with a designated AD category - I bank.
 - The DP in turn forwards the order to the concerned MF, and remits the money to the MF's scheme account on the same day as the receipt of funds from the QFI. In case of receipt of money after business hours, DP has to remit the funds to the MF scheme account by the next business day.
 - In the event of a delay, the DP has to immediately return the money to the designated overseas bank account of the QFI.
 - MF processes the order and credits the units into the demat account of the QFI.
 - If, for any reason, the units are not allotted, MF / DP has to ensure that the money is remitted back to the QFI's designated overseas bank account within 3 working days from the date of receipt of subscription of money in the single rupee pool bank account of the DP maintained with a designated AD category I bank.
- The redemption process is as follows:
 - The QFI can redeem, either through Delivery Instruction (physical/ electronic) or any another mode prescribed by the Depositories.
 - On receipt of instruction from QFIs, DP processes the same and forwards the redemption instructions to the MF.
 - Upon receipt of instruction from DP, MF processes the same and credits the single rupee pool bank account of the DP with the redemption proceeds.
 - The DP can make fresh purchase of units of equity and debt schemes of MF (if so instructed by the QFI) out of the redemption proceeds received, provided that payment is made towards such purchase within two working days of receipt of money from MF in the pooled bank account.
 - In case no purchase is made within the said period, the money has to be remitted by the DP to the designated bank overseas account of the QFI, within

two working days from the date of receipt of money from the MF in the pooled bank account.

- In case of dividend payout, the MF credits the single rupee pool bank account of the DP with the dividend amount. The DP in turn will remit the same to the designated bank overseas account of the QFI within two working days from the date of receipt of money from the MF in the DP's rupee pooled bank account.

9.3.2 Indirect Route (Unit Confirmation Receipts - UCR)

- There are four parties involved -the QFI, UCR issuer (based overseas), SEBI registered Custodian (based in India) and the MF.
- MF appoints one or more UCR issuing agents overseas, and one SEBI registered custodian in India. UCR issuer appointed by MF acts as agent of the MF.
- Entities fulfilling the following conditions can be appointed as UCR issuer:
 - The entity is able to demonstrate that it has proven track record, expertise and technology in the business of issuance of global depository receipts/ global custody agency.
 - The entity is registered with an overseas securities market / banking regulator.
- MF has to seek no objection from SEBI before appointing any UCR issuer, and furnish the details and information sought by SEBI about the UCR issuer. SEBI reserves the right to seek additional information / clarification and direct specific action, including non-appointment / revocation of appointment of that UCR Issuing Agent.
- QFIs can subscribe / redeem only through the UCR Issuer.
- The MF mandates the UCR issuer regarding the requirements for KYC, customer due diligence process and documents and information to be collected from the QFIs.
- MF has to obtain the relevant records of KYC/ other documents from the UCR issuer in order to comply with FATF standards, PMLA and SEBI circulars.
- The units of the MF, denominated in rupees, are held as underlying by the custodian in India in demat mode, against which the UCR issuer would issue UCR to the QFIs.
- MF has to ensure that for every UCR issued by the UCR issuer, Custodian in India holds corresponding number of units against it i.e. there will be one unit of MF scheme for every unit of UCR.
- MF will receive money from UCR issuer, either in a foreign country by opening bank account overseas (in accordance with the relevant FEMA regulations), or in Indian rupees in the respective MF scheme account held in India.

- Units purchased and redeemed through a UCR issuer are to be settled on gross basis. Under no circumstances can they be netted against other investors of the UCR issuer.
- If the MF opens a bank account abroad, the investor transactions are as follows:
 - UCR issuer forwards the purchase / subscription order of the QFI to the MF/ Custodian. Upon receipt and transfer of funds to India, the MF issues units to the custodian. The custodian in turn confirms to the UCR Issuer to issue UCR to the QFIs.
 - In case of redemption, the UCR issuer confirms receipt of redemption request to the MF and the Custodian. Upon receipt of instruction, the MF processes the same and transfers the redemption proceeds to the MF's overseas bank account for making payment to the designated overseas bank account of the QFI.
 - In case of dividend payout, the MF transfers the dividend amounts to the MF's overseas bank account for making payment to the designated overseas bank account of the QFI.
- If the MF does not open a bank account abroad, the transactions would flow as follows:
 - UCR issuer forwards the purchase order to the MF and Custodian, and remits the funds into MF scheme account (in rupee terms). Upon receipt of funds; the MF issues units to the custodian. The custodian in turn confirms to the UCR Issuer to issue UCR to the QFI.
 - In case of redemption, the UCR issuer confirms receipt of redemption request to the MF & Custodian. Upon receipt of instruction, the MF processes the request and remits the redemption proceeds to the UCR issuer, which in turn remits the redemption proceeds to the designated bank account of the QFI.
 - In case of dividend payout, the MF remits the dividend amount to the UCR issuer, which in turn remits the dividend amount to the designated bank account of the QFI.

In case of subscription, the MF has to allot units based on the NAV of the day on which funds are realized in the MF's scheme bank account in India. In case of redemption, units are to be redeemed on the day on which transaction slip/instruction is received and time stamped by the MF, as per the applicable cut off time.

The demat / UCR holding by QFIs is non-transferable and non-tradeable. Systematic Investments/ transfer/ withdrawals and switches too are not permitted for QFIs.

The MF/ DP has to:

- Capture the bank account details of the QFIs designated overseas bank account, and ensure that all subscriptions are received from that overseas account and redemption proceeds are also transferred into the same overseas account.
- Ensure that the overseas bank account which QFIs has designated for the purpose is based in countries which are compliant with FATF standards and are signatory to MMOU of IOSCO.
- Ensure that units/ UCRs held by QFIs are free from all encumbrances i.e. pledge or lien cannot be created for such units.
- Get QFIs to submit necessary information for the purpose of obtaining PAN.
- Ensure compliance with laws (rules and regulations) of the jurisdictions where the QFIs are based.
- Ensure that the interests of existing unit holders of the MF schemes are not adversely affected due to the issuance of UCRs/ demat units to the QFIs.

Points to remember

- Non-Resident Indians, Persons of Indian Origin, Foreign Institutional Investors and Qualified Foreign Investors are permitted to invest in Indian mutual fund schemes.
- NRI / PIO can invest on repatriable basis through an inward remittance through normal banking channels, or by debit to Non-Resident External (NRE) or Foreign Currency NonResident account of the investor.
- NRI / PIO can also invest on non-repatriable basis. The investment does not need to be in convertible currency. Normally, the investment happens through debit to Non-Resident Ordinary (NRO) account of the investor. The re-purchase proceeds cannot be repatriated. However, dividends can be repatriated abroad.
- Non-residents can execute a power of attorney (PoA) in favour of a resident, to make it convenient to handle the paper work. The PoA would need to be notarized. Further, the granter (the non-resident granting the power) and the attorney (the resident to whom the power is being given) need to comply with KYC requirements.
- FII means an institution established or incorporated outside India, which proposes to make investments in Indian securities and is registered with SEBI. SEBI-registered FIIs are permitted to invest, on repatriable basis, in Units of mutual funds
- Foreign investors other than NRIs / PIOs and FIIs, who fulfil the norms for direct investment in Indian mutual fund schemes, are termed Qualified Foreign Investors (QFIs). They are allowed to invest in both debt and equity schemes.

- QFI needs to be resident in a country that is compliant with Financial Action Task Force (FATF) standards, and that is a signatory to International Organization of Securities Commission's (IOSCO's) Multilateral Memorandum of Understanding (MMOU).
- MFs have to ensure that QFIs meet the KYC requirements as per the FATF standards, Prevention of Money Laundering Act, 2002 (PMLA) rules and regulations made there under, and SEBI circulars issued in this regard before accepting subscriptions from QFIs. They also have to deduct tax, as applicable, from the redemption proceeds of QFIs.
- QFI investment is permitted through direct route (demat) and indirect route (UCR - Unit Confirmation Receipt).
- Three parties are envisaged in the direct route - the QFI, qualified DP and the MF. Qualified DP shall open a demat account for the QFI only after ensuring compliance with all the requirements as per the PMLA, FATF standards and SEBI circulars.
- There are four parties involved in the indirect route - the QFI, UCR issuer (based overseas), SEBI registered Custodian (based in India) and the MF.
- In case of subscription, the MF has to allot units based on the NAV of the day on which funds are realized in the MF's scheme bank account in India. In case of redemption, units are to be redeemed on the day on which transaction slip/ instruction is received and time stamped by the MF, as per the applicable cut off time.
- The demat / UCR holding by QFIs is non-transferable and non-tradeable. Systematic Investments/ transfer/ withdrawals and switches too are not permitted for QFIs.

Chapter 10 : Investment by Indians in International MF Schemes

In the globalised world of investments, capital flows significantly and quickly between countries. Traditionally, India viewed itself as a capital-scarce and foreign currency-scarce country. Therefore, while investments from abroad into the country were welcomed, investments abroad by Indian residents were highly restricted.

Post-liberalisation many of these restrictions have been eased. The policy framework and issues arising out of international investment are discussed here.

10.1 Foreign Direct Investment and Portfolio Investment

When someone invests directly in a project abroad, it is called foreign direct investment. The investor normally takes an active interest in running or managing the business, appointing directors and key managerial personnel etc. Foreign direct investment creates real value in the physical economy in terms of output, employment etc. and tends to be long term. Therefore, governments encourage such investment.

Portfolio investors trade in securities with a view to benefit from changes in their value, rather than to create value through projects. The liquidity and foreign currency they bring in, and the consequent valuation gains in the market can help the economy. However, since the investor may not be committed to the project - the money itself may go to some other investor in the company, rather than the company itself - portfolio investment holding period is often shorter than what is seen with foreign direct investment.

Investments in mutual fund schemes are in the nature of portfolio investment.

10.2 Investing in International Mutual Fund Schemes

The tools and techniques discussed earlier for investing in local mutual fund schemes are equally applicable while investing in international mutual fund schemes. Some additional issues to consider are as follows:

10.2.1 Need to understand the international financial market

It is important to understand the market where money is being invested. Thus, an investor in a mutual fund scheme that proposes to invest in Thailand needs to be sure that the Thai market is an attractive investment destination.

10.2.2 Need to understand regulations regarding permissible investment

The regulations of both, India and the investee country need to be understood. In the earlier example, the Thai regulations should permit investment by the Indian investor.

With most countries, foreign investment in financial markets is more liberalised than foreign investment in real estate.

Besides, the investment should be permissible under Indian regulations. Indian residents are presently permitted to remit upto USD 200,000 in every financial year for investments and other specified purposes. Since the limit is per individual, families can transfer higher amounts every year.

10.2.3 Need to understand regulations regarding taxation

The objective underlying investments is to earn a post-tax return. Therefore, tax implications of the investment need to be understood. Besides a tax withheld in the investee country, the income may be liable to an assessment-based tax in India and / or the investee country. India has signed Double Taxation Avoidance Agreements (DTAA) with some countries. The investor needs to check if any benefits are available under such agreements.

10.2.4 Need to understand regulations regarding repatriation

For an Indian investing abroad, the investment cycle is complete when money is brought back to India. Some countries are easier to invest in, but not so easy to repatriate the money back.

The possibility of change in regulations in future too, needs to be factored. The investment may be repatriable at the time of investment; but if the country runs into economic trouble, it may limit the repatriability for foreign investors.

10.2.5 Foreign currency risk

An investor investing abroad is exposed to foreign currency risk. It is not adequate for the financial market abroad to gain value; the exchange rate of the country too is to be considered.

For example, suppose an Indian invested in the US when the S&P was at 1,200. Later, the S&P went up to 1,500 - a gain of 25%.

Suppose an investor invested USD 120,000, by buying USD from his Indian rupee bank account, when the USD was equal to Rs. 50.00. He would have drawn down his bank account by USD 120,000 X Rs. 50 per USD i.e. Rs. 60 lakh, for buying the requisite USD to make the investment.

The investment would have grown to USD 150,000 - a gain of 25% in USD terms, in line with the market there.

If the investor were to sell the investment, and at that stage each USD had strengthened to Rs. 60.00 per USD, then he would have USD 150,000 X Rs. 60 per USD i.e. Rs. 90

lakh. This represents a gain of 50% on the original investment of Rs. 60 lakh. The gain was 25% in USD terms, but because the USD strengthened, the return in Indian rupees was 50%.

On the other hand, if the rupee had strengthened (i.e. USD became weak) to Rs. 40 per USD, the investor would only receive USD 150,000 X Rs. 40 per USD i.e. Rs. 48 lakh. This represents a loss of 20% on the original investment of Rs. 60 lakh. The gain was 25% in USD terms, but because the USD weakened, there was a loss of 20% in Indian rupees.

Any taxes on the transaction or profits would pull down the post-tax returns further.

10.2.6 Transaction costs

The authorised dealer adds a margin at the time of buying or selling foreign currency. This foreign currency transaction cost needs to be borne by the investor.

Besides, there is the cost of any permissions for investing abroad, brokerage cost, demat cost etc.

All these transaction costs reduce the investor's returns.

10.3 Why invest abroad?

Considering the issues mentioned earlier, direct investment in mutual fund schemes abroad is meaningful only for large investors. Many of them prefer to keep some of their moneys abroad for the following reasons:

- Asset allocation

Allocating assets across different countries reduces the dependence on any single country's economic performance. However, in a globalised environment with free capital flows, markets across countries can move in tandem in the same direction. This can affect the benefits of asset allocation.

- Country risk

As has been seen in the past, specific countries or regions can run into trouble. For example, Ireland and Greece in the recent past; south-east Asia in the late 1990s. Besides economic issues, war or internal strife can wreak havoc on markets, including real estate. Investors can hedge their portfolio against such scenarios by investing in other countries.

10.4 International Fund of Funds

Investments abroad can be facilitated through a fund of funds structure as follows:

- A feeder fund can receive money in India in Indian rupees.
- A host fund abroad can be the target for the feeder fund to invest in.

In such a structure, the feeder fund operates like a fund of funds. Investors in the fund of funds will earn a return that is linked to the return that the host fund generates, as also the movement in currency exchange rate. The return profile is thus similar to direct investment in the fund abroad. Benefits of such a structure are:

- Since the feeder fund receives money in Indian rupees, it becomes possible for even small investors to get exposure to international markets.
- The Indian investor does not need to worry too much about the regulations and market structure abroad.
- The feeder fund being based in India, would be subject to SEBI regulations.
- The investment being in Indian rupees, the investor's USD 200,000 foreign remittance limit is available for other purposes.

Points to remember

- When someone invests directly in a project abroad, it is called foreign direct investment. On the other hand, a portfolio investor may not be committed to a project. The money itself may go to some other investor in the company, rather than the company itself. Portfolio investment holding period is often shorter than what is seen with foreign direct investment. Investments in mutual fund schemes are in the nature of portfolio investment.
- Indian residents are permitted to remit upto USD 200,000 in every financial year for investments and other specified purposes. Since the limit is per individual, families can transfer higher amounts every year.
- Before investing abroad, investors should understand the international financial markets, foreign currency risk and regulations regarding permissible investments, repatriation and tax.
- International investments help in asset allocation and diversifying country risk.
- Investments abroad can be facilitated through a fund of funds structure as follows:
 - A feeder fund can receive money in India in Indian rupees.
 - A host fund abroad can be the target for the feeder fund to invest in.

Chapter 11 : Mutual Fund Taxation

In NCFM's Workbook titled Securities Market (Advanced) Module, taxation of mutual fund schemes was introduced. This chapter gets into the applicative aspects of the same.

11.1 Mutual Fund Tax Provisions

The mutual fund trust (and therefore the mutual fund schemes) is exempt from tax. However, the trustee company and AMC pay tax, like any other company.

Despite the exemption to the mutual fund trust, investors in mutual fund schemes are impacted by income tax as follows:

11.1.1 Securities Transaction Tax (STT)

This is applicable to equities and equity-oriented funds, but not to debt and debt-oriented funds.

An equity-oriented fund is a fund that invests at least 65% of its corpus in equities of domestic companies. Thus, international funds, gold funds and balanced funds with less than 65% allocation to equity do not qualify.

Applicable rates are:

- STT on equity-oriented schemes of mutual funds

On scheme's purchase of equity shares in the stock exchange	0.125%
On scheme's sale of equity shares in stock exchange	0.125%
On scheme's sale of futures & options in stock exchange	0.017%
○ STT on investors in equity oriented schemes of mutual fund	
On investor's purchase of the units in stock exchange	0.125%
On investor's sale of the units in stock exchange	0.125%
On re-purchase of investor's units by the AMC	0.250%

11.1.2 Capital Gains Tax

The difference between the selling price (of sale in the stock exchange or as re-purchase of units by the scheme) and buying price of an investment is treated as a capital gain (or capital loss, if the selling price is lower).

Since the mutual fund is exempt from tax, the scheme does not pay a tax on its capital gains. However, investors in mutual fund schemes are liable to be taxed on their capital gains. The nature of capital gain viz. long term or short term, makes a difference. If the investment (any type of mutual fund scheme) is held for more than 1 year, it qualifies to be a long term capital gain. Else, it is a short term capital gain.

Capital gains are taxed as follows:

- o Equity-oriented schemes
 - o Long Term Capital Gains Nil
 - o Short Term Capital Gains 15% + Surcharge + Education Cess
- o Other Schemes
 - o Long Term Capital Gains
 - The maximum tax rate is 10% + Surcharge + Education Cess.
 - Investor can bring down the taxation by taking the benefit of indexation. Cost of acquisition can be increased to the extent of inflation. Selling price being held constant, the adjusted capital gains would be lower. Tax would need to be calculated at 20% + Surcharge + Education Cess on the adjusted capital gains.
 - o Short Term Capital Gains

The income is added to the income of the assessee. Thus, it would be taxed at Nil / 10% / 20% / 30%, depending on the applicable tax slab. Further, surcharge and education cess would be applicable.

11.1.3 Tax on Income Distributed

This is applicable only on dividend distributed by debt-oriented schemes. The applicable rate is:

- Individuals & Hindu Undivided Families
 - o 25% plus surcharge plus education cess, for liquid schemes
 - o 12.5% plus surcharge plus education cess, for other debt schemes
- Other investors

30% plus surcharge plus education cess for all debt schemes

11.1.4 Tax Deducted at Source (TDS) / Withholding Tax

There is no TDS on dividend or re-purchase amount for resident investors.

Non-resident investors might have to bear withholding tax, which will reduce the amount they receive from the scheme as dividend or re-purchase amounts. They can however take the benefit of Double Taxation Avoidance Agreements, if India has signed such an agreement with the country of their residence.

11.2 Compounding Wealth, Gross of Tax

Let us compare taxation of mutual funds with bank deposits, where people tend to keep significant amounts invested.

11.2.1 Bank Fixed Deposit

Interest on bank fixed deposits is added to the income of the assessee. Thus, it would be taxed at Nil / 10% / 20% / 30%, depending on the applicable tax slab. Further, surcharge and education cess would be applicable. This is similar to taxation of short term capital gains on non-equity mutual fund schemes.

In every financial year, upto Rs. 10,000 of interest income is exempt from TDS. Beyond that amount, tax would be deducted at 10%. Resident individuals can file Forms 15G or 15H to claim exemption from TDS in specific situations.

An investor who is in the highest tax bracket, while filing the income tax return, is likely to find that the applicable tax on the bank interest income is 30% plus surcharge plus education cess. Accordingly, additional amount will have to be deposited with the income tax authorities on self-assessment basis.

Consider the case of a normal investor who is subject to TDS. If Rs. 100,000 has been invested in a bank fixed deposit yielding 10%, the amount that would be available for re-investment at the end of Year 1 varies as shown in Table 11.1.

Table 11.1

Taxation applicable on Bank Fixed Deposits

Tax Slab->	Nil	10%	20%	30%
Fixed Deposit (Rs.)	100,000	100,000	100,000	100,000
Interest on Fixed Deposit (Rs.)	10,000	10,000	10,000	10,000
TDS (Rs.)	Nil @	1,000	1,000	1,000
Net FD Interest Received (Rs.)	10,000	9,000	9,000	9,000
Additional Self Assessment Tax*	Nil	Nil	1,000	2,000
Net Interest Income for Year * (available for re-investment in next year)	10,000	9,000	8,000	7,000
@ Depositor may have filed 15G / 15H				
* Surcharge & education cess are applicable, but have been ignored in this calculation				

The growth in the wealth of an investor in the 30% tax bracket would be as shown in Table 11.2.

Table 11.2

Growth in Wealth (Bank Fixed Deposits)

Year->	1	2	3	Total
Fixed Deposit (Rs.)	100,000	107,000	114,490	
Interest on Fixed Deposit (Rs.)	10,000	10,700	11,449	32,149
TDS (Rs.)	1,000	1,070	1,145	3,215
Net FD Interest Received (Rs.)	9,000	9,630	10,304	28,934
Additional Self-Assessment Tax (Rs.) *	2,000	2,140	2,290	6,430
Net Interest Income for Year (Rs) *	7,000	7,490	8,014	22,504
(available for re-investment in next year)				
Value of Fixed Deposit after re-investment (Rs.)	107,000	114,490	122,504	

11.2.2 Mutual Fund

The mutual fund scheme does not pay a tax on its income every year. Taxation only comes in the specific situations discussed earlier in this chapter.

Suppose, the investor had invested in a scheme, which in turn invested in a bank fixed deposit that earned the same rate of interest of 10%. So long as the investor keeps the money invested in the scheme, taxation is avoided. Growth in wealth of investor (irrespective of tax slab) would be as shown in Table 11.3.

Table 11.3

Growth in Wealth (Mutual Fund Scheme)

Year->	1	2	3	Total
Mutual Fund Investment (Rs.)	100,000	110,000	121,000	
Interest earned by scheme (Rs.)	10,000	11,000	12,100	33,100
TDS (Rs.)	Nil	Nil	Nil	Nil
Net Interest Received (Rs.)	10,000	11,000	12,100	33,100
Additional Self-Assessment Tax (Rs.)	Nil	Nil	Nil	Nil
Net Interest Income for Year (Rs)	10,000	11,000	12,100	33,100
(available for re-investment in next year)				
Value of Mutual Fund Investment post-interest (Rs.)	110,000	121,000	133,100	

In the mutual fund investment, wealth of the investor is growing on gross basis i.e. without tax deduction each year. Thus, the investor's wealth is 8.65% higher than in the case of bank fixed deposit (Rs. 133,100 as compared to Rs. 122,504). The difference of 8.65% is a steep 86.5% of the 10% interest rate.

11.3 Dividend Payout and Growth Options within Schemes

Suppose the Rs. 100,000 was invested by an individual / HUF in a liquid scheme. Further, let us assume that the dividend payout option of that scheme pays off all its income

as dividend. The comparative position of the investor between the dividend payout and growth options is shown in Table 11.4.

A few points to note, from the table:

- Although the quoted rate for dividend distribution tax is 25% for individuals / HUF investing in liquid schemes, the tax is applied on the income distributed (Rs. 8,000). The tax of Rs. 2,000 is only 20% on the Rs. 10,000 earned by the scheme. Thus, the effective rate of dividend distribution tax is 20% (plus surcharge plus education cess), although the quoted rate is 25%.
- Similarly, for individuals and HUFs investing in other debt schemes, the quoted dividend distribution tax rate is 12.5%, but the effective rate is only 11.11% (plus surcharge plus education cess).
- For investors other than individuals / HUFs investing in debt schemes, the quoted dividend distribution tax rate of 30% translates to an effective rate of 23.08% (plus surcharge plus education cess).
- The dividend distribution tax is applicable to all investors in debt mutual fund schemes, irrespective of their tax slab. Even a loss making investor, who would otherwise not pay a tax, bears dividend distribution tax (the scheme pays it when the dividend is distributed).
- It stands to reason that for most investors in debt schemes, it is better to opt for growth option instead of dividend payout option.

Table 11.4

Dividend Payout v/s Growth (Individual / HUF in Liquid Scheme)

	Dividend Payout Option	Growth Option
Investment by mutual fund scheme (Rs.)	100,000	100,000
Interest earned by mutual fund scheme (Rs.)	10,000	10,000
Dividend Distributed by Scheme	8,000	Nil
Dividend Distribution Tax at 25% on dividend distributed *	2,000	Nil
Net assets after the dividend	100,000	110,000
Wealth of Investor (Net assets + Dividend)	108,000	110,000
* Surcharge & education cess are applicable, but have been ignored in this calculation		

If the investor in the growth option were to redeem the investment, there will be no TDS on the capital gain for resident investors. The ultimate taxation would not be more than 10%, if it is a long term capital gain. Only if the holding period is less than a year (leading to a short term capital gain) investors in the higher tax brackets might prefer the dividend payout option, where the effective dividend distribution tax rate would be lower than their tax slab rate.

11.4 Double Indexation

In the above example, if the investor invested in the growth option on March 30, 2009 and redeemed the investment on April 2, 2010.

The investment happened in financial year 2008-09, for which the government has declared cost inflation index of 582.

The investor redeemed the investment in financial year in 2010-11, for which the cost inflation index is 711.

The capital gains is Rs. 110,000 minus Rs. 100,000 i.e. Rs. 10,000.

The holding period is 367 days, which is more than 1 year. Therefore, it is a long term capital gain.

The maximum tax the investor has to bear is 10% (plus surcharge plus education cess) on the capital gain of Rs. 10,000. Thus, the maximum tax payable would be Rs. 1,000 (plus surcharge plus education cess).

Investor can benefit from indexation. The indexed cost of acquisition is $\text{Rs. } 100,000 \times \frac{711}{582}$ i.e. Rs. 122,165. This is higher than the selling price of Rs. 110,000. Thus, the investor ends up with a long term capital loss of Rs. 12, 165. This can be set off against long term capital gains, as discussed in the next section.

Another point to note is that although the investor held the investment for slightly more than a year, the investor gets the benefit of indexation for two years viz. 2009-10 and 2010-11. Hence the name "double indexation" for such structures.

Mutual funds tend to come out with fixed maturity plans towards the end of every financial year to help them benefit from such double indexation.

11.5 Setting Off & Carry Forward of Losses

The income tax act provides for five heads of income:

- Salaries
- Income from House Property
- Profits and Gains of Business or Profession
- Capital Gains
- Income from other sources

Setting off losses in source of income against income in some other source of income is governed by the following conditions:

- Loss under any source within any head of income, other than capital gains, is to be set off against income from any other source under the same head of income in the same assessment year.

- Loss under any source within any head of income, other than capital gains, is to be set off against income from any other source under any other head of income in the same assessment year.
- Loss under the head Profits & Gains of Business or Profession cannot be set off against income from salaries.
- Unabsorbed business losses in a previous year can be carried forward and set off against future Profits and Gains of Business or Profession, for 8 assessment years.
- Losses from speculative business can only be set off against profits from speculative business.
- Unabsorbed speculative losses in a previous year can be carried forward and set off against future speculative profit, for 4 assessment years.
- Loss under the head Capital Gain, cannot be set off against any other head of income.
- Short term capital loss is to be set off against long term capital gain or short term capital gain.
- Long term capital loss is to be set off only against long term capital gain.
- Unabsorbed losses (long term or short term) can be carried forward for set off against future capital gains for 8 assessment years.

11.6 Dividend Stripping

Dividend received in the hands of the investor is tax-free for all mutual fund schemes.

Suppose an investor buys units within 3 months prior to the record date for a dividend, and sells those units within 9 months after the record date, and incurs a capital loss.

The capital loss will not be available for set-off against other capital gains to the extent of the dividend that was exempted from tax.

Suppose, the record date for a dividend of Re. 1 per unit is April 1, 2011. Investor buys the units at Rs. 15 and sells them at Rs.12.

The dividend of Rs.1 would be exempt from tax in the hands of the investor.

There is also a capital loss of Rs. 15 minus Rs. 12 i.e. Rs. 3 per unit. If the investor wants to set off this loss against other capital gains, then, either the units should have been bought before January 1, 2011, or they should have been sold after December 31, 2011.

If the investor buys the units during the 3 month period of January 1, 2011 to March 31, 2011; and sells the units during the 9 month period of April 1, 2011 to December

31, 2011, then out of the Rs. 3 capital loss, Rs. 1 will be disallowed because that is the amount the investor received as tax-free dividend. The balance capital loss of Rs. 2 will however be available for setting off against other capital gains.

Points to remember

- STT is applicable to equities and equity-oriented funds, but not to debt and debt-oriented funds.
- An equity-oriented fund is a fund that invests at least 65% of its corpus in equities of domestic companies. Thus, international funds, gold funds and balanced funds with less than 65% allocation to equity do not qualify.
- STT on equity-oriented schemes of mutual funds is applicable as follows:
 - On scheme's purchase of equity shares in the stock exchange at 0.125%
 - On scheme's sale of equity shares in stock exchange at 0.125%
 - On scheme's sale of futures & options in stock exchange at 0.017%
- STT on investors in equity oriented schemes of mutual fund is applicable as follows:
 - On investor's purchase of the units in stock exchange at 0.125%
 - On investor's sale of the units in stock exchange at 0.125%
 - On re-purchase of investor's units by the AMC at 0.250%
- The difference between the selling price (of sale in the stock exchange or as re-purchase of units by the scheme) and buying price of an investment is treated as a capital gain (or capital loss, if the selling price is lower).
- Since the mutual fund is exempt from tax, the scheme does not pay a tax on its capital gains. However, investors in mutual fund schemes are liable to be taxed on their capital gains.
- If the investment (in any type of mutual fund scheme) is held for more than 1 year, it qualifies to be a long term capital gain. Else, it is a short term capital gain.
- Long term capital gains from equity mutual fund schemes are exempt from tax.
- Short term capital gains from equity mutual fund schemes are taxed at 15% plus surcharge plus education cess.
- The maximum tax rate on long term capital gains from non-equity mutual fund schemes is 10% + Surcharge + Education Cess.

Investor can bring down the taxation by taking the benefit of indexation. Cost of acquisition can be increased to the extent of inflation.

Selling price being held constant, the adjusted capital gains would be lower. Tax would need to be calculated at 20% + Surcharge + Education Cess on the adjusted capital gains.

- Short Term Capital Gains from non-equity mutual fund schemes is added to the income of the assessee. Thus, it would be taxed at Nil / 10% / 20% / 30%, depending on the applicable tax slab. Further, surcharge and education cess would be applicable.
- Tax on Income Distributed is applicable only on dividend distributed by debt-oriented schemes. The applicable rate is:
 - Individuals & Hindu Undivided Families
 - 25% plus surcharge plus education cess, for liquid schemes
 - 12.5% plus surcharge plus education cess, for other debt schemes
 - Other investors
 - 30% plus surcharge plus education cess for all debt schemes

The effective rate of tax on dividend distribution is lower than these quoted rates.

- There is no TDS on dividend or re-purchase amount for resident investors.
- Non-resident investors might have to bear withholding tax, which will reduce the amount they receive from the scheme as dividend or re-purchase amounts. They can however take the benefit of Double Taxation Avoidance Agreements, if India has signed such an agreement with the country of their residence.
- Wealth build up in a bank fixed deposit happens net of tax. Mutual funds offer the benefit of growing wealth on gross basis. The possibility of double indexation also exists. Thus, investor's wealth can grow faster through mutual funds.
- The dividend distribution tax is applicable to all investors in debt mutual fund schemes, irrespective of their tax slab. Even a loss making investor, who would otherwise not pay a tax, bears dividend distribution tax (the scheme pays it when the dividend is distributed).

It stands to reason that for most investors in debt schemes, it is better to opt for growth option instead of dividend payout option.

- The income tax act provides for five heads of income:
 - Salaries
 - Income from House Property
 - Profits and Gains of Business or Profession
 - Capital Gains
 - Income from other sources

- Loss under any source within any head of income, other than capital gains, is to be set off against income from any other source under the same head of income in the same assessment year.
- Loss under any source within any head of income, other than capital gains, is to be set off against income from any other source under any other head of income in the same assessment year.
- Loss under the head Profits & Gains of Business or Profession cannot be set off against income from salaries.
- Unabsorbed business losses in a previous year can be carried forward and set off against future Profits and Gains of Business or Profession, for 8 assessment years.
- Losses from speculative business can only be set off against profits from speculative business.
- Unabsorbed speculative losses in a previous year can be carried forward and set off against future speculative profit, for 4 assessment years.
- Loss under the head Capital Gain, cannot be set off against any other head of income.
- Short term capital loss is to be set off against long term capital gain or short term capital gain.
- Long term capital loss is to be set off only against long term capital gain.
- Unabsorbed losses (long term or short term) can be carried forward for set off against future capital gains for 8 assessment years.
- Dividend received in the hands of the investor is tax-free for all mutual fund schemes.
- Suppose an investor buys units within 3 months prior to the record date for a dividend, and sells those units within 9 months after the record date, and incurs a capital loss.

The capital loss will not be available for set-off against other capital gains to the extent of the dividend that was exempted from tax.

Chapter 12 : SID, SAI, KIM& Fact Sheets

12.1 Scheme Information Document (SID)

The Scheme Information Document has all information specific to the scheme. It is to be updated within 3 months of the end of every financial year. Only if the scheme is launched in the second half of a financial year, the first update can happen within 3 months of the end of the following financial year.

Changes until an update are incorporated in an addenda, and stapled to the SID. The changes are also advertised in an English newspaper and a newspaper in the language of the state where the registered office of the mutual fund is located.

The position of SID is clear from the following disclosures that are found in the cover page of any SID:

- The Scheme Information Document sets out concisely the information about the scheme that a prospective investor ought to know before investing. Investors should also ascertain about any further changes to the Scheme Information Document after the date of this document from the mutual fund / investor service centres / website / distributors or brokers before investing in the scheme.
- The scheme particulars have been prepared in accordance with the Securities and Exchange Board of India (Mutual Funds) Regulations, 1996, as amended till date, and filed with SEBI, along with Due Diligence Certificate from the AMC. The units being offered for public subscription have not been approved or recommended by the Securities and Exchange Board of India nor has Securities and Exchange Board of India certified the accuracy or adequacy of the Scheme Information Document.
- The investors are advised to refer to the Statement of Additional Information (SAI) for details of the mutual fund, tax and legal issues and general information on the website of the mutual fund.
- SAI is incorporated by reference (is legally a part of the Scheme Information Document). For a free copy of the current SAI, please contact your nearest Investor Service Centre or log on to the mutual fund website.
- The Scheme Information Document should be read in conjunction with the SAI and not in isolation.
- This Scheme Information Document is dated _____.

The Cover Page also has the following information:

- Name of the Scheme, type of Scheme (equity, balanced, income, debt, liquid, ETF, etc.; open-end / close-ended / interval), name of the AMC, classes of units offered

for sale, price of the units, opening date, closing date and scheme re-opening date (if applicable);.

- Names of mutual fund, AMC and trustee company, along with address and website details
- If the scheme is an assured returns scheme, then the name of the guarantor

The highlights section would have the following information:

- Investment objective
- Liquidity
- Benchmark
- Transparency / NAV Disclosure
- Loads
- Minimum Application Amount

The definitions section explains all the terms used in the SID that are not explained in the regulations.

Risk factors, to be disclosed in legible fonts, are grouped into standard risk factors and scheme specific risk factors. Some of these risk factors are as follows:

- Standard Risk Factors
 - Investment in mutual fund units involves investment risks such as trading volumes, settlement risk, liquidity risk, default risk including the possible loss of principal.
 - As the price / value / interest rates of the securities in which the scheme invests fluctuates, the value of your investment in the scheme may go up or down (Mutual funds may also provide factors affecting capital market in general and not limited to the aforesaid).
 - Past performance of the sponsor / AMC / mutual fund does not guarantee future performance of the scheme.
 - The name of the scheme does not in any manner indicate either the quality of the scheme or its future prospects and returns.
 - The sponsor is not responsible or liable for any loss resulting from the operation of the scheme beyond the initial contribution of _____ made by it towards setting up the fund.
 - The present scheme is the first scheme being launched under its management. (This would be mentioned, if the AMC has no previous experience in managing a Mutual Fund).

- The present scheme is not a guaranteed or assured return scheme (This is mentioned for all schemes except assured return schemes).
- Scheme-specific Risk Factors
 - Arising from the investment objective, the investment strategy and the asset allocation of the scheme
 - Arising from non-diversification, if any
 - Arising out of close-ended schemes, namely infrequent trading, discount to NAV etc.
 - In the case of assured returns schemes, the net worth and liquidity position of the guarantor and the source of the guarantee has to be disclosed.

If the return is assured only for a specific period, then there needs to be a statement to the effect that there is no guarantee that such return may be generated for the remaining duration of the scheme.

The due diligence certificate mentioned in the cover page has to be signed by the compliance officer, chief executive officer, managing director, whole time director, or executive director of the AMC. The certificate, which is included verbatim in the SID, has the following confirmations:

- The draft Scheme Information Document forwarded to SEBI is in accordance with the SEBI (Mutual Funds) Regulations, 1996 and the guidelines and directives issued by SEBI from time to time.
- All legal requirements connected with the launch of the scheme as also the guidelines, instructions, etc. issued by the government and any other competent authority in this behalf, have been duly complied with.
- The disclosures made in the Scheme Information Document are true, fair and adequate to enable the investors to make a well-informed decision regarding investment in the proposed scheme.
- The intermediaries named in the Scheme Information Document and Statement of Additional Information are registered with SEBI and such registration is valid, as on date.

An important section of the SID is the scheme details, where the following information is include:

- Type of scheme, i.e. open / close / interval, equity / debt / income / liquid / balanced / ETF, etc.
- Scheme's investment objective and policies (including the types of securities in which it will invest) is to be clearly and concisely stated

- Scheme's proposed asset allocation, giving the broad classification of assets and indicative exposure level in percentage terms specifying the risk profile, as follows:

Instrument	Indicative Allocation (% of total assets)		Risk Profile
	Maximum	Minimum	

The asset allocation should be consistent with the investment objective of the scheme.

If the scheme's name implies that it will invest primarily in a particular type of security, or in a certain industry or industries, the scheme should have an investment policy which requires that, under normal circumstances, at least 65 per cent of the value of its total assets be invested in the indicated type of security or industry.

Percentage of investment in foreign securities, derivatives, stock lending, securitized debt, etc. is to be indicated.

- The types of instruments in which the scheme will invest and the concerned regulations and limits applicable

Various derivative products that the scheme will invest in, specifying (i) the instruments to be used and (ii) the applicable limits

- The investment strategies of the scheme - Information about investment approach and risk control should be included in simple terms.

In case the scheme proposes to invest in derivatives, the various strategies to be adopted by the fund manager are to be disclosed.

- Assured return schemes need to disclose:
 - How many schemes have assured returns, their number and corpus size?
 - The justification as to how the net worth and liquidity position of the guarantor would be adequate to meet the shortfall in these schemes.
 - Details of the schemes which did not pay assured returns in the past and how the shortfall was met.
- The floors and ceilings within a range of 5% of the intended allocation (in %) against each sub asset class / credit rating, as per the following sample matrix:

Instruments:Credit Rating->	AAA	AA	A	BBB
Certificate of Deposits				
Commercial Paper				
Non-Convertible Debentures				
Securitized Debt				
Any other				

- Portfolio turnover policy has to be disclosed, particularly by equity oriented schemes

In discussing its investment strategies, the scheme has to briefly discuss the probable effect of such strategies on the rate of the total portfolio turnover of the scheme, if such effects are significant; and also other consequences which will result from the higher portfolio turnover rate, e.g. higher brokerage and transaction cost.

- Fundamental Attributes
 - Type of Scheme
 - Investment Objective (Main objective & Investment pattern)
 - Terms of the issue
 - Provision for liquidity (Listing, Re-purchase, Redemption)
 - Aggregate fees and expenses
 - Any safety net or guarantee
- Benchmark - The name and the justification (specific to the scheme objective) for the use of benchmark index with which the performance of the scheme can be compared with.
- Name, age, qualification and experience of the fund manager to the scheme to be disclosed. The experience of the fund manager should include last 10 years of experience and also the name of any other schemes under his / her management.
- All the investment restrictions as contained in the Seventh Schedule to SEBI (Mutual Funds) Regulations, 1996 and applicable to the scheme should be incorporated.

Further, in case the fund follows any internal norms vis-à-vis limiting exposure to a particular scrip or sector, etc. apart from the aforementioned investment restrictions, the same need to be disclosed.

- In case of equity schemes only equity related investment restrictions need to be disclosed, though the scheme would be investing a portion of the assets in bonds for liquidity or for other purposes.
- In the case of a fixed income / debt schemes, only the investment restriction applicable to bonds is to be disclosed.
- In the case of balanced schemes, all investment restrictions are to be disclosed.

- Past performance of the scheme, as shown in the following table:

[In case of a new scheme, this is not applicable. Hence give the statement-“This scheme is a new scheme and does not have any performance track record”]
Or
[In case of a scheme in existence, the return figures shall be given for that scheme only. For a scheme which is in existence for more than 1 year, the returns given will be Compounded Annualised Returns and for scheme which is in existence for less than 1 year, the returns would be absolute returns since inception. Absolute returns for each financial year for the last 5 years shall be represented by means of a bar diagram as per the adjacent format.]

Compounded Annualised Returns	Scheme Returns %	Benchmark Returns %
Returns for the last 1 year		
Returns for the last 3 years		
Returns for the last 5 years		
Returns since inception		
Year-wise returns for the last 5 financial years		



The SID has the following details of the units and the offer, in general:

- New Fund Offer (NFO)
 - Opening date, Closing Date, Offering Price, Minimum Application Amount, Minimum Target Amount, Maximum Amount to be raised (if any), Plans / Options offered, Dividend policy, Allotment procedure, Refund procedure, Who can invest, Where to submit applications, How to apply, Listing, Special facilities (e.g., SIP, SWP, STP), Restrictions on Transfer
- Ongoing Offer
 - Re-opening date, How sale and re-purchase price will be determined, Cut-off timing, Where applications are to be submitted, Minimum amount for transactions, Minimum balance to be maintained, Consequences of non-maintenance of minimum balance, Special facilities, Procedures regarding account statement, dividend, redemption and consequences of delay
- Periodic disclosures that will be made e.g. NAV
- Brief policies of the mutual fund with regard computation of NAV of the scheme in accordance with SEBI (Mutual Funds) Regulations, 1996.
 - Rounding off policy for NAV as per the applicable guidelines.
 - Policy on computation of NAV in case of investment in foreign securities.

Fees, expenses and loads, which have a direct bearing on investors' returns are detailed as follows:

- Initial Issue Expenses
 - For the scheme proposed to be issued, the nature of the issue expenses to be incurred, such as advertising expenses, commission to agents or brokers, registrar's expenses, printing and marketing expenses and postage and miscellaneous expenses need to be described. The source for meeting these expenses may be disclosed.
- Annual Scheme Recurring Expenses (as a per cent of Average Weekly Net Assets)
 - Expenses chargeable to the scheme need to be quantified. This would include investment management and advisory fee, trustee fee, custodian fee, registrar and transfer agent fee, marketing and selling expenses, brokerage and transaction cost on distribution of units, audit fee, investor communications cost, investor servicing cost, fund transfer cost, insurance premium, winding up costs for termination, cost of statutory advertisement, etc. Some of these expenses can be clubbed together.
 - If there is more than one plan, then the expense is to be given separately for each plan.
 - The mutual fund has to update the current expense ratios on the website within two working days, mentioning the effective date of the change.
 - The maximum limit for management fee and annual scheme running expense as per SEBI regulations too are to be disclosed.
- Load Structure
 - Details of Exit Load, CDSC

The SID also makes a reference to the investors' rights that are detailed in the SAI.

Finally, the SID mentions penalties, pending litigation or proceedings, findings of inspections or investigations for which action may have been taken or is in the process of being taken by any regulatory authority against the mutual fund or AMC.

12.2 Statement of Additional Information (SAI)

The Statement of Additional Information features details that are common across schemes, such as:

- Information about the Mutual Fund Sponsor, AMC and Trustee Companies
 - Constitution of the Mutual Fund

ABC (the "Mutual Fund") has been constituted as a trust on _____ in accordance with the provisions of the Indian Trusts Act, 1882 (2 of 1882) with XYZ, as the

Sponsor and DEF as the Trustee. The Trust Deed has been registered under the Indian Registration Act, 1908. The Mutual Fund was registered with SEBI on _____ under Registration Code MF

o Sponsor

ABC Mutual Fund is sponsored by XYZ. The Sponsor is the Settler of the Mutual Fund Trust. The Sponsor has entrusted a sum of ` _____ to the Trustee as the initial contribution towards the corpus of the Mutual Fund.

Financial Performance of the Sponsor (past three years) is as follows: ▪

Net Worth

- Total Income
- Profit after Tax
- Assets Under Management (if applicable).

o Trustees

DEF (the "Trustee"), through its Board of Directors, shall discharge its obligations as trustee of the ABC Mutual Fund. The Trustee ensures that the transactions entered into by the AMC are in accordance with the SEBI Regulations and will also review the activities carried on by the AMC.

Details of Trustee Directors as follows:

- Name, Age, Qualifications, Brief Experience
- Responsibilities and duties of the Trustee as well as the specific and general due diligence.

o Asset Management Company

STP Ltd. is a private limited company incorporated under the Companies Act, 1956 on _____, having its Registered Office at _____. STP Ltd. has been appointed as the Asset Management Company of the -----Mutual Fund by the Trustee vide Investment Management Agreement (IMA) dated _____, and executed between DEF and STP.

Details of AMC Directors as follows:

- Name, Age, Qualifications, Brief Experience
- State the Duties and obligation of the AMC as specified in the SEBI Mutual Fund Regulations.

Information on Key Personnel is as follows:

- Name, Age, Qualifications, Brief Experience of CEO, CIO, Operations Head, Compliance Officer, Sales Head, Risk Manager, Investor Relations Officer.

- The AMC may decide on the key personnel it wants to mention in the SAI in addition to the persons mentioned above.
- o Service Providers
Details of Custodian, Transfer Agent, Statutory Auditor, Legal Counsel, Fund Accountant, Collecting Bankers.
- Condensed Financial Information about Schemes
Details to be given for all schemes launched by the mutual fund in last 3 fiscal years (excluding redeemed schemes)
 - o NAV at beginning of year
 - o Dividend
 - o NAV at end of year
 - o Annualised Return
 - o Net Assets at end of period
 - o Ratio of Recurring Expenses to Net Assets.
- How to Apply?
Procedures and KYC Requirements
- Rights of Unit-holders in Scheme
- Investment Valuation Norms for Securities and Other Assets
- Tax, Legal and General Information
 - o Applicable tax provisions for Mutual Fund and for investments in Mutual Fund scheme.
 - o Information on Nomination Facility, KYC Requirements, Requirements of Prevention of Money Laundering Act, Transfer and transmission of units, Duration of the scheme/Winding up, Procedure and manner of winding up, etc.
 - o Information on Underwriting, Securities Lending and Borrowing by the Mutual Funds, Inter-scheme transfers, Associate Transactions, etc.
 - o Documents available for inspection:
The following documents will be available for inspection at the office of the Mutual Fund at _____ during business hours on any day (excluding Saturdays, Sundays and public holidays):
 - Memorandum and Articles of Association of the AMC. ▪
 - Investment Management Agreement.
 - Trust Deed and amendments thereto, if any.

- Mutual Fund Registration Certificate.
 - Agreement between the Mutual Fund and the Custodian.
 - Agreement with Registrar and Share Transfer Agents.
 - Consent of Auditors to act in the said capacity.
 - Consent of Legal Advisors to act in the said capacity.
 - Securities and Exchange Board of India (Mutual Funds) Regulations, 1996 and amendments from time to time thereto.
 - Indian Trusts Act, 1882.
- Investor Grievances Redressal Mechanism

Brief description of the investors' complaints history for the last three fiscal years for existing schemes, and the redressal mechanism thereof.

The SAI should include data updated every two months on the number of complaints received, redressed and pending with the Mutual Fund.

SAI is to be updated within 3 months of the end of each financial year.

12.3 Key Information Memorandum (KIM)

Key Information Memorandum is a summary of the SID and SAI. As per SEBI regulations, the KIM is attached to the Application Form. Being brief, it is easier to review. KIM is more commonly found in the market with distributors, investors etc. KIM has the following details:

(Type of Scheme)

KEY INFORMATION MEMORANDUM

Scheme

(_____)

Offer for Units of Rs.10 Per Unit for cash during the

Initial Offer Period and at NAV based prices upon re-opening

Initial Offer Opens on:

Initial Offer Closes on:

Scheme Re-opens for continuous sale and repurchase on:

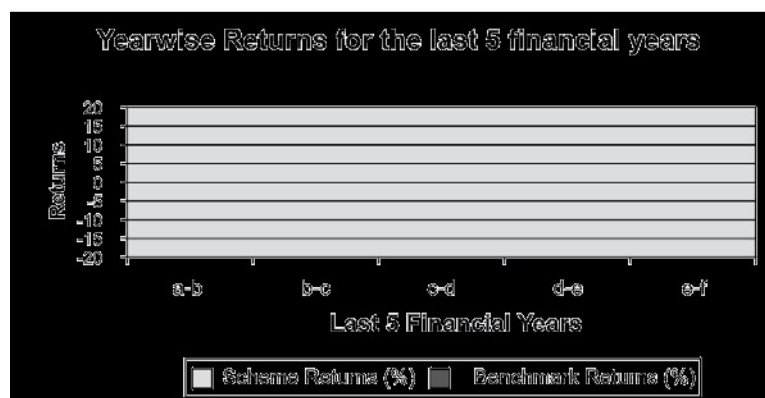
This Key Information Memorandum (KIM) sets forth the information, which a prospective investor ought to know before investing. For further details of the scheme/Mutual Fund, due diligence certificate by the AMC, Key Personnel, investors' rights & services, risk factors, penalties & pending litigations, associate transactions etc. investors should, before investment, refer to the

Scheme Information Document and Statement of Additional Information available free of cost at any of the Investor Service Centres or distributors or from the website www. _____.

The Scheme particulars have been prepared in accordance with Securities and Exchange Board of India (Mutual Funds) Regulations 1996, as amended till date, and filed with Securities and Exchange Board of India (SEBI). The units being offered for public subscription have not been approved or disapproved by SEBI, nor has SEBI certified the accuracy or adequacy of this KIM.

Investment Objective		
Asset Allocation Pattern of the scheme	Types of Instruments	
	Equity and Equity Linked Instruments	Normal Allocation (% of Net Assets)
	Debt securities	
	Money market instruments	
Risk Profile of the Scheme	<p>Mutual Fund Units involve investment risks including the possible loss of principal.</p> <p>Please read the SID carefully for details on risk factors before investment.</p> <p>Scheme specific Risk Factors are summarized below:</p> <p> </p>	
Plans and Options		
Applicable NAV (after the scheme opens for repurchase and sale)		
Minimum Application Amount/ Number of Units	Purchase	Additional Purchase
Despatch of Repurchase (Redemption) Request	Within 10 working days of the receipt of the redemption request at the authorised centre of the ----- Fund.	
Benchmark Index		
Dividend Policy		
Name of the Fund		
Manager		
Investment Objective		
Name of the Trustee Company		

[In case of a new scheme, the statement should be given "This scheme does not have any performance track record"] Or [In case of a scheme in existence, the return figures shall be given for that scheme only, as per the For a scheme which is in existence for more than 1 year, the returns given will be Compounded Annualised Returns and for scheme which is in existence for less than 1 year, the returns would be absolute returns since inception. Absolute returns for each financial year for the last 5 years shall be represented by means of a bar diagram as per the adjacent format.	Compounded Annualised Returns	Scheme Returns %	Benchmark Returns %
	Returns for the last 1 year		
	Returns for the last 3 years		
	Returns for the last 5 years		
	Returns since inception		
	Year-wise returns for the last 5 financial years		



Expenses of the Scheme	New Fund Offer Period	Continuous Offer
(i) Load Structure	Entry load : ----	Entry load : ----
(ii) Recurring expenses	Exit load : ----	Exit load : ----
	CDSC (if any) :	CDSC (if any) : __
	First Rs. 100 crores :	Actual expenses for the previous financial
	Next Rs. 300 crores :	year: ----
	Next Rs. 300 crores :	(Not Applicable in case of a new scheme)
	Balance :	
Tax treatment for the Investors (Unitholders)	Investor are advised to refer to the details in the Statement of Additional Information and also independently refer to his tax advisor.	
Daily Net Asset Value (NAV) Publication	The NAV will be declared on all ----- days and will be published in 2 newspapers. NAV can also be viewed on www.____ and http://www.amfiindia.com/ [You can also telephone us at ----- (optional)].	
For Investor Grievances please contact	Name and Address of Registrar	Name, address, telephone number, fax number, e-mail id of -----Mutual Fund
Unitholders' Information	frequency and the policy of the fund house for the providing the Accounts Statement, Annual Financial results and Half yearly portfolio to the investors.	

Date: N.B. Data and information shall be up-to-date but in no case older than 30 days from the date of KIM	
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12.4 Fund Account Statements / Consolidated Statement of Accounts

The fund account statement gives the following details of the investor:

- Name of investor, Folio Number, Account No.
- PAN No.
- Bank Mandate Details
- Scheme including option
- Number of units held at the beginning of the statement period, additional units purchased, any units sold / redeemed and the closing balance of units held
- If investment has been made through a distributor, then the distributor's name
- Cost of purchase, Dividends declared

Unit-holders are entitled to account statements of their holdings and transactions, on an ongoing basis, as follows:

- If there are no transactions, then once every 6 months. The AMC may:
 - Send it along with the Portfolio Statement or Annual Report of the scheme
 - Send a soft copy, instead of hard copy, if investor has given such a mandate.
- In the case of SIP / SWP / STP:
 - The AMC shall send it once every quarter ending March, June, September and December within 10 working days of the end of the respective quarter.
(However, the first account statement under SIP/STP/SWP has to be issued within 10 working days of the initial investment).
- The AMC has to provide it on Unit-holders' request, within 5 working days, without any charges.
- AMCs have to issue consolidated account statement (across all mutual funds) for each calendar month, by the 10th of the following month, to investors in whose folios transaction(s) has/have taken place during that month.

12.5 Fact Sheets

Although fact sheet is not mandated by SEBI, most AMCs come out with a monthly fact sheet. Some also come out with an annual fact sheet.

The information commonly found in fact sheets is as follows:

- Market round up and view on future direction
- Scheme-wise details on:
 - Name of scheme

- Investment objective
- Options
- Dividend frequency
- Load structure
- Minimum investment amount
- Corpus
- Key ratios such as portfolio turnover, Beta, standard deviation, alpha, Sharp ratio, weighted average maturity, duration
- Benchmark
- Inception date
- Performance of the scheme as compared to the benchmark
 - Since inception
 - Yearwise for the last 5 years
- Current value of Rs. 10,000 invested in the scheme and in the benchmark
- Portfolio details - Composition of net assets with details of securities, credit rating, sector etc.

Readers are advised to visit the website of AMCs to review samples of SID, SAI, KIM and Fact Sheets. These are easily downloadable from the websites, free of cost.

Points to remember

- The Scheme Information Document has all information specific to the scheme. It is to be updated within 3 months of the end of every financial year.
- SAI is incorporated by reference (is legally a part of the Scheme Information Document).
- Risk factors, to be disclosed in legible fonts in SID, are grouped into standard risk factors and scheme specific risk factors.
- The due diligence certificate has to be signed by the compliance officer, chief executive officer, managing director, whole time director, or executive director of the AMC.
- Assured return schemes need to disclose:
 - How many schemes have assured returns, their number and corpus size?
 - The justification as to how the net worth and liquidity position of the guarantor would be adequate to meet the shortfall in these schemes.
 - Details of the schemes which did not pay assured returns in the past and how the shortfall was met.

- Statement of Additional Information features details that are common across schemes. It is to be updated within 3 months of the end of each financial year.
- Key Information Memorandum is a summary of the SID and SAI. As per SEBI regulations, the KIM is attached to the Application Form.
- If there are no transactions, unit-holders are entitled to account statements of their holdings every 6 months.
- AMCs have to issue consolidated account statement (across all mutual funds) for each calendar month, by the 10th of the following month, to investors in whose folios transaction(s) has/have taken place during that month.
- Although fact sheet is not mandated by SEBI, most AMCs come out with a monthly fact sheet. Some also come out with an annual fact sheet.

References

Bogle, John C., Common Sense on Mutual Funds, (John Wiley & Sons, Inc., 1999)

Hall, Alvin D., Getting Started in Mutual Funds, (John Wiley & Sons, Inc., 2000)

Sadhak, H., Mutual Funds in India — Marketing Strategies and Investment Practices, (Response Books 1997).

Sankaran,Sundar, Indian Mutual Funds Handbook, [Vision Books (2003, 2007, 2011)]

Sankaran,Sundar, NISM Series VA: MFD Certification Workbook, [National Institute of Securities Market (2010)]