

Preface

The **National Stock Exchange of India Ltd. (NSE)**, set up in the year 1993, is today the largest stock exchange in India and a preferred exchange for trading in equity, debt and derivatives instruments by investors. NSE has set up a sophisticated electronic trading, clearing and settlement platform and its infrastructure serves as a role model for the securities industry. The standards set by NSE in terms of market practices; products and technology have become industry benchmarks and are being replicated by many other market participants.

NSE has four broad segments Wholesale Debt Market Segment (commenced in June 1994), Capital Market Segment (commenced in November 1994) Futures and Options Segment (commenced June 2000) and the Currency Derivatives segment (commenced in August 2008). Various products which are traded on the NSE include, equity shares, bonds, debentures, warrants, exchange traded funds, mutual funds, government securities, futures and options on indices & single stocks and currency futures. Thousands of investors rely on the NSE's accessible, liquid and transparent markets for order execution. Each day over 7 million trades take place on the NSE. Average daily turnover exceeds Rs. 60,000 crores (US \$ 12 billion). 1000+ broker members (trading members) of NSE are spread across India. Today NSE's share to the total equity market turnover in India averages around 71% whereas in the futures and options market this share is around 99%.

At NSE, it has always been our endeavour to continuously upgrade the skills and proficiency of the Indian investor. Since, mutual funds play a crucial role in channelising the savings of investors, it becomes important to understand how they function. Mutual funds offer various products catering to different classes of investors. It is important to understand them before investing.

This module has been developed for those of you who are keen to acquire some basic but key information about mutual funds as an initial step towards becoming a more informed investor. We hope this module will act as a means of satisfying some of your initial queries on mutual funds.

This book has developed with the assistance of M/s Money Bee Institute whose details are provided below:

Money Bee Institute

"Yashashree"

Sudarshan SBI Officer's Society,
Hindustan Colony, Amravati Road,

Nagpur – 440010. (Tel nos : 9860641317 / 9967654979)

Email : moneybee.finplan@gmail.com

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**Distribution of weights in the
Mutual Funds : A Beginners' Module Curriculum**

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

CHAPTER 1

MUTUAL FUNDS

1.1 INTRODUCTION

A **mutual fund** is a professionally managed type of collective investment scheme that pools money from many investors and invests it in stocks, bonds, short-term money market instruments and other securities. Mutual funds have a fund manager who invests the money on behalf of the investors by buying / selling stocks, bonds etc. Currently, the worldwide value of all mutual funds totals more than \$US 26 trillion. The United States leads with the number of mutual fund schemes. There are more than 8000 mutual fund schemes in the U.S.A. Comparatively, India has around 1000 mutual fund schemes, but this number has grown exponentially in the last few years. The Total Assets under Management in India of all Mutual funds put together touched a peak of Rs. 5,44,535 crs. at the end of August 2008.

There are various investment avenues available to an investor such as real estate, bank deposits, post office deposits, shares, debentures, bonds etc. A mutual fund is one more type of investment avenue available to investors. There are many reasons why investors prefer mutual funds. Buying shares directly from the market is one way of investing. But this requires spending time to find out the performance of the company whose share is being purchased, understanding the future business prospects of the company, finding out the track record of the promoters and the dividend, bonus issue history of the company etc. An informed investor needs to do research before investing. However, many investors find it cumbersome and time consuming to pore over so much of information, get access to so much of details before investing in the shares. Investors therefore prefer the mutual fund route. They invest in a mutual fund scheme which in turn takes the responsibility of investing in stocks and shares after due analysis and research. The investor need not bother with researching hundreds of stocks. It leaves it to the mutual fund and its professional fund management team. Another reason why investors prefer mutual funds is because mutual funds offer diversification. An investor's money is invested by the mutual fund in a variety of shares, bonds and other securities thus diversifying the investors portfolio across different companies and sectors. This diversification helps in reducing the overall risk of the portfolio. It is also less expensive to invest in a mutual fund since the minimum investment amount in mutual fund units is fairly low (Rs. 500 or so). With Rs. 500 an investor may be able to buy only a

few stocks and not get the desired diversification. These are some of the reasons why mutual funds have gained in popularity over the years.

Indians have been traditionally savers and invested money in traditional savings instruments such as bank deposits. Against this background, if we look at approximately Rs. 5 lakh crores which Indian Mutual Funds are managing, then it is no mean an achievement. A country traditionally putting money in safe, risk-free investments like Bank FDs, Post Office and Life Insurance, has started to invest in stocks, bonds and shares – thanks to the mutual fund industry.

However, there is still a lot to be done. The Rs. 5 Lakh crores stated above, includes investments by the corporate sector as well. Going by various reports, not more than 5% of household savings are channellised into the markets, either directly or through the mutual fund route. Not all parts of the country are contributing equally into the mutual fund corpus. 8 cities account for over 60% of the total assets under management in mutual funds. The total number of certified Mutual Funds Advisors is around 50,000 – whereas there are over 20 lakhs life insurance advisors. These are issues which need to be addressed jointly by all concerned with the mutual fund industry. Market dynamics are making industry players to look at smaller cities to increase penetration. Competition is ensuring that costs incurred in managing the funds are kept low and fund houses are trying to give more value for money by increasing operational efficiencies and cutting expenses. As of today there are 41 Mutual Funds in the country. Together they offer over 1000 schemes to the investor. Many more mutual funds are expected to enter India in the next few years.

All these developments will lead to far more participation by the retail investor and ample of job opportunities for young Indians in the mutual fund industry. This module is designed to meet the requirements of both the investor as well as the industry professionals, mainly those proposing to enter the mutual fund industry and therefore require a foundation in the subject. Investors need to understand the nuances of mutual funds, the workings of various schemes before they invest, since their money is being invested in risky assets like stocks/ bonds (bonds also carry risk). The language of the module is kept simple and the explanation is peppered with 'concept clarifiers' and examples.

Let us now try and understand the characteristics of mutual funds in India and the different types of mutual fund schemes available in the market.

1.2 MUTUAL FUNDS : STRUCTURE IN INDIA

For anybody to become well aware about mutual funds, it is imperative for him or her to know the structure of a mutual fund. How does a mutual fund come into being? Who are the important people in a mutual fund? What are their roles? etc. We will start our understanding by looking at the mutual fund structure in brief.

Mutual Funds in India follow a **3-tier structure**. There is a **Sponsor** (the First tier), who thinks of starting a mutual fund. The Sponsor approaches the Securities & Exchange Board of India (SEBI), which is the market regulator and also the regulator for mutual funds.

Not everyone can start a mutual fund. SEBI checks whether the person is of integrity, whether he has enough experience in the financial sector, his networth etc. Once SEBI is convinced, the sponsor creates a Public Trust (the Second tier) as per the Indian Trusts Act, 1882. Trusts have no legal identity in India and cannot enter into contracts, hence the **Trustees** are the people authorized to act on behalf of the Trust. Contracts are entered into in the name of the Trustees. Once the Trust is created, it is registered with SEBI **after which this trust is known as the mutual fund.**

It is important to understand the difference between the Sponsor and the Trust. They are two separate entities. Sponsor is not the Trust; i.e. Sponsor is not the Mutual Fund. **It is the Trust which is the Mutual Fund.**

The Trustees role is not to manage the money. Their job is only to see, whether the money is being managed as per stated objectives. Trustees may be seen as the internal regulators of a mutual fund.

1.3 WHO MANAGES INVESTOR'S MONEY?

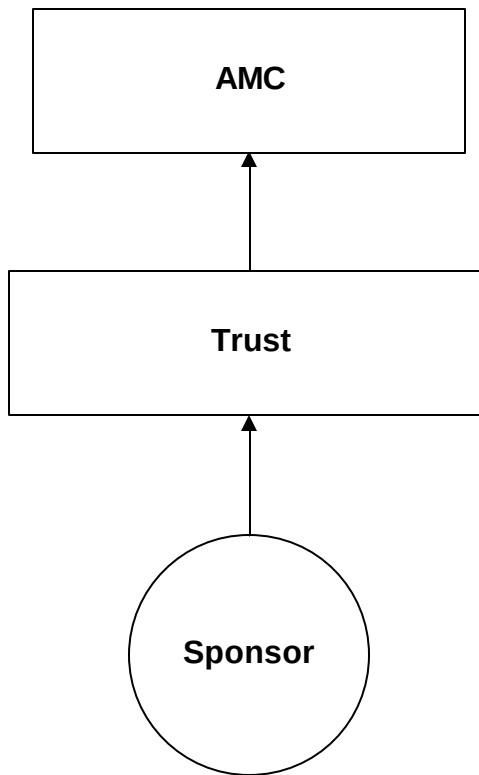
This is the role of the **Asset Management Company** (the Third tier). Trustees appoint the Asset Management Company (AMC), to manage investor's money. The AMC in return charges a fee for the services provided and this fee is borne by the investors as it is deducted from the money collected from them. The AMC's Board of Directors must have at least 50% of Directors who are independent directors. The AMC has to be approved by SEBI. The AMC functions under the supervision of it's Board of Directors, and also under the direction of the Trustees and SEBI. It is the AMC, which in the name of the Trust, floats new schemes and manage these schemes by buying and selling securities. In order to do this the AMC needs to follow all rules and

regulations prescribed by SEBI and as per the Investment Management Agreement it signs with the Trustees.

If any fund manager, analyst intends to buy/ sell some securities, the permission of the Compliance Officer is a must. A compliance Officer is one of the most important persons in the AMC. Whenever the fund intends to launch a new scheme, the AMC has to submit a Draft Offer Document to SEBI. This draft offer document, after getting SEBI approval becomes the offer document of the scheme. The Offer Document (OD) is a legal document and investors rely upon the information provided in the OD for investing in the mutual fund scheme. The Compliance Officer has to sign the Due Diligence Certificate in the OD. This certificate says that all the information provided inside the OD is true and correct. This ensures that there is accountability and somebody is responsible for the OD. In case there is no compliance officer, then senior executives like CEO, Chairman of the AMC has to sign the due diligence certificate. The certificate ensures that the AMC takes responsibility of the OD and its contents.

1.4 WHO IS A CUSTODIAN?

A custodian's role is safe keeping of physical securities and also keeping a tab on the corporate actions like rights, bonus and dividends declared by the companies in which the fund has invested. The Custodian is appointed by the Board of Trustees. The custodian also participates in a clearing and settlement system through approved depository companies on behalf of mutual funds, in case of dematerialized securities. In India today, securities (and units of mutual funds) are no longer held in physical form but mostly in dematerialized form with the Depositories. The holdings are held in the Depository through Depository Participants (DPs). Only the physical securities are held by the Custodian. The deliveries and receipt of units of a mutual fund are done by the custodian or a depository participant at the instruction of the AMC and under the overall direction and responsibility of the Trustees. Regulations provide that the Sponsor and the Custodian must be separate entities.



Fund Structure

1.5 WHAT IS THE ROLE OF THE AMC?

The role of the AMC is to manage investor's money on a day to day basis. Thus it is imperative that people with the highest integrity are involved with this activity. The AMC cannot deal with a single broker beyond a certain limit of transactions. The AMC cannot act as a Trustee for some other Mutual Fund. The responsibility of preparing the OD lies with the AMC. Appointments of intermediaries like independent financial advisors (IFAs), national and regional distributors, banks, etc. is also done by the AMC. Finally, it is the AMC which is responsible for the acts of its employees and service providers.

As can be seen, it is the AMC that does all the operations. All activities by the AMC are done under the name of the Trust, i.e. the mutual fund. The AMC

charges a fee for providing its services. SEBI has prescribed limits for this. This fee is borne by the investor as the fee is charged to the scheme, in fact, the fee is charged as a percentage of the scheme's net assets. An important point to note here is that this fee is included in the overall expenses permitted by SEBI. There is a maximum limit to the amount that can be charged as expense to the scheme, and this fee has to be within that limit. Thus regulations ensure that beyond a certain limit, investor's money is not used for meeting expenses.

1.6 WHAT IS AN NFO?

Once the 3 – tier structure is in place, the AMC launches new schemes, under the name of the Trust, after getting approval from the Trustees and SEBI. The launch of a new scheme is known as a New Fund Offer (NFO). We see NFOs hitting markets regularly. It is like an invitation to the investors to put their money into the mutual fund scheme by subscribing to its units. When a scheme is launched, the distributors talk to potential investors and collect money from them by way of cheques or demand drafts. Mutual funds cannot accept cash. (Mutual funds units can also be purchased on-line through a number of intermediaries who offer on-line purchase / redemption facilities). Before investing, it is expected that the investor reads the Offer Document (OD) carefully to understand the risks associated with the scheme.

1.7 WHAT IS THE ROLE OF A REGISTRAR AND TRANSFER AGENTS?

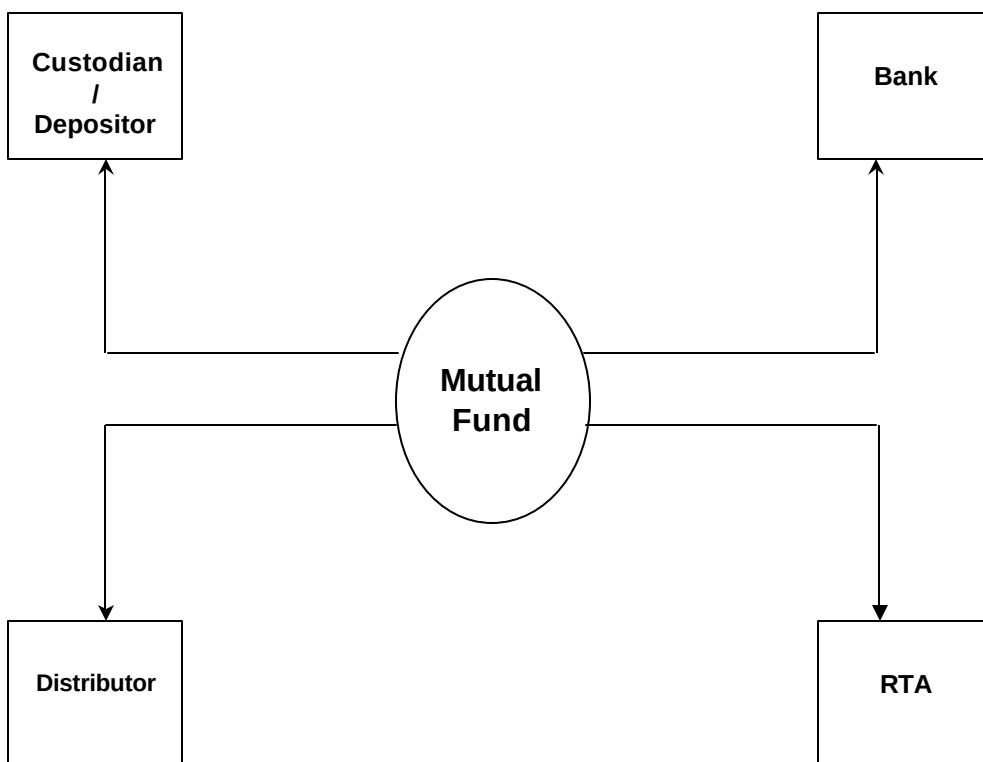
Registrars and Transfer Agents (RTAs) perform the important role of maintaining investor records. All the New Fund Offer (NFO) forms, redemption forms (i.e. when an investor wants to exit from a scheme, it requests for redemption) go to the RTA's office where the information is converted from physical to electronic form. How many units will the investor get, at what price, what is the applicable NAV, what is the entry load, how much money will he get in case of redemption, exit loads, folio number, etc. is all taken care of by the RTA.

1.8 WHAT IS THE PROCEDURE FOR INVESTING IN AN NFO?

The investor has to fill a form, which is available with the distributor. The investor must read the Offer Document (OD) before investing in a mutual fund scheme. In case the investor does not read the OD, he must read the

Key Information Memorandum (KIM), which is available with the application form. Investors have the right to ask for the KIM/ OD from the distributor.

Once the form is filled and the cheque is given to the distributor, he forwards both these documents to the RTA. The RTA after capturing all the information from the application form into the system, sends the form to a location where all the forms are stored and the cheque is sent to the bank where the mutual fund has an account. After the cheque is cleared, the RTA then creates units for the investor. The same process is followed in case an investor intends to invest in a scheme, whose units are available for subscription on an on-going basis, even after the NFO period is over.



Fund Constituents

1.9 WHAT ARE THE INVESTOR'S RIGHTS & OBLIGATIONS?

Some of the Rights and Obligations of investors are :-

- ◆ Investors are mutual, beneficial and proportional owners of the scheme's assets. The investments are held by the trust in fiduciary capacity (The fiduciary duty is a legal relationship of confidence or trust between two or more parties).
- ◆ In case of dividend declaration, investors have a right to receive the dividend within 30 days of declaration.
- ◆ On redemption request by investors, the AMC must dispatch the redemption proceeds within 10 working days of the request. In case the AMC fails to do so, it has to pay an interest @ 15%. This rate may change from time to time subject to regulations.
- ◆ In case the investor fails to claim the redemption proceeds immediately, then the applicable NAV depends upon when the investor claims the redemption proceeds.
- ◆ Investors can obtain relevant information from the trustees and inspect documents like trust deed, investment management agreement, annual reports, offer documents, etc. They must receive audited annual reports within 6 months from the financial year end.
- ◆ Investors can wind up a scheme or even terminate the AMC if unit holders representing 75% of scheme's assets pass a resolution to that respect.
- ◆ Investors have a right to be informed about changes in the fundamental attributes of a scheme. Fundamental attributes include type of scheme, investment objectives and policies and terms of issue.
- ◆ Lastly, investors can approach the investor relations officer for grievance redressal. In case the investor does not get appropriate solution, he can approach the investor grievance cell of SEBI. The investor can also sue the trustees.

The offer document is a legal document and it is the investor's obligation to read the OD carefully before investing. The OD contains all the material information that the investor would require to make an informed decision.

It contains the risk factors, dividend policy, investment objective, expenses expected to be incurred by the proposed scheme, fund manager's experience, historical performance of other schemes of the fund and a lot of other vital information.

It is not mandatory for the fund house to distribute the OD with each application form but if the investor asks for it, the fund house has to give it to the investor. However, an abridged version of the OD, known as the Key Information Memorandum (KIM) has to be provided with the application form.

CHAPTER 2

MUTUAL FUND PRODUCTS AND FEATURES – EQUITY FUNDS

A variety of schemes are offered by mutual funds. It is critical for investors to know the features of these products, before money is invested in them. Let us first understand what are Open Ended and Close Ended funds.

2.1 WHAT ARE OPEN ENDED AND CLOSE ENDED FUNDS?

Equity Funds (or any Mutual Fund scheme for that matter) can either be **open ended** or **close ended**. An open ended scheme allows the investor to enter and exit at his convenience, anytime (except under certain conditions) whereas a close ended scheme restricts the freedom of entry and exit. Whenever a new fund is launched by an AMC, it is known as New Fund Offer (NFO). Units are offered to investors at the par value of Rs. 10/ unit. In case of open ended schemes, investors can buy the units even after the NFO period is over. Thus, when the fund sells units, the investor buys the units from the fund and when the investor wishes to redeem the units, the fund repurchases the units from the investor. This can be done even after the NFO has closed. The buy / sell of units takes place at the Net Asset Value (NAV) declared by the fund. The freedom to invest after the NFO period is over is not there in close ended schemes. Investors have to invest only during the NFO period; i.e. as long as the NFO is on or the scheme is open for subscription. Once the NFO closes, new investors cannot enter, nor can existing investors exit, till the term of the scheme comes to an end. However, in order to provide entry and exit option, close ended mutual funds list their schemes on stock exchanges. This provides an opportunity for investors to buy and sell the units from each other. This is just like buying / selling shares on the stock exchange. This is done through a stock broker. The outstanding units of the fund does not increase in this case since the fund is itself not selling any units. Sometimes, close ended funds also offer 'buy-back of fund shares / units', thus offering another avenue for investors to exit the fund. Therefore, regulations drafted in India permit investors in close ended funds to exit even before the term is over.

2.2 WHAT ARE EQUITY FUNDS?

2.2.1 *Salient Features*

These are by far the most widely known category of funds though they account for broadly 40% of the industry's assets, while the remaining 60% is contributed by debt oriented funds. Equity funds essentially invest the investor's money in equity shares of companies. Fund managers try and identify companies with good future prospects and invest in the shares of such companies. They generally are considered as having the highest levels of risks (equity share prices can fluctuate a lot), and hence, they also offer the probability of maximum returns. However, High Risk, High Return should not be understood as "If I take high risk I *will* get high returns". Nobody is guaranteeing higher returns if one takes high risk by investing in equity funds, hence it must be understood that "If I take high risk, I *may* get high returns or I *may* also incur losses". This concept of Higher the Risk, Higher the Returns must be clearly understood before investing in Equity Funds, as it is one of the important characteristics of Equity fund investing.

2.2.2 *Equity Fund Definition*

Equity Funds are defined as those funds which have at least 65% of their Average Weekly Net Assets invested in Indian Equities. This is important from taxation point of view, as funds investing 100% in international equities are also equity funds from the investors' asset allocation point of view, but the tax laws do not recognise these funds as Equity Funds and hence investors have to pay tax on the Long Term Capital Gains made from such investments (which they do not have to in case of equity funds which have at least 65% of their Average Weekly Net Assets invested in Indian Equities).

Equity Funds come in various flavours and the industry keeps innovating to make products available for all types of investors. Relatively safer types of Equity Funds include Index Funds and diversified Large Cap Funds, while the riskier varieties are the Sector Funds. However, since equities as an asset class are risky, there is no guaranteeing returns for any type of fund. International Funds, Gold Funds (not to be confused with Gold ETF) and Fund of Funds are some of the different types of funds, which are designed for different types of investor preferences. These funds are explained later.

Equity Funds can be classified on the basis of market capitalisation of the stocks they invest in – namely Large Cap Funds, Mid Cap Funds or Small Cap Funds – or on the basis of investment strategy the scheme intends to have

like Index Funds, Infrastructure Fund, Power Sector Fund, Quant Fund, Arbitrage Fund, Natural Resources Fund, etc. These funds are explained later.

2.3 WHAT IS AN INDEX FUND?

Equity Schemes come in many variants and thus can be segregated according to their risk levels. At the lowest end of the equity funds risk – return matrix come the index funds while at the highest end come the sectoral schemes or specialty schemes. These schemes are the riskiest amongst all types' schemes as well. However, since equities as an asset class are risky, there is no guaranteeing returns for any type of fund.

Index Funds invest in stocks comprising indices, such as the Nifty 50, which is a broad based index comprising 50 stocks. There can be funds on other indices which have a large number of stocks such as the CNX Midcap 100 or S&P CNX 500. Here the investment is spread across a large number of stocks. In India today we find many index funds based on the Nifty 50 index, which comprises large, liquid and blue chip 50 stocks.

The objective of a typical Index Fund states – 'This Fund will invest in stocks comprising the Nifty and in the same proportion as in the index'. The fund manager will not indulge in research and stock selection, but passively invest in the Nifty 50 scrips only, i.e. 50 stocks which form part of Nifty 50, in proportion to their market capitalisation. Due to this, index funds are known as passively managed funds. Such passive approach also translates into lower costs as well as returns which closely tracks the benchmark index return (i.e. Nifty 50 for an index fund based on Nifty 50). Index funds never attempt to beat the index returns, their objective is always to mirror the index returns as closely as possible.

The difference between the returns generated by the benchmark index and the Index Fund is known as tracking error. By definition, Tracking Error is the variance between the daily returns of the underlying index and the NAV of the scheme over any given period.

Concept Clarifier – Tracking Error

Tracking Error is the Standard Deviation of the difference between daily returns of the index and the NAV of the scheme (index fund). This can be easily calculated on a standard MS office spreadsheet, by taking the daily returns of the Index, the daily returns of the NAV of the scheme, finding the difference between the two for each day and then calculating the standard deviation of difference by using the excel formula for 'standard deviation'. In simple terms it is the difference between the returns delivered by the underlying index and those delivered by the scheme. The fund manager may buy/ sell securities anytime during the day, whereas the underlying index will be calculated on the basis of closing prices of the Nifty 50 stocks. Thus there will be a difference between the returns of the scheme and the index. There may be a difference in returns due to cash position held by the fund manager. This will lead to investor's money not being allocated exactly as per the index but only very close to the index. If the index's portfolio composition changes, it will require some time for the fund manager to exit the earlier stock and replace it with the new entrant in the index. These and other reasons like dividend accrued but not distributed, accrued expenses etc. all result in returns of the scheme being different from those delivered by the underlying index.

This difference is captured by Tracking Error. As is obvious, this should be as low as possible.

The fund with the least Tracking Error will be the one which investors would prefer since it is the fund tracking the index closely. Tracking Error is also function of the scheme expenses. Lower the expenses, lower the Tracking Error. Hence an index fund with low expense ratio, generally has a low Tracking Error.

2.4 WHAT ARE DIVERSIFIED LARGE CAP FUNDS?

Another category of equity funds is the diversified large cap funds. These are funds which restrict their stock selection to the large cap stocks – typically the top 100 or 200 stocks with highest market capitalization and liquidity. It is generally perceived that large cap stocks are those which have sound businesses, strong management, globally competitive products and are quick to respond to market dynamics. Therefore, diversified large cap funds are considered as stable and safe. However, since equities as an asset class are risky, there is no guaranteeing returns for any type of fund. These funds are actively managed funds unlike the index funds which are passively managed, In an actively managed fund the fund manager pores over data and information, researches the company, the economy, analyses market trends,

takes into account government policies on different sectors and then selects the stock to invest. This is called as active management.

A point to be noted here is that anything other than an index funds are actively managed funds and they generally have higher expenses as compared to index funds. In this case, the fund manager has the choice to invest in stocks beyond the index. Thus, active decision making comes in. Any scheme which is involved in active decision making is incurring higher expenses and may also be assuming higher risks. This is mainly because as the stock selection universe increases from index stocks to largecaps to midcaps and finally to smallcaps, the risk levels associated with each category increases above the previous category. The logical conclusion from this is that actively managed funds should also deliver higher returns than the index, as investors must be compensated for higher risks. But this is not always so. Studies have shown that a majority of actively managed funds are unable to beat the index returns on a consistent basis year after year. Secondly, there is no guaranteeing which actively managed fund will beat the index in a given year. Index funds therefore have grown exponentially in some countries due to the inconsistency of returns of actively managed funds.

2.5 WHAT ARE MIDCAP FUNDS?

After largecap funds come the midcap funds, which invest in stocks belonging to the mid cap segment of the market. Many of these midcaps are said to be the 'emerging bluechips' or 'tomorrow's largecaps'. There can be actively managed or passively managed mid cap funds. There are indices such as the CNX Midcap index which tracks the midcap segment of the markets and there are some passively managed index funds investing in the CNX Midcap companies.

2.6 WHAT ARE SECTORAL FUNDS?

Funds that invest in stocks from a single sector or related sectors are called Sectoral funds. Examples of such funds are IT Funds, Pharma Funds, Infrastructure Funds, etc. Regulations do not permit funds to invest over 10% of their Net Asset Value in a single company. This is to ensure that schemes are diversified enough and investors are not subjected to undue risk. This regulation is relaxed for sectoral funds and index funds.

There are many other types of schemes available in our country, and there are still many products and variants that have yet to enter our markets. While it is beyond the scope of this curriculum to discuss all types in detail,

there is one emerging type of scheme, namely Exchange Traded Funds or ETFs, which is discussed in detail in the next section.

2.7 OTHER EQUITY SCHEMES :

2.7.1 Arbitrage Funds

These invest simultaneously in the cash and the derivatives market and take advantage of the price differential of a stock and derivatives by taking opposite positions in the two markets (for e.g. stock and stock futures).

2.7.2 Multicap Funds

These funds can, theoretically, have a smallcap portfolio today and a largecap portfolio tomorrow. The fund manager has total freedom to invest in any stock from any sector.

2.7.3 Quant Funds

A typical description of this type of scheme is that 'The system is the fund manager', i.e. there are some predefined conditions based upon rigorous backtesting entered into the system and as and when the system throws 'buy' and 'sell' calls, the scheme enters, and/ or exits those stocks.

2.7.4 P / E Ratio Fund

A fund which invests in stocks based upon their P/E ratios. Thus when a stock is trading at a historically low P/E multiple, the fund will buy the stock, and when the P/E ratio is at the upper end of the band, the scheme will sell.

Concept Clarifier – P / E Ratio
P / E Ratio stands for Price Earnings Ratio. It is also known as Price Earnings multiple. This is a ratio of the current market price (CMP) of a share to its earning per share (EPS).
Thus if a company has issued 100 cr. shares and the profit after tax; i.e. the net profit of the company is Rs. 2000 cr., then the EPS for this company will be $2000 / 100 = \text{Rs. } 20$.
If this company's share's CMP is Rs. 200, then the P / E ratio will be $200 / 20 = 10x$.
The unit of P/E Ratio is 'times'. In the above example we say that the P/E Ratio is 10 times; i.e. the price (CMP) of the company's share is 10 times its EPS.

2.7.5 International Equities Fund

This is a type of fund which invests in stocks of companies outside India. This can be a Fund of Fund, whereby, we invest in one fund, which acts as a 'feeder' fund for some other fund(s), i.e invests in other mutual funds, or it can be a fund which directly invests in overseas equities. These may be further designed as 'International Commodities Securities Fund' or 'World Real Estate and Bank Fund' etc.

2.7.6 Growth Schemes

Growth schemes invest in those stocks of those companies whose profits are expected to grow at a higher than average rate. For example, telecom sector is a growth sector because many people in India still do not own a phone – so as they buy more and more cell phones, the profits of telecom companies will increase. Similarly, infrastructure; we do not have well connected roads all over the country, neither do we have best of ports or airports. For our country to move forward, this infrastructure has to be of world class. Hence companies in these sectors may potentially grow at a relatively faster pace. Growth schemes will invest in stocks of such companies.

Concept Clarifier – Growth and Value Investing

Investment approaches can be broadly classified into Growth based and Value Based. While Growth investing refers to investing in fast growing companies, Value investing approach is based upon the premise that a stock/ sector is currently undervalued and the market will eventually realize its true value. So, a value investor will buy such a stock/ sector today and wait for the price to move up. When that happens, the Value investor will exit and search for another undervalued opportunity.

Hence in Growth investing, it is the growth momentum that the investor looks for, whereas in Value investing, the investor looks for the mismatch between the current market price and the true value of the investment.

Contra Funds can be said to be following a Value investing approach.

For example, when interest rates rise, people defer their purchases as the cost of borrowing increases. This affects banks, housing and auto sectors and the stocks of these companies come down. A Value fund manager will opine that as and when interest rates come down these stocks will go up again; hence he will buy these stocks today, when nobody wants to own them. Thus he will be taking a contrarian call.

The risk in Growth investing is that if growth momentum of the company goes down slightly, then the stock's price can go down rather fast, while in Value investing, the risk is that the investor may have to wait for a really long time before the market values the investment correctly.

2.7.7 ELSS

Equity Linked Savings Schemes (ELSS) are equity schemes, where investors get tax benefit upto Rs. 1 lakh under section 80C of the Income Tax Act. These are open ended schemes but have a lock in period of 3 years. These schemes serve the dual purpose of equity investing as well as tax planning for the investor; however it must be noted that investors cannot, under any circumstances, get their money back before 3 years are over from the date of investment.

2.7.8 Fund of Funds

These are funds which do not directly invest in stocks and shares but invest in units of other mutual funds which they feel will perform well and give high returns. In fact such funds are relying on the judgment of other fund managers.

Let us now look at the internal workings of an equity fund and what must an investor know to make an informed decision.

Concept Clarifier – AUM

Assets Under Management (AUM) represents the money which is managed by a mutual fund in a scheme. Adding AUMs for all schemes of a fund house gives the AUM of that fund house and the figure arrived at by adding AUMs of all fund houses represents the industry AUM.

AUM is calculated by multiplying the Net Asset Value (NAV – explained in detail later) of a scheme by the number of units issued by that scheme.

A change in AUM can happen either because of fall in NAV or redemptions. In case of sharp market falls, the NAVs move down, because of which the AUMs may reduce.

2.8 WHAT IS AN ENTRY LOAD?

Investors have to bear expenses for availing of the services (professional management) of the mutual fund. The first expense that an investor has to incur is by way of **Entry Load**. This is charged to meet the selling and distribution expenses of the scheme. A major portion of the Entry Load is used for paying commissions to the distributor. The distributor (also called a mutual fund advisor) could be an Independent Financial Advisor, a bank or a

large national distributor or a regional distributor etc. They are the intermediaries who help an investor with choosing the right scheme, financial planning and investing in schemes from time to time to meet one's requirements. Investors must ensure that his Advisor has passed the AMFI – Mutual Fund (Advisors) module certification.

Concept Clarifier – Entry Loads

Loads are charged to a scheme to meet its selling, marketing and distribution expenses. Loads can be charged at the time of entry, at the time of exit, as a fixed amount every year or in a staggered manner depending upon the time for which the investor is invested. Loads are charged as a percent of the NAV. Entry Load is charged when the investor enters the scheme. This is also known as front end load.

Entry load can have an impact on the number of units being allotted to an investor :

Example:

	Without Entry Load	With Entry Load
Scheme NAV (Rs.)	10	10
Entry Load	0%	2.25%
Buying Price (Rs.)	$10 + 10 * 0\% = 10$	$10 + 10 * 2.25\% = 10.225$
Investment (Rs.)	25,000	25,000
Units Allotted	$25,000 / 10 = 2500$	$25,000 / 10.225 = 2444.98$
Annual Returns = 12%. NAV of the scheme will rise to $10 + 10 * 12\% = 11.2$		
Profit/ Unit	$11.2 - 10 = \text{Rs. } 1.2$	$11.2 - 10.225 = \text{Rs. } 0.975$
Total Profit	$1.2 * 2500 = 3000$	$0.975 * 2444.98 = 2583.86$
Return on Investment	$3000 / 25,000 = 12\%$	$2583.86 / 25,000 = 9.54\%$

As can be seen from the above illustration, in case the investor has to bear an entry load, his cost of buying increases which translates into lesser number of units being allocated. When the NAV appreciates, his profit is reduced due to higher buying cost, which results in less Return on Investment (RoI).

Direct investment or invest through an advisor?

Investors who wish to invest directly; i.e. not through the intermediary, can approach the Asset Management Company (AMC) and invest on their own. This helps the investor to reduce the costs of investing; however going through an intermediary (the distributor) may have its advantages also. Firstly, the intermediary can help the investor in choosing the right scheme. Secondly, some intermediaries also provide after sales service, which an investor may not get in case he approaches the AMC directly. Intermediaries also provide valuation of investments across fund houses. However, it is for the investor to decide whether he wants to invest directly or through an intermediary and also which intermediary, since all intermediaries do not offer similar levels of service.

Entry Load is applied as a percent of the Net Asset Value (NAV). Net Assets of a scheme is that figure which is arrived at after deducting all scheme liabilities from its asset. NAV is calculated by dividing the value of Net Assets by the outstanding number of Units.

Concept Clarifier – NAV

Assets	Rs. Crs.	Liabilities	Rs. Crs.
Shares	345	Unit Capital	300
Debentures	23	Reserves & Surplus	85.7
Money Market Instruments	12		
Accrued Income	2.3	Accrued Expenditure	1.5
Other Current Assets	1.2	Other Current Liabilities	0.5
Deferred Revenue Expenditure	4.2		
	387.7		387.7
Units Issued (Cr.)	30		
Face Value (Rs.)	10		
Net Assets (Rs.)	385.7		
NAV (Rs.)	12.86		

All Figures in Rs. Cr

The above table shows a typical scheme balance sheet. Investments are entered under the assets column. Adding all assets gives the total of

Rs. 387.7 cr. From this if we deduct the liabilities of Rs. 2 cr. i.e. Accrued Expenditure and Other Current Liabilities, we get Rs. 385.7 cr as Net Assets of the scheme.

The scheme has issued 30 crs. units @ Rs. 10 each during the NFO. This translates in Rs. 300 crs. being garnered by the scheme then. This is represented by Unit Capital in the Balance Sheet. Thus, as of now, the net assets worth Rs. 385.7 cr are to be divided amongst 30 crs. units. This means the scheme has a Net Asset Value or NAV of Rs. 12.86.

The important point that the investor must focus here is that the Rs. 300 crs. garnered by the scheme has increased to Rs. 387 crs., which translates into a 29.23% gain, whereas, the return for the investor is 28.57% ($(12.86 - 10) / 10 = 28.57\%$).

Apart from Entry Load, there are other expenses which the investor has to bear. Whether an investor chooses to invest directly or through an intermediary, he must be aware of these finer points, which may materially affect investment decisions. We will now look at the other important points which should be considered before making an investment in an Equity Fund. All these are easily available in the **Fund Fact Sheets**.

Concept Clarifier – Fund Fact Sheet

Investors must read the Offer Document (OD) before investing. If not the OD, at least the Key Information Memorandum (KIM), which has to be provided with the application form. After an investor has entered into a scheme, he must monitor his investments regularly. This can be achieved by going through the Fund Fact Sheet. This is a monthly document which all mutual funds have to publish. This document gives all details as regards the AUMs of all its schemes, top holdings in all the portfolios of all the schemes, loads, minimum investment, performance over 1, 3, 5 years and also since launch, comparison of scheme's performance with the benchmark index (most mutual fund schemes compare their performance with a benchmark index such as the Nifty 50) over the same time periods, fund managers outlook, portfolio composition, expense ratio, portfolio turnover, risk adjusted returns, equity/debt split for schemes, YTM for debt portfolios and other information which the mutual fund considers important from the investor's decision making point of view.

In a nutshell, the fund fact sheet is the document which investors must read, understand and keep themselves updated with.

2.9 WHAT IS EXPENSE RATIO?

Among other things that an investor must look at before finalising a scheme, is that he must check out the **Expense Ratio**.

Concept Clarifier – Expense Ratio
Expense Ratio is defined as the ratio of expenses incurred by a scheme to its Average Weekly Net Assets. It means how much of investors money is going for expenses and how much is getting invested. This ratio should be as low as possible. Assume that a scheme has average weekly net assets of Rs 100 cr. and the scheme incurs Rs. 1 cr as annual expenses, then the expense ratio would be $1 / 100 = 1\%$. In case this scheme's expense ratio is comparable to or better than its peers then this scheme would qualify as a good investment, based on this parameter only. If this scheme performs well and its AUM increases to Rs. 150 cr in the next year whereas its annual expenses increase to Rs. 2 cr, then its expense would be $2 / 150 = 1.33\%$. It is not enough to compare a scheme's expense ratio with peers. The scheme's expense ratio must be tracked over different time periods. Ideally as net assets increase, the expense ratio of a scheme should come down.

2.10 WHAT IS PORTFOLIO TURNOVER?

Fund managers keep churning their portfolio depending upon their outlook for the market, sector or company. This churning can be done very frequently or may be done after sufficient time gaps. There is no rule which governs this and it is the mandate of the scheme and the fund managers' outlook and style that determine the churning. However, what is important to understand is that a very high churning frequency will lead to higher trading and transaction costs, which may eat into investor returns. **Portfolio Turnover** is the ratio which helps us to find how aggressively the portfolio is being churned.

While churning increases the costs, it does not have any impact on the Expense Ratio, as transaction costs are not considered while calculating expense ratio. Transaction costs are included in the buying & selling price of the scrip by way of brokerage, STT, cess, etc. Thus the portfolio value is computed *net* of these expenses and hence considering them while

calculating Expense Ratio as well would mean recording them twice – which would be incorrect.

Concept Clarifier – Portfolio Turnover
Portfolio Turnover is defined as 'Lesser of Assets bought or sold/ Net Assets'. A scheme with Rs. 100 cr as net assets sells Rs 20 cr of its investments. Thus its Portfolio Turnover Rate would be $20/100 = 20\%$.
If this scheme's net assets increase to Rs. 120 cr and the fund manager decides to churn the entire portfolio by exiting all stocks, then the Portfolio Turnover would be $120/120 = 100\%$.
If the fund manager churns the entire portfolio twice in a single year then we would say that the Portfolio Turnover rate is 200% or that the portfolio is churned once every 6 months. Liquid funds have very high portfolio turnover due to less maturity of the paper. Once the paper matures, the fund manager has to buy another security, thus churning the portfolio.

2.11 HOW DOES AUM AFFECT PORTFOLIO TURNOVER?

The scheme's AUM can also have an impact on the performance of the scheme. In case the scheme performs well and thereby attracts a lot of money flow, it may happen that the fund manager may not be able to deploy that extra money successfully as he may not find enough opportunities. Thus an increased fund size may result in lower returns. If the fund manager tries to acquire significantly large quantities of a stock, the buying pressure may lead to higher stock prices, thereby higher average cost for the scheme. Also, if the holdings by the scheme in any stock are huge, then exit may be difficult as selling from the scheme itself can put pressure on the prices. Thus the first share may be sold at a higher price and as the supply increases the prices may fall, and the last share may get sold at a lower price.

A scheme with a very small AUM does not face these problems but has its own set of problems. The Expense Ratio of such a scheme will be very high as expenses are calculated as a percent of Average Weekly Net Assets. As the fund size increases, the Expense Ratio tends to go down.

Similarly Portfolio Turnover will be magnified as the denominator (Average Net Assets) is small and hence the turnover appears to be very high.

Thus, the investor must look at AUM for the previous few months, say last 12 months and compare the same with that of the industry and also similar schemes. If it is found that the scheme's performance is in line or better than

its peers consistently, even though the AUM is increasing, then it can be a fair indicator that increased AUM is not a problem for the fund manager.

2.12 HOW TO ANALYSE CASH LEVEL IN PORTFOLIOS?

The next logical point of focus must be the **Cash Level** in the scheme. The Cash level is the amount of money the mutual fund is holding in Cash, i.e. the amount not invested in stocks and bonds but lying in cash. If the scheme is having higher than industry average cash levels consistently, more so in a bull market, it will lead to a inferior performance by the scheme than its peers. However, in a falling market, it is this higher cash level that will protect investor wealth from depleting. Hence whenever one is analyzing cash levels, it is extremely important to see why the fund manager is sitting on high cash levels. It may be so that he is expecting a fall therefore he is not committing large portions of monies. It may be so in a bull market or a bear market. The strategy could be to enter once the prices correct. High cash levels can also be seen as a cushion for sudden redemptions and in large amounts.

2.13 WHAT ARE EXIT LOADS?

As there are Entry Loads, there exist Exit Loads as well. As Entry Loads increase the cost of buying, similarly Exit Loads reduce the amount received by the investor. Not all schemes have an Exit Load, and not all schemes have similar exit loads as well. Some schemes have Contingent Deferred Sales Charge (CDSC). This is nothing but a modified form of Exit Load, wherein the investor has to pay different Exit Loads depending upon his investment period.

If the investor exits early, he will have to bear more Exit Load and if he remains invested for a longer period of time, his Exit Load will reduce. Thus the longer the investor remains invested, lesser is the Exit Load. After some time the Exit Load reduces to nil; i.e. if the investor exits after a specified time period, he will not have to bear any Exit Load.

Concept Clarifier – CDSC

CDSC acts as a disincentive for the investor to redeem early. The effect of CDSC is that the investor has to bear a lesser back end load if he remains invested for a longer period of time.

Exit Time	CDSC
Exit within first 3 years	3 %
Exit within 3 to 5 years	2 %
Exit after 5 years	Nil

As can be seen, if the investor remains invested for a longer period of time, he pays less load.

CHAPTER 3

GOLD ETFS

3.1 INTRODUCTION TO EXCHANGE TRADED FUNDS

Exchange Traded Funds (ETFs) are mutual fund units which investors buy/sell from the stock exchange, as against a normal mutual fund unit, where the investor buys / sells through a distributor or directly from the AMC. ETF as a concept is relatively new in India. It was only in early nineties that the concept gained in popularity in the USA. ETFs have relatively lesser costs as compared to a mutual fund scheme. This is largely due to the structure of ETFs. While in case of a mutual fund scheme, the AMC deals directly with the investors or distributors, the ETF structure is such that the AMC does not have to deal directly with investors or distributors. It instead issues units to a few designated large participants, who are also called as Authorised Participants (APs), who in turn act as market makers for the ETFs. The Authorised Participants provide two way quotes for the ETFs on the stock exchange, which enables investors to buy and sell the ETFs at any given point of time when the stock markets are open for trading. ETFs therefore trade like stocks. Buying and selling ETFs is similar to buying and selling shares on the stock exchange. Prices are available on real time and the ETFs can be purchased through a stock exchange broker just like one would buy / sell shares. There are huge reductions in marketing expenses and commissions as the Authorised Participants are not paid by the AMC, but they get their income by offering two way quotes on the floor of the exchange.

Due to these lower expenses, the Tracking Error for an ETF is usually low. Tracking Error is the acid test for an index fund/ ETF. By design an index fund/ index ETF should only replicate the index return. The difference between the returns generated by the scheme/ ETF and those generated by the index is the tracking error.

Assets in ETFs

Practically any asset class can be used to create ETFs. Globally there are ETFs on Silver, Gold, Indices (SPDRs, Cubes, etc), etc. In India, we have ETFs on Gold and Indices (Nifty, Bank Nifty etc.). We also have ETFs which are similar to Liquid Funds.

Index ETF

An index ETF is one where the underlying is an index, say Nifty. The APs deliver the shares comprising the Nifty, in the same proportion as they are in the Nifty, to the AMC and create ETF units in bulk (These are known as Creation Units). Once the APs get these units, they provide liquidity to these units by offering to buy and sell through the stock exchange. They give two way quotes, buy and sell quote for investors to buy and sell the ETFs. ETFs therefore have to be listed on stock exchanges. There are many ETFs presently listed on the NSE.

3.2 SALIENT FEATURES

An Exchange Traded Fund (ETF) is essentially a scheme where the investor has to buy/ sell units from the market through a broker (just as he/ she would buy a share). An investor must have a demat account for buying ETFs (For understanding what is demat please refer to NCFM module 'Financial Markets : A Beginners' Module). An important feature of ETFs is the huge reduction in costs. While a typical Index fund would have expenses in the range of 1.5% of Net Assets, an ETF might have expenses around 0.75%. In fact, in international markets these expenses are even lower. In India too this may be the trend once more Index Funds and ETFs come to the market and their popularity increases. Expenses, especially in the long term, determine to a large extent, how much money the investor makes. This is because lesser expenses mean more of the investor's money is getting invested today and over a longer period of time, the power of compounding will turn this saving into a significant contributor to the investors' returns.

Scheme	A	B
Investment (Rs.)	10000	10000
Expense Ratio	1.50%	0.75%
Term (Years)	25	25
Compounded Average Growth Rate (CAGR)	12%	12%
Amount (Rs.)	116508.16	140835.93
Difference (Rs.)	24327.77	

If an investor invests Rs 10,000 in 2 schemes each, for 25 years, with both the schemes delivering returns at a CAGR of 12% and the only difference being in the expenses of the schemes, then at the end of the term, while scheme A would have turned the investment into Rs 1.16 Lakhs, scheme B would have grown to Rs 1.40 Lakhs – a difference of Rs 24,327.77! Post

expenses, scheme A's CAGR comes out to be 10.32%, while scheme B's CAGR stands at 11.16%.

Concept Clarifier – Buying/ Selling ETFs
An investor can approach a trading member of NSE and enter into an agreement with the trading member. Buying and selling ETFs requires the investor to have demat and trading accounts. The procedure is exactly similar to buying and selling shares. The investor needs to have sufficient money in the trading account. Once this is done, the investor needs to tell the broker precisely how many units he wants to buy/ sell and at what price. Investors should take care that they place the order completely. They should not tell the broker to buy/ sell according to the broker's judgement. Investors should also not keep signed delivery instruction slips with the broker as there may be a possibility of their misuse. Placing signed delivery instruction slips with the broker is similar to giving blank signed cheques to someone.

Gold ETFs (G-ETFs) are a special type of ETF which invests in Gold and Gold related securities. This product gives the investor an option to diversify his investments into a different asset class, other than equity and debt.

Traditionally, Indians are known to be big buyers of Gold; an age old tradition. G-ETFs can be said to be a new age product, designed to suit our traditional requirements. We buy Gold, among other things for children's marriages, for gifting during ceremonies etc. Holding physical Gold can have its' disadvantages:

1. Fear of theft
2. Payment Wealth Tax
3. No surety of quality
4. Changes in fashion and trends
5. Locker costs
6. Lesser realisation on remoulding of ornaments

G-ETFs score over all these disadvantages, while at the same time retaining the inherent advantages of Gold investing.

In case of Gold ETFs, investors buy Units, which are backed by Gold. Thus, every time an investor buys 1 unit of G-ETFs, it is similar to an equivalent quantity of Gold being earmarked for him somewhere. Thus his units are 'as good as Gold'.

Say for example 1 G-ETF = 1 gm of 99.5% pure Gold, then buying 1 G-ETF unit every month for 20 years would have given the investor a holding of 240 gm of Gold, by the time his child's marriage approaches (240 gm = 1 gm/month * 12 months * 20 Years). After 20 years the investor can convert the G-ETFs into 240 gm of physical gold by approaching the mutual fund or sell the G-ETFs in the market at the current price and buy 240 gm of gold.

Secondly, all these years, the investor need not worry about theft, locker charges, quality of Gold or changes in fashion as he would be holding Gold in paper form. As and when the investor needs the Gold, he may sell the Units in the market and realise an amount equivalent to his holdings at the then prevailing rate of Gold ETF. This money can be used to buy physical gold and make ornaments as per the prevailing trends. The investor may also simply transfer the units to his child's demat account as well! Lastly, the investor will not have to pay any wealth tax on his holdings. There maybe other taxes, expenses to be borne from time to time, which the investor needs to bear in mind while buying / selling G-ETFs.

3.3 WORKING

The G-ETF is designed as an open ended scheme. Investors can buy/ sell units any time at then prevailing market price. This is an important point of differentiation of ETFs from similar open ended funds. In case of open ended funds, investors get units (or the units are redeemed) at a price based upon that day's NAV. In case of ETFs, investors can buy (or sell) units at a price which is prevailing at that point of time during market hours. Thus for all investors of open ended schemes, on any given day their buying (or redemption) price will be same, whereas for ETF investors, the prices will vary for each, depending upon when they bought (or sold) units on that day.

The way Gold ETFs work is as under:

3.3.1 During New Fund Offer (NFO)

- ◆ AMC decides of launching G-ETF
- ◆ Investors give money to AMC and AMC gives units to investors in return
- ◆ AMC buys Gold of specified quality at the prevailing rates from investors' money

3.3.2 On an on going basis

- ◆ Authorised Participants (typically large institutional investors) give money/ Gold to AMC
- ◆ AMC gives equivalent number of units bundled together to these authorized participants (AP)
- ◆ APs split these bundled units into individual units and offer for sale in the secondary market
- ◆ Investors can buy G-ETF units from the secondary markets either from the quantity being sold by the APs or by other retail investors
- ◆ Retail investors can also sell their units in the market

The Gold which the AP deposits for buying the bundled ETF units is known as 'Portfolio Deposit'. This Portfolio Deposit has to be deposited with the Custodian. A custodian is someone who handles the physical Gold for the AMC. The AMC signs an agreement with the Custodian, where all the terms and conditions are agreed upon. Once the AP deposits Gold with the custodian, it is the responsibility of the custodian to ensure safety of the Gold, otherwise he has to bear the liability, to the extent of the market value of the Gold.

The custodian has to keep record of all the Gold that has been deposited/ withdrawn under the G-ETF. An account is maintained for this purpose, which is known as 'Allocated Account'. The custodian, on a daily basis, enters the inflows and outflows of Gold bars from this account. All details such as the serial number, refiner, fineness etc. are maintained in this account. The transfer of Gold from or into the Allocated Account happens at the end of each business day. A report is submitted by the custodian, no later than the following business day, to the AMC.

The money which the AP deposits for buying the bundled ETF units is known as 'Cash Component'. This Cash Component is paid to the AMC. The Cash Component is not mandatory and is paid to adjust for the difference between the applicable NAV and the market value of the Portfolio Deposit. This difference may be due to accrued dividend, management fees, etc. The bundled units (which the AP receives on payment of Portfolio Deposit to the custodian and Cash Component to the AMC) are known as Creation Units. Each Creation Unit comprises of a pre-defined number of ETFs Units (say 25,000 or 100 or any other number).

Thus, now it can be said that **Authorised Participants pay Portfolio Deposit and / or Cash Component and get Creation Units in return.**

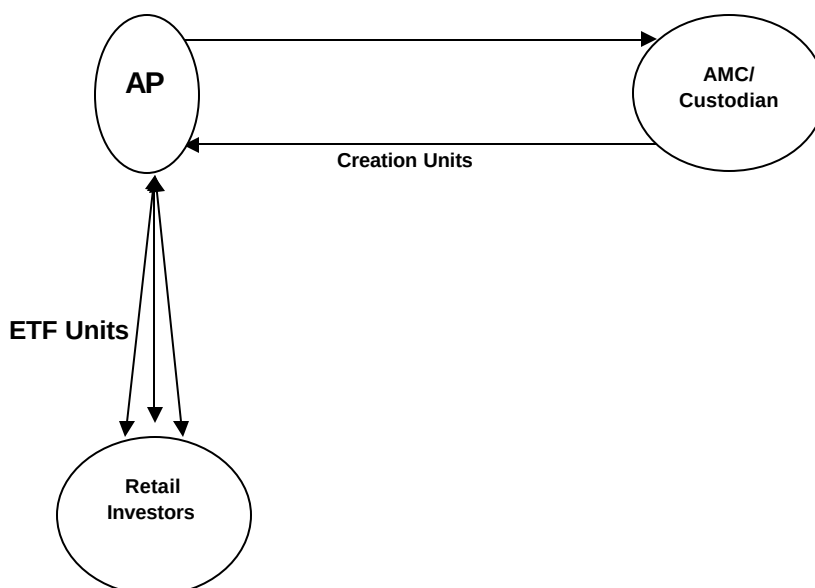
Each Creation Unit consists of a pre defined number of G-ETF Units. APs strip these Creation Units (which are nothing but bundled G-ETF units) and sell individual G-ETF units in the market. Thus retail investors can buy/ sell 1 unit or it's multiples in the secondary market.

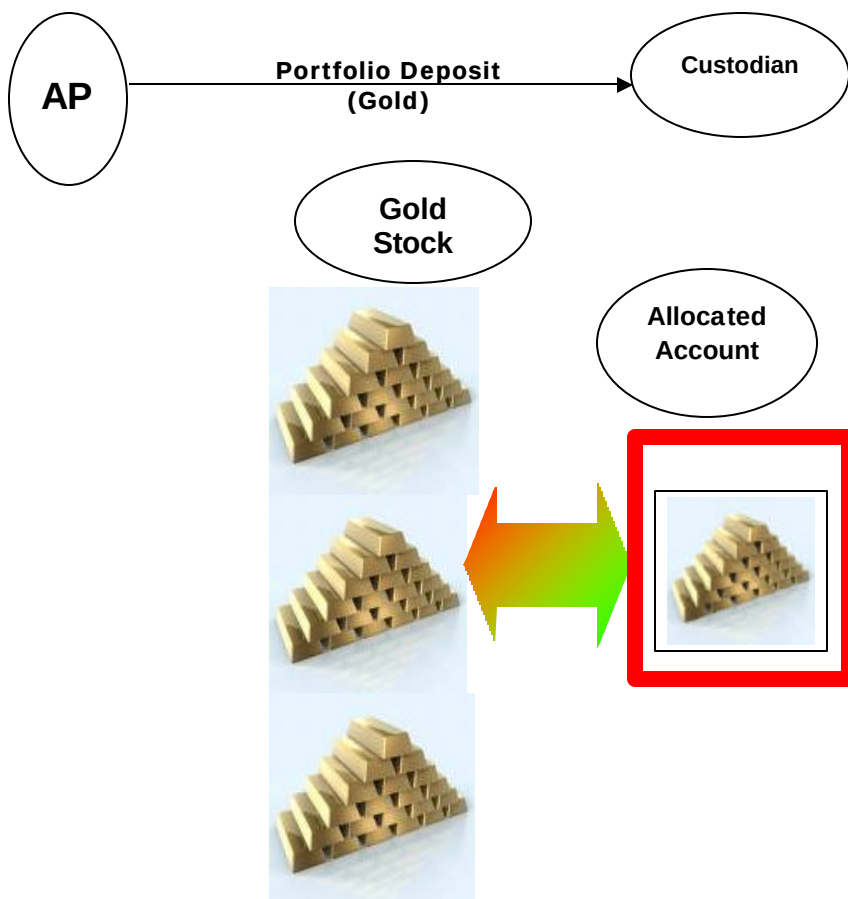
3.4 MARKET MAKING BY APs

APs are like market makers and continuously offer two way quotes (buy and sell). They earn on the difference between the two way quotes they offer. This difference is known as bid-ask spread. They provide liquidity to the ETFs by continuously offering to buy and sell ETF units.

If the last traded price of a G-ETF is Rs. 1000, then an AP will give a two way quote by offering to buy an ETF unit at Rs 999 and offering to sell an ETF unit Rs. 1001. Thus whenever the AP buys, he will buy @ 999 and when he sells, he will sell at 1001, thereby earning Rs. 2 as the difference. It should also be understood that the impact of this transaction is that the AP does not increase/ decrease his holding in the ETF. This is known as earning through Dealer Spreads. APs also play an important role of aligning the price of the unit with the NAV. This is done by exploiting the arbitrage opportunities.

It should be understood that it is not only APs who can sell ETF units in the market. Retail investors get liquidity by selling their units as well. So it is not always that the buyer of units is necessarily buying from APs – the seller at the other end may be a retail investor who wishes to exit.





As explained earlier, the custodian maintains record of all the Gold that comes into and goes out of the scheme's Portfolio Deposit. The custodian makes respective entries in the Allocated Account thus transferring Gold into and out of the scheme at the end of each business day. The custodian has no right on the Gold in the Allocated Account.

The custodian may appoint a sub-custodian to perform some of the duties. The custodian charges fee for the services rendered and has to buy adequate insurance for the Gold held. The premium paid for the insurance is borne by the scheme as a transaction cost and is allowed as an expense under SEBI guidelines. This expense contributes in a small way to the tracking error.

The difference between the returns given by Gold and those delivered by the scheme is known as Tracking Error. It is defined as the variance between the

daily returns of the underlying (Gold in this case) and the NAV of the scheme for any given time period.

Gold has to be valued as per a specific formula mandated by regulations. This formula takes into account various inputs like price of Gold in US \$/ ounce as decided by the London Bullion Markets Association (LBMA) every morning, the conversion factor for ounce to Kg, the prevailing USD/ INR exchange rate, customs duty, octroi, sales tax, etc.

3.5 CREATION UNITS, PORTFOLIO DEPOSIT AND CASH COMPONENT (AN EXAMPLE) :

Let us look at the following example to understand Creation Units, Portfolio Deposit and Cash Component in detail.

Assumption: 1 ETF unit = 1 gm of 99.5% pure Gold

During New Fund Offer (NFO)

Amount Invested (Rs.): 5000

Price of 1 gm of Gold (Rs.): 1000

Since 1 ETF unit = 1 gm of Gold

Issue Price (Rs.) = 1000

Units Allotted (Number = Investment/ Issue Price): 5

Creation Units

1 Creation Unit = 100 ETF units

NAV (Rs.) = 1050

Price of 1 gm of Gold (Rs.): 1000

So, 100 Units will cost (Rs.) = $1050 \times 100 = 1,05,000$

100 ETF will be equal to 100 gm of Gold

Therefore, value of Portfolio Deposit (Rs.) = $1000 \times 100 = 1,00,000$

Hence Cash Component (Rs.) = $1,05,000 - 1,00,000 = 5,000$

Thus it can be seen by depositing Gold worth Rs 1,00,000 as Portfolio Deposit and Rs. 5,000 as Cash Component, the Authorised Participant has created 1 Creation Unit comprising of 100 ETF units.

Let us now see how the Authorised Participant ensures parity between the NAV and market price of the ETFs.

As can be well understood, the price of ETF will be determined by market forces, and although it is linked to the prices of Gold, it will not mirror the

exact movements at all given points of time. This will happen due to excess buying or selling pressure on the ETFs, due to which prices may rise or fall more than the Gold price. Such exaggerated movements provide opportunity for arbitrage, which the APs exploit and make risk less gains. This process also ensures that prices of ETF remain largely in sync with those of the underlying.

Consider a case where the demand for ETFs has increased due to any reason. A rise in demand will lead to rise in prices, as many people will rush to buy the units, thereby putting an upward pressure on the prices.

This can be explained by the following example

Price of Gold (Rs. / gm) = 1000

NAV (Rs.) = 1050

CMP of ETF units (Rs.) = 1200

In such a situation an AP will buy Creation Units and sell ETFs in the market.

To purchase 1 Creation Unit, he will have to deposit Gold worth Rs 1,00,000 (Price of Gold * number of ETF units in Creation Units * gm per ETF) as Portfolio Deposit with the custodian and balance Rs. 5,000 as Cash Component with the AMC.

Once he has the Creation Unit, he will sell individual ETF units in the market at Rs. 1200/ unit, thereby making a profit of Rs. 150 (1200 - 1050) per unit.

As he buys physical Gold the price of Gold will increase. Similarly as he sells fresh ETF units in the market, the supply of ETFs will increase. These two actions will lead to increase in Gold prices and reduction in ETF prices, thereby removing the anomaly in the prices of the ETF units and the underlying.

Similarly, if ETF prices fall way below the price of Gold, APs will buy ETF units cheap and redeem them in Creation Unit lot size. Such an action will reduce supply of ETFs from the market and increase the supply of physical Gold (Gold held with Custodian will come into the market). Both these actions will help align prices of underlying and ETF units as ETF prices will increase due to buying (and subsequent cutting of supply) and price of physical Gold will reduce due to fresh supply in the market.

CHAPTER 4

DEBT FUNDS

4.1 SALIENT FEATURES

Debt funds are funds which invest money in debt instruments such as short and long term bonds, government securities, t-bills, corporate paper, commercial paper, call money etc. The fees in debt funds are lower, on average, than equity funds because the overall management costs are lower. The main investing objectives of a debt fund is usually preservation of capital and generation of income. Performance against a benchmark is considered to be a secondary consideration. Investments in the equity markets are considered to be fraught with uncertainties and volatility. These factors may have an impact on constant flow of returns. Which is why debt schemes, which are considered to be safer and less volatile have attracted investors. Debt markets in India are wholesale in nature and hence retail investors generally find it difficult to directly participate in the debt markets. Not many understand the relationship between interest rates and bond prices or difference between Coupon and Yield. Therefore venturing into debt market investments is not common among investors. Investors can however participate in the debt markets through debt mutual funds.

One must understand the salient features of a debt paper to understand the debt market.

Debt paper is issued by Government, corporates and financial institutions to meet funding requirements. A debt paper is essentially a contract which says that the borrower is taking some money on loan and after sometime the lender will get the money back as well as some interest on the money lent.

Concept Clarifier – Face Value, Coupon, Maturity
Any debt paper will have Face Value, Coupon and Maturity as its standard characteristics.
Face Value represents the amount of money taken as loan. Thus when an investor invests Rs. 100 in a paper, at the time of issuing the paper, then the face value of that paper is said to be Rs. 100. For our understanding point of view, Face Value is that amount which is printed on the debt paper. The

borrower issues this paper; i.e. takes a loan from the investor as per this Face Value. So, if the Face Value is Rs. 100, the borrower will take a loan of Rs. 100 from the investor and give the paper to the investor.

Next question is what the investor will earn from this investment. This can be found by looking at the 'Coupon' of the paper. The Coupon represents the interest that the borrower will pay on the Face Value. Thus, if the Coupon is 8% for the above discussed paper, it means that the borrower will pay Rs. 8 every year to the investor as interest income. It must be understood that the Face Value and the Coupon of a debt paper never change. There are some papers where the Coupon changes periodically, but again, for the moment we will ignore such paper. Since the investor will earn a fixed income (8% on Rs. 100 or Rs. 8 per year in our example), such instruments are also known as Fixed Income securities.

Finally the question arises, for how long the borrower has taken a loan. This can be understood by looking at the 'Maturity'. So if the paper in our example says that the maturity of the paper is 10 years, it means that for 10 years the investor will receive Rs. 8 as interest income and after 10 years, he will get his Principal of Rs. 100 back.

Thus now we can say, about the paper in our example that the borrower has taken a Rs. 100 loan, for a period of 10 years, and he has promised to pay 8% interest annually.

This is the most basic form of debt paper. There can be modifications made to the issue price, coupon rate, frequency of coupon payment, etc., but all these modifications are out of these basic features.

Prima facie this arrangement looks risk free. However two important questions need to be asked here:

1. What if interest rates rise during the tenure of the loan?
2. What if the borrower fails to pay the interest and/ or fails to repay the principal?

In case interest rates rise, then the investor's money will continue to grow at the earlier fixed rate of interest; i.e. the investor loses on the higher rate of interest, which his money could have earned. In case the borrower fails to pay the interest it would result in an income loss for the investor and if the borrower fails to repay the principal, it would mean an absolute loss for the investor. A prospective debt fund investor must study both these risks carefully before entering debt funds.

4.2 WHAT IS INTEREST RATE RISK?

The first risk which we discussed is known as the **Interest Rate Risk**. This can be reduced by adjusting the maturity of the debt fund portfolio, i.e. the buyer of the debt paper would buy debt paper of lesser maturity so that when the paper matures, he can buy newer paper with higher interest rates. So, if the investor expects interest rates to rise, he would be better off giving short-term loans (when an investor buys a debt paper, he essentially gives a loan to the issuer of the paper). By giving a short-term loan, he would receive his money back in a short period of time. As interest rates would have risen by then, he would be able to give another loan (again short term), this time at the new higher interest rates. Thus in a rising interest rate scenario, the investor can reduce interest rate risk by investing in debt paper of extremely short-term maturity.

Concept Clarifier – Interest Rate Risk
In our example, we have discussed about a debt paper which has a maturity of 10 years and a coupon of 8%. What will happen if interest rates rise after 2 years to 10%? The investor would have earned Rs. 8 for 2 years and will earn Rs. 8 yet again in the 3rd year as well. But had he got the Rs. 100 with him (which he had invested 2 years ago), instead of investing at 8%, he would have preferred to invest @ 10%. Thus by investing in a long term paper, he has locked himself out of higher interest income. The best way to mitigate interest rate risk is to invest in papers with short-term maturities, so that as interest rate rises, the investor will get back the money invested faster, which he can reinvest at a higher interest rates in newer debt paper. However, this should be done, only when the investor is of the opinion that interest rates will continue to rise in future otherwise frequent trading in debt paper will be costly and cumbersome.

4.3 WHAT IS CREDIT RISK?

The second risk is known as **Credit Risk or Risk of Default**. It refers to the situation where the borrower fails to honour either one or both of his obligations of paying regular interest and returning the principal on maturity. A bigger threat is that the borrower does not repay the principal. This can happen if the borrower turns bankrupt. This risk can be taken care of by investing in paper issued by companies with very high **Credit Rating**. The probability of a borrower with very high Credit Rating defaulting is far lesser

than that of a borrower with low credit rating. Government paper is the ultimate in safety when it comes to credit risk (hence the description 'risk free security'). This is because the Government will never default on its obligations. If the Government does not have cash (similar to a company going bankrupt), it can print more money to meet its obligations or change the tax laws so as to earn more revenue (neither of which a corporate can do!).

Concept Clarifier – Credit Risk or Risk of Default

Different borrowers have different levels of credit risks associated and investors would like to know the precise risk level of a borrower. This is done by a process known as Credit Rating. This process is carried by professional credit rating agencies like CRISIL, ICRA etc. In India, credit rating agencies have to be registered with SEBI and are regulated by SEBI (Credit Rating) Regulations, 1999.

These credit rating agencies analyse companies on various financial parameters like profitability, cash flows, debt, industry outlook, impact of economic policies, etc. based on which instruments are classified as investment grade and speculative grade. Looking at these ratings, the borrower comes to know the risk level associated with the corporate.

Some of CRISIL's rating symbols are given below:

AAA – These are the safest among corporate debentures. This rating implies investors can safely expect to earn interest regularly as well as the probability of default of their principal is as good as nil.

BBB – These instruments are safe, however, in case environment changes, there is a probability that the coupon payment and principal repayment ability may be hampered.

The above 2 ratings represent the topmost and lowest rating of investment grade securities. Anything less than BBB is termed as speculative grade. The rating grade 'D' represents default. Such companies are already in default and only liquidation of assets will result in realization of principal and/ or interest.

4.4 HOW IS A DEBT INSTRUMENT PRICED?

Debt fund investing requires a different analysis, and understanding of basic bond market concepts is essential. There exist some relationships between yields and bond prices, between years to maturity and impact of change in

interest rates, between credit risk and yields, and so on. We need to understand each of these relationships before we can start investing in debt funds.

The price of an instrument (equity / bond) is nothing but the present value of the future cash flows. (for understanding the meaning of present value, please refer to NCFM module 'Financial Markets : A Beginners Module'). In case of bonds, there is no ambiguity about future cash flows, as is the case of equities. Future cash flows in case of bonds are the periodic coupon payments that the investor will receive. Future cash flows for equities are the dividends than the investor may receive. Bond coupon payments are known right at the beginning, whereas there is no surety about a share paying dividends to an investor. Thus different investors/ analysts have different earning projections for equities, and hence each participant has a different view on the present value of a share. Bond cash flows being known, there is no confusion about what the present value of each future cash flow should be.

Concept Clarifier – Compounding & Discounting
Suppose an investor invests Rs. 100 (initial investment) in a bank FD @ 8% for 10 years, then to calculate the amount that he will receive after 10 years, we will use the compound interest formula given below – $A = P * (1 + r)^t$ Substituting $P = 100$, $r = 8\%$ and $t = 10$ years, we get the value for A as Rs. 215.89. This process is known as compounding. Instead of calculating the final amount after 10 years, if the investor says he needs Rs. 215.89 after 10 years and we know that a bank FD is offering 8% per annum, we need to calculate how much money he should invest today to reach a value of Rs. 215.89 after 10 years. Again we use the same formula, but slightly tweaked. Here we solve for P (initial investment), as against for A in the previous example. $P = A / (1 + r)^t$ Substituting $A = 215.89$, $r = 8\%$ and $t = 10$ years, we can find the value of P as Rs. 100.

This process is the exact opposite of compounding and this is known as discounting. This is the process used in bond markets to find the price of a bond. We add the present values (PV) of all future cash flows to arrive at the price of the bond. The r is substituted by the Yield To Maturity (YTM) while calculating the PV of bond's future cash flows.

An important factor in bond pricing is the **Yield to Maturity (YTM)**. This is rate applied to the future cash flow (coupon payment) to arrive at its present value. If the YTM increases, the present value of the cash flows will go down. This is obvious as the YTM appears in the denominator of the formula, and we know as the denominator increases, the value of the ratio goes down. So here as well, as the YTM increases, the present value falls.

Concept Clarifier – YTM

Yield To Maturity (YTM) is that rate which the investor will receive in case:

1. He holds a bond till maturity and
2. He reinvests the coupons at the same rate

It is a measure of the return of the bond. **Yield to maturity** is essentially a way to measure the total amount of money you'll make on a bond, but instead of expressing that figure as a Rupee amount, it's expressed as a percentage—an annual rate of return. For example, let's take an imaginary bond, say, for a company called ABC International Ltd.:

1. You've just purchased it for Rs. 950.
2. Its par value (the amount the issuer will refund you when the bond reaches maturity) is Rs.1000.
3. So at this point, you know you'll be making at least Rs. 50 (Rs. 1000 minus Rs. 950).
4. The coupon rate of your ABC International Ltd. bond is 8%.
5. The coupon rate is the annual interest rate you'll be paid in installments by the issuer.
6. For the sake of calculating yield, the coupon rate is figured as compound interest, which assumes that you will reinvest the money you're paid in interest.
7. The maturity date of your bond is exactly three years from now.

Taking all this information into account, the return on your investment in ABC International Ltd. will be Rs. 296.73. Here's where this total comes from:

1. Rs. 50 (par value minus the purchase price)
2. Rs. 246.73 (three years' worth of compound interest payments from the issuer at 8% of Rs. 950)

Therefore, the yield to maturity for this bond is about 5.9 % . Here's why:

1. Your total return on your investment is Rs. 246.73.
2. Rs. 246.73 is about 25.97% of \$950.
3. Divide that total rate of 25.97% by three (three years) and you get 8.65%.

In the explanation for compounding, we have assumed that the interest earned after 1 year, gets reinvested in the FD for the remaining 9 years @ 8%. Similarly the interest earned after 2 years (Interest on the initial investment plus the interest earned on the interest reinvested after 1 year) is again reinvested in the FD at the same rate of 8% for the remaining 8 years, and so on. The second point mentioned above means exactly this.

This may be true for bank FDs, where we get the benefit of cumulative interest, however, for bonds; the coupon (interest income) is a cash outflow every year and not a reinvestment as in case of FDs. So there is no reinvestment here. Even if the investor receives the coupon as a cash outflow, and intends to reinvest the same, there is no guarantee that for 10 years he will be able to reinvest the coupon, each year @ 8%.

Thus, YTM is based upon some assumptions (i.e. you will be reinvesting the interest earned at the coupon rate), which may not always be true. In spite of its shortcomings, YTM is an important indicator to know the total return from a bond.

Let us say in the above discussed example, the Bank FD is not 8% but 9%. Now the investor will not have to invest Rs. 100 today, but only Rs. 91.193 to get Rs. 215.89 after 10 years. (if you substitute 8% with 9% in the calculation given above you get $P = \text{Rs. } 91.193$).

As mentioned earlier, price of a bond is the present value of future cash flows. Thus if all the present values go down (due to increase in YTM), then

their sum will also go down. This brings us to an important relation – **As interest rates go up, bond prices come down**. Let us try and understand this!

Let us say a bond is issued with a term to maturity of 3 years, coupon of 8% and face value of Rs. 100. Obviously, the prevailing interest rates during that time have to be around 8%. If the prevailing rates are higher, investors will not invest in a 8% coupon bearing bond, and if rates are lower, the issuer will not issue a bond with 8% coupon, as a higher coupon means higher interest payments for the issuer.

The cash flows for the bond and the Present Values (PVs) of these cash flows are as given below –

@ 8 % discounting	Year 0	Year 1	Year 2	Year 3
	Pays 100			
Present Value of Rs. 8 : Rs. 7.41		To Receive Rs. 8		
Present Value of Rs. 8 : Rs. 6.86			To Receive Rs. 8	
Present Value of Rs. 108 : Rs. 85.73				To Receive Rs. 108
Price = 7.41 + 6.86 + 85.73 = 100 (This is the Present Value of all the future cash flows in Year 1, Year 2 and Year 3)				

By using the discounting formula we can find the PVs of all the 3 cash flows. The investor will get Rs 8 as interest payment each year, whereas in the final year, the investor will also get the Rs. 100 principal back (alongwith Rs. 8 as the last interest). Here we will use 8% as the rate of discounting. This means that the investor will have to invest Rs. 7.41 today @ 8% per annum for the next 1 year to get Rs. 8. Similarly, he will have to invest Rs. 6.86 today @ 8% per annum for the next 2 years to get Rs. 8 after 2 years and finally he will have to invest Rs. 85.73 @ 8% per annum for the next 3 years to get Rs. 108 after 3 years.

Adding all the PVs, we get the CMP of the bond as Rs. 100. (in this example we assume interest rates prevalent in the market have remained at 8% and investors are happy earning 8% by investing in this bond).

Now, if interest rates in the market rise immediately to 9% after the bond is issued, we will have to use 9% as the rate of discounting (investors would like to earn 9% from this bond). In that case the cash flows and their PVs will be :

@ 9 % discounting	Year 0	Year 1	Year 2	Year 3
	Pays Rs. 97.47			
Present Value of Rs. 8 : Rs. 7.34		To Receive Rs. 8		
Present Value of Rs. 8 : Rs. 6.73			To Receive Rs. 8	
Present Value of Rs. 8 : Rs. 83.40				To Receive Rs. 108
Price = 7.34 + 6.73 + 83.40 = 97.47 (This is the Present Value of all the future cash flows in Year 1, Year 2 and Year 3)				

As can be seen, the investor *will invest less today*, i.e. the price of the bond will go down as the interest rates in the markets have increased. When interest rates rise in the economy, it *does not translate into the coupon rate changing*. As can be seen here, the investor will continue to get Rs. 8; i.e. 8% of the FV of Rs 100. However, he will try to earn 9% return by adjusting his initial investment. The bond price in the market will therefore fall as the interest rates in the market goes up. Thus we can say that *bond prices and interest rates move in opposite directions*.

Relationship between interest rates and debt mutual fund schemes :

As interest rates fall, the NAV of debt mutual funds rise, since the prices of the debt instruments the mutual fund is holding rises. As interest rates rise, the NAV of debt mutual funds fall, since the prices of the debt instruments the mutual fund is holding falls. Mutual funds which invest in debt paper keep an eye on interest rates, maturity etc. before deciding on which paper to invest.

4.5 DEBT MUTUAL FUND SCHEMES

4.5.1 Fixed Maturity Plans

FMPs have become very popular in the past few years. FMPs are essentially close ended debt schemes. The money received by the scheme is used by the fund managers to buy debt securities with maturities coinciding with the maturity of the scheme. There is no rule which stops the fund manager from selling these securities earlier, but typically fund managers avoid it and hold on to the debt papers till maturity. Investors must look at the portfolio of FMPs before investing. If an FMP is giving a relatively higher 'indicative yield',

it may be investing in slightly riskier securities. Thus investors must assess the risk level of the portfolio by looking at the credit ratings of the securities. Indicative yield is the return which investors can expect from the FMP. Regulations do not allow mutual funds to guarantee returns, hence mutual funds give investors an idea of what returns can they expect from the fund. An important point to note here is that indicative yields are pre-tax. Investors will get lesser returns after they include the tax liability.

4.5.2 Capital Protection Funds

These are close ended funds which invest in debt as well as equity or derivatives. The scheme invests some portion of investor's money in debt instruments, with the objective of capital protection. The remaining portion gets invested in equities or derivatives instruments like options. This component of investment provides the higher return potential. It is beyond the scope of this book to explain how Options work. For that you may need to refer to NCFM modules 'Financial Markets : A Beginners' Module' or 'Derivatives Markets (Dealers) module'. It is important to note here that although the name suggests 'Capital Protection', there is no guarantee that at all times the investor's capital will be fully protected.

4.5.3 Gilt Funds

These are those funds which invest only in securities issued by the Government. This can be the Central Govt. or even State Govts. Gilt funds are safe to the extent that they do not carry any Credit Risk. However, it must be noted that even if one invests in Government Securities, interest rate risk always remains.

4.5.4 Balanced Funds

These are funds which invest in debt as well as equity instruments. These are also known as hybrid funds. Balanced does not necessarily mean 50:50 ratio between debt and equity. There can be schemes like MIPs or Children benefit plans which are predominantly debt oriented but have some equity exposure as well. From taxation point of view, it is important to note how much portion of money is invested in equities and how much in debt. This point is dealt with in greater detail in the chapter on Taxation.

4.5.5 *MIPs*

Monthly Income Plans (MIPs) are hybrid funds; i.e. they invest in debt papers as well as equities. Investors who want a regular income stream invest in these schemes. The objective of these schemes is to provide regular income to the investor by paying dividends; however, there is no guarantee that these schemes will pay dividends every month. Investment in the debt portion provides for the monthly income whereas investment in the equities provides for the extra return which is helpful in minimising the impact of inflation.

4.5.6 *Child Benefit Plans*

These are debt oriented funds, with very little component invested into equities. The objective here is to capital protection and steady appreciation as well. Parents can invest in these schemes with a 5 – 15 year horizon, so that they have adequate money when their children need it for meeting expenses related to higher education.

CHAPTER 5

LIQUID FUNDS

5.1 SALIENT FEATURES

By far the biggest contributor to the MF industry, Liquid Funds attract a lot of institutional and High Networth Individuals (HNI) money. It accounts for approximately 40% of industry AUM. Less risky and better returns than a bank current account, are the two plus points of Liquid Funds.

Concept Clarifier – Money Markets
Term to maturity of a debt paper is one of the most important characteristic of a debt paper. Debt papers can have term to maturity of as high as 20 years and more or as low as 90 days and less. The market for short term paper; i.e. paper with less than 1 year maturity attracts huge interest, volumes and money. This is because the demand for short term money by corporates, financial institutions and Government is huge. At the same time, there is a class of investors with which there is an availability of short term funds. Due to this constant demand and ready investors, the volumes in trades of this short-term paper have increased so much that this segment is classified as a separate segment in the debt markets and is known as Money Markets. Money Market refers to that part of the debt market where papers with maturities less than 1 year is traded. Commercial Papers, Certificate of Deposits, Treasury Bills, Collateralised Borrowing & Lending Obligations (CBLOs), Interest Rate Swaps (IRS), etc. are the instruments which comprise this market.

Money Market instruments have maturities not exceeding 1 year. Hence Liquid Funds (also known as Money Market Mutual Funds) have portfolios having average maturities of less than or equal to 1 year. Thus such schemes normally do not carry any interest rate risk. Liquid Funds do not carry Entry/Exit Loads. Other recurring expenses associated with Liquid Schemes are also kept to a bare minimum.

Concept Clarifier – Mark To Market

Mark To Market is that activity where a portfolio's (a holding of shares or bonds etc.) profit/ loss is calculated on a daily basis. The valuation of the portfolio has to be done on a daily basis.

If a fund manager buys a security @ Rs. 100 and after 1 day the price falls to Rs. 98, then we say that there is a loss of Rs. 2 on the security. This is marking to market.

Marking To Market is to be done for all papers, equity as well as debt, however some debt papers are exempted from this. Debt papers with lesser maturities (less than 182 days) do not have to be marked to market, since interest rate changes do not affect the prices of such debt papers significantly. Liquid Funds, by regulation cannot invest more than 10% of their net assets in papers having maturities more than 182 days.

Liquid paper having maturity less than 182 days is valued by using the 'Cost plus Interest Accrued Method'.

Concept Clarifier – Cost plus Interest Accrued Method

Suppose a 90 Day Commercial Paper is issued by a corporate at Rs. 91. The paper will redeem at Rs. 100 on maturity; i.e. after 90 days. This means that the investor will earn $100 - 91 = \text{Rs. } 9$ as interest over the 90 day period. This translates into a daily earning of $9/90 = \text{Rs. } 0.10$ per day.

It is important to note here that although we said that the investor will earn 10 paise every day, there is no cash flow coming to the investor. This means that the interest is only *getting accrued*.

Now if the investor wishes to sell this paper after 35 days in the secondary market, what should be the price at which he should sell? Here we add the total accrued interest to the cost of buying and calculate the current book value of the CP. Since we are adding interest accrued to the cost, this method is known as Cost Plus Interest Accrued Method.

If 10 paise get accrued each day, then in 35 days, $35 * 0.10 = \text{Rs. } 3.5$ have got accrued.

The cost of the investor was Rs. 91 and Rs. 3.5 have got accrued as interest, so the current book value is $91 + 3.5 = \text{Rs. } 94.5$

As mentioned earlier, interest rate movements do not affect debt papers with maturities less than or equal to 182 days. It is only those papers which have higher maturity that have to be marked to market.

Concept Clarifier – Money Market Paper with maturity more than 182 days		
Any debt paper has the following three characteristics:		
Par Value	Coupon	Maturity
Whenever interest rates move, bond prices change. Hence, technically speaking even a bond with a residual maturity of 1 day, i.e. maturing tomorrow, will have an impact on its price due to change in interest rates. However, that impact will be so infinitesimally small, that there is no point in recording a loss for such a paper. This recording of paper profits/ losses, as explained earlier, is known as Marking To Market. Since the impact of interest rates is directly proportional to the average maturity, bonds with shorter maturity are not marked to market. The investor must realize that mark to market is not required for schemes with maturities less than 182 days; i.e. interest rates movements do not result in capital gains/ losses for such a scheme. Hence we say Liquid Funds do not carry any interest rate risk.		

5.2 FLOATING RATE SCHEME

These are schemes where the debt paper has a Coupon which keeps changing as per the changes in the interest rates. Thus there is no price risk involved in such paper. We know when rates go up, bond prices go down. However, if the rates increase and so also the coupon changes and increases to the level of the interest rates, there is no reason for the price of the paper to fall, as the investor is compensated by getting higher coupon, in line with the on going market interest rates. Investors prefer Floating Rate funds in a rising interest rate scenario.

5.3 WHAT IS PORTFOLIO CHURNING IN LIQUID FUNDS?

A liquid fund will constantly change its portfolio. This is because the paper which it invests in is extremely short term in nature. Regularly some papers would be maturing and the scheme will get the cash back. The fund manager will use this cash to buy new securities and hence the portfolio will keep

changing constantly. As can be understood from this, Liquid Funds will have an extremely high portfolio turnover.

Liquid Funds see a lot of inflows and outflows on a daily basis. The very nature of such schemes is that money is parked for extremely short term. Also, investors opt for options like daily or weekly dividend. All this would mean, the back end activity for a liquid fund must be quite hectic – due to the large sizes of the transactions and also due to the large volumes.

As in equities, we have different index for Largecaps, Midcaps & Smallcaps, similarly in bonds we have indices depending upon the maturity profile of the constituent bonds. Thus for a portfolio comprising of long term bonds, we have the Li Bex, for the mid term bond portfolio, we have the Mi Bex and for the Liquid Funds we have the Si Bex as the underlying indices.

CHAPTER 6

TAXATION

Taxation in case of Mutual Funds must be understood, primarily, from Capital Gains, Securities Transaction Tax (STT) and Dividends point of view. Tax rules differ for equity and debt schemes and also for Individuals, NRIs, OCBs and corporates.

Investors also get benefit under section 80C of the Income Tax Act if they invest in a special type of equity scheme, namely, Equity Linked Savings Scheme.

6.1 CAPITAL GAINS TAXATION

Taxation		
	Equity Scheme	Debt Scheme
	Min. 65 % invested in Indian Equities	
Long Term Capital Gains	0 %	10% - Without Indexation
(More than 12 months holding period)		20% - With Indexation
Short Term Capital Gains	15 %	Marginal Rate of Tax
(Less than or equal to 12 months holding period)		Profit added to income

To understand Capital Gains Taxation, definitions of equity and debt schemes must be understood; similarly difference between Long Term and Short Term must also be understood.

As per SEBI Regulations, any scheme which has minimum 65% of its average weekly net assets invested in Indian equities, is an equity scheme. An investor in such a scheme will not have to pay any tax on the capital gains which he makes, provided he holds the scheme's units for a period of more

than 12 months. While exiting the scheme, the investor will have to bear a Securities Transaction Tax (STT) @ 0.25% of the value of selling price. However, if the investor makes a profit by selling his units at a higher NAV (capital gains), within 12 months, then such a capital gain is treated as being short-term in nature, and hence taxed @ 15% of the profits.

Investors in all other schemes have to pay capital gains tax, either short term or long term. In case a scheme invests 100% in foreign equities, then such a scheme is not considered to be an equity scheme from taxation angle and the investor has to pay tax even on the long term capital gains made from such a scheme.

In case investors make capital gains within 12 months, for non-equity schemes, the capital gains are added to their income and then the total income is taxed as per their tax slab. This is known as taxation at the marginal rate.

For long-term capital gains made by investors in non-equity schemes, they have to pay tax either @ 10% or @ 20%, depending upon whether investors opt for indexation benefit or not.

6.2 INDEXATION BENEFIT

Indexation is a procedure by which the investor can get benefit from the fact that inflation has eroded his returns.

Indexation works on the simple concept that if an investor buys a unit @ Rs. 10 and sells it @ Rs. 30 after 5 years, then his profit of Rs. 20 per unit needs to be adjusted for the inflation increase during the same time period. This is because inflation reduces purchasing power. What Rs. 100 could have bought when he bought the unit @ Rs.10, would now have increased in price due to inflation. Thus he can now buy less for the same Rs. 100.

If during the same time, inflation has increased by 12%, then the adjusted cost of the unit purchased (at today's price) would be $\text{Rs. } 10 * (1 + 12\%) = \text{Rs. } 11.2$.

So his profit would not be Rs. 20, but $\text{Rs. } 30 - \text{Rs. } 11.2 = \text{Rs. } 18.8$.

Thus, by adjusting his buying price for inflation, he has effectively negated the impact of inflation – thereby reducing his profits. Obviously, his tax liability would reduce by doing so.

The Government allows the investor to choose how he would like to calculate his tax.

In case he chooses not to take the benefit of indexation, his profit would be Rs. 20 and he would have to pay a tax @ 10% on the capital gain. Thus he would pay tax of $20 * 10\% = \text{Rs. } 2$. In case he opts for the indexation benefit, his profit would be Rs. 18.8, as calculated earlier. Since he has taken the benefit of indexation, he needs to pay tax at a higher rate of 20%. Thus his tax liability would be $18.8 * 20\% = \text{Rs. } 3.76$. In this case he would obviously opt for paying tax without taking the benefit of indexation as his tax liability is less in that case.

6.3 WHY FMPs ARE POPULAR?

To understand why Fixed Maturity Plan (FMP) schemes of mutual funds are popular let us look at one of the aspects : FMP Taxation

Let us consider the following example:

A mutual fund launches a 370 Day FMP with an indicative yield of 11.5% on 30/ Mar/ 07. The scheme will mature on 4/ Apr/ 08.

An investor wishes to invest in the scheme. What is the best option for an investor; should he go for dividend or growth option?

Assume the investor invests Rs. 10,000

6.3.1 Case I – Dividend Option

If the investor invests Rs. 10,000 in a bank FD @ 11.5% for 370 days (i.e. 12.33 months, assuming a 30 day month), he will earn an interest of Rs. 1,181.94.

$$\text{Rs. } 1181.94 = (10,000 * 11.5\%) * (12.33/12)$$

(The above method is known as Simple Annualised Returns Method. It essentially calculates the total interest earned $(10,000 * 11.5\%)$ which is equal to Rs. 1150. Since the 11.5% is annual rate, therefore we need to calculate the interest earned per month. This is equal to $1150/12$ which come out to be Rs. 95.83. What this means is that every month the investor will earn Rs. 95.83, so in 12.33 months he will earn $95.83 * 12.33 = \text{Rs. } 1181.94$).

In the investor is in the 30% tax bracket, he will have to pay a tax @ 33.99% (after including surcharge @ 10%, education cess @ 2% and higher education cess @ 1%) on this interest earned.

So the tax liability will be $1181.94 \times 33.99\% = \text{Rs. } 401.74$

Hence his post tax income will be $1181.94 - 401.74 = \text{Rs. } 780.20$.

This Rs. 780.20 he has earned on an investment of Rs. 10,000, hence his return percent is $\text{Rs. } (780.20 / \text{Rs. } 10,000) \times 100 = 7.8\%$

This 7.8% is earned in 12.33 months, hence his per month return percent is $7.8 / 12.33 = 0.63\%$. If he has earned 0.63% in 1 month, then he earns $0.63\% \times 12 = 7.59\%$ in 1 year. Thus, his post tax simple annualized return is 7.59% in case he invests in a bank FD for 370 Days @ 11.5% interest.

Now, consider he invests in an FMP at the same rate. As earlier, his pre-tax return would be Rs. 1181.94. However the tax liability on this would be @ 14.1625% (which is the rate of Dividend Distribution Tax (DDT) applicable for individuals and HUFs. Also note that he will not have to pay the tax himself, neither will he have to file returns for the dividend earned. The dividend which he earns is after deduction of the Dividend Distribution Tax. The tax is deducted at the Mutual Funds end.)

Thus the tax payable comes out as $1181.94 \times 14.1625\% = \text{Rs. } 167.39$.

So the post tax returns of the investor are $1181.94 - 167.39 = \text{Rs. } 1014.55$. The investor will receive from the mutual fund Rs. 1014.55 as dividend.

This Rs. 1014.55 is earned on an investment of Rs. 10,000 and over a period of 12.33 months, so post tax the simple annualized returns comes out to be 9.87% (as calculated above for FD).

As can be seen, on a post tax basis, the returns for the investor are higher in an FMP as compared to a bank FD. However, it must be noted that FMPs invest in securities and the risk level associated with securities is higher than that of a bank FD.

In case the above investor is not an individual or an HUF but a corporate then the rate of DDT would be 22.66%. In that case the post tax simple annualized return would be 9.38%, which is still higher than that delivered by FD.

6.3.2 Case II – Growth Option

6.3.2.1 Without Indexation

As above, the investor invests Rs. 10,000 in a debt fund @11.5% for 370 days (i.e. 12.33 months, assuming a 30 day month). At redemption he will get Rs. 11,181.94

The investor earns Rs. 1181.94 as capital gains pre-tax. For debt funds, the tax rate applicable for long term capital gain is 10% without indexation. This translates into 11.33% after including surcharge and education cess.

Thus, the tax payable by the investor on the capital gain of Rs. 1181.94 will be equal to $\text{Rs. } 1181.94 * 11.33\% = \text{Rs. } 133.91$

Post tax income, in this case will be $1181.94 - 133.91 = \text{Rs. } 1048.03$.

Calculating post tax simple annualized returns as above:

$$(1048 / 10,000) * (12 / 12.33) = 10.20\%$$

6.3.2.2 With Indexation

When the investor entered the fund, the cost inflation index was at 480 and when he exited at maturity the cost inflation index had risen to 519.

This means that inflation has risen by 8.13%. So, to adjust for this inflation, the cost of the unit should also be increased by 8.13%.

Thus the new indexed cost of acquisition will become $\text{Rs. } 10000 * (1 + 8.13\%) = \text{Rs. } 10182.5$

Now the profit will be equal to $11181.94 - 10182.5 = \text{Rs. } 999.44$

Here we have considered 11181.94 instead of 1181.94. We have taken the entire amount and not only the profit/ interest earned as we have to calculate the profit.

Since we taken the benefit of indexation, the applicable tax rate will be 20%, which will translate into 22.66% after considering surcharge and education cess.

So the tax payable will be equal to $999.44 * 22.66\% = \text{Rs. } 226.47$

Post tax returns will be equal to $1181.94 - 226.47 = \text{Rs. } 955.47$

Calculating post tax simple annualized returns as earlier we get 9.3% as the return.

The point to be observed here is that FMP is giving a higher return under any option as compared to a bank FD. This is true only if the investor is in the 30% tax bracket.

CHAPTER 7

REGULATIONS

7.1 OVERVIEW

Regulations ensure that schemes do not invest beyond a certain percent of their NAVs in a single security. Some of the guidelines regarding these are given below:

- ◆ No scheme can invest more than 15% of its NAV in rated debt instruments of a single issuer. This limit may be increased to 20% with prior approval of Trustees. This restriction is not applicable to Government securities.
- ◆ No scheme can invest more than 10% of its NAV in unrated paper of a single issuer and total investment by any scheme in unrated papers cannot exceed 25% of NAV
- ◆ No fund, under all its schemes can hold more than 10% of company's paid up capital.
- ◆ No scheme can invest more than 10% of its NAV in a single company.
- ◆ If a scheme invests in another scheme of the same or different AMC, no fees will be charged. Aggregate inter scheme investment cannot exceed 5% of net asset value of the mutual fund.
- ◆ No scheme can invest in unlisted securities of its sponsor or its group entities.
- ◆ Schemes can invest in unlisted securities issued by entities other than the sponsor or sponsor's group. Open ended schemes can invest maximum of 5% of net assets in such securities whereas close ended schemes can invest upto 10% of net assets in such securities.
- ◆ Schemes cannot invest in listed entities belonging to the sponsor group beyond 25% of its net assets.

There are many other mutual fund regulations which are beyond the purview of this module. Candidates are requested to refer to AMFI-Mutual Fund (Advisors) Module for more information.

7.2 WHAT IS THE NAME OF INDUSTRY ASSOCIATION FOR THE MUTUAL FUND INDUSTRY?

AMFI (Association of Mutual Funds in India) is the industry association for the mutual fund industry in India which was incorporated in the year 1995.

7.3 WHAT ARE THE OBJECTIVES OF AMFI?

The Principal objective of AMFI are to:

- 1) Promote the interests of the mutual funds and unit holders and interact with regulators- SEBI/RBI/Govt./Regulators.
- 2) To set and maintain ethical, commercial and professional standards in the industry and to recommend and promote best business practices and code of conduct to be followed by members and others engaged in the activities of mutual fund and asset management.
- 3) To increase public awareness and understanding of the concept and working of mutual funds in the country, to undertake investor awareness programmes and to disseminate information on the mutual fund industry.
- 4) To develop a cadre of well trained distributors and to implement a programme of training and certification for all intermediaries and others engaged in the industry.

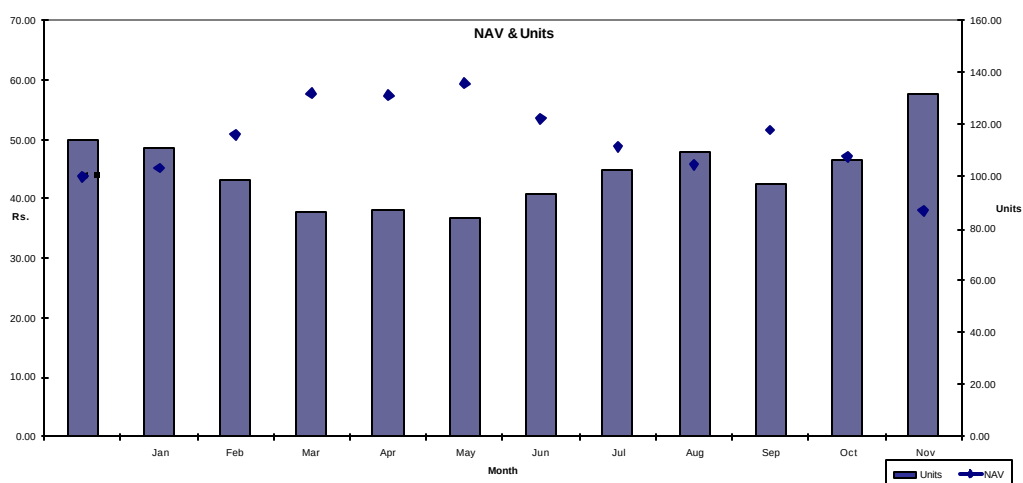
7.4 ADVANTAGES OF MUTUAL FUNDS

- Mutual Funds give investors best of both the worlds. Investor's money is managed by professional fund managers and the money is deployed in a diversified portfolio. Retail investors cannot buy a diversified portfolio for say Rs. 5000, but if they invest in a mutual fund, they can own such a portfolio. Mutual Funds help to reap the benefit of returns by a portfolio spread across a wide spectrum of companies with small investments.

- Investors may not have resources at their disposal to do detailed analysis of companies. Time is a big constraint and they may not have the expertise to read and analyze balance sheets, annual reports, research reports etc. A mutual fund does this for investors as fund managers, assisted by a team of research analysts, scan this data regularly.
- Investors can enter / exit schemes anytime they want (at least in open ended schemes). They can invest in an SIP, where every month, a stipulated amount automatically goes out of their savings account into a scheme of their choice. Such hassle free arrangement is not always easy in case of direct investing in shares.
- There may be a situation where an investor holds some shares, but cannot exit the same as there are no buyers in the market. Such a problem of illiquidity generally does not exist in case of mutual funds, as the investor can redeem his units by approaching the mutual fund.
- As more and more AMCs come in the market, investors will continue to get newer products and competition will ensure that costs are kept at a minimum. Initially mutual fund schemes could invest only in debt and equities. Then they were allowed to invest in derivative instruments. Gold ETFs were introduced, investing in international securities was allowed and recently real estate mutual funds where also in the process of being cleared. We may one day have commodity mutual funds or other exotic asset classes oriented funds. Thus it is in investor's best interest if they are aware of the nitty gritty of MFs.
- Investors can either invest with the objective of getting capital appreciation or regular dividends. Young investors who are having a steady regular monthly income would prefer to invest for the long term to meet various goals and thus opt for capital appreciation (growth or dividend reinvestment options), whereas retired individuals, who have with them a kitty and would need a monthly income would like to invest with the objective of getting a regular income. This can be achieved by investing in debt oriented schemes and opting for dividend payout option. Mutual funds are therefore for all kinds of investors.
- An investor with limited funds might be able to invest in only one or two stocks / bonds, thus increasing his / her risk. However, a mutual fund will spread its risk by investing a number of sound stocks or bonds. A fund normally invests in companies across a wide range of industries, so the risk is diversified.

- Mutual Funds regularly provide investors with information on the value of their investments. Mutual Funds also provide complete portfolio disclosure of the investments made by various schemes and also the proportion invested in each asset type.
- The large amount of Mutual Funds offer the investor a wide variety to choose from. An investor can pick up a scheme depending upon his risk/return profile.
- All the Mutual Funds are registered with SEBI and they function within the provisions of strict regulation designed to protect the interests of the investor.

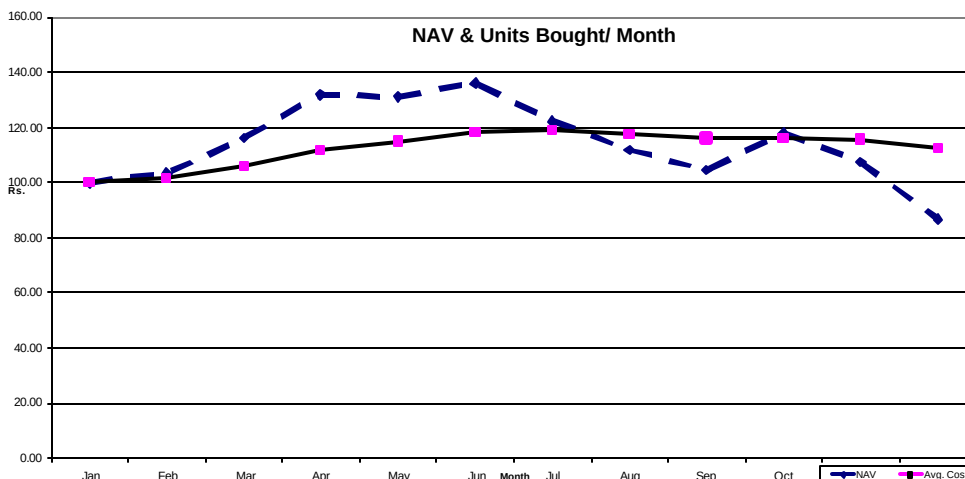
7.5 WHAT IS A SYSTEMATIC INVESTMENT PLAN (SIP)?



The above chart shows how the NAV of a scheme has moved in a given year. There was no way the investor could have known that in May the peak will be formed, after which the NAV will slide for the rest of the year. The investor, by deciding to invest Rs. 5000 regularly each month automatically got the benefit of the swings. As can be seen, he got least number of units in the months of Mar, Apr and May, whereas when the NAV continued its downward journey subsequently, he accumulated higher number of units.

This is the benefit of disciplined investing. Many a times it is seen that in bear markets, when the NAVs are at their rock bottom, investor are gripped by panic and either stop their SIPs or worse, sell their units at a loss. Due to the

in-built mechanism of SIP, investors average cost reduces as can be seen from the chart below :



Averaging works both ways. Thus, when the NAV moves sharply in either direction, the impact of averaging is clearly witnessed as the change in average cost for the investor is only marginal.

Here it can be seen that although the NAV has swung in a range of Rs. 80 to Rs. 140, the average cost for the investor has remained in the narrow range of Rs. 100 to Rs. 120. This is the impact of averaging.

As can be seen, SIP helps in averaging cost of acquiring units, however STP can prove to be even better than SIP.

7.6 WHAT IS SYSTEMATIC TRANSFER PLAN (STP)?

In SIP investor's money moves out of his savings account into the scheme of his choice. Let's say an investor has decided to invest Rs 5,000 every month, such that Rs. 1,000 gets invested on the 5th, 10th, 15th, 20th and 25th of the month. This means that the Rs. 5000, which will get invested in stages till 25th will remain in the savings account of the investor for 25 days and earn interest @ 3.5%.

If the investor moves this amount of Rs. 5000 at the beginning of the month to a Liquid Fund and transfers Rs. 1000 on the given dates to the scheme of his choice, then not only will he get the benefit of SIP, but he will earn slightly higher interest as well in the Liquid Funds as compared to a bank FD. As the money is being invested in a Liquid Fund, the risk level associated is also minimal. Add to this the fact that liquid funds do not have any entry/ exit loads. This is known as STP.

7.7 WHAT IS SYSTEMATIC WITHDRAWAL PLAN (SWP)?

SWP stands for Systematic Withdrawal Plan. Here the investor invests a lumpsum amount and withdraws some money regularly over a period of time. This results in a steady income for the investor while at the same time his principal also gets drawn down gradually.

Say for example an investor aged 60 years receives Rs. 20 lakh at retirement. If he wants to use this money over a 20 year period, he can withdraw $\text{Rs. } 20,00,000 / 20 = \text{Rs. } 1,00,000$ per annum. This translates into Rs. 8,333 per month. (The investor will also get return on his investment of Rs. 20 lakh, depending on where the money has been invested by the mutual fund). In this example we have not considered the effect of compounding. If that is considered, then he will be able to either draw some more money every month, or he can get the same amount of Rs. 8,333 per month for a longer period of time.

The conceptual difference between SWP and MIP is that SWP is an investment style whereas MIP is a type of scheme. In SWP the investor's capital goes down whereas in MIP, the capital is not touched and only the interest is paid to the investor as dividend.

7.8 CHOOSING BETWEEN DIVIDEND PAYOUT, DIVIDEND REINVESTMENT AND GROWTH OPTIONS – WHICH ONE IS BETTER FOR THE INVESTOR?

Investors often get confused between the above mentioned (Dividend Payout, Dividend Reinvestment and Growth Options) three options which he has to choose while investing in mutual fund's units. These options have to be

selected by the investor at the time of purchasing the units and many a times investors feel that the dividend reinvestment option is better than growth as they get more number of units. Let's understand the three options :

7.8.1 Growth Option

Growth option is for those investors who are looking for capital appreciation. Say an investor aged 25 invests Rs 1 lakh in an equity scheme. He would not be requiring a regular income from his investment as his salary can be used for meeting his monthly expenses. He would instead want his money to grow and this can happen only if he remains invested for a long period of time. Such an investor should go for Growth option. The NAV will fluctuate as the market moves. So if the scheme delivers a return of 12% after 1 year, his money would have grown by Rs. 12,000. Assuming that he had invested at a NAV of Rs. 100, then after 1 year the NAV would have grown to Rs 112.

Notice here that neither is any money coming out of the scheme, nor is the investor getting more units. His units will remain at 1,000 ($1,00,000 / 100$) which he bought when he invested Rs. 1 lakh @ Rs. 100/ unit.

7.8.2 Dividend Payout Option

In case an investor chooses a Dividend Payout option, then after 1 year he would Receive Rs. 12 as dividend. This results in a cash outflow from the scheme. The impact of this would be that the NAV would fall by Rs. 12 (to Rs. 100 after a year. In the growth option the NAV became Rs. 112) . Here he will not get any more number of units (they remain at 1,000), but will receive Rs 12,000 as dividend ($\text{Rs. 12 per unit} \times 1,000 \text{ units}$).

Dividend Payout will not give him the benefit of compounding as Rs. 12,000 would be taken out of the scheme and will not continue to grow like money which is still invested in the scheme .

7.8.3 Dividend Reinvestment Option

In case of Dividend Reinvestment option, the investor chooses to reinvest the dividend in the scheme. So the Rs. 12, which he receives as dividend gets invested into the scheme again @ Rs. 100. This is because after payment of dividend, the NAV would fall to Rs. 100.

Thus the investor gets $\text{Rs. 12,000} / \text{Rs. 100} = 120$ additional units. Notice here that although the investor has got 120 units more, the NAV has come down to Rs. 100.

Hence the return in case of all the three options would be same. For Growth Option, the investor will have 100 units @ 112, which equals to Rs. 1,12,000 while for Dividend Reinvested Option the investor will have 1120 units @ Rs. 100 which again amounts to Rs. 1,12,000. Thus it can be seen that there is no difference in either Growth or Dividend Reinvestment Plan.

It must be noted that for equity schemes there is no Dividend Distribution Tax, however for debt schemes, investor will not get Rs. 12 as dividend, but slightly less due to Dividend Distribution Tax. In case of Dividend Reinvestment Option, he will get slightly lesser number of units and not exactly 120 due to Dividend Distribution Tax.

In case of Dividend Payout option the investor will lose out on the power of compounding from the second year onwards.

Concept Clarifier – Power of Compounding
Compound Interest refers to interest earned on interest. The formula for Compound Interest is: $A = P * (1 + r)^t$ Where, A = Amount P = Principal invested r = rate of interest per annum t = Number of Years As can be seen, the three variables that affect the final Amount are Principal, rate of interest and time for which money is invested. It is time which acts as the biggest determinant as it pulls up the value in an exponential manner. Hence it is important to invest for the long term to get the benefit of compounding.

NCFM Model Test Paper
Mutual Funds : A Beginners' Module

- Q:1 For anybody to start a mutual fund, relevant experience in financial services is mandatory [2 Marks]
- (a) TRUE
(b) FALSE
- Q:2 Mutual Funds in India follow a 3-tier structure [2 Marks]
- (a) TRUE
(b) FALSE
- Q:3 The sponsor registers the mutual fund with SEBI after forming the trust [2 Marks]
- (a) FALSE
(b) TRUE
- Q:4. Trustees manage investor's money [2 Marks]
- (a) TRUE
(b) FALSE
- Q:5 Fund managers of closed ended schemes are not allowed to churn portfolios as frequently as open end schemes [2 Marks]
- (a) TRUE
(b) FALSE
- Q:6 Only the physical securities are held by the Custodian. [2 Marks]
- (a) TRUE
(b) FALSE
- Q:7 The AMC cannot act as a Trustee for some other Mutual Fund.[2 Marks]
- (a) TRUE
(b) FALSE

Q:8 Offer Document is not a legal document [2 Marks]

- (a) TRUE
- (b) FALSE

Q:9 A scheme has 50 cr units issued with a face value of Rs. 10. Its NAV is Rs. 12.36. Its AUM in Rs. Cr is (Entry Load 2%) [2 Marks]

- (a) 500
- (b) 618
- (c) 630.36
- (d) Insufficient Information

Q:10 Entry load is highest for Liquid schemes [2 Marks]

- (a) TRUE
- (b) FALSE

Q:11 Tracking error in index funds is only due to entry loads [2 Marks]

- (a) TRUE
- (b) FALSE

Q:12 Scheme A has 2.5% entry load, Scheme B has none. No scheme has an exit load. How much more annual returns will be A have to deliver to match B's performance if B delivers 12% annual returns [2 Marks]

- (a) 2.5%
- (b) 12%
- (c) 14.87%
- (d) 2.87%

Q:13 Investors are mutual, beneficial and proportional owners of the scheme's assets. [2 Marks]

- (a) TRUE
- (b) FALSE

Q:14 Investors have a right to be informed about changes in the fundamental attributes of a scheme. [2 Marks]

- (a) TRUE
- (b) FALSE

Q:15 NAV of a scheme without entry load will rise more than NAV of a scheme with an entry load [2 Marks]

- (a) TRUE
- (b) FALSE

Q:16 A scheme with lower NAV is always better than a scheme with higher NAV [2 Marks]

- (a) TRUE
- (b) FALSE

Q:17 Index Funds invest in stocks comprising indices [2 Marks]

- (a) TRUE
- (b) FALSE

Q:18 If a scheme has 45 cr units issued and has a FV of Rs. 10 and NAV is at 11.13, unit capital (Rs. Cr) would be equal to [2 Marks]

- (a) 500.85
- (b) 50.85
- (c) 950.85
- (d) 450

Q:19 If a scheme issues more units, its NAV will [2 Marks]

- (a) Have no impact
- (b) Fall
- (c) Rise
- (d) Can't say

Q:20 Redemption of units translates into higher NAV [2 Marks]

- (a) TRUE
- (b) FALSE

Q:21 Offer Document has to be provided by the advisor along with the application form [2 Marks]

- (a) TRUE
- (b) FALSE

Q:22 A fund fact sheet is published by mutual funds [2 Marks]

- (a) TRUE
- (b) FALSE

Q:23 Fund fact sheet gives comparison of performance of each scheme with its benchmark [2 Marks]

- (a) TRUE
- (b) FALSE

Q:24 Expense Ratio = Expenses/ Average Weekly Net Assets [2 Marks]

- (a) TRUE
- (b) FALSE

Q:25 Among equity funds, risk is highest for index funds [2 Marks]

- (a) TRUE
- (b) FALSE

Q:26 Expense Ratio for a fund should be as low as possible [2 Marks]

- (a) TRUE
- (b) FALSE

Q:27 Expense Ratio will increase if investors start redeeming [2 Marks]

- (a) TRUE
- (b) FALSE

Q:28 A scheme has average weekly net assets of Rs. 324 cr and has annual expenses of Rs. 3.24 cr, its expense ratio is [2 Marks]

- (a) 1%
- (b) 10%
- (c) Can't say
- (d) Insufficient information

Q:29 For a scheme to be defined as equity fund, it must have minimum [2 Marks]

- (a) 65% in Indian equities
- (b) 65% in equities
- (c) 51% Indian equities
- (d) 35% in Indian equities

Q:30 Long term capital gains will not be charged for international funds with 100% investment in foreign equities as compared to a fund investing only in Indian companies [2 Marks]

- (a) TRUE
- (b) FALSE

Q:31 If YTM increases [2 Marks]

- (a) Future Value of Cash Flows goes down
- (b) Present Value of Cash Flows goes up
- (c) Present Value of Cash Flows goes down
- (d) Future Value of Cash Flows goes up

Q:32 Gains made from Equity funds are not liable for long term capital gains tax [2 Marks]

- (a) TRUE
- (b) FALSE

Q:33 A 100% international equity fund is similar to a debt fund from taxation viewpoint [2 Marks]

- (a) TRUE
- (b) FALSE

Q:34 SWP stands for [2 Marks]

- (a) Systematic Whining Pain
- (b) Systematic Whining Plan
- (c) Systematic Withdrawal Plan

Q:35 Growth option is for those investors who are looking for capital appreciation. [2 Marks]

- (a) TRUE
- (b) FALSE

Q:36 In case of Dividend Reinvestment option, the investor chooses to reinvest the dividend in the scheme. [2 Marks]

- (a) TRUE
- (b) FALSE

Q:37 Equity Mutual fund investors have to bear Securities Transaction Tax (STT) [2 Marks]

- (a) TRUE
- (b) FALSE

Q:38 SEBI stands for [2 Marks]

- (a) Securities & Exchange Board Institute
- (b) Securities & Exchanges Board of India
- (c) Securities & Exchange Board of India
- (d) Securities & Exchanges Board of Institute

Q:39 Money Markets refers to that part of the debt market where the maturity is [2 Marks]

- (a) less than 1 year
- (b) less than 1 month
- (c) less than 6 months
- (d) more than 1 year

Q:40 Long term capital gains will not be charged for international funds with minimum 65% in Indian equities. [2 Marks]

- (a) FALSE
- (b) TRUE

NOTE : THIS IS A SAMPLE TEST. THE ACTUAL TEST WILL CONTAIN 50 QUESTIONS.

Answers :

1	(a)	21	(b)
2	(a)	22	(a)
3	(b)	23	(a)
4	(b)	24	(a)
5	(b)	25	(b)
6	(a)	26	(a)
7	(a)	27	(a)
8	(b)	28	(a)
9	(b)	29	(a)
10	(b)	30	(b)
11	(b)	31	(c)
12	(d)	32	(a)
13	(a)	33	(a)
14	(a)	34	(c)
15	(b)	35	(a)
16	(b)	36	(a)
17	(a)	37	(a)
18	(d)	38	(c)
19	(a)	39	(a)
20	(b)	40	(b)