CHAPTER 1: INVESTMENT LANDSCAPE

Learning Objectives:

After studying this chapter, you should understand about:

- Investors and their financial goals
- Saving or investment
- Different asset classes
- Investment risks
- Risk measures and management strategies
- Behavioral biases in investment decision making
- Risk profiling
- Understanding asset allocation
- Do-it-yourself v/s taking professional help

1.1 Investors and their Financial Goals

"Please suggest some good investments." "Which mutual fund schemes should one buy this year?" "Which is the best mutual fund scheme?" "Which is the best investment?" "Should I invest in stocks or real estate?" "What is your view of the stock market?" "Are my investments proper? Or should I make some changes?"

One hears these and many similar questions, very regularly. There is an issue with these questions. These are about the investments and not the investor. The investor's needs are not even discussed, and probably not even considered important.

As leadership guru and bestselling author Simon Sinek says, "Start with Why". The discussion of investments must start with "why" – the purpose of investment. "Why is one investing?"

1.1.1 Why Investments?

Let us take a look at some examples:

Shalini, an eight-year-old girl, lives in a mid-size town in North India with her parents. She is highly inspired by watching the recent success of India's space programs, in which some women scientists played a huge role. She wants to become a space scientist. Her parents, Mrs. And Mr. Gupta want to support her pursue her dream.

Rabindra, 45 years old, is working as an engineer in a large multinational firm. His wife is a homemaker. Since the company does not provide any pension plan, he is worried about how they would be able to live a comfortable life once he retires from the job.

Surinder Singh has recently moved to a large city from his hometown, as he got a promotion and a transfer in the company where he works. While his job is very good,he is facing trouble in settling down with a house. He is tired of going house-hunting every now and then and is thinking of buying his own house in the near future.

Mrs. D'Souza has recently retired from her job. She received a large sum as retirement benefits. She intends to invest the same in order to receive regular income to live a comfortable life.

1.1.2 Financial Goals

The above are some examples of common situations we see regularly in our own life or the lives of people around us. Though there is no explicit mention of money in these examples, we intuitively know that money would be involved in each of these situations, whether Shalini has to be educated well, or Surinder Singh has to buy a house, or Mrs. D'Souza or Rabindra have to fund their lives in retirement. In the investment world, the requirements of these four are known as financial objectives. When we assign amounts and timelines to these objectives, we convert these into **financial goals.**

There are numerous examples of such financial goals. Among the most common are funding a child's education, the cost of the marriage of one's son or daughter, funding the lifestyle in retirement, buying a vehicle, buying or renovating one's house, taking a big vacation. At the same time, there could be some not-so-common ones like starting one's own business or taking a sabbatical from work and fund one's higher education.

Goal setting is a very important exercise while planning for investments. As seen above, all the financial goals are about the need for money that cannot be fulfilled through the inflow at that time. While the expenses for the goal may be high or low, the income (from salary, professional fees, etc.) may be less than the amount required to fund the goal. This is where money needs to be withdrawn from the investments – in other words, this is why one needs to invest the money.

The first step in goal setting is to identify these events in life. Some of these are desirable and can be planned, whereas some others, which may be undesirable, may spring up as surprises. Those events with a potential negative outcome would be undesirable. Some of the examples of the same are the death of a family member, hospitalization, accident, theft, fire,etc. One cannot plan to fund the expenses associated with such events through investments,though we can create an emergency fund using some savings and investment products. Apart from the emergency fund, one may buy insurance policies to cover the risks of such events.

After identifying the events, one needs to assign priorities–which of these are more important than the others. Retirement or children's education fall into the responsibility's category, whereas a grand vacation may be a good-to-have goal. Having said that, it is only the individual and the family that can decide which is which. A financial advisor may only guide and help one take an appropriate decision. At the same time, the role of such an intermediary would be very important.

After that, one needs to assign a timeline as well as the amount of funding required at the time of such events. Take for example, if someone is planning to buy a house, one needs to decide the type of house one wants, as well as the location. These inputs would help arrive at approximate cost. After that one needs to decide by when one would like to buy this. Both the timeline and amount are critical for one to be able to plan to achieve the goal.

Such an exercise allows one to classify the goals in terms of the timeline – are the goals in the near term, or far in the future?

1.1.3 Short term needs versus Long Term Goals

Take a relook at the examples at the beginning of the chapter. Shalini's higher education is roughly ten years away, whereas Rabindra may work for another fifteen years. On the other hand, Surinder Singh may need to buy a house in the next couple of years. Mrs. D'Souza's case is interesting since she has a need for income from investments in the immediate term, but the same must also continue for a long and uncertain period, as the income is required for life. Rabindra would also enter a similar situation on retirement.

The retirement goal can be broken into two parts – accumulating a sum for retirement and then taking income out of the corpus thus accumulated. Another look at the two approaches to classify the goals indicates that the goals can be placed in the following matrix:

	Critically important (responsibilities orneeds)	**Dreams**	**Good-to-have**
Immediate term			
Near term			
Medium term			
Long term			

This looks very similar to the urgent v/s important matrix that Stephen Covey discussed in his bestseller "The Seven Habits of Highly Effective People". The matrix is referred to in the context of time management, and it classifies various tasks one undertakes during the day, as well as over a period. Let us take a look at the matrix:

The Time Management Matrix		
	Urgent	Not Urgent
Important	I	II
Not Important	III	IV

(Source: The Seven Habits of Highly Effective People, by Stephen R Covey)

In the book, Covey says that as long as you keep focusing on Quadrant I, it keeps getting bigger and bigger and then starts to dominate you. This quadrant referred to by Covey is "urgent and important". When that happens, the 'important but not-so-urgent' tasks are not plannedfor in time until they also enter the quadrant 1, becoming urgent. The same principle appliesto financial goals, too. A large number of people struggle with their finances since they do not plan for the important and not urgent events in life.

Wisdom suggests that if one plans well for those important and not urgent tasks (and goals), life changes for the better. In order to achieve this, it is important to first classify the financial goals – those events in life in terms of timeline and importance in one's life.

1.1.4 Financial Goals, Time Horizon for their achievement and Inflation

The next step would be to assign amounts to the financial goals. In the process of planning, this is an important question: How much would it cost? Shalini, the eight-year-old, wants to be a space scientist, for which she needs good quality education. How much would such education cost? Well, this question must be answered in terms of the amount needed when Shalini reaches college. And that is roughly a decade from now. In such a case, the costs are quite likely to move up. Such a rise in the cost of the goals is called inflation. It applies to many other areas of personal finance. This is known as inflation with respect to the goal value.

Inflation adjustment for the goal values is critical, without which the entire planning can go haywire. The cost of education has been going up at a very fast pace over the last few decades. Similar is the case of the cost of healthcare, which can have a big impact on the expenses during the retirement years.

1.1.5 The Pool Approach

Some people have a pool of savings / investment and meet their financial requirements from the pool. It is possible to manage that way. However, the lacuna is, you are not sure of the horizon for the investments. As we will see going ahead, knowing your horizon is important for investment decisions.

Case Study:

In case of Shalini's higher education. Assume that the cost of her higher education is Rs. 50 lacs (in today's price), whereas Shalini would go to college 10 years later. If the inflation in college fees is expected to be 8 percent p.a., her parents need to provide for Rs. 1,07,94,625 in 10 years, approximately.[2] There are too many assumptions involved here–the course Shalini would pursue, the cost of the education, and the inflation. However, one needs to start with some assumptions to plan properly. Else, the parents may plan to accumulate Rs. 50 lacs, which would be grossly insufficient.

[2]Note: Inflation numbers are taken based on random assumptions, and only for illustration purposes.

Inflation has a long-term impact, and hence while planning for funding all the long-term goals, one must consider inflation in the cost of the goal. On the other hand, the immediate term and near-term goals may not have a big impact due to changes in price.

As mentioned earlier, inflation is the rise in prices of various products, and services consumed. If the inflation is 6 percent p.a., the household expenses would be higher a year later in comparison to today's cost of living. If a family's monthly expenses are Rs. 30,000 currently, they would be spending Rs. 31,800 next year if the inflation is 6 percent. This does not look like much, but if the inflation stays at the same level, this family's monthly expenses would be roughly Rs. 53,725 after 10 years; and Rs. 96,214 after 20 years.

There is one thing common in all these financial goals: a mismatch of cash flows. Either the expenses are far higher than the income at that point in time, or there is no income at the time of funding these goals. Since these are future goals, an investor may have time to accumulate one's savings; and grow them through appropriate investment avenues.

1.2 Savings or Investments?

Before taking a look at various investment options available for an investor, some important questions need to be tackled. Do the two words "saving" and "investment" mean the same thing? Or are they different words? If these are different things, which is better – saving or investing? Such clarification is warranted since many individuals use the two terms interchangeably.

The word "saving" originates from the same root as "safe". The safety of money is of critical importance here. Whereas, when one invests money, the primary objective typically is to earn profits. The important point to note here is that there is a trade-off between risk and return.

The other difference is evident from the dictionary definition of "saving"– reduction in the amount of money used. This definition refers to reducing consumption so that some money is saved. It is this saved money that can be invested. In other words, saving and investing are not to be considered as two completely different things, but two steps of the same process – in order to invest money, one needs to save first. Thus, saving precedes investing.

1.2.1 Factors to evaluate investments

The three most important factors to evaluate investments are safety, liquidity, and returns. In addition to these, there are few more parameters such as convenience, ticket size (or the minimum investment required), taxability of earnings, tax deduction, etc. These factors have been discussed below:

Safety: This begins with the safety of capital invested. However, one could stretch that to also include the degree of surety of income from investment. In order to understand the safety of an investment, it is important to understand the risks involved.

Liquidity: How easily can one liquidate the investment and convert it to cash? The degree of ease is different across different categories, and even within the categories, the same could be different across products. Sometimes, the nature of the product could be such that selling it is difficult, whereas sometimes there could be some operational features, e.g., a lock-in for a certain period, after which one may be able to liquidate the investment; or a penalty for an early exit. While such a penalty does not hamper liquidity, it only lowers the investment returns. Another aspect that one may also want to look at is divisibility. Is it possible to liquidate part of the investment or is it necessary to sell the whole thing?

Returns: As seen earlier in the definition of investments, the major purpose is to get some returns from investment. Such returns may be in the form of regular (or periodic) income, also known as current income; and capital appreciation, or capital gains.

The current income is receivable periodically, without having to sell the investment, whereas the capital gains can be realized only when one sells the investment.

The exit charges or penalty would bring down the returns, as seen earlier. Hence, whenever there are any such charges for early withdrawals, the same must be considered as a trade-off between liquidity and returns.

Convenience: Any investment must be evaluated in terms of convenience with respect to investing, taking the money out–fully or partially, as well as the investor's ability to conveniently check the value of the investment, as well as to receive the income.

Ticket size: What is the minimum amount required for investment? There are some avenues where an investor can start investing amounts as small as Rs. 50 or Rs. 100, whereas some require more than Rs. 1 lakh, and sometimes more than Rs. 1 crore. This becomes an important factor while taking a decision about the selection of investment options. At the same time, this must not be the only factor. Some investors (though a very small number) have started considering certain investments (requiring large amounts), only because they could afford the same, without checking whether they needed it, or if that was appropriate for their situation and goals.

Taxability of income: What one retains after taxes is what matters, and hence, taxation of the earnings is another important factor that one must consider. While looking at the taxability of income, it is critical to evaluate various other factors, too, and not look at taxation in isolation. For example, some products may offer lower tax on investment returns, but the safety also may be low. At the same time, there could be some products that may offer low tax on investment returns, only if the investor stays invested for a certain term, or till the maturity of the product. In other words, if the investor sells the investment before maturity (or a certain minimum period), the investment returns may be taxable.

Tax deduction: A related matter is the tax deduction that may be available in case of certain products. Such a deduction effectively increases the return on investment, since the same is calculated after factoring the net amount invested.

However, where a deduction is available, the product may have a lock-in period of certain years. Once again, this is a trade-off between liquidity and tax deduction.

The above discussion offers a good framework for the evaluation of investment products. However, as mentioned earlier, no factor should be seen in isolation. One also must consider the investor's situation while evaluating the avenues.

1.3 Different Asset Classes

Various investment avenues can be grouped in various categories, called asset classes. An asset class is a grouping of investments that exhibit similar characteristics. There are four broad asset categories or asset classes, and then there are various subcategories, within each of these. The four broad categories—Real estate, Commodities, Equity and Fixed income.

1.3.1 Real Estate

Real estate is considered as the most important and popular among all the asset classes. However, the popularity of this asset category is large because of a reason not related to investment. For those who have bought their own houses, it is the largest expense in life. The word used here is "expense", and not "investment". This would be elaborated later, but it is pertinent to mention here that in majority of cases, individuals purchase real estate for self-occupation. This should not be considered as an investment, since selling the same may have a negative impact on one's lifestyle.

Real estate could be further classified into various categories, viz., residential real estate, land, commercial real estate, etc.

As an asset category, real estate exhibits certain traits, some of which are listed as under:

- Location is the most important factor impacting the performance of an investment in real estate
- Real estate is illiquid
- It is not a divisible asset
- One can invest in physical real estate, as well as in the financial form
- Apart from capital appreciation, it can also generate current income in form of rents
- In case of real estate, the transaction costs, e.g., brokerage charges, registration charges, etc. are quite high. This would bring down the return on investment.
- The cost of maintenance of the property, as well as any taxes payable must be adjusted before calculating the return on investment, something that many individual investors do not. These expenses are also quite high, and cannot be ignored.
- The investments acquired or sold shall be accounted at transaction price excluding all transaction costs such as brokerage, stamp charges and any charge customarily included in the broker's contract note that are attributable to acquisition/sale of investments.

1.3.2 Commodities

This is another asset category that people at large are familiar with in various ways. On a regular basis, people consume many commodities, e.g., agricultural commodities like spices; petroleum products such as petrol and diesel; or metals like gold and silver. However, it is not possible to invest in most of these, as many of these are either perishable and hence cannot be stored for long, or storage of the same could take a lot of space, creating a different kind of difficulties.

Though there are commodities derivatives available on many commodities, it may not be wise to call these "investments" for two reasons, (1) these are leveraged contracts, i.e., one can take large exposure with a small of money making it highly risky and (2) these are normally short-term contracts, whereas the investors' needs may be for longer periods.

On the other hand, there are at least two commodities that many investors are quite familiar with as investment avenues, viz., gold, and silver.

When someone invests in these commodities, the prices are almost in sync across the world. It is easy to understand the prices of gold and silver across countries by simply looking at the foreign exchange rate between the two countries' currencies, and making adjustments for various costs and restrictions imposed by any of the countries. In this manner, these two are globally accepted assets.

Both these commodities have been used as investments or storage of value for long. In fact, the history of currency would be incomplete without mention of these two. Gold has also been considered by many as a safe haven asset. In case of failure of an economy, or a currency, gold is considered to be the final shelter. However, the opposite camp also comes with very strong arguments. Many currencies across the world were pegged to the gold reserves available with the central bank of the country for long. However, this so-called gold standard has been done away with a few decades ago. And still, most of the central banks hold gold in their reserves.

An investor in these commodities would have to count only on capital appreciation since these do not generate any current income.

Gold and silver come in varying degrees of purity. Each one can be bought at different prices from the market. However, for a large majority of investors, it is almost impossible to make out the level of purity. If we opt for a purity certificate, the cost goes up and without one, the risk of getting lower quality metal is high.

1.3.3 Fixed Income

When someone borrows money, one has to return the principal borrowed to the lender in the future. There could also be some interest payable on the amount borrowed. There are various forms of borrowing, some of which are through marketable instruments like bonds and debentures[3].

There are many issuers of such papers, e.g., Companies, Union Government, State Governments, Municipal Corporations, banks, financial institutions, public sector enterprises, etc.

Many bonds pay regular interest; thus, the investors can expect current income. At the same time, if someone has invested at the time of issuance of the bond and hold the same till maturity, in almost all cases, there would be no capital gains. On the other hand, a transaction through secondary market – whether at the time of buying or at the time of selling, or both – may result into capital gains or losses.

Bonds are generally considered to be safer than equity. However, these are not totally free from risks. These risks will be discussed in detail later in the chapter.

Bonds can be classified into subcategories on the basis of issuer type i.e., issued by the government or corporates or on the basis of the maturity date: short term bonds (ideal for liquidity needs), medium term bonds, and long-term bonds (income generation needs).

1.3.4 Equity

This is the owner's capital in a business. Someone who buys shares in a company becomes a part-owner in the business. In that sense, this is risk capital, since the owner's earnings from the business are linked to the fortunes, and hence the risks, of the business. When one buys the shares of a company through the secondary market, the share price could be high or low in comparison to the fair price.

Historically, equity investing has generated returns in excess of inflation, which means the purchasing power of one's money has increased over the years. It has also delivered higher returns than other investment avenues, most of the time, if one considers long investment periods. Since the base year of 1979, Sensex has grown from a level of 100 to around 66000 i.e., July 2023. This is an appreciation of around 16 percent p.a., compounded annually.[4]

Apart from long term capital appreciation, equity share owners may also receive dividends from the company. Such dividends are shared out of the profit that the company has generated from its business operations. If the company does really well, the dividends tend to grow over the years.

To sum up, equity share prices generally fluctuate a lot, often without regard to the business fundamentals. However, over long periods of time, the share prices follow the fortunes of the

[3]We would use the two words bonds and debentures interchangeably in this discussion.

[4]Sensex is BSE's benchmark index representing shares of 30 large-sized companies. It is also considered to be one of the bellwether indices, a barometer of what is happening in the stock market in India.

firm. If the profits of the company continue to grow over the years, the share price follows.

There are similarities and differences between the various asset categories.

Investments in equity and bonds can be done only in financial form, whereas one can buy the other two assets, viz., real estate and commodities either in financial or in physical form. It is this physical form that gives a feeling of safety to many. Anything that is tangible is perceived to be safer than something intangible.

Real estate and commodities differ from equity and bonds in another way, too. These could be bought as an investment or for consumption purposes. For example, one may invest in residential property and give it on rent to generate income. This is an investment. At the same time, one may also buy a flat to live in–for residential purposes. Such a self-occupied house may not be an investment. A similar logic may be applied to gold and silver by checking whether one has invested in the metal or bought the same for personal use.

When someone invests in equity shares, part of the profits made by the company may be shared with the investor. With a careful analysis of various equity shares, it is possible to receive a periodic income (though without any guarantee about how much would one receive, and whether one receives anything at all). Similarly, real estate could be given on rent to generate intermittent cash flow. Bonds pay interest income. It is the commodities where such intermittent cash flow is not generated.

An investor in equity, real estate and commodities is an owner of the asset, whereas an investor in bonds has lent money to someone. In such a case, the lender's receipts—be its interest payments or return of principal amount invested – are agreed at the time of the issue of such instruments. In all the other three cases, the investor's cash flows (or receipts) are unknown. To that extent, the future returns from these assets, which may also be called ownership assets, would be highly uncertain in comparison to the lending assets like bonds or fixed deposits.

While the above discussion was about the characteristics of various asset classes and certain differences across the asset categories, the same must be seen from another perspective, too. While one may buy equity shares listed in India in Indian Rupees, one can also invest in shares of various companies listed outside India. This provides exposure to another currency. For example, an investor buying the shares of a company listed on the London Stock Exchange is exposed to the fortunes of the company, as well as the change in the exchange rate between the British Pound and the Indian Rupee.

Similarly, one could also invest in bonds denominated in various currencies other than Indian Rupee, and one could also buy real estate abroad. These are called international assets. However, one must understand the basic nature of the asset class as discussed earlier, and then try to assess the impact of currency fluctuation on these investments.

Different investment avenues can be categorized into different asset category as can be seen from the illustration in Table 1.1:

Table 1.1 Investment avenues classified under different asset categories

Equity	**Fixed Income**
• Blue-chip Companies • Mid-sized companies • Small-sized companies • Unlisted Companies • Foreign Stocks • Equity Mutual Funds • Exchange Traded Funds • Index Funds	• Fixed deposit with a bank • Recurring deposit with a bank • Endowment Policies • Money back Policies • Public Provident Fund • Sukanya Samruddhi Yojana (SSY) • Senior Citizens' Savings Scheme (SCSS) • Post office Monthly Income Scheme • Recurring deposit with a post office • Company fixed deposit • Debentures/bonds • Debt Mutual Funds
Real Estate/Infrastructure	**Commodities**
Physical Asset • Residential/ Commercial Financial Asset • Real Estate Mutual Funds (REMF) • Real Estate Investment Trusts (ReIT) • Infrastructure Investment Trust (InvIT)	• Gold • Silver • Gold Funds • Commodity ETFs
Hybrid asset classes	**Others**
• Hybrid Mutual funds or Multi Asset Fund	• Rare coins • Art • Rare stamps

1.4 Investment Risks

To obtain a better understanding of the investment avenues, it is essential to understand the different types of risks involved.

1.4.1 Inflation Risk

Inflation or price inflation is the general rise in the prices of various commodities, products, and services that we consume. Inflation erodes the purchasing power of money. The following table explains what inflation can do to the purchasing power of our money.

How much money would you need to buy the goods you can buy with Rs. 10,000 today	**If inflation is assumed at 8% p.a.[5]**

[5] The numbers are arrived at by using the future value equation, i.e., A = P * (1 + r) ^ n, where A is the future value (the values in the right-side column); P is the present value (Rs. 10,000 in the example); r is the rate of inflation (8% p.a. in the example); n is the number of years (the periods in the first column in this table).

After 5 years	Rs. 14,693
After 10 years	Rs. 21,589
After 20 years	Rs. 46,610
After 30 years	Rs. 1,00,627

The above table shows how fast the purchasing power of the money goes down. This risk hits hard over long periods. If this is not properly accounted for in the investment plan, one may fall short of the target when the need arises.

One may also look at the impact of inflation in another way. If one could buy 100 units of something with Rs. 10,000 today, assuming inflation of 8 percent p.a., one would be able to buy only 68 units of the same thing after 5 years, and only 46 units after 10 years. This clearly shows the loss of purchasing power.

In this context, it is pertinent to take a look at whether the investments are able to protect purchasing power or not. In order to protect the purchasing power, the investment return should be at least as much as inflation. If the same is higher than inflation, the purchasing power increases, whereas if one earns lower returns than inflation, the purchasing power drops.

Incidentally, when one seeks the total safety of invested capital, along with anytime liquidity, the investment returns are usually lower than inflation. Take for example, if you earn an interest rate of 7 per cent p.a. on your fixed deposit when the inflation is at 8 per cent p.a., it is obvious that the investment grows at a slower pace than the rise in prices. The returns on investment without factoring inflation is known as the "nominal rate". However, when this number is adjusted for inflation, one gets the "real rate of return". If the investment returns are higher than inflation, the investor is earning a positive real rate, and vice versa.

1.4.2 Liquidity Risk

Investments in fixed income assets are usually considered less risky than equity. Even within that, government securities are considered the safest. In order to avail the full benefits of the investments, or to earn the promised returns, there is a condition attached. The investment must be held till maturity. In case if one needs liquidity, there could be some charges or such an option may not be available at all.

Here is an example. Assume that an investor has invested one's money in a safe investment option, a bank deposit for a goal that is due five years from now. For such a goal, one chose to invest in a five-year fixed deposit. As is clear, the term of the deposit is five years, and the promised returns would accrue to the investor only if the money is kept in the deposit for the entire period. In case, for some reason the investor needs the money before maturity, there could be some deduction in the interest, which reduces the investment return. Some other products like PPF (Public Provident Fund) may offer no liquidity for a certain period, and even after that, there may be only partial liquidity.

This risk is also very closely associated with real estate, where liquidity is very low, and often it takes weeks or months to sell the investment.

Some investment options offer instant access to funds, but the value of the investment may be subject to fluctuations. Equity shares, listed on stock exchanges are an example of this. While it is easy to sell shares to get cash in case of a large number of listed shares, the equity prices go up and down periodically. Such investments are not appropriate for funding short term liquidity needs.

1.4.3 Credit Risk

When someone lends money to a borrower, the borrower commits to repay the principal as well as pay the interest as per the agreed schedule. The same applies in the case of a debenture or a bond or a fixed deposit. In the case of these instruments, the issuer of the instruments is the borrower, whereas the investor is the lender. The issuer agrees to pay the interest and repay the principal as per an agreed schedule. There are three possibilities in such arrangements:

(1) the issuer honours all commitments in time, (2) the issuer pays the dues, but with some delay, and (3) the issuer does not pay principal and the interest at all. While the first is the desirable situation, the latter two are not. Credit risk is all about the possibility that the second or the third situation may arise.

Any delay or default in the repayment of principal or payment of interest may arise due to a problem with one or both of the two reasons: (1) the ability of the borrower, or (2) the intention of the borrower. While the ability of the borrower, if the same happens to be a company, is a function of the business stability and profitability of the company. Stable companies, which may be market leaders in their respective segments, may pose a lower risk, in comparison to a new company, or a small-sized company in the same industry. Some industries may also exhibit higher stability in comparison to some other.

A lender tries to assess both before lending the money or expects enough compensation in case the ability appears to be low. In the case of debentures or bonds, the investor would expect higher interest from bonds with low safety.

In this context, the bonds issued by the government of their own country would be considered to be the safest for investors. Such bonds normally offer the lowest interest rates for the citizens of the country, due to the high (highest) safety of capital. All the other bonds/ debentures available in the country would offer a higher rate of interest.

1.4.4 Market Risk and Price Risk

When securities are traded in an open market, people can buy or sell the same based on their opinions. It does not matter whether these opinions are based on facts, or otherwise. Since the opinions may change very fast, the prices may fluctuate more in comparison to the change in facts related to security. Such fluctuations are also referred to as volatility.

There are two types of risks to a security—market risk and price risk.

Let us understand this through an example. When there is a possibility of a country getting into a warlike situation, there is a widespread fear that this may impact the economy and the companies within it. Due to such a fear, it is quite possible that the prices of all stocks (or at least a large number of stocks) in the market may witness a fall. This is a market-wide fall. On the other hand, when the sales of a company's products fall, due to technological changes, or the arrival of a better product, the company's share price falls. During such times, there could be many other companies, whose share prices may rise. This is an example of a company specific risk. As is evident from the discussion, the stability of the company's business and the profitability of the firm play a major role with respect to company specific risk factors. Between the general, market-wide factors and firm-specific factors, there could be some industry-specific factors, which would impact all the firms within the same industry. For example, if the Government policy changes with respect to a particular industry, all the firms may get impacted. Similarly, if a new and better technology becomes available, all the firms within the same industry that use the old technology may get impacted. This happened when mobile phones started becoming popular, the pager industry vanished in less than a couple of decades.

The risk specific to the security can be reduced through diversification across unrelated securities, but the one that is market-wide cannot be reduced through diversification.

1.4.5 Interest Rate Risk

Interest rate risk is the risk that an investment's value will change as a result of a change in interest rates. This risk affects the value of bonds/debt instruments more directly than stocks. Any reduction in interest rates will increase the value of the instrument and vice versa.

While most investors are familiar with the concept of debentures, they normally buy and hold these bonds till maturity. On maturity of the bond, they get the maturity amount, since it is part of the bond agreement (assuming the company does not default on the commitment).

On the other hand, if an investor sells the bond in the secondary market, one would have to do the transaction at the current market price. This price depends on many factors, but chief among these is the change in the interest rates in the economy. The relationship between interest rates and bond prices is inverse.

When the interest rates in the economy increase, the prices of existing bonds decrease, since they continue to offer the old interest rates. Assume that a bond was issued at Rs. 1000 for one year, and it offered an interest rate of 8 percent. Immediately after the bond was issued, the interest rates in the economy increased, and new bonds are now offering 8.5 percent interest.

In such a case, the earlier bond becomes less attractive. If the investor who invested in that bond wants to sell, it can only be done at a discount. The reverse is also true. If in the above example, had the interest rate moved down, the price of the bond would have moved up. The interest rate risk varies for bonds with different maturities. Those with longer maturity would witness higher price fluctuations in comparison to those with shorter maturities. Such movements in bond prices on account of changes in interest are referred to as “interest rate risk”. This is a market-wide factor affecting the prices of all bonds.

1.5 Risk Measures and Management Strategies

Many of the risks cannot be eliminated, and the investor must take some of those, in order to earn decent returns on one’s investment portfolio. However, one needs to manage the risks that one is taking. One may consider the following strategies for management of the investment risks:

- **Avoid**

One may avoid certain investment products if one does not want to take the respective risk. However, this may also mean giving up the opportunity to benefit out of the said investment. Many experts recommend that one should avoid the investment avenues that one does not understand.

- **Take a position to benefit from some event/development**

An investor can also take an investment position in anticipation of some developments in the market. Let us take an example here: a bond investor expects the interest rates to go down. In such a case, one may sell the short maturity bonds and invest in long maturity bonds. If the interest rates move down, the investor’s judgment would be rewarded handsomely. At the same time, if the judgment is wrong, there could be losses, too. This is an example of managing the interest rate risk.

Similarly, some investors manage their investment portfolios using such strategies across multiple asset categories.

In order to take and dynamically change such positions, the investor must have superior knowledge than a large number of investors in the market. This is difficult and hence risky. Due to the amount of skill required, and the risks involved, such strategies are not recommended for a large number of investors.

- **Diversify**

While the previous strategy is possible when one has superior knowledge, not everyone would possess the same. For a lay investor a prudent approach would be to diversify across various investment options. This spreads the risk of loss and thus the probability of losing everything can be significantly reduced through diversification.

Before managing the risks, the risks have to be measured. Measurement of credit risk is undertaken through credit rating and credit spreads. Risks related to volatility in prices, primarily the fluctuations that happen in investment returns are measured through variance, standard deviation, beta, modified duration which will be discussed in Chapter 10.

1.6 Behavioural Biases in Investment Decision Making

Before discussing asset allocation, it is important to take a detour and discuss behavioural biases in investment decision making. This is also one of the risks the investors must understand. However, this risk is not related to the investments, but the role of emotions in decision making, or in other words the irrational behaviour of investors towards management of money.

Investors are driven by emotions and biases. The most dominant emotions are fear, greed and hope. Some important biases are discussed below:

- **Availability Heuristic**

Most people rely on examples or experiences that come to mind immediately while analyzing any data, information, or options to choose from. In the investing world, this means that enough research is not undertaken for evaluating investment options. This leads to missing out on critical information, especially pertaining to various investment risks.

- **Confirmation Bias**

Investors also suffer from confirmation bias. This is the tendency to look for additional information that confirms their already held beliefs or views. It also means interpreting new information to confirm the views. In other words, investors decide first and then look for data to support their views. The downside is very similar to the previous one – investors tend to miss out on many risks.

- **Familiarity Bias**

An individual tends to prefer the familiar over the novel, as the popular proverb goes, “A known devil is better than an unknown angel.” This leads an investor to concentrate the investments in what is familiar, which at times prevents one from exploring better opportunities, as well as from a meaningful diversification.

- **Herd Mentality**

“Man is a social animal” – Human beings love to be part of a group. While this behaviour has helped our ancestors survive in hostile situations and against powerful animals, this often works against investors interests in the financial markets. There are numerous examples, where simply being against the herd has been the most profitable strategy.

- **Loss Aversion**

Loss aversion explains people's tendency to prefer avoiding losses to acquiring equivalent gains: it is better not to lose Rs. 5,000 than to gain Rs. 5,000. Such behaviour often leads people to stay away from profitable opportunities, due to the perception of high risks, even when the risk could be very low. This was first identified by Psychologists Daniel Kahneman and Amos Tversky. Kahneman went on to win Nobel Prize in Economics, later on.

- **Overconfidence**

This bias refers to a person's overconfidence in one's abilities or judgment. This leads one to believe that one is far better than others at something, whereas the reality may be quite different. Under the spell of such a bias, one tends to lower the guards and take on risks without proper assessment.

- **Recency bias**

The impact of recent events on decision making can be very strong. This applies equally to positive and negative experiences. Investors tend to extrapolate the event into the future and expect a repeat. A bear market or a financial crisis leads people to prefer safe assets. Similarly, a bull market makes people allocate more than what is advised for risky assets. The recent experience overrides analysis in decision making. For example, a rise in prices of equities will make people think only about a further rise which would lead to more investment being made in equities. This increases the risk. On the other hand, a fall in prices in an asset would make people stay away thinking it would fall further which could lead to loss of opportunities.

- **Behaviour patterns**

There are different types of people and the factors that influence their lives also impact the manner in which they save or invest. The drive to save more or be regular in investing often come from these personal factors. Behavioural tests are very useful in determining and knowing the kind of personality a person has and this would include whether they are spenders or savers or investors. Knowing this can help in making the right efforts to get the individual to perform the desired ac-on.

- **Interest of the investors**

Many times, the financial and investment decisions are not guided by the fact as to whether this investment is suitable for a person or not but by the interest of the investor. This can lead to the construction of portfolios which are not suitable for specific people. For example, someone working in the Information Technology industry might just have technology stocks in their portfolio. This leads to a concentration of risk and is something that has to be avoided.

- **Ethical standards**

The presence of ethical principles in the dealing of individuals also has an impact as far as their investment behaviour is concerned. Those following ethical standards are more likely to pay attention to their investments and be disciplined because they tend to follow the norms. This is a big help when it comes to building long term wealth. Trying to take shortcuts might derail the entire investment process and set back the existing efforts.

These are only some of the biases. This is not an exhaustive list. The negative effect of these biases is that the investor does not gather enough information to be able to identify more opportunities or to evaluate various risks related to investment avenues. It is only prudent for an investor to do a detailed analysis as is possible, without taking such shortcuts.

It is important to avoid behavioral biases in investment decisions. To detach emotions from investments, it is better to take the opinion of a third person i.e. Registered Investment Advisor (RIA) or Mutual Fund Distributor (MFD).

1.7 Risk Profiling

The risk profilers try to ascertain the risk appetite of the investor so that one does not sell mutual fund schemes that carry a higher risk than what the investor can handle. In order to ascertain the risk appetite, the following must be evaluated:

- The need to take risks
- The ability to take risks, and
- The willingness to take risks

Out of the above, the need to take risks arises when the investor needs higher returns to reach one's goals. The ability to take risk refers to the financial ability, and the investment horizon, whereas the willingness is linked to the psychological capacity to handle risk. The distributor has to evaluate these three, and strike a balance between them, whenever there is a conflict.

There are various approaches to creating the risk profile of the investor. The distributor is free to choose from these options. Alternately, one can also design one's own method or tools for the same, based on the brief discussion mentioned above.

1.8 Understanding Asset Allocation

The basic meaning of asset allocation is to allocate an investor's money across asset categories in order to achieve some objective. In reality, most investors' portfolios would have the money allocated across various asset categories. However, in many such cases, the same may be done without any process or rationale behind it.

Asset Allocation is a process of allocating money across various asset categories in line with a stated objective. The underlined words are very important. First, it is a "process", which always involves several steps, and those steps should not be ignored or skipped. Second, the whole idea behind asset allocation is to achieve some objective. Whichever approach one selects, one must go through the steps of the process in order to achieve the objective.
There are two popular approaches to asset allocation[6].

Strategic asset allocation

[6]Note: In order to keep the discussion simple, and to understand the concept of asset allocation well, we will use a two- asset portfolio, consisting equity and debt, as example in the discussion under this topic.

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

In other words, it is an approach to maintain a target allocation across various asset categories. Such a target asset allocation across the asset categories is decided based on the analysis of the needs and risk appetite of the investor. Such an analysis would help a mutual fund distributor to arrive at allocation between various asset categories in percentage terms. This percentage target is also called the "strategic asset allocation".

Tactical asset allocation

As opposed to the strategic asset allocation, one may choose to dynamically change the allocation between the asset categories. The purpose of such an approach may be to take advantage of the opportunities presented by various markets at different points in time, but the primary reason for doing so is to improve the risk-adjusted return of the portfolio. In other words, the attempt is to either reduce the portfolio risk without compromising the returns or to enhance portfolio returns without increasing the risk. Tactical asset allocation is also referred to as dynamic asset allocation. Tactical asset allocation is typically suitable for seasoned investors operating with a large investible surplus.

As an illustration, if the appropriate allocation to equity and debt in a portfolio is say 60:40 and equity valuations are attractive, it may be increased to say 65:35 or 70:30. If equity valuation is stretched, it may be reduced somewhat.

Rebalancing

An investor may select any of the asset allocation approaches, however, there may be a need to make modifications in the asset allocations.

Let us first start with the strategic allocation. In that case, the asset allocation is likely to change periodically, since the different assets may not move together in the same direction and may not move equally, even when the direction is the same. In such a case, it is quite possible that the current asset allocation may be different from the target allocation. What should one do in such a scenario?

Well, many practitioners advocate that the portfolio should be rebalanced to restore the target asset allocation. Their argument is that the asset allocation was decided by an analysis of the needs and risk appetite of the investor. We need to reduce the allocation to the risky asset if that has gone up. On the other hand, if the allocation has gone down in the asset that has the potential to generate higher returns, we need to correct that as well.
Such a rebalancing offers a huge benefit – it makes the investor buy low and sell high. Let us

understand this through an example:

Assume that the target asset allocation for an investor is 50:50 between asset categories A and B. A year later, asset category A went up by 20 percent, whereas asset B went down by 5 percent. In such a case, the allocation has deviated from the target. If we started investment of Rs. 1,000 each in both the cases, the value in both the cases would stand at Rs. 1,200 in asset A and Rs. 950 in asset B, with the total portfolio value at Rs. 2,150. The current allocation stands at 55.81 percent in asset A and 44.19 percent in asset B. This needs to be restored to 50:50. That means selling some part of the investment in asset A (worth Rs. 125) and buying some in asset B.

As we can see here the asset A, which has gone up, is sold; and asset B, which has gone down, is bought. This happens automatically, without the investor having to take a view on the direction of the markets.

The rebalancing approach can work very well over the years when the various asset categories go through many market cycles of ups and downs.

On the other hand, one may also need to do a rebalancing of the asset allocation, when the investor's situation changes and thus the needs or the risk appetite might have changed. Rebalancing is required in the case of strategic asset allocation as well as tactical asset allocation.

With the purpose to ensure uniformity across mutual funds, SEBI has provided the timelines for rebalancing of schemes. In the event of deviation from mandated asset allocation mentioned in the Scheme Information Document (SID) due to passive breaches (occurrence of instances not arising out of omission and commission of AMCs), mandated rebalancing period for all schemes other than Index Funds and Exchange Traded Funds is 30 business days. However, the mandated rebalancing period is not applicable to the Overnight Funds.

1.9 Do-it-yourself versus Taking Professional Help

As discussed earlier, investors need to invest money from time to time. These investments can be made in various financial instruments ranging from Government sponsored schemes to bank fixed deposits to company debentures to shares of companies or real estate properties of even precious metals like gold or silver.

One option is to manage the investments oneself. That would involve finding the right investments and carrying out the related research and administration work. The other option is to outsource the entire job to a professional or a company engaged in such a business.

A mutual fund is that second option – it is managed by a team of professionals, known as the asset management company. This is what really needs to be understood. By choosing to