STOCKS to *Riches*

Insights on Investor Behaviour

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To
My wife
Gita

PREFACE

Our paradigms, more than mere market forces, govern the financial decisions we make. This implies that not only do we need basic knowledge of how **Money** grows, we also need to forego instant gratification and live the universal principles of austerity and hard work, all of which form the basis of achieving financial freedom.

Investing is putting money to work and (unlike gambling) is governed by the universal law of the farm: what you sow today cannot be reaped immediately tomorrow. This book explains what real investing is and the investing strategies one may adopt. Today, 'equities' is the preferred asset class due to its inherent tax efficient character. Hence we focus on equity investments in to the stock markets. **Stock Markets**: why are they so interesting? Why are they so unpredictable? Why are we unable to understand how they behave? Stock market volatility reflects the behaviour of its participants, that is, the investors. Investors react differently when they become a part of the herd. We try to understand this human behaviour and become aware of certain behavioural anomalies that distort our thinking and make us take decisions that are against our financial interest. Understanding **Behavioural Finance** and how it affects markets is the key to a successful investment strategy. Wearing the cloak of patience, eschewing greed and conquering fear, form the basis of these strategies, but behavioural finance goes beyond commonly known principles, and helps us understand the intricate mechanisms of the smartest individual's reflexive, and yet doomed responses, to the Capital Market.

I am neither an economist nor an academician. I am an investor, a stockbroker, a financial planner and a money manager. My knowledge is due to formal education in the field of behavioural finance from the course "Investment Decisions and Behavioural Finance" at the Kennedy School of Government, Harvard University, and my extensive study of the works of scholars, economists and academicians in various fields of investment, money management and behavioural finance. These include great thinkers and scholars like Amos Tversky and Daniel Kahneman, Richard Thaler, Hersh Shefrin, Richard Geist, Robert Shiller, Benjamin Graham, Warren Buffet, Stephen Covey, Robert T. Kiyosaki, Gustave le Bon, Charles D. Ellis, Max Bazzerman, Gary Belsky and Thomas Gilovich to name just a few, some of whom I have had the good fortune to interact with. To this, I have added my unique perspective, viewing the activity on Dalal Street through the behavioural finance lens.

This book brings the knowledge of these great thinkers into an Indian context, and helps me to share with you my experiences with various types of investors, fund managers, corporates, the media, and fellow students. As an optimist, I firmly believe that I am writing this book at the start of one of the biggest bull markets in Indian history. It is January 2005. I am sure my experiences will give you new perspectives and help you be a better investor. Simply learning to see the common psychological and cognitive errors in your investment decisions may be enough. You will take a giant step forward.

My chosen profession of stockbroker has served as an ideal vantage point from which I have been able to observe different behavioural nuances and patterns. I have been in touch with various types of investors, fund managers, speculators, traders, etc. Each one has his own agenda, perspectives, goals and thought processes. No one is perpetually right or wrong. The correctness or otherwise of any decision depends upon the sentiments prevailing at a particular time and unsurprisingly, individual confidence levels will fluctuate according to the degree of accuracy in predictions.

Chapter 1 explains what investing really is. It is a confusing subject and means different things to different people. I am sure you will change your perspective of investing as you go through the chapter. Chapter 2 explains the difference between investment and speculation. It is important to know the difference as many people today acquire speculative habits in the error that they are investing. Chapter 3 helps you understand the different ways of investing. The key to successful investing is keeping your emotions under control. This is easier said than done. Chapters 4 to 8 helps you to understand this psychology of Investing. Chapter 4 is an introduction to behavioural finance—how our emotions drive our decision-making, and how those decisions may not be in our best financial interest. We understand why even smart and intelligent people make big money mistakes.

Chapter 5 explains our reactions when confronted with fear, and our behavioural anomalies of Loss Aversion and Sunk Cost Fallacy arising out of our fear of making losses. A plan of action to overcome these anomalies concludes the chapter. Chapter 6 shows how our greed leads us to behavioural anomalies of maintaining the status quo by getting into the Decision Paralysis mode and the Endowment Effect, that is attachment to our possessions. Once you are aware as to why you behave in such particular ways there is a plan of action that can help you to overcome these faults.

Chapter 7 explains the human tendency to treat the same amount of money differently depending on how it has been acquired, the effort taken to acquire the same and when it is acquired. This is in spite of the fact that money is fungible. People have different types of mental accounts and this is reflected in their investing and spending decisions. Understanding mental accounting and following the solutions at the end will help your investing and spending decisions.

Chapter 8 explains mental heuristics. These are the short cuts the brain takes to process information. It does not process the full information. This leads to decision biases. We human beings sometimes follow the rule of the thumb without understanding its implications. We do so because of a habit or a custom or just because everyone is doing it. There is no rationality in these actions. There are different types of biases and an understanding of these will help you understand your own irrationality and that of others. It will also help you better understand stock markets and you will be able to live with its volatility. Chapter 9 is on mutual funds. That open-ended mutual funds are the best form of investments for the retail investor is a myth. It is a mental heuristic. It is an idea, which is past its time. New environment calls for radical thinking and bold concepts. Discard the old—and then only can we embrace the future. Money management is a profession, which unfortunately has been turned in to a business with the advent of open-ended mutual funds. In such a scenario, the new emerging model to serve the interests of the investors would be an individual portfolio manager. Chapter 10 takes you to the real life on the stock markets. Understand its participants and their behaviour. Understand the true internal working of the markets. You have heard of stock market bubbles. Understand how they are formed and how the different types of behavioural anomalies we have discussed in earlier chapters play their part at different levels of the bubble formation. Booms are always followed by busts and this occurs due to totally opposite behaviour from the same participants. It's a tug of war between fear and greed and greed and fear. And lastly we come to Chapter 11 "Why must one Invest" and why Equity Investment is the best form of investing. Today, equities as an asset class are the most tax friendly and tax efficient asset class. Equities will form a major portion of every Indian's portfolio. International investment companies will be attracted towards investments in India.

The seeds of the equity cult were sown by Mr. Dhirubhai Ambani way back in 1977 with his vision of the Reliance Empire. 2005 marks the beginning of the Indian equity tidal wave, which will also attract international investment companies to set up bases in India.

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This is a book of experiences, of encounters and realities. My due acknowledgements to the various people who have come in my life and enabled me to have insights into their behaviour. These include my clients, friends, business associates, fund managers, brokers, investors etc.

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An extraordinary team delivers extraordinary results. I am grateful to our team at Parag Parikh Financial Advisory Services Ltd. which include Rajiv Thakker, M. Alarkan, Hiten Sampat, Manoj Shroff, Hiroo Thadani, Nirjhar Handa, Jayant Pai, Kunal Kalra and Shishir Karnik who were always by my side and offering me a helping hand during the various stages of the completion of the book.

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And above all, the Almighty, without whose wish and blessings nothing can happen. I thank him for having chosen me for this project.

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Author's Profile

Parag Parikh is Founder Chairman of Parag Parikh Financial Advisory Services Limited (PPFAS), Mumbai. Mr Parikh has over 25 years' experience in investing, broking and advisory business. He regularly shares his insights through guest contributions in many of India's leading financial publications such as *The Economic Times*, *Business Standard* and *DNA*, through appearances on CNBC, NDTV Profit, Aaj Tak and Star News, as well as by undertaking lectures at various investor and educational forums.

Mr Parikh has a Masters in Commerce from Mumbai University and is a Certified Financial Planner (CFP) from the Financial Planning Standards Board of India. He is an alumni of the Harvard Business School having successfully completed the prestigious Owner President Management Program. He has also attended the program on Investment Decisions and Behaviourial Finance at the John F. Kennedy School of Government at the Harvard.

A keen believer in nurturing one's physical, mental, emotional, and spiritual side, Mr. Parikh engages in physical activities such as golf, reads extensively, and practises Vipassana regularly.

CHAPTER 1

INVESTING

Investing is a challenging game and we are all into it at some time or the other. The clearer we are about it, the more successful we will be at mastering it.

Let's eavesdrop on this dinner conversation between a father, mother, son and daughter.

Son: *Dad, give me some money. I want to invest in the stock market. All my college friends go to this broker who provides terminals where one can invest.*

Dad: *Invest?*

Son: *Yes, my friends make a lot of money. They buy stocks on the broker's advice and when the prices rise, they sell and make a clean profit.*

Dad: *Well, this is the age for you to study, get good grades so that you can get a good job that will secure your future. I don't want you to get into speculating in stocks.*

Daughter: *Dad, you have to give me some extra money this month, as I need to buy some gold jewellery. I will be getting married in a couple of years and I need to start building my jewellery collection now.*

Mother: *Baby, look at yourself in the mirror. You are putting on so much weight. If you want to look good wearing gold jewellery you require a good body. Why don't you go to the gym for regular workouts instead of wasting your time watching TV? It's high time you start watching your figure if you want to get a good husband and settle down in life.*

Daughter: *Oh mom, my boyfriend is a big investor. He buys and sells commodities. He knows how to make money. We have decided to get married. You need not worry about my future.*

Son: *Oh, so he is a commodity investor? Great! Dad, I told you it's a great business. I want to be a stock investor. You don't understand what a big thing investing is. You can make a lot of money through it.. See dad, you slog the whole day at your factory. Become an investor and we will become rich.*

Mother: *Children, your dad works so hard at his factory, which is why we have a comfortable life. It's wrong to run down your father. He chose to set up this factory. So what if he did not get into investing?*

Son and Daughter: *But we can make big money through investing. Why should dad work so hard at the factory when this is a better option?*

Mom: *I don't want to get into this debate but I am happy to have inherited from my father some stocks and a real estate property. I get my regular dividends from my stocks and the rent from the property. Why should I bother about investing?*

Dad: *Well, I think I will go to sleep. I am really confused about this. Investing is a difficult subject. Good night.*

In the conversation, no one understands 'investing'. The son and the daughter talk about it but do not know what it exactly is. The father has invested in the factory and asks his son to invest in his education. But he does not know what investing means either. The mother asks her daughter to invest in her body by exercising regularly. The daughter too does not realise that buying gold jewellery is real investing, not commodity trading. The mother is the real investor in stocks and real estate. Yet, she does not know about it.

What is Investing?

Investing is a very exhaustive subject. It means different things to different people. At some point of time we all are investing in something. It may be relationships; it may be a marriage or a career. Life is all about doing something to reap benefits in the future. So all of us are in the investment game. However, it means different things to different people. People invest in:

- large families so that when they grow old, their children can take care of them,
- education, to ensure job security and a comfortable life,
- land and crops, in order to fend for themselves and their families,
- small families, to provide a good standard of education and living for their child,
- their health, by exercising regularly and eating a balanced diet,
- charitable works, to serve the poor and the needy, and
- external assets like real estate, shares in listed companies, gold, silver, etc., so that they can fall back upon them in tough times.

Thus we have a lot of people doing different things in the name of investing. This makes the subject of investing very complex.

Investment Products

These come in the form of stocks, bonds, mutual funds, real estate, precious metals, insurance, commodities, etc. The reason people choose one form or another is distinct as each is designed to satisfy a particular need.

- Stocks offer dividends and capital appreciation.
- Bonds are much safer than stocks and offer a safe return on the money invested.
- Mutual funds may be seen as less risky than stocks.
- Investment in real estate could be for capital appreciation, to earn rent or for self-accommodation.
- Insurance is used as a security.

- Precious metals like gold and silver appreciate over time and are therefore a good hedge against unforeseen political uncertainties.

Thus each investment product has different distinct characteristics and each is designed to satisfy a peculiar need. Each is designed to do something different.

Investment Procedures

These are nothing but techniques, methods or formulae for dealing in the various investment products.

- If one were to buy an investment product and hold it, then the procedure adopted is called going *long*.
- If one were to sell an investment product and then buy it the procedure adopted is called going *short*.
- If one buys and then sells, the procedure is called *trading*.

There have been various innovations in investment procedures by the introduction of the Futures and Options markets. We have thus different procedures to speculate and hedge in the form of call options, put options, and futures. All these different types of procedures make the financial markets interesting.

Investor Classification

Investors are classified by the products they use and the procedure adopted by them.

- A stock trader is one who uses the product *stock* and the procedure *trading*.
- A long-term investor on the other hand uses the product *stock* and the procedure of *buying and holding long*.
- A short seller uses the same product *stock* and the procedure of *selling and then buying back*.

- Similarly, a real estate speculator whose product is *real estate* adopts the procedure of *speculation.*
- A collector of rare coins *buys and holds long* the product of *rare coins.*
- A commodities future trader adopts the procedure of the *futures market* to trade in *commodities.*
- A stock option trader adopts the procedure of *hedging* in the product of *stocks.*
- A day trader uses the product *stocks* and the procedure of *speculation.*
- A saver is one who wants to hold over a long term by putting his money in the bank.

Thus, there are different types of people doing different things with the same investment products. Under the banner of investing are people who are really gamblers, speculators, traders, hedgers, savers, dreamers and losers.

Investing is a Plan

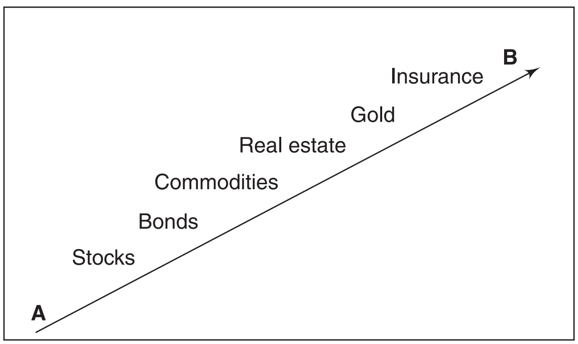
It is not a product or a procedure. It is a very personal plan. An individual has to decide what his goals are and how he can go from one level of comfort to another. He would have certain resources coming to him and certain commitments to be fulfilled. A person is able to earn when he is young. These earnings need to be invested wisely so that in old age, when a person's capacity to earn diminishes, he can fall back on his investments. Therefore, he needs to have a clear picture of his financials before making an investment plan.

Example: Take the case of a working couple, aged 30, with two school-going children—a son and a daughter. At present they live a very comfortable life. But they need to plan for the future and invest their earnings wisely to take care of future expenses. The children will want to go in for higher studies within the next 7–10 years. They will need to be married. The family might need a bigger house or there could be some major illness in the family.

All these expenses will have to be met. The needs will increase but the income may not keep pace. If one does not plan for these expenses one may not be able to achieve the milestones as and when they come. So this couple will need to estimate their income flow and visualise their expenses. An investment plan will help them to plan for eventualities in the future.

If one is at comfort level ‘A’. From there one needs to go to a higher comfort level ‘B’. To do that one would need different types of investment vehicles like stocks, bonds, real estate, etc. One would choose the investment vehicles according to one’s needs. Fig. 1.1 explain this.

FIGURE 1.1



Investment Plan and Investment Vehicles

Investment Vehicles

Why do we have so many different types of cars and trucks? Because different people have different needs. A farmer would find the Tata Sumo useful at his village, while a couple staying in a city would find the Maruti 800 more convenient. Likewise, a Toyota Qualis would well suit a large family. Similarly, in the investment world, investment products are also known as *Investment Vehicles.*

Different people have different needs and different investment goals and they use different investment vehicles. Say, a person from Mumbai has to go to a hotel in Delhi. He would use either a train or car or bus or airplane to go from Mumbai to Delhi. On reaching Delhi, to go to his hotel he could choose a bicycle, a taxi, a bus, a rickshaw, a car or he could even walk it up. In his plan he has a choice of vehicles and he would choose what suits him best. Similarly, when one has an investment plan in place one can choose one or more investment vehicles according to one's needs and means.

Trends and Diversification

We live in a world of continuous change. Good times follow bad and vice versa. Nothing is permanent. We need to be aware of changing trends so that we can benefit from them.

We have just talked about diversification into different asset classes according to our investment plan. But that does not mean we stay invested in just those asset classes. We cannot get married to them. They all are there to serve a purpose and once that is served we need to move on to a new asset class. Alternatively you may have an asset class that has appreciated considerably due to positive trends in that asset class. Here we need to remember the law of nature. Whatever goes up must come down and vice versa. So we need to make a call. Sell a portion of that asset class which resembles the profit and move that money to another asset class where the trend is bearish. What happens? The asset remains intact, but the money earned from that asset class has moved to a different asset class where the chances of an upside are much more. Thus you are increasing the velocity of your money.

Now one would say that this is quite risky and tantamount to speculating. Yes, it could be risky if you are trying to time the markets and get in and out of a stock. But here we are talking about trends in an asset class. Take for instance the real estate market which was very low and subdued in the years between 1998 and 2003. Prior to that it was very good. The trend changed and if anyone had invested in the real estate market when the trend was bearish, he would make a lot of money. Similarly investors were very shy of the stock markets after the tech bust in 2000. The stock markets were very subdued and investors preferred to put their money in fixed income securities and banks. If one were aware of the trends and thinking of increasing the velocity of one's money, one would have invested in stocks in the year 2002–2003 when the valuations were very cheap. Many wise investors did that and reaped the benefits. Of course to do this you require sufficient financial knowledge and wisdom, or the right professionals advising you.

Each Plan is Different

Investment plans also differ from person to person depending upon the age, gender, size of the family, aspirations, goals, etc. For a young man of 20 years, stocks and real estate could be the dominant vehicles as he is starting his life and his risk-taking ability is much more. For a retired person of 70 years, bonds could be the dominant vehicle as safety is more important. For a family with daughters to be married, gold and jewellery could be the dominant vehicle as against a family with sons where real estate could be the dominant vehicle.

Trading is not Investing

We find so many people focusing on a product, say *stocks*, and a procedure, *trading*, but they do not have an investment plan in place. Most people are trying to make money by what they think is investing. But trading is not investing; it is only a procedure or a technique. We come across a lot of youngsters today who when asked what they do for a living, proudly answer that their business is investing. They go early to a broker's office when the markets open and remain there till evening. All day they buy and sell stocks. They believe they are investing when actually they are trading. This is the new breed of traders known as day traders.

There is nothing wrong with trading; these traders also play their part in providing liquidity to the markets. It's only when people are not clear about their own investment plan that all these products and techniques become overwhelming and confusing. There are a number of TV shows and advertisements on investment. Under the banner of investing and investments they knowingly or unknowingly arouse your gambling instincts by giving you trading and speculating ideas. Maybe they themselves are also ignorant about 'investing'. Look at some of the advertisements of banks, mutual funds, brokers and investment advisors. None of them will talk about helping you to make an investment plan. Most of them offer to help you trade or speculate promising you quick returns. They get away with it because investing is a complex subject and not many people know much about it. Be very careful of instant gratification ideas. They are only dreams. Everyone and anyone in the stock market could be a trader but not everyone is an investor.

Plan of Action

- Make an investment plan for yourself.
- Decide the different types of investment vehicles you need and the procedure you need to adopt.
- If you believe trading is the appropriate procedure for you so be it. But understand that you are trading and not investing. So when the vagaries of the market hit you hard do not wonder how it happened. You opted for the trading choice that seems easier, and you paid the price.

Investment planning is a continuous process. We are living in times of constant change and our goals change with our changed circumstances, requiring us to reweigh our options constantly. It requires discipline to stay the long-term course and patience to achieve the desired outcome. If equity stocks happen to be the most preferred investment vehicle in your investment plan, you need to understand the strategy that needs to be adopted. The next chapter explains investment strategy.

CHAPTER 2

INVESTMENT STRATEGY: INVESTMENT AND SPECULATION

Investment strategy is the first issue that investors should consider. Investing is an act of faith, a willingness to postpone present consumption to save for the future. Thus, investing for the long-term is central to the achievement of optimum returns for the investor.

There are two sources of returns in the stock markets[1]:

1. Fundamentals represented by earnings and dividends,
2. Speculation represented by the markets valuation of these fundamentals.

The first is reliable and sustainable over the long run; the second is dangerous and risky. These lessons of history are central to the understanding of investing. These two sources of returns could be further classified into *Cash Flow* and *Capital Gains*.

Cash Flow

When one believes in the fundamentals of investing, one is looking at the dividend payouts of the company. These arise from the company's earning potential, and are possible only when the company has a positive cash flow. This cash flow is a product of the fundamentals, or inherent strength, of the company, the sustainability of the business, and the robustness of the business model. Along with that there are other variables such as the quality of the management, competitive market position, core competencies, etc. Investing in such companies enables the investor to earn a regular income over many years.

The investment value of a stock is the present worth of all the dividends to be paid upon it. This is best explained by John Burr Williams. A stock is worth only what you get out of it. A stock derives its value from its dividends. A cow for her milk, a hen for her eggs, bees for their honey, and stocks for their dividends[2]. The capital appreciation that takes place is seen primarily from the angle of bonus and right shares, which in turn increase the shareholding leading to higher dividends. As a result the shareholder's cash flow is augmented. The rise in stock price is secondary, as there is no intention of selling for capital gain. It is only satisfying to know that one can cash in on such a huge appreciation in times of need.

When investors follow this cash flow model of fundamental investing, it is always based on the premise that over a long period, the stock markets will go up irrespective of the turbulence. For them, bull and bear markets are part of the investment process. On the contrary, they wait for bear markets, as they are able to get bargains. There is also a strong belief that equity investments are the best hedge against inflation.

Capital Gains

When a stock goes up in value and one sells it at a profit, that gain is known as capital gain. When people buy stocks in the belief that the prices will go up and they will be able to make a profit, it is known as speculation. The price of a stock listed on the stock markets reflects the value of the fundamentals. Speculators bet on the market value of the fundamentals. Now, there are traders and speculators who buy and sell stocks according to their perception of the correct price of the stock based on the fundamentals. Say a company like Colgate is quoted at a price of Rs. 145. A trader may feel that according to the fundamentals of the company Rs. 145 is a low price and that the stock could go up. So he would buy that stock at Rs. 145. When it goes up he makes a profit, which is his capital gain. If it goes down he makes a loss.

Stock price movements take place for a variety of reasons and the investor is vulnerable to a host of uncertainties. Yet he is willing to take the risk. Here people are not looking at the fundamentals of a company. They are looking at the stock price going up because of probable factors, such as the fortunes of the company changing, expectations of higher profits, a technological breakthrough, etc. They buy and sell stocks on information or an opinion or a rumour. The idea is to benefit from a price movement. The inherent gambling instinct in a human being is responsible for the huge turnover in this kind of speculation. Speculation per se is gambling. In the stock markets the other name for speculation is trading. It gives some credibility to the process and also has a differential tax treatment (the basic difference between speculation and trading is that in the former no delivery of the stocks is taken and in trading the delivery is effected).

The capital gains model is based on the premise that stock markets always witness bull and bear phases; one follows the other. For speculators and traders the trick is to take advantage of the ups and downs of the market. Volatile stock price movements excite them. They follow the short-term approach. They strongly believe that since markets always fluctuate, a long-term strategy is useless. In fact, during the tech boom I interacted with some experts and fund managers who held the firm view that the old ways of investing were out as the rules of the game had changed. To buttress their claim they cited the example of how Warren Buffet missed the tech boom. Today, I know for sure that all of them are nursing their wounds. This is what short-term success does.

Warren Buffet's success till date is due to the fact that he would refrain from buying businesses he did not understand. He would buy stocks which were quoting a discount to their intrinsic value, and he would buy businesses from which he could visualise sustainable earnings over the long term. As the tech stocks did not fit in with these conditions, he stayed away from them.

Case Study on Infosys: September 2000

In 2000, I had done a study on the behaviour of the market valuation of the fundamentals of Infosys Technologies Limited, the leader in the software sector and a favourite of all the investors. It is a very good company and had been growing at over 100 per cent at that time. The stock price shot up from around Rs. 2,000 (Rs. 10 paid up) in January 1999 to around Rs. 12,000 (Rs. 5 paid up adjusted for split) in March 2000. Nothing spectacular had happened to the company to justify such a steep increase. But by the end of September 2000, the stock was down to Rs. 7,000. Nothing had gone drastically wrong with the company either since March when it was quoted around Rs. 12,000.

How did this happen? Let's do some arithmetic on the figures of Infosys to understand how the irrational market values the fundamentals. Infosys at its peak price of Rs. 12,800 commanded a market cap of a huge Rs. 85,000 crore. The market justified this on the grounds that the company was growing aggressively at near 100 per cent per annum. In the financial year 2000, Infosys reported revenues of Rs. 882 crore. If we were to compound this figure at 85 per cent annually for 10 years (as some people believed the growth would continue), then in financial year 2010 Infosys would report revenues of a staggering Rs. 414,176 crore. At that time, assuming a market capitalisation of 100 times revenues (similar to what Infosys was quoting at its peak) it would put Infosys' value at USD 9.2 trillion. The GDP of USA was around the same figure! It is surely not possible that Infosys can be worth as much as the entire GDP of the US.

If this cannot happen, two things are possible. One, that Infosys cannot continue to grow at 85 per cent, and second, that it cannot continue to quote at 100 times revenue. While I do not rule out momentum movements, I believe it is quite difficult to gauge the correct timing of entry and exit. So, though Infosys is a great company a lot of people lost fortunes when they speculated on the stock price and bought the stock for capital gains. As against that, all who had bought the stock for cash flow and held on to the stock, irrespective of market fluctuations, are very wealthy even at today's stock prices. This is the power of investing for the long-term in fundamentals.

To sum up, let's take the example of a cattle farm and a dairy farm[3]. In a cattle farm the asset is the cattle. Cattle are bred and reared to yield good value when they are sold to the slaughterhouse. This is what is speculation or trading. You buy an asset, wait till the price increases, then sell it off in the market for a profit. This is how capital gain investing works.

On the other hand in a dairy farm the asset is also cattle. Here too the cattle are bred and reared but they are not sold to the slaughterhouse. The cattle have a long-term use; they are used to obtain a regular supply of milk.

In both cases the asset is the same but it is used differently—one for meat and the other for milk. Similarly, in the investment world some people use stocks for capital gains by trading while others use stocks for cash flow by investing long-term.

The Law of the Farm

Stock market investing is all about managing the rewards associated with the risks undertaken. Without risk there is no return. Invest you must but before that you must bear in mind the law of the farm. You reap what you sow but the crop is also subjected to the changing seasons. The seed has to endure summer, rain, winter and spring before it turns into a full-blown tree. Stock market investments also work that way. There are no short cuts. If we invest in the right stocks with the right business model and fundamentals, over the long run we are assured of optimum returns. However, to do this requires patience and we have to go through the ups and downs but it is important to stay the course. Getting carried away by the greed of quick returns ultimately destroys wealth, as it does not conform to the law of nature. Many of us forget that nature and society are one.

A Good Strategy

There is nothing wrong in speculation as such. On the contrary it is beneficial in two ways. Firstly, without speculation untested new companies like Infosys, Satyam, and in earlier times companies like Reliance, would never have been able to raise the necessary capital for expansion. The tempting chance of a huge gain is the grease that lubricates the machinery of innovation. Secondly, the risk is exchanged every time the stock is sold and bought, but it is never eliminated. When the buyer buys a stock he takes the primary risk that the stock will go down. However, the seller still retains the residual risk of the chance that the stock he sold may go up.

However, speculating can go wrong[4] if people:

- do not understand the difference between investing and speculating,
- speculate without the right knowledge and skill,
- speculate beyond their capacity to take a loss (that is called margin trading).

The greatest problem today is that most investors are acquiring speculative habits believing that they are investing. The attraction of quick money and the advent of the futures market have lured them to margin trading. For a number of people, this has become a full-time occupation due to the advent of the Internet and online trading. This could be bad news especially when they are dealing with their life savings.

Risk-Reward Balance

The important thing to remember is that investing is all about risk and reward. The higher the risk the greater the reward, and vice versa. The investor needs to select the right balance when choosing an investment vehicle and the strategy. During the IT sector boom, the stock prices of IT companies were going up by leaps and bounds and people were buying such stocks at any price thinking that the price would go up. There was no rationality as to the value and the price. People were thus only buying risk. There was no effort to balance the risk reward ratio. We all know the fate of various IT investors when the markets crashed.

In March 2003, when the Iraq war was on, the markets were very down and some of the stocks were available at ridiculously low valuations. The dividend yield was also very high. The price to earnings (PE) ratios were attractive. This was the time to invest in good stocks as one would be only buying reward and the risk would be minimal. The risk reward ratio would be in the investor's favour.

Nothing is Right or Wrong

Here are certain facts which prove the point that long-term investment is very rewarding and that patience is a virtue in equity markets. Three companies (and there are several others), that have given excellent long-term returns to investors who bought stocks over a decade ago and held on to them, are Hindustan Lever, Hero Honda and Infosys.

Hindustan Lever has given a compounded annual growth rate (CAGR) of 21 per cent in returns for the last 13 years, whereas Hero Honda has given 41 per cent CAGR to shareholders on their investments during the same period. Infosys has delivered an astounding 79 per cent annual return to shareholders since its listing 11 years ago. All these figures include dividends. As we can see this is far higher than the returns available on any other investment avenue like bonds or bank deposits.

However, this does not mean that these stocks have only gone one way, that is upwards. They have had pretty serious declines at various points of time, but despite that the long-term results from owning them have been impressive. Hindustan Lever has been falling for the last two years, Infosys had a very sharp decline after the bursting of the bubble in technology stocks, and Hero Honda also fell significantly in early 2003 when its quarterly sales slowed down.

Short-term investments can also be rewarding for the speculator who is able to take big risks and time the markets. Take the case of a speculator who had bought Infosys at Rs. 2,000 when the market started moving up, and sold it when it went to Rs. 13,800 within a year and a half. He made tremendous gains and he laughed at the investor who held on to the stock since the beginning and got a return of 79 per cent CAGR. A speculator could have short sold Hindustan Lever at Rs. 210 in November 2003 and recovered it at Rs. 120 in August 2004 making a return that even a long-term investor in Hindustan Lever would envy. Speculators do make a killing, as some would have definitely done during the various periods of the boom and the bust cycles. The only rider is, can they do it consistently over time? A lot of speculators could have made more money than the long-term investors on the above stocks. So it is difficult to say which strategy is good and which is bad. It depends upon the individual's mental attitude, discipline, risk-taking ability and patience.

This conclusively proves a few points namely:

- Long-term investing can be very rewarding if you buy the right company at the right price,
- A stock can decline significantly in the short run and yet give a decent long-term return,
- Short-term investing (speculation) can also be very rewarding if you are able to time the markets and take advantage of short-term volatility.

Table 2.1 Compounded Annual Growth Rate of Infosys Technologies Ltd.

(Rupees in crores)

Year ended March	*Net Profit*	*Market Cap as on March 31st*	*PE Ratio*
2000	294	58900	200
2001	629	27012	43
2002	808	24713	31
2003	958	26763	28
2004	1243	32908	26
CAGR	43%	–14%	

As can be seen from the above table, even though the net profit of Infosys has grown at 43 per cent CAGR, 2000–2004, the market capitalisation has fallen by 14 per cent CAGR in the same period. This is the impact on investors when a good business is bought at irrational prices. The PE ratio has continuously declined. So, if one had bought the stock at a higher price in 2000 he would be losing money in spite of the company showing improved performance. This is the risk one takes when one is speculating. Most of the IT experts and fund managers ignored Benjamin Graham's words of warning: "Obvious prospects for physical growth in a business do not translate into obvious profits for investors."

In today's changing times there is so much of uncertainty that looking at the long-term approach seems unviable. Hence the stock markets have become the bedrock of brute speculation. This is the reason for so much volatility. It is also turning long-term investors into short-term punters. This is how the investment world works today. If you want to be a successful investor there are three ways of investing. Chapter 3 looks at the best way to invest.

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CHAPTER 3

THREE WAYS OF INVESTING

There are three ways by which an investor can invest to achieve superior results. One is intellectually difficult, the second is physically difficult and the third is emotionally difficult.[1]

The Intellectually Difficult Path

Investors like Warren Buffet, Charlie Munger, John Templeton, and a few others have taken the intellectually difficult path of beating the markets. This path is pursued by those who have a profound understanding of investing, can see future trends clearly, and can comprehend business and the environment. They know that patience is a virtue and therefore take long-term positions. We admire them but usually in retrospect. Initially, we may see them as being misguided, but that is only because of our inability to grasp their point of view.

This method is all about the cash flow approach. It is the most difficult path as it requires a keen mind to study the different concepts of investing—how different businesses work, and how economic policies and market forces affect the business environment. A good grasp of the various fields of management is required to understand organisations and their ability to capitalise on various business opportunities. A good knowledge of the field of liberal arts is basic to the development of various investment concepts. Here the name of the game is patience. Such investors are always on the lookout for good opportunities and bargain prices. As long-term investors, they are willing to wait for them. They are not perturbed by events, news, rumours and gossip that create short-term volatilities. They have a strong belief in their abilities and, since their goal is investing long-term for cash flows as against capital gains, they are in no hurry to invest. They strongly believe that opportunities are always there but that when the biggest of them come, one must have the money to invest. They are therefore, very careful about allocating resources. They never buy on impulse. They can be out of the market for months, even years. They have the patience to wait till the right moment. Brokers usually do not like such investors as they do not churn their portfolios regularly. Intellectual investors are also emotionally strong. That is the reason they are able to exercise such restraint.

We all want to be such investors but we cannot, as we believe that we are not all as intellectually blessed as they are. This is a wrong notion. The reason they are intellectually capable is because they work hard and make the effort to reach that stage. They constantly explore opportunities by talking with managements, examining different viewpoints on business, trying to understand economic policies and its effect on business environment, etc. Their intellectual capability is derived from their hard work and their strong belief in the long-term approach to investments. Moreover, they use common sense in their judgements and are not swayed by rumours.

The Physically Difficult Path

Most people are deeply involved in the physically difficult way of beating the markets. They come early to the office and stay late. They do not know what their children are doing as they don't have time for them. They choose work over the family. They carry with them all the newspapers to read whenever time permits. They are always busy with breakfast meetings, more luncheon meetings and even more dinner meetings. Their talk revolves round finding the next best investment opportunity to make money. They visit companies and plants and talk with the management. They keep in touch with a number of brokers as they believe it will increase their efficiency in the stock markets. They are overloaded with information. They are constantly on the telephone making calls and receiving more calls though most of the time the answering machine takes the calls. They continuously monitor stock price movements. At the office they scan their terminals and the CNBC news for market movements, and at home they keep tabs on the NASDAQ. They carry home huge reports to read before the next day. When they are on the move, they are busy on their mobile phones. Market gossip excites them and they make decisions based on rumours. News regarding political developments, monsoon forecasts, inflation figures, change in a minister's portfolio, and GDP growth figures play an important role in their lives. They tend to time the markets on such news. In every way they expend tremendous physical energy and effort to beat the market by outmanoeuvring the competition. But they don't realise that others are also doing the same.

My experience in the stock market dealing with fund managers has been really amusing. They sincerely believe that keeping themselves busy this way makes them look important and increases their ability to pick up the winners. Once I was at the office of a fund manager and we were chatting informally. The telephone rang but he did not answer it. After a couple of rings, the call went to the answering machine. This is how most of them behave. Show the world they are busy.

The day traders also take the physically difficult path of investing. They spend the entire day collecting information and make decisions based on that information. So, with all the fund managers and the day traders treading the same path, how can any one of them achieve better results?

Good opportunities come once in a while and you spot them only when you are cool and have the time to think. The physically difficult path is based on the assumption that there are a lot of opportunities out there and you have to keep digging hard to be successful at investing. The current volatility in the markets is the result of too many people trying to invest by this method. Life is simple. We make it complicated.

The Emotionally Difficult Path

Most of us may find the intellectually and the physically difficult paths too daunting. In that case we could opt for what is called the emotionally difficult path. Actually, this path is very straightforward. Simply work out a long-term investment policy that is right for you and be committed to it. This is how you do it. When your friends or your broker tell you about a great investment opportunity and they say it is a great time to buy, don't buy. When the newspapers report big investment opportunities, be wary of such news. When your neighbours tell of how the stock markets have made them rich in the last couple of months, don't be tempted. When your banker offers credit facility against your shares to buy more shares, stay calm and unconcerned.

When analysts on TV tell you that the market is going to crash and that stock prices will nose dive, don't sell. When newspapers report a bear phase and tell you to liquidate your portfolio, don't sell. When your neighbours exit the stock markets, don't follow them. When your broker tells you to sell as he sees bad times ahead, do not listen to his advice and sell. Emotional discipline is the most difficult. It is not easy to control your emotions and go against the herd. But you need to believe in yourself and the investment policy to which you are committed. It often pays to go against popular opinion. The emotionally difficult path like the intellectually difficult path lays stress on the virtue of patience. Both are based on the view that the long-term approach to investments is the only strategy that can enrich investors and increase their wealth. The stress is on the cash flow approach. Patience focuses an investor's attention on the goal of compounding money over a long period. It can be magic even when the rate is modest. To give an example: If one were to compound money at a modest rate of seven per cent the money would double at the end of 10 years and it would be 16 times at the end of 40 years. Patience also helps you to control transaction costs. The more you churn your portfolio the more you pay the broker in terms of brokerage and off course the government in terms of taxes on your capital gains. Then you also have costs like depository charges, transaction tax and service tax. All these costs could be avoided if one has patience.

The emotionally difficult path requires an understanding of how our emotions guide our decision-making especially when we deal with money. Our emotions directly affect our decisions on investments and expenditure. We have to learn to think with our emotions rather than have our emotions do the thinking. Understanding our own anomalies as also that of others will help us become better investors. In the next four chapters we will learn how to use our emotions to our benefit.

Why is Investing so Difficult

The most difficult part of investing, is understanding the behaviour of the stock markets. Market fluctuations are based on the varied opinions expressed by its participants, which in turn are subject to change commensurate with the changing sentiments of people. It's the crowd behaviour that dominates the decision-making and is responsible for the sudden changes in the sentiments. Take for instance the black Monday in May 2004. The markets lost around 700 points when the elections brought the Congress to power. What precipitated this huge fall? Had anything gone drastically wrong with the performance of the companies whose stock prices crashed? Definitely not. But the sentiment changed. The BJP being voted out of power was a big change and normally we do not like changes. Hence there was gloom all around and people dumped stocks as though there was no future. The herd mentality was at work and the markets crashed as each one wanted to get out faster than his neighbour. If you were emotionally strong and you had bought when the others were panicking, you would have ended making a huge fortune. But this seems easy only in hindsight. At that point of time to go against the crowd is the most difficult but the most sensible thing to do. Understanding behavioural science is the key to success in the financial markets. Its application not only helps you control your emotions but also helps you to understand other's emotions and benefit from their mistakes.

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CHAPTER 4

INTRODUCTION TO BEHAVIOURAL FINANCE

"With such positive news from the company why is the stock going down?"

"I am a qualified chartered accountant. I went through the financials of the company and I feel that at the current price, the stock is too expensive. I would not buy it nor recommend the same to anybody. But I am surprised that in the last two weeks the stock is up 15 per cent."

"My friend works with this company. He told me that it was doing exceedingly well and that they have export orders worth crores in hand. So I bought the stock. It's six months and I have been waiting but the stock is going down."

"The company has announced a 1:1 bonus. It's good news so I bought the stock. But the stock went down instead of going up like I thought it would."

"I read the morning's newspapers and was impressed by the Finance Minister's speech and his intention to give sops to the economy. The markets greeted the news positively and went up so I bought stocks. The next day the markets were down for no reason and I lost on my investment."

"I heard the experts' comments on TV on the current budget presented by the Finance Minister. They were not very happy with it. I sold my stocks only to find that within a week the markets were up 10 per cent. I don't know why I sold my stocks which I had been holding for the last four years."

"I cannot understand the markets. I would rather stay away."

Aren't all these statements familiar? You have heard them or perhaps made them yourself. In an ever changing and uncertain world we are trying to find some predictability where none exists. The easiest thing to do is to avoid such irrational markets. But then you would be missing out on one of the most favourable modes of investment. My sincere advice would be to catch the bull by the horns. Confront the problem rather than run away from it. Try to understand why this happens to most people instead of wondering why it is happening to you. Here is my story.

During the IT bubble I too found myself bewildered and confused. The valuations of the dotcom businesses and IT stocks seemed highly inflated. Pundits in the market and the media were pontificating on the "new economy" and giving convoluted justifications for what appeared to be sheer insanity. I wondered, was the entire world mad and I the only one left sane, or was I insane and the world perfectly rational?

I had a client who had invested around Rs. 70 lakhs in different IT stocks in 1998 on his friend's recommendation. In 1999, his portfolio value was around Rs.3 crores. When he asked for my advice I told him to sell as I thought that the PE multiples were very high and the valuations seemed far too stretched. He did not do so and six months later when we met he informed me that the portfolio value was around Rs.6 crores. Once again he asked me what he should do. I was a bit embarrassed by the question, as I knew that he was not asking for advice but telling me indirectly that I was not in sync with the markets. I still insisted that he sell but he did not. Sometime later the portfolio value went up to Rs.8 crores.

This was the frustration I had to go through, of being in the investment business and not being able to advise clients correctly. There were times I had sleepless nights fearing that the world was going too fast for me to understand. I doubted my abilities, my competencies and my knowledge. The inability to understand the madness added to the frustration. In fact, I lost quite a few clients as they thought that I was too conservative and not in tune with the new economy.

To find an answer to this question I did some serious soul searching. My quest led to a fledgling, little known field called Behavioural Finance. This is where anthropology meets economics, and psychology intersects finance. Untaught in MBA curriculum across the world, it remains the domain of a few gurus and special interest groups.

After an extensive study of the literature available on the subject I started observing my own behaviour when it came to decisions regarding money matters. Of course this had more to do with investing as it happens to be my profession. I also studied the behaviour of my institutional and retail clients when they made their investment decisions. As an intermediary I came across many cases of irrational behaviour and this pushed me to pursue a deeper understanding of this field. The examples given in this book are all drawn from my dealings with my clients, friends, colleagues and associates.

If Investments do Well, Why do Investors Fare Poorly?

Table 4.1 Returns 1984–2004

Equity	*PPF*	*Cash*
15.8%	11.2%	4%

Studies of different types of investments over the past 20 years show that equities have done exceedingly well with returns of 15.80 per cent. Yet whenever we ask investors about their performance, the majority say that equity investments are risky and they have lost money in the stock market. They always curse the volatility and blame it for their losses. Even well educated investors with an above average IQ do not do well on the stock markets. It's a paradox that while equity investments have done well investors have done poorly. The reality is that human beings make decisions not only with their minds but also with their hearts. Our emotions define us and we make most of our life decisions on purely emotional considerations. Our logic and rationale only retrospectively justify these decisions; they do not determine them. Our emotions are subject to change rapidly and this affects our behaviour and decision-making.

Emotions Change Paradigms

This is a true story of a friend who ran a coaching class with one of his colleagues. They started off well and within a couple of months they were full to capacity. After six months a few students complained to my friend about his colleague's rude behaviour. The allegation was that he was very short-tempered and arrogant. They wanted him removed or else they would discontinue the classes. My friend was worried. His colleague was his partner and he could not be removed. Moreover he was a brilliant professional and an able tutor. After a couple of weeks the colleague fell ill and was absent for some time. The students were very happy. They thought that they had been successful in removing him. One day my friend learned that the colleague had brain tumour and needed an operation. This news shocked my friend, as now his partner would be out of action for quite some time. He informed the students of this calamity. The students were stunned and this shock changed their attitude. Hatred and resentment gave way to empathy and love. They visited him at the hospital and took him flowers. They repented their stand and prayed for his early recovery so that he could come back to teach.

The purpose of this story is to understand that as humans we are emotional beings and our behaviour and decisions are guided by our emotions. Frequently emotions prompt us to make decisions

> **Warren Buffet**
>
> "Success in investing doesn't correlate with IQ once you are above the level of 25. Once you have ordinary intelligence, what you need is the temperament to control the urges that get other people in to trouble in investing"

Source: Business Week, June 25, 1999

that may not be in our rational financial interest. Indeed, decisions that enrich us emotionally may impoverish us financially. Behavioural finance is the study of how emotions and cognitive errors can cause disasters in our financial affairs.

Classical Economic Theory v/s Behavioural Economic Theory

The Classical Economic Theory talks about efficiency of the markets and people making rational decisions to maximise their profits. It assumes that the markets are efficient and no one can take advantage of its movements. It also assumes that humans are rational beings and will act to maximise their gains. However behavioural economists believe that the markets are inefficient and human beings are not rational beings.

Consider this example. If you and I were walking down a busy street in Colaba and you said you saw a Rs. 5 coin on the road, I would says it's impossible. So many people walk this road and the markets being efficient someone would have definitely picked it up. But in reality we do come across such instances. This shows that the markets are not as efficient as they seem to be. Further, if we assume that people make rational decisions to maximise profits then how do we explain people giving to charities or throwing a party to celebrate a birthday or an anniversary? Definitely this is not about maximising profits by rational people.

Here's another example of how irrational we can be. The acronym TIPS stands for: To Insure Prompt Service. If tips ensure good service we should be tipping before the service starts. Yet, we give tips at the end of the meal. We even give tips when the service is substandard. Tipping is more a custom. We do it mechanically, unaware that we are behaving irrationally. Yet, in economic theory we are rational beings always intent on maximising our economic status. This is a common mistake we make without realising its pure economic implications.

Behavioural finance researchers seek to bridge the gap between classical economics and psychology to explain how and why people and markets do what they do. Behavioural finance raises a couple of important issues for investors. The first is whether or not it is possible to systematically exploit irrational market behaviour when it occurs. The second issue is how to avoid making sub-optimal decisions as an investor. The goal is to close the gap between how we actually *make* decisions and how we *should make* decisions.

In the stock markets, behavioural finance explains why we:

- hold on to stocks that are crashing;
- sell stocks that are rising;
- ridiculously overvalue and undervalue stocks;
- jump in late and buy stocks that have peaked in a rally just before the price declines;
- take desperate risks and gamble wildly when our stocks fall;
- avoid taking the reasonable risk of buying promising stocks unless there is an absolutely 'assured' profit;
- never find the right price to buy and sell stock;
- prefer fixed income over stocks;
- buy when we have to sell and sell when we should be buying;
- buy because others are buying and sell because others are selling.

Psychology can play a strategic role in the financial markets, a fact that is being increasingly recognised. Students and proponents of behavioural finance create investment strategies that capitalise on irrational investor behaviour. They seek to identify market conditions in which investors are likely to overreact or under react to new information. These mistakes cause under priced or overpriced securities. The goal of behavioural finance strategies is to invest in or disinvest from these securities before most investors recognise their error, and to benefit from the subsequent jump or fall in prices once they do.

The Three Sources of Alpha for Superior Performance

Today, all intelligent investors depend on information-based strategies. A few decades back, the traditional managers were able to get information on companies faster than their peers by virtue of their superior relationships with the insiders in the companies, the politicians, bureaucrats, etc. The ability to get first hand information was the competitive edge. This enabled them to make superior returns in the stock markets.

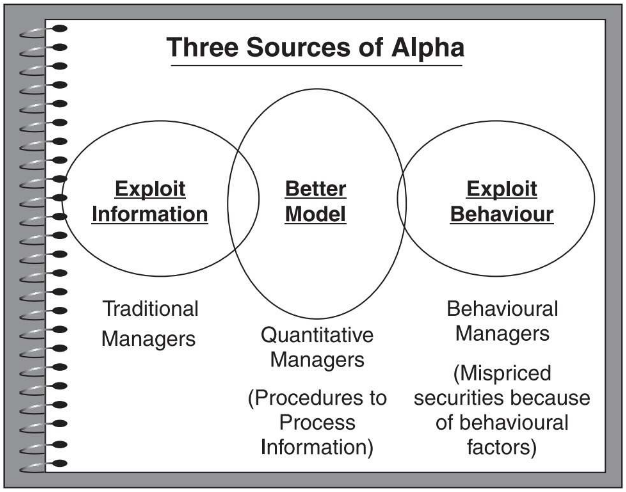
Times changed, and with the progress of computer technology, large amounts of information could be processed quickly. The assimilation of information became easy due to faster communication channels and the advent of the Internet. The new competitive edge needed not only a quick access to information, but also the ability to process loads of information in the shortest possible time. Spreadsheets became the order of the day. Over time, this edge became a commodity, as Moore's law has enabled broader use of computing technologies due to their ever-falling prices.

The world has changed with the advent of the Internet and fast technological advances. We now have real time information–opinions from across the globe can be expressed together in real time on chat sites. There is an information overload which brings chaos. The quantum and speed add to the confusion. The human mind is faced with continuous decision-making and this overload leads to emotional decisions out of fear and greed. Thus, understanding human behaviour and identifying mispriced securities due to such behaviour is the new competitive edge.

The recent stock market volatility and the losses suffered by so many investors calls for a drastic change in the way we look at the stock markets. From this great crisis arises a greater opportunity to embrace the new concepts of behavioural finance as a strategy.

In the year 2002, the Nobel Prize for Economics was conferred on Daniel Kahneman, who, along with Amos Twersky, outlined the Prospect Theory, one of the key pillars of behavioural finance.

FIGURE 4.1



Three Sources of Alpha

It is heartening to note that the highest prize for economics went to behavioural economists. Such encouragement is likely to bring behavioural finance from the domain of a select few to the mainstream of economics and finance.

Let's move on. Chapters 5, 6, 7, and 8 detail common behavioural anomalies and the steps needed to overcome them. This understanding will definitely help you to be a better investor than you currently are.

CHAPTER 5

LOSS AVERSION AND SUNK COST FALLACY

"I will tell you how to become rich. Close the doors. Be fearful when others are greedy. Be greedy when others are fearful"

—Warren Buffet lecturing to a group of students at Columbia University

"Most of the time, common stocks are subject to irrational and excessive price fluctuations in both directions as a consequence of the ingrained tendency of most people to speculate or gamble… to give way to hope, fear, and greed"

—Benjamin Graham

We have all heard about investors' greed when the stock markets are in a bull phase and their fear when the markets are falling. It is important, therefore, to understand how these emotions of greed and fear impact our thinking and make us act in ways that are contrary to our financial interests. How do we make decisions when faced with risk? How do fear of losing and greed for gains impact our decision-making? This is best captured in the risk analysis expounded by Daniel Kahneman and Amos Tversky[1]. Prospect Theory is one of the pillars upon which the whole of behavioural economics rests. A brief exposition of this theory will enable us to understand our strong emotions of fear and greed.

As far as our feelings toward our losses are concerned, we suffer from two behavioural anomalies: **Loss Aversion,** that is our fear of losing, and **Sunk Cost Fallacy,** that is our inability to forget money already spent.

As far as our feelings toward gains are concerned, we suffer from **Status Quo Bias,** that is our inability to make decisions, and the **Endowment Effect**, that is the tendency to fall in love with what we own and thus resist change.

Loss Aversion

"I want to play it safe. I don't want my capital wiped away. I would rather invest my money in fixed income securities."

—A client Ramesh in 2002.

"Stock markets are not for me, especially when I know how people got wiped out in the tech boom. I've got a family to support. I am happy earning six per cent in a bank deposit. At least I know my money is safe."

—Mr. Gandhi's comment in 2001.

"I had bought Visual Soft at Rs.3000. I saw a high of Rs.9500. Now it is Rs.400. I will hold on to it. I am a long-term investor."

—Sudhir the trader's adamant attitude in 2001.

"I participated in the tech sector boom. I booked my profits in Infosys and Wipro early, but I still hold Pentafour, Satyam, Global and Aftek. I could not sell because after I bought they never went above my cost price."

—Mrs. Arora brooding over her inability to book losses.

"I had 30 per cent of my portfolio in the technology stocks. When the stocks fell I gradually increased my commitment and today it is 100 per cent. I know that over a period of time I will recover my losses. The stocks are bound to rebound."

—Mr. Kanan, a very knowledgeable investor doubling his bets.

The above statements are just a sample of how people react to the stock markets. Maybe you, too, have thought and acted on the same lines. Well, not for long. You will soon change your thinking as you read on.

Let's take a look at the following two scenarios.

Scenario 1: You are given Rs. 1000 and two options:

A. Guaranteed win of Rs. 500.

B. Flip of a coin. If it's heads you get Rs. 1000 and if it is tails you get nothing.

Which option will you choose? Now lets go to Scenario 2.

Scenario 2: You are given Rs. 2000 and two options:

A. Guaranteed loss of Rs. 500.

B. Flip of a coin. If it's tails you lose Rs. 1000 and if it is heads you lose nothing.

Which option will you choose?

Research suggests it's more than likely you chose option A in Scenario1, because there was a guaranteed win of Rs. 500. You acted conservatively and took the opportunity to lock in sure profits. But in Scenario 2 you would most likely choose option B because you did not want to be confronted with a guaranteed loss of Rs. 500. Hence you were willing to take more risks if it meant avoiding losses. It is this bias which makes gamblers so popular with the casinos.

Why is it that when confronted with a sure profit we become conservative and when confronted with a loss we tend to take more risks? It's because the pain of a loss is three times more than the pleasure of an equal amount of gain. Over time pain becomes terrifying and pleasure becomes boring. Consider this. You get an electric shock while using your TV. That will scare you and you will avoid going near the TV till the fault is set right. Now contrast this with the pleasure you get when you buy a car for the first time. After a while you get bored with it and you long for a better and bigger car. It never stops. Your desires keep upgrading because pleasure over time becomes boring.

We tend to see losses and profits in isolation and that is the reason we are more prone to suffer from loss aversion. Hence, we should not view different stocks or different classes of assets individually but as part of the portfolio as a whole. For example, suppose there is a decline of 10 per cent in equities and a rise of eight per cent in bonds, we should look at the overall effect which is only two per cent. Or take the case of a portfolio with 10 stocks, each valued at Rupees one lakh. If two stocks depreciate by 50 per cent, the overall effect on the portfolio is only 10 per cent. But if we were to look at the stocks in isolation we would see it as two stocks losing 50 per cent in value. That's a big shock, and we could make decisions that we repent later.

In the scenarios mentioned earlier, if we looked at the final financial position after exercising the options, the automatic choice would be option A in both cases as it would leave us with Rs.1500.

Impact of Loss Aversion

A. **Investors tend to prefer fixed income investments to stocks.** Witness the period after the bursting of the dotcom bubble till the beginning of 2003. Everyone was so afraid of losing that they preferred to stay invested in fixed income securities. They shunned equities although that was the best time to invest because of attractive valuations and good dividend yields. The pain of investors losing fortunes in technology stocks was so vivid and true that investors were not willing to risk anything in the stock markets. The emotion of fear was so strong it created loss aversion. Actually the right time to invest is when others are scared.

B. **Investors tend to take their profits very early.** To be successful in the stock markets it is important to ride the winners and discard the losers. However, loss aversion makes us ultra conservative so we book profits very early. We all suffer from loss aversion and that is the reason we find that winners get small amount of profits and losers pile up huge losses. Winning streaks tend to be short-lived.

C. **Investors take more risks when threatened with a loss.** They tend to lose their balance when confronted with a loss and become more daring and venturesome. This is not due to courage but because of madness caused by the pain of a loss. One of our clients bought 10 low valued stocks all quoting below par. When I questioned his wisdom of putting his hard-earned money in such stocks, he replied that if just a couple of them turned out to be multi-baggers he would make good money. He believed so strongly in his strategy that he held on to over a hundred such junk stocks in the hope that one day he would make it big. Since he was losing he kept taking bigger risks and increased his exposure.

D. **Investors tend to hold on to losers and sell winners.** A portfolio of stocks with a few winners at the top followed by a long list of losers is not uncommon. As discussed earlier it is because we go for sure gains and take more risks when threatened with a loss. So if you have one such portfolio you need to know that your decision-making is being controlled by loss aversion. Instead of riding the winners you are riding the losers.

E. **Tax Aversion.** People are always wary of paying taxes. This is also one sort of loss aversion. Tax is an outflow and is considered to be a loss. But in reality we pay tax on our income. We need a change of mindset. Always count your income net of taxes. This will enable you to avoid tax aversion arising out of loss aversion.

Going back to our examples at the beginning of this chapter, let us understand how each person reacted to loss aversion. Ramesh and Mr. Gandhi were so averse to loss that they opted for fixed income securities and bank deposits. Of course if we take into account the ravages of inflation then both of them had opted for a guaranteed losing proposition—return of around six per cent as against a government reported inflation of around eight per cent. Under the excuse of being a long-term investor Sudhir held on to the loser. Mrs. Arora sold the winners too early and, contrarily held on to the losers. Mr. Kanan's fear of losing saw him take higher risks until he had put 100 per cent of his portfolio in tech stocks. Now there's nothing wrong with tech stocks. But in his case he had put aside the asset allocation theory of diversification and increased his chances of losing.

An over sensitivity to loss can also have negative consequences. One area in which loss aversion skews judgement is investing. In the short-term investors, being especially sensitive to loss, contribute to the panic selling that accompanies stock market crashes. This is what happened in May 2004 when the markets tumbled and the BSE Sensex was down by over 700 points in just two trading sessions. Investors over-reacted as the injured wanted to cut their losses. This precipitated the fall steeply. However, a couple of days later these investors experienced a different kind of pain when the stock market climbed again. By pulling out of the stock markets in reaction to short-term drops you run the greater risk of missing out on the more productive and profitable days.

The idea that investors are not risk averse but loss averse is one of the main tenets of behavioural finance. While the distinction might seem trivial, studies have shown that investors will increase their risk, defined in terms of uncertainty, to avoid the smallest probability of loss. It is not so much that people hate uncertainty, but rather that they hate losing.

Sunk Cost Fallacy

1. **Investor**: *I have invested in Sterlite Optic. It is a great stock. I have read about the telecom boom and I am sure this is right.*

   Broker: *The telecom craze has ended, there is overcapacity and the story is over. The stock is going down as the industry fundamentals have changed.*

   Investor: *So what, I will buy more and bring down my cost of purchase. I know it was a great stock. Please buy 2000 Sterlite Optic.*

2. **Housewife**: *I thought investing was fun so I enrolled for these classes. I think I have made a mistake as I feel I am not cut out for this. But I will complete the course as I have already paid the fees and they don't have a refund policy.*

3. **Student**: *I am not interested in commerce.. I took it because I wanted to be with my friends. I know I have made a big mistake. But since I have already completed three years, I would rather complete the rest and take the degree.*

4. **Businessman**: *In the last two years I have spent so much money on car repairs, I would have been better off buying a new one.*

5. Teenager: *Oh, what a boring book. I should not have wasted my money on it. With great difficulty I read the first 30 pages. I still have 400 more pages but I hope to complete that by the end of this week.*

6. Day Trader: *It's really tough to make money in such volatile markets. I should not have got this terminal at home. It's a fixed expense every month, and I have to trade everyday so that I can at least recover my fixed costs.*

Why do people do what they do not like? Is it not simpler to choose not to do it?"

Now what would *you* do in the following two scenarios?

Scenario A: You have complimentary tickets for a Filmfare Awards night. On the evening of the programme there is a severe rainstorm and traffic is disrupted due to floods. You have to travel from Colaba to Andheri. Would you go? Yes or No.

Scenario B: You have bought a ticket for a Filmfare Awards night for Rs.1500. On the evening of the programme there is a severe rainstorm and traffic is disrupted due to floods. You have to travel from Colaba to Andheri. Would you go? Yes or No.

Most people would go for the show if they had paid for the tickets and would avoid it if they had received the same as complimentary. Actually this distinction makes no sense as the money for the ticket is already spent. You will not get it back whether you go to the event or not. What we must really look at is the additional risk we are taking by braving the storm and the additional costs we may incur if the car is damaged or we fall sick. The danger posed by the rainstorm is the same, whether the tickets are free or paid for.

This particular type of loss aversion to which we all are prone is what Richard Thaler described as the *Sunk Cost Fallacy*. You increase your commitment to justify your past actions because your ego is tied to the commitment.

Let's go back to the statements given earlier. The investor made a decision and does not want to admit that his decision has gone wrong. So to justify it he buys more stock and takes solace in that he is bringing down his cost of purchase. The housewife goes through the ordeal because she is already enrolled. She does not consider the extra time, energy and money, by way of transportation, she will spend to fulfil the original wrong choice. The student takes his graduation because he has already completed three years. Would he really learn much when he is not interested in the subject? The businessman should have recognised that there is something like the economic life of a car. Rather, he chose to continue spending on repairs, as every time a new expense came up he thought of the previous repair costs and thus went on and on. The teenager has already spent on the book so he will finish it howsoever boring and time consuming it is. The day trader operates a business he knows will fail, but since he has already incurred fixed expenses he will keep going.

Each of them had a choice. To do or not to do. However, they continued doing what they don't like because they wanted to justify their previous actions. Also, they did not want to appear wasteful and incompetent in their financial decisions.

But sunk cost fallacy can also help us in a positive way. For example, a person joins a gym vowing to work out regularly. Instead of paying daily charges if he were to take a yearly membership, the sunk cost fallacy would help him to be regular, as he has already expended the year's fees. This serves as a motivation to keep going.

Impact of Sunk Cost Fallacy

1. *Averaging Cost of Purchase:* Generally, when investors go wrong in their purchase of stock they buy more at every fall. They believe that this will bring down the cost of their purchase. There is nothing wrong in that, provided they are confident that the stock has great value. But if they buy only to justify past actions, then they are prone to sunk cost fallacy.
2. *Spending on Repairs:* Two years ago you painted your old car. Last year you replaced the tyres and changed the suspension.

This year the mechanic informs you that the engine needs an overhaul. Every year you justify your spending on repairs because of earlier expenditures when actually you need to discard the car as it has reached the end of its economic life. Maybe it is wiser to buy a new car. Spending on repairs is a common sunk cost fallacy with most of us.

3. *Government Spending on Unviable Projects:* Bureaucratic procedures have delayed a project and it has now become unviable. But a lot of steel and cement have already reached the site and the plans are ready. The initial fees of the engineers have been paid. Since so much money has already been spent the project is completed even though it is unviable. This is how sunk cost fallacy works with governments.

The influence of sunk cost fallacy is evident in our day-to-day lives. How many times have we not sat through a boring movie just because we had bought the tickets? Here are some examples of the impact of sunk cost fallacy.

At a buffet there are a variety of dishes as the restaurant has to satisfy the palates of different types of people. Instead of exercising our choice, we tend to overeat only because we have paid for it. That is sunk cost fallacy working on us. The next time you go to a buffet, remember your health is more important than the indulgence.

It is not enough to understand the two behavioural anomalies of loss aversion and sunk cost fallacy. We have to recognise our own anomalies so we can improve ourselves and become better investors.

Getting Out From Under

To find out whether you are you a victim of Loss Aversion and Sunk Cost Fallacy answer these questions.

- Do you prefer fixed income securities over stocks?
- Are you tempted to move out of the markets when prices fall?

- Does your portfolio consist of a few winners followed by a long list of losers?
- Do you sell your winners fast and hold on to losers?
- Do you make important spending decisions based on your past spending?

If your answer to all the questions is yes, then you are a victim of Loss Aversion and Sunk Cost Fallacy. The following suggestions will enable you to make wiser investment decisions in the future.

Check Your Appetite for Loss

Start with the assumption that you are probably more sensitive to losing money than you actually think. This will help you to avoid making decisions that you will regret later. Your earlier success may not necessarily mean you have made smart decisions. It is important to assess your level of loss aversion and risk tolerance to improve your ability to make smart investments. As mentioned earlier loss aversion can have two different reactions. The first reaction is related to the pangs that come with stock market volatility. Ask yourself whether you will exit the stock market at the first sign of trouble. If tomorrow the market drops by 20 per cent, will you be tempted to take your money out and invest in bonds? If your answer is yes then your level of loss aversion is high and you are not prepared for the ups and downs of the market. The second reaction is to hold on to the losers and sell the winners. Consider the following situation. You own Rs. 50000 worth of Wipro stock, which you bought for Rs. 25000, and Rs. 50000 worth of TELCO stock, which you had bought for Rs. 100000. Now you need Rs. 50000 urgently. Which stock would you sell?

If you choose to sell Wipro then like most of us you suffer loss aversion, which makes you sell the winners and hold on to the losers. The best strategy under such circumstances would be to sell half of each and avoid paying taxes.

Diversify within Asset Classes and Across Assets

The best way to avoid the pain of losing is to avoid losing money. There is no foolproof solution to that but there are ways to minimise the loss. One needs to not only diversify within asset classes but also across different assets. A portfolio of equity stocks can be diversified by limiting an individual stock exposure to around 10 per cent and an industry exposure to around 20 per cent. Similarly, all the wealth should not be put into one asset class only; it could be distributed between stocks, bonds, real estate, gold, mutual funds, etc. The idea is that a loss in one asset could be offset by a gain in another. So you are less likely to react emotionally and act foolishly on impulse. As discussed earlier, taking an overall view of your portfolio helps you to avoid loss aversion traps.

Total Portfolio Vision

We must avoid looking at gains and losses in isolation. We must train ourselves to look at individual investments as a part of the whole portfolio. This requires discipline. You could put your information reports on a spreadsheet to get the big picture. Secondly, it is important to have a solid investment philosophy and a strategy in place. It's best to put the investment plan down on paper. For example, suppose you take an asset allocation approach. Determine the portion of the portfolio to be invested in stocks, bonds, real estate, etc. Write down the rationale behind each investment particularly if it is stocks. Writing it down increases your commitment to follow the course. In fact it is a way of using sunk cost fallacy to your advantage because you are committing yourself to the plan and will stick by it. When you identify your goals and justify all your investments in the context of achieving those goals you are less likely to react to the ups and downs of the markets.

Let Bygones be Bygones

Very often our decisions are weighted down by our past actions. It is best to forget the past but that is easier said than done. If financially you can let bygones be bygones you will be that much better off for trying. For example, suppose you are debating the sale of an investment. Your goal should be maximisation of wealth, not justifying your purchase. What is important is the worth of the investment today. You need to evaluate the investment based on its current potential for future gain or future loss. One way of doing it is to reframe past decisions. Assume that you can reverse history and start anew. For example, you bought 1000 shares of Sterlite Optic at Rs. 400 a share. The current price is Rs. 55. Ask yourself whether you would buy Sterlite Optic at the current price. If your answer is no, it is time for you to sell your holding. If it is yes and you believe that the lower price is a bargain, hold on and buy more.

Reframe Losses as Gains

We need to evaluate our investments individually with an eye on our financial situation. If there is a loss look at the positive side. You will be able to adjust it against your gains as it is tax deductible. By viewing your potential loss as a gain (gain being the lower amount of taxes you will pay) you master your loss aversion.

Segregate Gains and Integrate Losses

To multiply your happiness, divide your pleasures. Imagine the joy of receiving Rs. 15,000 one week and another Rs. 10,000 next week rather than getting Rs. 25,000 at one time. Of course you cannot plan your gifts but you can plan some of life's windfalls and space them out. By the same logic since pain becomes terrifying over time it is better to integrate your losses. When you visit the dentist and have many cavaties to be filled do it in one sitting. Don't subject yourself to multiple traumas. Similarly when you have to pay your taxes pay them in one go rather than in instalments. Weber's law implies that the pain of two moderately bad experiences will typically exceed the pain of experiencing both at one time. Use Weber's law to your advantage.

Pay Less Attention to Your Investments

This is difficult when market volatility is on the rise. The point is the more frequently we check our investments the more we feel the urge to react to the ups and downs of the markets. For investors who do not trade professionally. A six-month review of a portfolio is frequent enough to make necessary adjustments in asset allocation. Yes, one might miss a market dip or a rise but it is a good trade off against peace of mind.

Fear and greed are two sides of the same coin. We have seen how fear affects us when we are faced with losses. Now let's go to the next chapter to understand our behaviour when we are faced with gains and greed drives us.

Reference

1. Daniel Kahneman and Amos Tversky, *Prospect Theory: An Analysis of Decisions under Risk*, *Econometrica*, March 1979.

Chapter 6

Decision Paralysis and the Endowment Effect

Roopesh, a businessman, has come to meet with Satish, a portfolio manager.

Roopesh: *I am a businessman. I have inherited from my father a portfolio of various stocks. He was an investor and he died five years ago. I've always wanted professional help on handling my portfolio as I know nothing about stocks and my own business keeps me busy.*

Satish: *It would be a pleasure to construct a good portfolio for you. I have been in this profession for the last 20 years and have many high net worth individuals and corporates as my clients. Could I have a list of your stocks?*

Roopesh: *Here it is. Can we discuss it right now? I have already wasted five years doing nothing.*

Satish: *At a glance I can see that it is a very lopsided portfolio and drastic changes are required to balance the industry weightage. A number of stocks will have to be sold as they are not viable. Had you done something about the portfolio immediately after your father died you would not have been saddled with so many junk stocks. Since we need to act quickly I will put my comments on this sheet.*

Roopesh: *Oh, thank you so much for understanding the urgency of the situation and working on it right away. I will get everything in order and meet up with you the day after tomorrow.*

Satish: *That may not be possible as I am extremely busy. How about next week?*

Roopesh: *Satish, you know the urgency so please spare some time for me. I will adjust my schedule.*

Satish: *Is 4 p.m. okay with you?*

Roopesh: *It's perfect. Thanks for squeezing me in. I just need to get over this. I am so indebted to you for your time.*

They meet at the scheduled time.

Roopesh: *I did some homework and I have a few queries.*

Satish: *Please go ahead. I will clarify all your doubts.*

The meeting goes on for an hour. Initially, Roopesh's questions are the same but Satish is patient and clarifies all his doubts. The meeting ends with Roopesh scheduling another appointment after a couple of days.

Roopesh: *Thank you once again for your time. You know how urgent this is for me so before I finalise I brought my wife along so that she too is clear about everything. Meet my wife Meena.*

Satish: *Nice meeting you. Now what can I do for you? I hope your husband has explained everything to you. If you have any questions don't hesitate to ask.*

Meena: *I am just a housewife. I do not understand investments. My husband insisted that I come as he wanted to finalise some business with you. He told me that you are an expert in your field and he trusts you very much. I am happy that he has ultimately taken a decision after five years.*

Roopesh: *Yes, I am glad I have met the right portfolio manager. Now to complete the formalities and take action, shall we meet tomorrow? Please give me an appointment as this matter is my first priority.*

Satish: *Okay. Since we will require time to finalise, let's make it 6 p.m. tomorrow.*

Roopesh: *Thank you very much. I will be there. I will bring my wife too in case you need her signature. Goodbye.*

Next morning Roopesh calls Satish's secretary and asks her to reschedule the meeting after two weeks, as he will be travelling on business. The meeting is rescheduled for two weeks later. Roopesh walks in with a gentleman.

Roopesh: *Satish, meet my friend Atul. He is a leading chartered accountant. Before finalising I thought he should meet with you and you can clarify his doubts. I hope you don't mind.*

Satish: *Yes, Atul. Please go ahead with your questions.*

Atul: *I have heard a lot about you. I have nothing to ask a professional like you. I know Roopesh is in safe hands. Roopesh, I know of Satish's reputation and you can be assured that you have got the best professional working for you.*

Roopesh: *Thank you. Now that Atul has given me the green signal I do not have any hesitation. I will call tomorrow and fix a time so that I can bring my wife and we can complete the formalities.*

The next day Roopesh calls Satish's secretary and asks for an appointment after three weeks as he has another urgent business appointment. The secretary refuses to reschedule the appointment.

Why did the secretary do that, especially after Satish had spent so many hours with a prospective client and the signing was a near certainty? What do you make of Roopesh's behaviour? Why was he postponing his decision? Roopesh suffers from decision paralysis. He cannot make decisions and is resilient to change. Satish had lost trust in him. He guessed that nothing would make him act. To buy time Roopesh went on a business trip, then brought his wife along, and after that his friend Atul. His wife and his friend were not even informed about the talk he had had with Satish and neither was competent enough to ask Satish any worthwhile questions. Though Roopesh harped on the urgency of the matter and insisted that it was a top priority he just could not decide what to do. Perhaps he has been behaving this way earlier as well. He fears change, so he prefers maintaining the status quo. He understands that he needs to take action but he cannot.

Loss aversion and sunk cost fallacy can lead us to take action or, as the prospect theory explains, to avoid it or delay it. Loss aversion together with several other factors such as fear of regret and resistance to change can contribute to Decision Paralysis or Status Quo Bias. This phenomenon hampers us in many areas of life, from choosing an investment option to buying a house. Once you are familiar with the complicated forces at play you will understand why choice and change can be so intimidating.

A significant consequence of decision paralysis in financial decisions is that by deferring purchase you may miss the opportunity or run the risk of prices rising. Imagine there is a very good house for sale. You like it because it suits all your requirements and the price seems right. But you cannot decide and opt to see a few more houses. With multiple choices, a decision is difficult. As time passes another bidder enters the fray and you lose the opportunity. Because of decision paralysis you lost the house.

How often have you not seen a stock move up and regret you did not buy it when you could at a much lower price? Or, despite professional advice to sell before the prices crashed you missed the opportunity because you could not take a decision on time. Most times missed opportunities are a result of our inability to decide at the appropriate time. Today, there are a large number of investment options available in the capital markets. With over 7000 stocks listed on the stock exchanges and a battery of mutual funds offering varied investment options decision-making becomes that much harder.

Taking Decisions

We have to understand that deciding not to take a decision is also a decision. When we take a decision we give ourselves a chance to move from the present comfort zone. Once we do that we have a 50-50 chance of going right or wrong. If we choose not to take a decision we miss this chance of going right. Maintaining a status quo in times of continuous change is definitely unwise. Another way of looking at decision paralysis is that it is a natural human tendency to resist change.

The reasons we don't take decisions are:

- fear of going wrong

- the possibility of losing
- to avoid looking foolish
- unwillingness to take risks

All these reasons stem from our psychological and cognitive defects. The most acute of these are loss aversion and egocentric human nature. Along with that heuristics like regret avoidance and belief perseverance also play a significant role in our mental make-up.

Take the following illustration. You inherit from your rich uncle Rs. 50 lakh and you want to invest it. You buy stocks, bonds, fixed deposits, etc., according to your preference and needs. It is simple–you have the money and you allocate across assets. But if you were to inherit a portfolio of stocks amounting to Rs. 50 lakh, what would you do? You need to make multiple choices. You could sell the stocks in the portfolio and buy different stocks or some bonds, etc., or you could leave the portfolio as it is. Most people would choose to leave the portfolio as it is. They would choose to maintain the status quo. When there are multiple options one is more likely to delay an action or take no action at all. The greater the choice, the harder the decision.

This happens frequently in the fund management industry. A new fund manager takes charge of a mutual fund. The fund has fared well under the stewardship of the previous fund manager. The new fund manager has a difficult task on hand. He has multiple choices. He could leave the portfolio as it is for the first month, or revamp the portfolio with stocks of his own choosing, or change the weightage of the portfolio, or give it an aggressive touch, or adopt any other option. In most cases the fund manager would adopt the first option. But since his job is to act decisively he should realise that his performance will be judged from the day of joining and inheriting the fund. However he could also fall into the trap of benchmarking his performance to that of his predecessor and thus fall prey to decision paralysis and status quo bias.

Investing and Decision Paralysis

Decision paralysis plays an important role in financial matters especially when you are dealing in the stock markets. The volatility of the stock markets also adds to distorted human behaviour. Most people would do nothing, or as we call it, maintain the status quo. Here are some examples of decision paralysis at work.

1. During the IT boom stocks reached new heights. This went on for over a year. Those who invested in tech stocks became wealthy. A number of us, fund managers and clients, thought that the markets were irrational and that the tech stocks were priced high. However, everybody wanted to ride the wave, confident that they would sell when the market softened. A fund manager of a leading mutual fund who also shared my opinion on the market valuations said he would sell when the tide turned. His fund had a weightage of 80 per cent in the technology sector. When the market dropped it did not go down in one go. It was gradual before the steep fall came. Actually the fund manager should have sold when the market began to weaken. He had been looking forward to such a situation, yet when the time came for him to do it he did not sell. He suffered decision paralysis and so did millions of other investors who lost their fortunes in the tech bust. It was greed that got them to that position. In chapter four I mentioned a client who made huge profits in the tech sector. I had consistently advised him to sell. He did not and suffered a loss when he liquidated.

2. We all remember the story of Unit Trust of India (UTI) the guardian to millions of Indian investors, corporates, pensioners, widows, working class, etc. Established in 1964 it was the only Indian mutual fund where Indians invested their savings. Operating in a socialistic environment the fund was open-ended but not net asset value (NAV) based. It consistently distributed dividends and the government supposedly guaranteed repayment. One could enter and exit at the prices made available by UTI itself. Liberalisation in 1991 and the entry of private and public sector mutual funds

soon challenged UTI's supremacy. Despite operating in a competitive environment it continued to follow its earlier policies. In 1995 the stock markets boomed. That was the time to make it open-ended and let investors enter and exit at the current NAV. Times were changing and UTI's position was threatened. The writing was on the wall but no action was taken. The Deepak Parekh committee was appointed to advise restructuring of UTI but nothing was done. Until one day the inevitable happened. This not only shattered the investors of UTI but also shook the stock markets and it took over a couple of years for the markets to recover.

3. Another example of decision paralysis is when investors buy top performing funds and do not reshuffle their portfolios. They are happy since their funds are doing well. But when there is a choice of funds it is important to choose the right one, which may not necessarily be the one that has performed well. On the contrary the chances of it sustaining its performance are much lower. By definition a mutual fund captures the mutuality of the market, so in bull phases you should reshuffle. Don't let decision paralysis hamper your investment decisions.

4. Greed and fear are a part of the market flow. Excesses characterise the bull phase where every stock is sellable. During such a phase all types of companies enter the capital market to capitalise on the bull run. Money becomes easily available. Investors get trapped by such stocks when the bull run ends. They swear they will get out of such stocks as soon as they can. For years they wait for the opportunity to exit, but when the next rally comes and such junk stocks start rising they do not sell. They prefer to maintain the status quo as they get greedy, hoping to make more money on such junk stocks.

I have come across various examples of investors who are unable to decide and prefer to maintain the status quo. Why do people behave this way? Is the prospect of change so frightening? Yes it is, and the concept of Endowment Effect explains it all.

Endowment Effect

What would you do in the following situations?

You have been gifted a souvenir jug worth Rs. 100 (in the marketplace). Someone offers to buy it from you. What is the very least you would expect to be paid for the jug?

A. Rs. 100 B. Rs. 80 C. Rs. 70 D. Rs. 50

Your neighbour has received a souvenir jug worth Rs. 100 (in the marketplace) as a gift. He offers you the jug for sale. What is the most you are willing to pay for the jug?

A. Rs. 100 B. Rs. 80 C. Rs. 70 D. Rs. 50

It is obvious. When someone offers to buy the jug from you, you would like to be paid Rs. 100. But when the same jug is offered to you, you would like to pay only Rs. 50. Why is there such a big difference in the price offered and the price tendered when the person is the same and the jug is the same? Because we perceive that whatever belongs to us is more valuable than what belongs to others. When something comes into our possession its value increases. In a way this explains why people prefer the status quo to change. By foregoing change in favour of the familiar they express happiness with the current situation. True, a decision to do or not to do something could be influenced by a host of other factors such as doubt, fear or confusion. Nonetheless, keeping things as they are is a vote of confidence for the current circumstances, irrespective of whether they are good or bad. A preference for holding on to what you have is a lot stronger than most people think.

Because people place an inordinately high value on what they have, a decision to change becomes difficult. Of course people do manage to overcome this tendency, for if they didn't they would not sell their homes or trade their used cars or divorce their spouses. But to the extent that the endowment effect makes it difficult to properly value what is and isn't yours, you may fail to pursue options that are in your best interest. In fact the endowment effect is just another manifestation of loss aversion: people place too much emphasis on instant gratification and too little value on opportunity costs.

Impact of Endowment Effect

The endowment effect is very relevant to investing. Stock market participants, analysts, fund managers and companies all become victims of endowment at one time or other. Here are a few examples of the endowment effect as it plays out in real life.

Overvaluing One's Holdings

Ganesh: "*What is the price of Tata Steel?*"

Broker: "*It is Rs. 298/299.* "

Ganesh: *"Give me a call when it reaches Rs. 300. I need to sell."*

The price reaches Rs. 301.

Broker: "*The price is Rs. 301/302. Should I sell? It is one rupee above your limit of Rs. 300.*"

Ganesh: "*No. The market seems to be going up. I will wait for a price of Rs. 305. Give me a call then.* "

The price goes up to Rs. 306 and the broker calls.

Broker: "*The price is Rs. 306. What should I do?* "

Ganesh: *"Wait till it touches Rs. 315. Then don't even ask me, just sell. I am sure it will go up. This is a great company and such a low price is ridiculous."*

The price falls to Rs. 301.

Broker: "*The markets are down and the stock is back to Rs. 301.*"

Ganesh: "*The market may be down but the stock cannot go down. I know we will get the price tomorrow when the markets are up. Don't worry we will sell tomorrow at Rs. 315. I just can't believe it that the market is selling a good stock so cheap.*"

Every time the stock went up Ganesh would increase his limit. Was he playing games? No. He is a serious investor. He strongly believes that Tata Steel is a great company. He is proud of his holdings and he firmly believes that the market is undervaluing his stock.

The Trial and Money Back Guarantee Scheme

Raju: "*Mom, see what I've got, the latest stereo system. It will fit perfectly in our drawing room. Wait till I play it. You will love the sound.*"

Mom: "*Raju, where did you get the money for such an expensive stereo?*"

Raju: "*It's on a 15-day trial basis. The shop round the corner allows you to use the goods before you buy. Since college is closed for two weeks I thought I'd listen to some music at home.*"

Mom: "*Are you sure they will take it back without any fuss?*"

Raju: "*Of course mom, don't worry. Here is the card. It says that they will take it back, no questions asked, if returned within the 15-day trial period.*"

Mom: "*That's great. Handle it carefully. They may not take it back if it is misused.*"

Raju: "*Don't worry, I will be careful.*"

After 14 days.

Mom: "*Raju, don't forget the trial period ends tomorrow. We have to return it, though we will miss it.*"

Raju: *"Mom, can we keep it and make the payment. A good system makes a difference. Moreover it fits in with our décor like it was specially made for us."*

Mom: "*Yes, you are right. Let's keep the stereo. We will make the payment.*"

Notice how taking a product on trial got Raju and his mother to buy it. The shop owner understands the endowment effect very well. He knows that once the stereo becomes a part of their endowment it will be very difficult for them to part with it. They did not find out whether the stereo is competitively priced, whether there are better models in the market, or whether the same company has introduced a better model. Because it had become a part of their endowment it became very precious to them.

Businesses understand endowment effect too well. That's why they are willing to give their products on trial with money back guarantees on purchases. They know that once customers own the product, even if it is for a few days, its perceived value increases, and they may not want to return it.

Confirmation Traps

Suresh: "*I am sorry I have to cancel this evening's date.*"

Swati: "*What happened? We'd fixed it two weeks ago.*"

Suresh: "*I have stocks in Jindal Steel and they have called an analysts' meet. The stock is very hot in the market.*"

Swati: "*Are you going to sell it?*"

Suresh: "*No, I may buy more. I want to know what the management thinks. I hope it's in line with my thinking. I researched the company before I bought the stock. I also know some of their managerial staff as I had met them when I last visited their office.*"

Swati: "*I still don't understand why you are cancelling our date. You are not going to sell, and you can learn what happened at the meet from your friends.*"

Why does one go to an analyst meet or on a company visit? To learn more about the company. But if you expect to hear actual facts you are living in a fool's paradise. Companies understand the value of the endowment effect. When they invite you and feed you, you will feel good about them and there is every chance you will buy into the company or get others to buy. Analysts go to analysts' meets for two reasons. Firstly they can meet other analysts, learn about new attractive job openings and salary scales, and of course be entertained. Secondly, if they or their firm hold stocks they want an endorsement on their holdings. The endowment effect makes them good salesmen for the company's stocks. For a company it's worth all the expenses.

A Fund Manager's Story

A fund manager had invested heavily in a technology company. During the first quarter of 2000 the company hosted an analysts' meet. The fund manager attended it, even though he needn't. As a holder of considerable stock he could have called the company people to his office. At the meet the management apprised the analysts of difficult times ahead. After the meeting the fund manager went around convincing others about the value of the stocks. He said he had just returned from the United States and that the management did not understand the future potentiality of their own business. The tech boom was collapsing but this fund manager could not face reality. He did not intend to misguide anybody but he was so caught up in the endowment effect that he sincerely believed nothing could go wrong with the stock. When the bubble burst he could not exit as he always felt that the market was undervaluing the stock. Needless to say a lot of other fund managers and individual investors suffered a similar fate.

The endowment effect leads people to go in for instant gratification and to ignore future opportunity costs. Some people refuse to invest in public provident funds even though they benefit from the employer having to put in an equal amount. They want to enjoy the pleasure of getting the whole salary without deduction. Only, this pleasure comes at the cost of foregoing future higher benefits.

Because of the endowment effect investors get caught up in their desire to seek endorsement of their actions. Investors seek information that supports their existing point of view, while avoiding information that contradicts their opinion. Psychologist Thane Pigman in *Slip of the Tongue* sums it up well: "I see it when I believe it." Company visits and analysts meet are good examples of confirmation traps.

Plan of Action

Are you a victim of decision paralysis and endowment effect? You might be if:

- You have a hard time choosing investment options
- You react adversely when your decisions turn out poorly
- You buy products on trial but never return them
- You delay making investment and spending decisions
- You hold on to stocks you own
- You go on company visits and buy stocks
- You do not have a retirement plan in place

There is no fixed action plan to deal with such situations. However, here are some suggestions you can bear in mind when you have to make a decision.

Deciding not to decide is also a decision. Postponements and delays may seem to be the path of least resistance. Taking a decision means moving away from your existing level of comfort. You have a 50 per cent chance of being right and a 50 per cent chance of being wrong. If you prefer the status quo and don't take a decision you lose the 50 per cent chance of being better off. In times of constant change it may not be in your interest to indulge in your present comfort mode.

Consider the opportunity costs. You believe that investing in stocks is a risky decision. You prefer to keep your money in bank deposits. This is not wrong, but when you invest in stocks you are investing in the future. Suppose when you had the opportunity to invest in stocks you didn't and the price went up. You would regret not taking a chance when you could. Imagining the benefits that would accrue will help you to overcome your resistance to change.

Put yourself on autopilot. Every month earmark a fixed sum towards investment in stocks. This will enable you to ride the bull and the bear waves without panicking. On the contrary you will be able to manage the heartburns that come with this volatility. If you have fixed expenditures like a house mortgage instruct your bankers to make the necessary payments every month. This will free you from having to decide whether to repay the loan or spend the money on something else.

Change your frame of reference. Approach decisions from a neutral state. Here's how to do it. You hold shares of Tata Steel and your friend recommends that you sell it and buy Jindal Iron and Steel instead. You cannot decide what to do. The best way is to imagine that you do not have any stock of Tata Steel but that you have cash that you can invest. You then decide between Tata Steel and Jindal. If your choice is Tata Steel then don't convert. If the choice is Jindal, go ahead and make the switch. This sounds simple and it is. The difficult part is recognising that your decision is being hampered by your approach to the problem.

Don't get married to your stocks. Investments are made to create income and wealth. Your goal is to go from one comfort level to another and for that you need different investment vehicles to meet your different requirements. Once they have fulfilled their task and helped you reach your goal you have to let go. You do not stay with them forever.

Understand that there is no free lunch. When you get to take home goods on trial, when you get invited for company visits, analysts' meets, or sales promotion parties, please treat them with scepticism. Don't allow yourself to feel good about such offers. Always look for the catch. Be detached and don't allow your emotions to control your decision-making.

Learn to apply the Dale Carnegie Principle on worry. When we have to take decisions we worry about the consequences. Before running away, ask yourself what is the worst that can happen if you take the decision. Analyse the facts and the situation; it may not be as bad as you think. Be prepared for the worst, then go ahead and take the decision.

Now that you know how emotions affect decision-making and what you should do to control your emotions, consider what would happen if you cheat yourself by avoiding reality. The next chapter deals with accountability when it comes to money.

CHAPTER 7

MENTAL ACCOUNTING

Episode I

Dilip had just taken an MBA in finance. He was intelligent and had a sixth sense when it came to picking stocks. He worked for a brokerage firm and was respected for his ability to read the markets. After a couple of years he married Sonia. At that point of time he had around Rs. 2 lakhs in his bank account. The year was 1991, when the process of liberalisation had begun and the stock markets were just taking off. Being adventurous, Dilip decided to use his savings to trade in stocks. It was a wise decision considering his track record as a stock picker and his past success with the brokering firm's clients. In the first year his capital increased to Rs. 8 lakhs. In 1993, his capital rose to Rs. 14 lakhs. Two years later, confident in his success, he quit his job to become a full time trader. Sonia did not agree with this decision but he told her this would give him more time to develop his skills by attending various seminars and keeping up with his reading which was so very important. He continued to do well and in 1994, his capital increased to Rs. 30 lakhs. The couple went on a trip to London. Sonia was very happy as they had moved to their own one bedroom apartment. In 1995, his capital soared to over Rs. 60 lakhs and so did his confidence. Being conservative, Sonia preferred to play safe. She insisted that Dilip should put aside some money in different safe assets, which they could fall back on in times of need. She was against Dilip investing all their capital in the stock markets. Dilip did not heed her advice. He thought the higher the investment the greater the profit. Their different approach to money created a rift between them. Arguments followed and the relationship was strained. Dilip's winning streak ended and he began to lose. But he thought that since he had a comfortable balance there was no need to worry. He betted heavily in a market that was going down and by 1997 he had lost everything. His flat was mortgaged to a financer, and Sonia filed for divorce. She accused him of being a compulsive gambler who lacked the financial prudence to take care of his wife. She said he could not handle money and had lost Rs. 60 lakhs in just two years in spite of her warning to save for their future. Dilip was shocked. He filed a petition arguing that Sonia's allegations were false and baseless. He had only lost Rs. 2 lakhs and that also over a period of six years.

Episode 2

Sunil and John were good friends. They worked for the same company and were financially sound. They enjoyed the good life and decided that every Saturday they would dine at a five-star restaurant. Each would pay the bill every alternate week. The first Saturday they dined at the Taj and Sunil paid the bill of Rs. 3000 with his credit card. The next Saturday they dined at the Hilton and this time John paid the bill of Rs. 2800 in cash as he did not have a credit card. The following Saturday the bill was Rs. 4200 and Sunil paid with his credit card. Next when John was due to pay, once again he paid the bill of Rs. 3900 in cash. After a couple of more such Saturday bashes, John told Sunil that they should quit going to five-star restaurants as it was very expensive. Sunil disagreed. He felt they needed this recreation and that they could afford it. He insisted they carry on and John gave in much against his wishes. The next time Sunil had to pay the bill he forgot his credit card and paid cash. The following day he told John that he agreed with him about staying away from five-star hotels.

Episode 3

Bomsi was a spectator at a cricket match. He had with him a bag in which he had carried his provisions for the day. During the game he was seen talking loudly and frequently on his mobile phones of which he had three. Suddenly, in the midst of an interesting over, he was heard arguing with an ice cream vendor. The dispute was over price. Bomsi showed the vendor his bag and told him, "*I have brought everything from home, even water. The only thing I can't bring is the ice cream because it melts. But I will not allow you to cheat me.*" Now Bomsi was a cricket aficionado. He cheered both teams enthusiastically. After the lunch break a player completed a century and Bomsi was ecstatic. He called the ice cream vendor, grabbed his bag and generously distributed ice creams all around. Within the next three hours he did this twice more. After the game ended he settled his bill with the vendor and even gave him a hefty tip. This man who had fought over the price of an ice cream in the morning had distributed ice creams by the dozen to people he did not even know. When asked about what he had done, he replied, "*I love cricket and I love to gamble on the game. When I win I like to celebrate. All my bets paid off. It's the bookies who are now paying for the ice creams, so let the people enjoy.*"

Mental Accounting is an idea developed and championed by Richard Thaler. It underlines one of the most common and costly mistakes people make when dealing with money. It is the tendency to place different values to the same sum of money depending on how it has been acquired and the effort required to acquire it. Traditional economic theory assumes that money is fungible, meaning that one type of monetary unit can replace another. This means that Rs. 100 in lottery winnings, Rs. 100 in salary and a Rs. 100 tax refund should have the same meaning as they have the same purchasing power. But studies indicate this is not so with individuals. People mentally separate their money in different accounts, giving each account a different significance.

The three instances mentioned earlier demonstrate how mental accounting affects people's behaviour.

Going back to Episode one Dilip started with Rs. 2 lakhs and now has nothing. To him his loss is only Rs. 2 lakhs because his gains in the stock markets were merely his winnings from his original capital and so not his own money. He treated the two accounts separately. Sonia, however, does not suffer from this bias.

In Episode two, every time John paid the bill with hard cash he felt the pain of seeing money go out of his pocket. Sunil did not experience this pain when he used his credit card. But when he paid in cash, he understood the pain of parting with the money and his attitude changed. In our minds, we distinguish between cash accounting and credit card accounting. Actually both are the same, but we view them differently because of our mental accounting bias. Hence, we tend to be more extravagant when we use credit cards.

In Episode three, Bomsi was stingy with his own money. But when he won, he became very extravagant. To him his winnings were not his own money but that of the bookies. Hence the celebration. Mentally, he accounted separately for his own money and for his winnings. Let's see what you would do in the following two situations.

Situation A

You have paid Rs. 500 for a movie ticket. When you reach the theatre you find that you have lost the ticket. Would you, buy a new ticket? or would you prefer to go back?

Situation B

You go to the theatre to watch a movie. When you reach the ticket window you find that you have lost Rs. 500 out of the Rs. 2000 you were carrying. Would you still buy the ticket?

Most people would say no to the first situation and yes to the second. However, both entail a loss of Rs. 500 and the cost of Rs. 1000 to watch the movie. So why take different decisions? Because most people segregate the loss of the ticket and the loss of cash into independent categories or accounts, and therefore react contrarily to the two situations.

Mental accounting is directly correlated to our emotional state. To understand it better, let's consider different types of mental accounts and the human behaviour associated with them.

Earned Income V/s Gift Income

When you receive your salary cheque you are very careful how you spend it. For you that money is sacrosanct, the fruit of your hard work. But if you got a gift of the same amount of money you would treat it very differently. You may spend it lavishly. Mentally, to you this is free money, but your salary money is not. You earned it, hence mentally you put it into a different account.

Quantity of the Money in Question

We create mental accounts according to the quantity of the money and treat them differently. A tax refund is a tax deferral payment by the tax authorities. But when we get a tax refund of say Rs. 1000 we are likely to spend that without giving it due thought. However, a tax refund of Rs. 20000 will set us thinking whether to deposit it in a bank, or buy mutual funds and stocks. We do this because small amounts go into the miscellaneous account and big amounts go into important decision accounts.

Large Purchases V/s Small Purchases

When you want to buy a fridge you make a lot of enquiries before making the purchase. You check out models and prices and even brands. When you have found one you like you do some hard bargaining and maybe get a discount of Rs. 500 on a fridge costing Rs. 20,000. That makes you happy, but do you do the same when shopping for groceries? Do you realise that if you put in a little effort and are able to save Rs. 10 a day, at the end of the year it would add up to a savings of Rs. 3500? Compare this with the saving of Rs. 500 on an expense that may not recur for the next 10 years or so. Many people are cost conscious when making large financial decisions, but they relax their discipline when it comes to small purchases. But that's where the difference matters.

Cash V/s Credit Cards

Today credit cards are a status symbol. Everyone wants one, and every bank is aggressively marketing it. It is a big profit earner for the bank and a hole in the pocket for the user who is not aware of the harm it can cause. Remember the example of Sunil and John. Sunil realised the value of money only when he paid the bill in cash.

Because we have different mental accounts, we treat cash and credit card transactions differently. People tend to shop more if they use credit cards as against paying cash. Actually both represent your own money. It's just that credit cards make us extravagant since we don't see the money change hands. Moreover, we pay interest on the credit offered. It is for this reason that credit card companies do a flourishing business.

Sacred Money

Ramesh was a successful investor and had done reasonably well for himself. One day he inherited Rs. 10 lakhs from his uncle. The uncle had worked hard and saved his money all his life. He did not take any risks and looked after his money with care. Ramesh treated this money as sacred as he had received it from someone who had toiled all his life to earn it. He would not consider putting it into the stock market where he had done reasonably well. Instead he put it into bank deposits. The money was marked "sacred" in his mental account. Had his uncle been extravagant maybe Ramesh would have played the stock markets with that money.

Impact of Mental Accounting on Investors

Mental accounting affects not only our personal finances but is more pronounced in the world of investments.

- Why do investors hold on to losing investments? They may offer various reasons to justify their action but the fact remains that mentally they are unwilling to accept that they are making a loss. Mentally we tend to believe that we book a loss only when we sell. Intellectually we recognise the loss but we hope that it will vanish. This is a common mental accounting error. On the contrary a loss can be adjusted against a profit, resulting in tax savings. Yet investors continue to fall prey to this common mental accounting error.

- Why do investors earn less interest and pay more? Ravi is highly educated, has a successful career in margin trading and is a savvy investor. In spite of the high interests paid by him, his returns from the business seem quite handsome. Being conservative, he prided himself on having comfortable bank deposits to take care of any unforeseen eventualities. He knew that the bank deposits offered a lower rate of return but he felt that was a price he would pay for the margin of safety that banks offered. It is ironical that he pays high interests in his margin trading while his own money earns a much lower interest in bank deposits. How much better off he would be if he utilised his own money for his own stock trade and avoided paying such high rates of interest. This is not a stray case; most people make such mistakes. The problem is that they have two mental accounts–"safe money" and "risk money"–for the same money.
- Most people believe that a bonus share is a freebie given by the company to its shareholders. They even buy more shares on such news. But they are dead wrong. Companies give bonus shares to capitalise reserves and balance their finances. But investors don't see it that way. They consider it to be a windfall. This leads them to become extravagant. Most investors suffer from this mental accounting error. That's why the stock markets rise on such announcements.
- Day traders trade in and out of a stock, time and again, with very narrow spreads. They think that they are generating income profitably. But consider the transaction costs and the brokerage they pay on such volumes. What they are in actually is the business of enriching their brokers and the tax authorities. It's like buying groceries and not heeding the cost.

Before discussing the plan of action it is important to understand that there are no set rules. The best advice is to refrain from using credit cards, and to treat all monies equally. We all have our individual faults and we have to decide what we need to do for ourselves. Mental accounting also has its positive and negative aspects and it is up to each individual to know what is best for him. For instance, if you are a big spender and unable to curtail your urges, mental accounting could be the most effective way to plan your fixed mortgage payments, kids' education fund, and retirement savings. In order to eliminate the harmful effects of mental accounting while preserving its benefits you need to audit your own mental accounting system.

Plan of Action

To devise a plan of action you have to make two important assessments. First, this test will determine whether you are prone to mental accounting.

Imagine you are at the mall shopping for an expensive suit. In the first instance you have won Rs. 10,000 in a lottery. Will you use that money to buy that expensive suit? In the second instance, you discover that you have Rs. 10,000 in your savings account, a sum about which you had forgotten. Will you use that money to buy the expensive suit?

If your answer is yes to the first question and no to the second, like most people you are prone to mental accounting, meaning that you are prone to wasting money as you place different values on the same sum of money.

Secondly, you have to review your finances. Ask yourself:

- Have you set aside any savings for emergencies?
- Do you avail of revolving credit on your credit cards from one month to the next?

If your answer is yes to both questions, you are a victim of mental accounting. You stack away your emergency money at low interest rates and pay high interest on your credit card balance. You are earning around six per cent and paying around 15 per cent on credit card debits. Financially you would be much better off if you did not set aside any emergency savings but rather spent the money. This would grant a clean credit card record and a higher credit limit. In the case of an emergency, the credit card is always at your disposal. Making this change would make you richer by 9 per cent. The following suggestions will help you create your own action plan.

Always Pay Cash

This in no way suggests that you throw away your credit cards. But, whenever you make a purchase pay cash instead of using the credit card. This will automatically make you aware of the outflow of cash from your pocket and you may reconsider the purchase. Another way would be to visually imagine the money you are spending when you sign the credit slip. The thought of that money will at least alert you to your actions.

Be Alert

Whenever you make a big purchase like a car be very careful about any other accessories the salesman offers you. Since the car entails a big expense the cost of the accessories seem negligible and you may be tempted to spend on something you don't really require. Ask yourself, do I really need the Rs. 25,000 leather seats when the originals are so good? Do I really require that Rs. 15,000 pioneer deck when the one that comes with the car is good enough? These expenses may not seem much when compared to the cost of the car but on their own they are big and definitely avoidable.

Be Patient

When you get a windfall, wait at least a couple of months before you take any decision. Initially put that money aside in a bank. After a while you will begin to view this money as a savings and therefore you will not waste it. That's the time to decide what you want to do with the money.

Treat All Income as Earnings

The best way to be resourceful with your money is to treat all money as earned income. Whenever you get any money ask yourself this question: How long will it take me to earn this amount of money after taxes? Over a period of time this habit will fine-tune your internal auditing system.

Having learned the art of sharpening your internal audit system it is time to understand how to process information. This will help you get over your mental anomalies.

CHAPTER

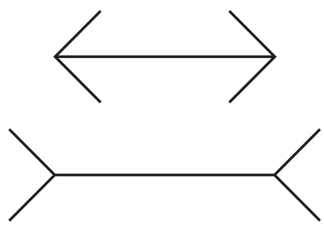
8

MENTAL HEURISTICS

Question 1–Three birds are sitting on a tree. Two decide to fly away. How many birds are there on the tree?

Question 2–Observe the following picture. Which line appears longer?

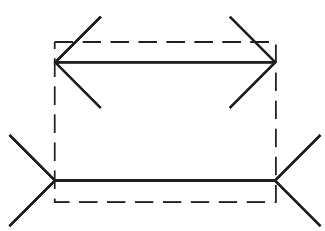
FIGURE 8.1



Cognitive Illusions Are Like Optical Illusions

The bottom line appears longer but if you look at the diagram below you notice that both the lines are of the same length.

FIGURE 8.2



Measurement Tools Help Identify Illusions

Although both the lines are the same why is it that the lower line appears longer? That's because the brain takes a short cut when processing information. It does not process all the information and this leads to biases. This process is known as Mental Heuristics. If your answer to the first question—how many birds are there on the tree? —is one, then you have fallen prey to a mental heuristic. Your brain did not process the information properly. The answer should be three birds. Two had only decided to fly away. They did not fly away. Had I told you that they flew away then you would be right.

The dictionary definition of the word heuristic refers to the process by which people reach conclusions, usually by trial and error. This often leads them to develop thumb rules, but these are not always accurate. One of the greatest advances of behavioural psychology is the identification of the principles underlying these thumb rules and the errors associated with them. In turn these rules have themselves come to be called heuristics. In short, the following four statements define Heuristic Bias.

- People develop general principles as they find out things for themselves.
- People rely on heuristics to draw inferences from available information.
- People are susceptible to certain errors because the heuristics they use are imperfect.
- People actually commit errors in particular situations.

There is a newly opened mega-store in the vicinity whose stock is listed on the stock market. You see a big queue outside it and you think it must be doing a roaring business. You buy the stock hoping it will go up because the store is doing well. But there could be umpteen reasons for the queue. The store definitely could be doing great business. But it is also possible that customers are queuing to return defective goods. Or perhaps the service is slow, or maybe all the other stores in the vicinity are closed on that day. There are various reasons for the queue but our brain does not weigh all the probabilities and makes a decision on half-baked information. Stock markets are interesting because investors do this all the time.

Take the example of Reliance Industries Limited (RIL) when the company discovered a gas vein. The stock jumped as investors cashed in on this news. But let us analyse the situation without falling prey to mental heuristics. The gas source was discovered but there were other factors to be considered—the quality of the gas, the number of wells to be drilled, the time it would take, the plans to finance the project, etc.—before the profits could be reaped. Yet analysts predicted the future profitability of RIL and on such hopes investors bought the stock at rising prices. This is how mental heuristics work when the brain does not process all the information and its implications. The tech boom was built on the same logic and we know the damage it has done.

Evolutionary forces shaped human cognition over centuries. That served our ancestors well, allowing for quick quality decisions. Today, the complexities of our lives throw up multifarious data that our minds may not assimilate very easily. The heuristics we rely on carry associated biases, which undermine the quality of our decisions. Let's take a look at some heuristics and their biases.

Availability Heuristic

One bias associated with availability is ease of recall. We are more likely to make judgements based on recent or easy to remember events rather than other similar but harder to recall instances. The flow of information around us is what guides us. If all of it is positive we are positively inclined. This is what happened in the India Shining story of 2003–4. All available information—press, television, bureaucracy, business and political circles—centred on the positive aspects of the Indian economy. No negatives were permitted. Shored by so much optimism the herd mentality came into play and everyone not only believed the story, they advocated it. This was reflected in the stock markets. The Sensex jumped from 2800 in April 2003 to over 6000 in April 2004. The NDA and its allies were sure they would win the elections as the India Shining story painted a rosy picture of their governance. Come May 2004 and the election results announced that the NDA government had lost. How did this happen? The post analysis revealed that the India Shining story had been aggressively sold in the major cities; hence the exit polls in these cities placed the NDA's chances very high. But 70 per cent of the population lives in the rural areas and for them India was not shining. Thus NDA lost. On May 17, 2004 the markets crashed by more than 800 points in just two days. The reason: all available information was negative. In bull markets there is only positive news and in bear markets it is only negative. That's why markets go up or come down on reflexivity.

Representative Heuristic

We assess the likelihood of an event by its similarity to other occurrences. A predominant bias associated with this is over reaction. In the stock markets, if the leaders report impressive performances then all the stocks in that particular sector benefit. The fortunes of the steel industry seemed to be changing and Tata Steel reported increased earnings and profits. All the stocks in the sector, including the junk and penny stocks, attracted investors' interest irrespective of whether they too would report increased earnings. When the textile industry reported good profits, not only did all the stocks in that sector rise, but companies in associated industries, like textile machinery manufacturers, spinning mills, dyes and chemicals also attracted attention. Representative heuristics also affect investors' actions. Investors try to replicate their portfolios by following the leaders. If they find that a leading fund or broker or a respected personality has bought a particular stock they also buy the stock. In a way this gives rise to the herd mentality.

Saliency Heuristic

Individuals over react to an unusual event assuming it to be a permanent trend. Two aeroplanes crash into the World Trade Centre and the world stops flying the next day. Surely this type of incident has a one in a million chance of recurring the next day. On the contrary the next day was probably the safest time for flying.

In bull markets analysts over react to an unusually good quarterly earnings assuming it would be repeated in the future and become bullish on the stock. In bear markets they overreact to a bad quarterly estimate extrapolating it too far in to the future. The 2004 second quarter GDP growth estimates of 10 per cent saw the markets going up on the assumption that the trend would continue. Actually it needs to be sustainable to justify good times ahead. However, this is how saliency heuristic works with investors.

Overconfidence

This is the story of a family that was reasonably wealthy and lived a comfortable life. The father was in the textile business and had been our client for eight years. He was a cautious investor. Since he lacked knowledge of the stock market, he would go by my advice as it suited his conservative nature. When he started business with us his son was in college, aspiring to become a chartered accountant. The proud father was waiting for his son to graduate so that he could manage his portfolio. I warned him that investment acumen does not come with becoming a chartered accountant. But he strongly believed that since it involved number crunching, and stock investment was all about balance sheet analysis, his son would be an excellent investor. After his graduation, the son, without prior experience took over the family's portfolio. One day he questioned me about some of the investment decisions and I gave him the required explanation. After a month he came back with his father. I was shocked and pained to hear his queries. He listed some stocks in the financial services sector that had gone up considerably, and wanted to know why I had not bought those stocks. I was a bit upset because the question was based on hindsight information, but I thought it my duty to clarify his doubts. I explained that these were fancy stocks and there was no merit in their valuations. I also told him that this bubble would burst soon and the stocks would not have any buyers. At that he shot back, "In your position you should have known that these stocks would go up. Even I did. Unfortunately I was not handling our portfolio or else it would have been very different." I had nothing to say to this inexperienced, overconfident young man. The proud father supported him. The son soon became an active player in the markets. Then, in 1995/1996 the markets crashed. This money was lost, the father had a stroke and the family had to leave Mumbai and settle down in their hometown in Gujarat. All this because of the son's overconfidence. There are many others like him. My advice is, respect the markets. They are interesting because we cannot understand them.

A word of caution: Any individual who is not professionally occupied in the financial industry, and even most of those who are, and who in any way attempts to actively manage an investment portfolio is probably suffering from overconfidence.

Successful investors sometimes believe that they are skilful because they are doing well with their investments. However, they fail to realise that their investment performance is the result of the stock market performance, not necessarily their individual abilities. In bullish times the stock markets are up and so is the performance of most of the mutual funds. By definition they capture the mutuality of the markets. It is at this point that fund managers can become overconfident and go all out to garner more business. There is a famous saying, "A rising tide lifts all boats". A corollary to that would be "A rising market lifts all egos".

At present our fiscal deficit is alarming but the markets believe we will tide over this impending crisis. Should the markets crash, as it portends, the analysts will blame the government's fiscal imprudence. But today one would be a fool to short sell because it does not pay to go against the herd in the short run. Moreover no one can predict when this predictable surprise will come.

Anchoring and Adjustment

Example 1

Jal: "*I need Rs. 50 lakhs urgently for my business. I have some gold and I want to sell it. Can you help me?*"

Broker: "*Why do you want to sell the gold? Instead, sell your stock of Pentafour. You bought it at Rs. 150 and it is now quoted at Rs. 1000.*"

Jal: "*No. That would be a loss. A couple of months ago the price was Rs. 1800.*"

Actually Jal would not lose if he were to sell the stock. But he is anchored to the price of Rs. 1800, believing the fall is temporary. What he does not realise is that Rs. 1800 is an unrealistic price and the chances of the stock returning to that price are slim. This is another reason after loss aversion that most investors hold on to losing investments.

Example 2

Husband: "*The suit I wanted to buy is on sale today. It was priced at Rs. 12000 last week. It's now at Rs. 6000.*"

Wife: "*There are so many suits on sale. Look around, you may get a better one.*"

Husband: "*Good idea. (He looks around.) I don't like any of them. They are expensive.*"

Wife: "*But in that range of Rs. 6000 there are so many other good suits. Look at these.*"

Husband: "*I did. They are not worth Rs. 6000. If I have to pay Rs. 6000 I would rather buy that suit. Then at least I know that I am getting a bargain at half the cost.*"

The man likes a particular suit only because he knows that it is worth Rs. 12000. He is anchored to that price and believes that only this one is a bargain. There is no anchor price on the other suits for him to think they are bargains.

Example 3

Sarosh: "*I bought this stock of Hughes Software at Rs. 700.*"

Ketan: "*I think you should sell it. The fortunes of the industry have changed.*"

Sarosh: "*I know, but my cost price is Rs. 700 and at present the stock is Rs. 540.*"

Ketan: "*So what? Take the loss. The way the markets are treating such companies it may go down further.*"

Sarosh: "*Okay, I will sell. I will wait for the price to come back to my cost of purchase.*"

Ketan: "*How do you know it will happen? The industry and the company dynamics have changed, so the faster you sell the better.*"

Sarosh: "*Yes, I know that. But I am waiting for the stock to touch Rs. 700.*"

The problem here is that Sarosh is anchored to his purchase price and cannot see the reality. Hence he cannot take a rational decision.

Individuals start with an initial value and make value assessments based on that value. The initial value may reflect historical precedent, current information or random information. The bias reflects people's insufficient adjustment to their initial values. The problem is acute when the initial value is not properly grounded. When individuals are anchored they under react to any new information that is made available to them. This is how anchoring becomes dangerous.

A client had a portfolio of technology stocks valued at over Rs. 3 crore. His initial investment was around Rs. 80 lakhs. When he required money he came to me for advice. The year was 2000. I told him to liquidate as he was still making good money. He refused, saying he was making a loss. According to him the portfolio was worth around Rs. 4 crores just a few months ago and the current value was only Rs. 3 crores. He was anchored to prices that were not at all realistic. Till recently he hadn't sold the stocks because the prices had fallen below his cost of purchase. The anchor had moved to his purchase price.

Around mid-2003 the markets climbed with good corporate earnings coming in. The bear phase had ended. By the yardstick of dividend yield, price earning ratios and price to book the markets were cheap. However, when the stock markets rose, many investors liquidated their stocks. They did not note the changing environment. They were anchored to an index of 3000 and when it went up they exited. Without due justification, they sincerely believed that the markets would be back to the 3000 levels.

Herd Mentality

Prakash bought a Maruti Esteem after carefully researching the decision. He was very happy with it and enjoyed driving the car on his long haul trips to Lonavala. After a few months a flood of strangers approached him and offered to buy the car at reduced prices. The vehicle was in good condition and had done a few thousand miles. Worried that he had not made the right decision Prakash considered selling his Maruti at half his cost price. Should he sell the car?

Before you answer, ask yourself what advice would you give him if he wanted to sell 1000 shares of Maruti, which he had bought for Rs. 400 and was now quoting at Rs. 300 due to depressed stock market conditions.

The history of the stock market shows that most investors buy stocks in companies or mutual funds for presumably sound reasons but exit their holdings the moment the market turns against them. They sell when a bunch of complete strangers offer them less than what they had paid. Conversely, they will pay high prices for stocks or real estate or paintings just because other people whom they don't even know are willing to pay such prices. The dotcom boom was a result of such thinking. In stock market parlance this is known as investing with the herd. We need to understand the manner in which the value of a stock or commodity is determined. To some extent what other people think matters a great deal. Beauty may be in the eyes of the beholder but value is often in the eyes of the buyer. If Prakash wanted to sell the Maruti then it was worth what the buyers would pay for it. But if he didn't then he was the only one to decide the value of his car.

In the stock markets most often investors allow popular opinion and behaviour to define values for them; sometimes for the good but often not. Their buying or selling decisions are made not on the basis of their own convictions, but on the value that strangers appropriate.

The herd mentality affects business decisions to a great extent. People try to replicate the leaders. In the end everyone behaves alike, which leads to cutting prices for market share. This is very common in the stock brokering business. Technology has made it easy to install trading terminals across the country. So, to survive in a competitive market, brokers have lowered their trading commissions to as little as 3 Paise. The difference between one broker and another is the difference in their commissions, not in the value they offer their clients. That is how the herd mentality works in business.

Size Bias

Two friends, Gautam and Salman, are just out of college and have taken up jobs. From day one Gautam sets aside Rs. 300 every month, which earns him 10 per cent per annum. After 10 years he stops as he has started a family. Salman got married early and did not save anything for a long while. After 10 years, he began to set aside Rs. 300 every month earning him 10 per cent per annum. He continued doing this for the next 30 years until he retired at the age of 60. Salman's investment was Rs. 1,08,000 while Gautam's was only Rs. 36,000.

When both retired who have more money? It would seem to be Salman as he has been saving for 30 years. In reality it was Gautam. At 60, Gautam got Rs. 1,051,212 while Salman got Rs. 621,787. This is the power of compounding which investors normally forget. Salman could not make up for the 10 years that Gautam's money compounded at an annual rate of 10 per cent per annum. We often tend to look at the big numbers and ignore the small. In money matters it is the small figures that make all the difference.

Many investors ask whether they can build an investment portfolio with a small capital. The answer is in order to grow big you need to start small and stay invested. The longer you hold the better for you. In fact the mission statement of our portfolio management services reads, "We create high net worth individuals, we do not chase them". We believe in the power of compounding.

A word of advice to day traders: considering the amount of transaction charges and brokerage they pay with each trade, if they really calculate the cost at the end of a year they will find it worthwhile to quit day trading and become brokers.

Investors also need to be alert. How many of them look at the expense ratio of a fund? Expense ratio is where the research costs, salaries, and other management expenses of a fund are deducted from the mutual fund holder's account every year. If the expense ratio of the fund is two per cent that means that for every Rs. 100 you have in the fund Rs. 2 will be deducted from your account every year. Now if you have invested in two funds, with expense ratios of 0.75 per cent and 2.5 per cent, the difference of 1.75 per cent can impact the returns to a great extent. Investors need to be aware of these small details when they invest in mutual funds.

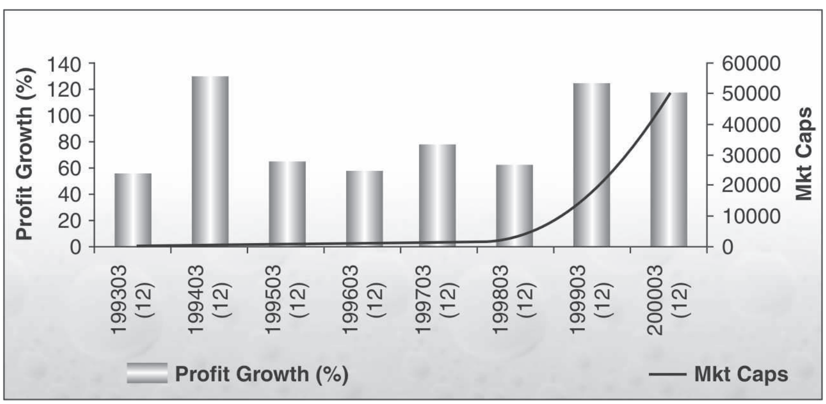
Pattern Recognition

Human minds are not perfectly rational. As a matter of fact a huge portion of the world's economy is run by irrational behaviour. For example, tobacco, alcohol, and junk food are injurious to health yet we continue to indulge in them. Diamond jewellery serves no useful purpose, yet it has a high value on account of the wearer's emotional perception, which is primarily determined by advertising and snob appeal. The market research conducted by Pepsi in 1980 illustrates the irrationality of human behaviour. Consumers were given unidentified samples of cola, including Coke and Pepsi. When asked their preference, most of them chose Pepsi. Then Coca-Cola conducted a similar research and they got the same results. They realised that people preferred the sweeter flavour of Pepsi. Taking a cue from this, the company re-launched their drink "New Coke" in a sweeter avatar. This $1 billion marketing exercise demonstrated that people drank Coke not for its taste but for the Americana image associated with it.

An example of how our brain works is the concept of pattern recognition. As children we learned language and mathematics through repetition. In fact almost everything we learn, we learn through repetition; in other words, through pattern recognition. Now this very concept that has helped us learn so much can be dangerous for us when investing. That is why we need to be aware about how it works.

Take this example. From 1993 the profits of the blue chip Infosys have grown above 50 per cent. Post 1998 the company grew at 100 per cent and the market consensus was that it would continue to grow at the same rate in the future. Hence every market participant believed that Infosys was the stock of the century and started chasing it. Thus the stock price ran up beyond the profit growth. See Fig. 8.3 below.

FIGURE 8.3

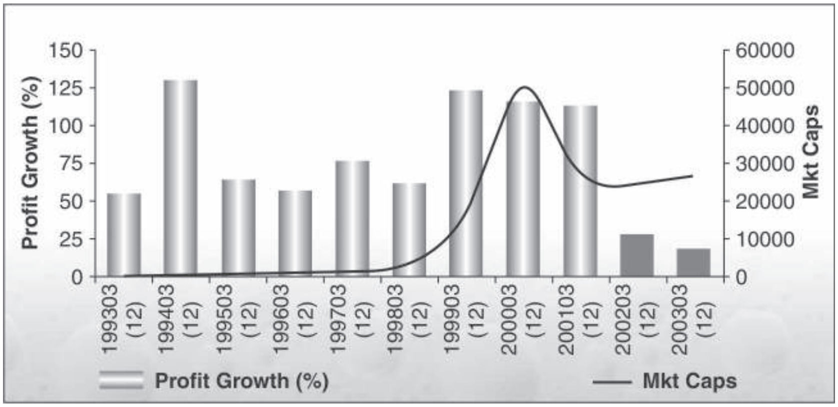


Note: Mkt cap calculated on monthly average stock prices

Infosys Profit Growth 1993–2000

The concept of pattern recognition would make us believe that growth rates will continue at 70–80 per cent. If so, where will the next profit growth bar be? See Fig. 8.4 below.

FIGURE 8.4



Note: Mkt cap calculated on monthly average stock prices

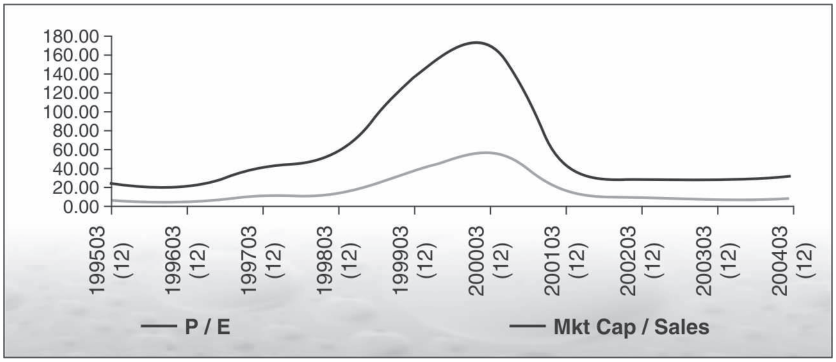
Infosys Profit Growth 1993–2003

Due to a sudden industry slowdown the profit growth dropped below its historical averages. Nothing changed in the company, only the pattern made by the investor went for a toss and the stock was punished. It seems the longer a stock does well, the more confident investors are that the stock will continue to do well. Hence they award it higher and higher multiples, as illustrated in the Figure 8.5.

The company has continued to perform very well and is on a much stronger footing than before.

Investors anchor their future projections on past performances, seeing the future as a repeat of the past. In panic situations our minds may be guided by our emotions. Hence we may under react or overreact. Investing is a fairly emotional activity; hence we must be aware of our senses and our programmed responses to specific situations.

FIGURE 8.5



Note: Mkt cap calculated on monthly average stock prices

Infosys Price Multiples

A good example of mental heuristics is the mutual fund industry. Mutual funds are efficient instruments to mobilise the savings of retail investors in the stock markets. The next chapter will guide you through this maze.

Chapter 9

Mutual Funds: An Idea Whose Time has Gone

Investing is a game of patience and investors get rewarded if they invest for the long-term. The longer one stays invested the greater are the rewards. Buy a value, sit on it and let time do the rest. However in today's changing times investors shun the age-old wisdom of long-term investing and chase the illusion of short-term quick profits. Keynes is often quoted–"In the long run we are all dead"–to justify the speculative urge of short-term quick profits. The strategy is to time the market rather than invest in good sustainable businesses. Sometimes you go right and make a quick buck. But the game of timing can be very difficult and it is hardly advisable when it concerns one's hard-earned money.

Everything changes but there are certain principles that do not change. The power of principles is that they are universal timeless truths. If we live our life based on these we can quickly adapt and apply them anywhere. In fact, in a fast-paced, ever changing world, we cling to practices, structures and systems for some sense of predictability in our lives. Forget the principles and we are headed for trouble. Investment management is a profession but it is being run like a business. So the rules of sound investment take a back seat and the rules of business dominate.

We have created and nurtured an investment society where insanity works. Let us see how this sort of behaviour has impacted the mutual fund industry and how that industry is responsible for the volatility in the stock market.

The Beginnings

This industry was created to channel the savings of a vast number of small investors into the capital markets. It is a vehicle to safeguard the interests of the small investors who are assumed to be incapable of taking investment decisions on their own. The mutual fund industry provides the basic infrastructure for professional investing in the form of professional fund managers, investment research, business analysts, stock market analysis and systems to cater to the huge pool of investors. The aim is to fulfil the long-term investment needs of the retail investors.

The Rules of the Game

- Long-term investment strategy
- Investor friendly: exit within 24 hours
- Professional fund managers with strong market expertise
- Backed by strong research analysts

The Paradox

Most mutual funds talk about long-term investment strategy. However, they are open-ended and the investor can exit whenever he wants. The paradox is that on the one hand it talks about a long-term investment philosophy but on the other it does not encourage the investor to be a long-term player. This is because the normal practice in the mutual fund industry is to have open-ended funds and the principle of long-term investment takes a back seat. The game is that of timing the market and looking for short-term gains. In fact it would be wrong to assume that investors do not want their money locked in for long periods. If that were true then people would not invest in RBI bonds, or post savings schemes for five to seven years, or in the Public Provident Fund for 15 years. The industry itself needs to be blamed for nurturing and nursing the culture of open-ended schemes.

As the industry grew so did the competition leading to high marketing costs. Money comes when the markets climb as the net asset values start going up. There is a scramble to get in and fund managers are pressured to invest in a rising market at inflated asset prices. However, when the market falls the net asset values fall and the investors pull out forcing fund managers to sell the portfolio at depressed prices to meet the redemptions. The basic principle of buying when prices are depressed and others are selling, and selling when prices are high and others are buying is not workable. Fund managers are forced to act in a way that does not conform with the basic investment principles. Their decisions are being controlled by the environment.

Fund Manager's Behaviour

Because of the pressure to perform in the short run, fund managers chase each other's net asset values rather than follow sound investment strategies. When the Information, Communication, and Entertainment (ICE) sector moved up in 1999, fund managers chased those stocks, and prices rose steeply. Most of them had the same ICE stocks among their top holdings. At the time of the rise of public sector undertakings in the oil sector, most of them had ONGC, BPCL and HPCL as their top holdings. Then when the fad passed, they competed to sell and depressed the prices. It is obvious that the herd mentality is what drives them to make decisions. Newspapers and financial journals report quarterly performance of funds. Influenced by this news, investors enter and exit funds forcing fund managers to change strategies midway. They are thus forced to keep up with market trends and this affects their performance. Also, the practice of offering bonuses and rewards for turning in short-term profits, rather than for following a sound investment strategy, forces them to adopt short-term strategies. As a result it is the investors who lose. For if making short-term money were so simple, in the market he would not be a fund manager, he would be busy making money for himself playing the market.

This is not to say that all fund managers are mediocre. The Indian capital market does have some very good talent and we need to create the right environment for such talent to flourish and at the same time reap benefits for the mutual fund holders.

Destructive Environment

A mutual fund manager manages the money of investors whom he has not even seen. It is the sales team and third party distributors who bring in the investors. In a situation where fiduciary responsibility is very important, not knowing the investor whose money he is managing can call his commitment into question. Mutual fund managers have a pile of cash to be invested in the stock markets. Naturally, brokers, company managements and other operators chase them with quick money ideas. With so much attention being showered on them, there is a danger that they could overestimate their abilities and performance. Sometimes the rewards for performance could also make them overconfident. It is true that we cannot blame the fund manager but the point is when there are so many good professionals in the field, they should not be forced to operate in a less than conducive environment.

The business of a broker is dependent upon the amount of resources he is able to mobilise for the fund. Hence brokers may try to sell a fund to investors not because it is a good investment but in order to generate business from the purchase and sale of stocks. The fund manager and the broker please each other for their own benefit and in the process it is the investor who suffers. The development of the mutual funds concept was perfect for its time. The idea was to pool together the resources of investors and invest it in the stock markets. Professional fund managers backed by strong research would handle the investments. Thus the investors were assured of the services of professionals. But times have changed. Levels of education have improved. Information flow has increased. Internet enables exchange of information in real time. Online trading enables real time execution. Chat sites help investors discuss their views and seek opinions. The power of knowledge has shifted from the hands of a few to those of the masses. We now have a web of smart professionals with new ideas, knowledge and aspirations as compared to a handful who are working for the mutual fund industry. In fact, the concept of a mutual fund has become outdated. Mutual funds are competing with millions of traders. And with so much volatility and pressure on performance, they have also become weekly traders, if not day-traders. Our belief that mutual funds are good is yet another example of a mental heuristic. In fact the concept of a mutual fund has become outdated.

A Profession or A Business

Money management is a profession. The professionals who work in it are validated by their performance. Unfortunately the advent of mutual funds has turned it into a business where the goal is to increase the assets under management. Today, funds compete for the size of assets, chasing a benchmark of relative returns. The aim is to beat the top-performing fund. Even a poor two per cent becomes a benchmark. On the other hand a professional like a portfolio manager will benchmark against absolute returns because in most cases his fees are linked to his performance.

A Solution

Open-ended mutual funds are the main cause of the volatility in the markets today. I believe that close-ended mutual funds are the best vehicles for a long-term investor. It allows the fund manager to be disciplined, which in turn reaps substantial rewards for investors. No doubt the choice of such funds is limited. In this case the price of the fund could fluctuate according to the net asset value, but when the units change hands they go from one investor to other and there is no redemption on the fund. The fund manager, therefore, is free to make long-term decisions because the environment does not control him. For the healthy growth of the mutual fund industry more such close-ended funds need to be floated.

However, the irony is that close-ended mutual funds quote at a premium prior to listing and at a discount to the net asset value after listing. This discount may be viewed as an expensive monument erected to the inertia and short sightedness of the shareholders. The price movement of close-ended funds displays the fickle behaviour of investors as investor sentiment varies through time. When noise traders are optimistic, the price of close-ended funds rise and the discount to the net asset value narrows. When noise traders are pessimistic, the price of close-ended funds decline and the discount to the net asset value widens. Investors in close-ended mutual funds are subject to two types of risk: firstly, the fundamental risk of the net asset value going down, and secondly, the noise trader risk of widening the discount due to pessimism. The opportunity arises in the second scenario. However, the investor would need patience to benefit from such an opportunity. But isn't investing game of patience after all!

The Future of Open-ended Mutual Funds

The market volatility of this industry is taking its toll on the participants, impacting their health, their families and their self-esteem. An investment culture is being destroyed, and investment principles are being eroded. Just because the mutual fund industry has grown by leaps and bounds in the USA does not make it right. Times are changing and too much is at stake. The savings of millions of investors cannot be subjected to abuse in an industry that encourages speculation.

A Bold Vision

Since investment management is a profession there is a great opportunity for the portfolio management industry to grow. A vision of thousands of professional portfolio managers spread across the country catering to the needs of individuals, helping them to invest and at the same time channel their savings to the stock market! A portfolio manager would be in direct touch with the investor and would be held responsible for his wrongdoings. A fiduciary relationship requires this set-up. The portfolio manager's business will be dependent on his individual expertise and performance and this would lead to better performance for the individual investor. Competition among portfolio managers will ensure performance and market forces will throw out the incompetent. Financial markets would improve. Even today if the portfolio management industry is given the same sops and tax benefits that the mutual fund industry enjoys, the latter would soon lose out. This is an idea whose time has come.

Now that we are aware how we fall prey to mental heuristics by ignoring the rules of investment, we shall study the stock market behaviour in times of boom and bust and how various types of investor behaviour play their part. Move on to the next chapter.

CHAPTER 10

THE STOCK MARKET BUBBLE

Stock markets are fascinating because they are so unpredictable. Furious activity is followed by long periods of lull. Many a fortune is made and lost. The greed and fear of participants make the stock markets volatile. The one who can understand this and in turn exploit it is easily the master.

Stock markets are known for their intermittent bubbles. To understand who and what causes them, we need to ascertain how the system works and what drives the participants. Systems Thinking[1] is an important tool we can use to understand the vagaries of the stock markets.

Systems Thinking

A system is that which maintains its existence and functions as a whole through the interaction of its various parts. A human body is a perfect example of a system. It consists of different parts and organs, each acting separately yet all working together and each impacting the others. Similarly, all around us there are systems, and systems within systems. Systems-thinking is looking at the whole picture, the different parts and the interconnection between the parts. It is thinking in circles, in loops rather than in straight lines. The parts of a system are all connected directly or indirectly. The action of one part affects the other and that other responds to the new influence. The influence then comes back to the first part in a modified way, making a loop not a straight line. This is known as the feedback loop. Hunger is a good example of this. When you feel hungry, you want to eat. So you eat as much as you need to satisfy your hunger. Once your hunger is satisfied you stop eating. Your hunger influenced your craving for food and in turn the amount of food you ate influenced your hunger. It looks like one action but actually it is a loop. It would be only one action if you knew exactly how much food to eat to feed your hunger and you ate that quantity of food.

When two parts are connected the influence can go both ways, like a telephone line; if you can dial a friend he can also dial you. Feedback is the output of a system re-entering as its input, or the return of information to influence the next step. Feedback is fundamental to systems. There are two types of feedback loops:

- **Reinforcing Feedback:** when changes in the whole system return to amplify the original change and this amplified change goes through the system producing more change in the same direction. An example would be a snowball rolling down the hill. It collects snow as it rolls and becomes larger and larger until it eventually becomes a boulder.
- **Balancing Feedback:** when changes in the whole system return to oppose the original change and so dampen the effect. A balancing feedback loop is where change in one part of the system results in change in the rest of the system that restrict, limit or oppose the initial change. These are loops that resist change and keep the system stable or else the reinforcing feedback would break the system.

Feedback is a circle. It takes time to travel round a circle and so the effects can appear some time after the cause. When there is a time delay between cause and effect and we assume there is no effect at all, we may be surprised when the effect suddenly happens. What we do now will affect our lives in the future when the consequences come round again. We do not see the connection and we blame prevailing conditions but actually the roots lie in our own past actions. We mould the future by our present actions.

Very often the most critical point of leverage in any system is the belief of the people, because it is these beliefs that sustain the system. The stock market is one such system and it is the beliefs and the behaviour of its various participants from time to time that shape their progress.

The Psychology of Stock Market Participants

Understanding the psychology of the participants is the key to knowing how they will behave when they are gripped by fear and greed. He who understands this psychology is able to manipulate the markets by using the different participants at different times. Now let's see what each one wants from the markets.

Government

At this point when the world has become a global village and each country wants to attract foreign capital, governments need booming markets. Stock markets are the barometer of an economy. They send positive signals to foreign investors when they are in a bull phase. Booming stock markets create confidence and spur the governments to go ahead with their economic policies. No government likes depressed stock markets.

Regulator

Appointed by the government, the regulator also likes booming stock markets. A rising market is evidence of good governance. It also results in additional revenue in the form of higher transaction and service charges due to the increase in turnover.

Stock Exchanges

They facilitate stock transactions. During boom periods, incomes skyrocket by way of transaction charges from brokers, listing fees, etc.

Brokers

In a bull market the clientele increases and so do business opportunities. This results in higher incomes for the brokers.

Banks

Their business increases with soaring stock markets as opportunities open up in lending against stocks, margin trading, depository and custodial business, etc. The feel good factor drives investors to banks for various financial services.

Companies

Rising markets lead to higher stock prices. The net worth of owners increase and companies can mop up more capital for expansions. Financially healthy companies are able to attract and retain good talent, and keep their shareholders happy.

Mutual Funds

Higher stock price means increased net asset values. Rising markets attract more investors which means more money under management, and higher asset management fees. They are also able to come out with different kinds of funds to satisfy every requirement.

Media

The media plays a pivotal role in spreading information. An increase in investors means increased viewers/readers, which translates into increased advertisement revenue.

Investors

The lure of quick money draws investors in a bull market. Day traders become very active as they are rewarded with easy gains.

Operators

He is the smartest and shrewdest of all. He is aware that the bull run psychology creates the bull run. He knows the system, he understands the psychology of the participants, and he has the ability to exploit that for his own benefit. He is the king-maker who uses his knowledge to win over investors, brokers and company management.

Making the Bubble

"*Whoever can supply them with illusions is easily their master.*"
—Gustav Le Bon.

Stock Price

The fulcrum of the stock market is the stock price. The management of companies is the biggest beneficiary of a price increase and it is in its interest to keep stock prices high. Anyone who promises to boost the price easily becomes its master. The operator understands this weakness very well. He tells the management that its company stock is undervalued and convinces it that he can take it higher. In most cases he is a broker or an investment banker, which gives him the credibility of knowing the stock markets.

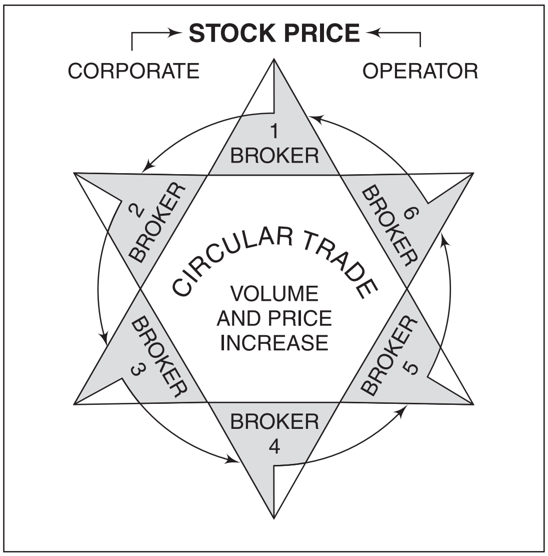
The Deal

The management gives the operator some stock at the current low price and a predetermined amount to rig the stock. The operator uses the money for his stock market operations while his profits come from a portion of the stock he is given at the beginning, which he sells when the price goes up. A fixed amount of performance fees is also given to execute the deal. Over and above that, the operator makes money by way of trading on his own account during the rigging process.

Circular Trading

Step 1: The operator has his own band of brokers who specialise in such operations. The circular trading starts. Broker 1 sells shares to broker 2 who in turn sells to broker 3 who then sells to broker 4 and so on. As the shares change hands the price increases. Thus reported prices on the screen show a steady rise and so does the reported volume. When this data reaches investors they think that since the stock is moving something must be happening. Circular trading picks up momentum and the stock price and volume increases. The reinforcing loop is created. Even if there is pressure to sell the operator absorbs it with the money given to him by the management. If the conditions are bullish the operator and his band of brokers also absorb the selling by taking their own positions. This creates an artificial scarcity and the reinforcing loop becomes stronger. See Figure 10.1 to understand the circular trading process.

FIGURE 10.1

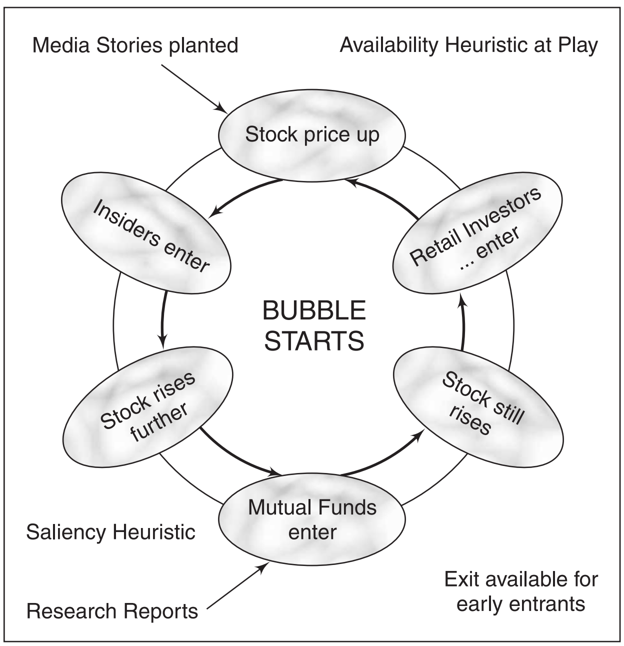


Creating the Reinforcing Loop

At this stage the manipulators cannot exit. They are making the bubble, so they need to support the price or else the reinforcing loop will break. The stock needs to get its momentum before it can stand on its own. So a fund manager of a mutual fund or an institutional investor is roped in to join the inner coterie. They have access to a huge pool of resources and their investment adds credibility to the stock. Investors are lured by the entrance of these investors. This helps the rigging and gives credibility to the stock.

Step 2: Now the stock has got its feet. Regular volume data and the rise in price attracts investors. Saliency heuristic is at work. The rise in stock is seen as a positive turn in the fortunes of the company. Slowly the stock becomes newsworthy. Stories about the company, its growth potential, business environment, earnings potential, restructuring and so on appear in stock market journals and newspapers. Various research reports are published. The availability heuristic is at play. All available information on the company is positive. The recall value for the stock gains prominence and more investors start buying. The seed of greed is sowed. With each price rise, demand for the stock increases and other players such as retail investors join the game. Fundamentals and valuations take a back seat.

FIGURE 10.2

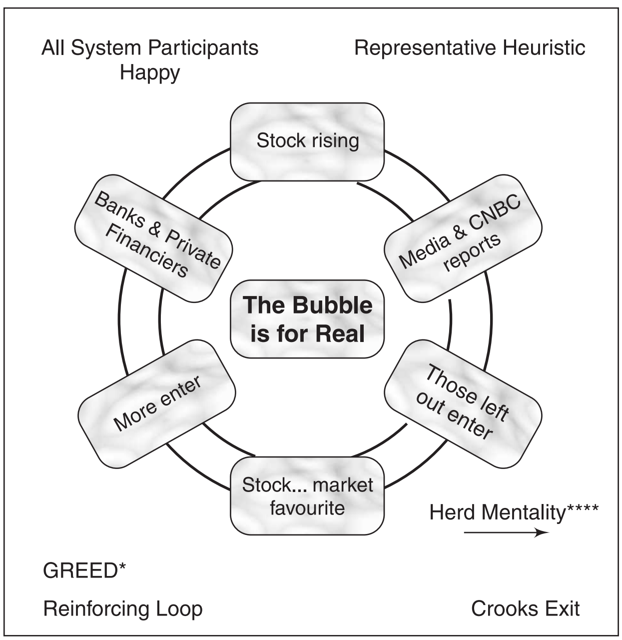


The Bubble Swells

The initial operator and his band of brokers at this stage do not do much except plant stories in the media, generate excitement about the stock by way of research reports, and convince other intermediaries who in turn recommend the stock to their clients. Essentially, their job is done. The stock is on autopilot. The bubble starts ballooning. At this stage the manipulators are able to exit.

Step 3: The net is spread. More stock market participants enter the fray. Banks and private financiers look for lending opportunities. The stock enters the list of stocks against which banks will give an overdraft facility. This further enhances the credibility of the stock. The stock builds huge volumes as genuine buying and selling takes place. Enter the media. Stock price movements are flashed on TV screens and analysts recommend it at investment debates. The stocks soar further on reflexivity as

FIGURE 10.3



The Bubble at its Peak

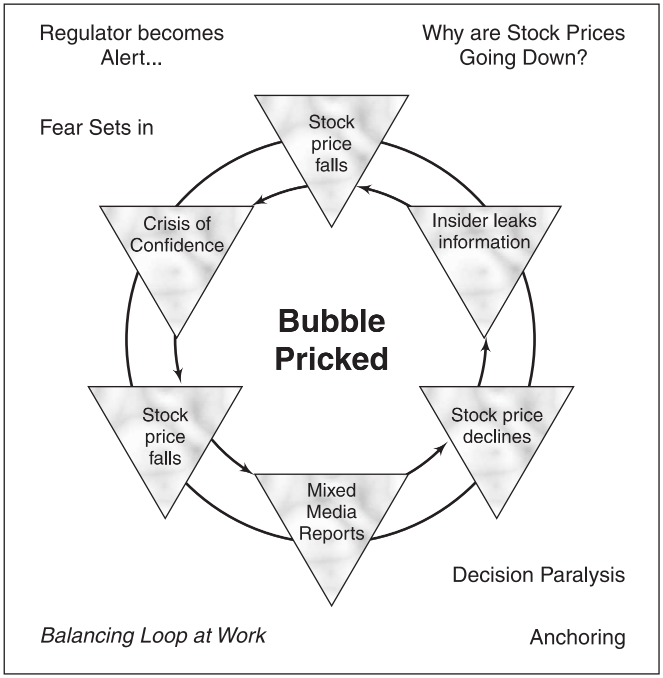
more and more investors enter the market, afraid that they will miss the bus. This herd mentality pushes the stock still further. Now with greed in the driving seat representative heuristic comes into play. Stocks in related industries also rise. The endowment effect makes investors feel that the market is undervaluing their stock and they become more confident of their holding. They become salesmen for the stock and recommend it to their own friends and relatives. Each person becomes an expert in his own sphere of influence. The initial operator then exits and moves to other stocks in the same industry where representative heuristic is at play. The bubble is for real and the reinforcing loop is strong. All the participants of the market are happy, as each one is a winner.

Between the cause and effect there is an interval, the duration of which no one can predict. The balancing loop has to come into play to correct the reinforcing loop, as the goal of every system is to be stable. Nobody can predict when that will happen, but happen it will. The severity of the balancing loop is directly proportionate to the severity of the reinforcing loop.

The Bubble Bursts

Gradually the stock price loses momentum. It does not rise the way it once did. In fact, with the loss of momentum it loses favour with technical analysts. The stock falls and does not recover for a couple of days. Then it falls further and confusion sets in. Insiders get jittery and adverse stories do the rounds. The stock price declines even further on such news. Now, fear and greed pull investors in opposite directions. Those holding the stocks get into decision paralysis and are reluctant to exit should the stock rebound. Some are anchored to the high prices and they feel that this downward movement is an opportunity to accumulate. Sunk cost fallacy drives investors to buy to average their cost of purchase. This leads to small cheater's rallies where the stock goes up for sometime only to fall further. More people get trapped. With declining prices there is a crisis of confidence. The regulator is alerted and starts investigating the fall in stock price. There is more confusion and uncertainty and the stock price falls steeply. The bubble has been pricked.

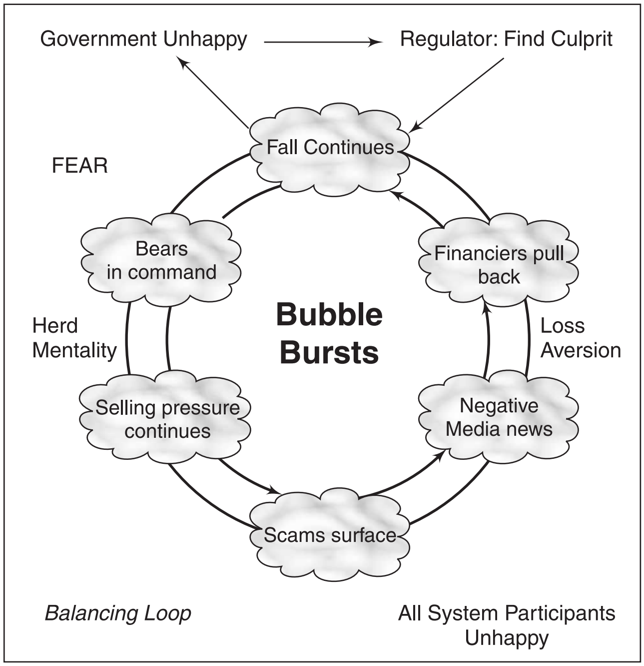
FIGURE 10.4



The Bubble is Pricked

Now the balancing loop accelerates. Negative news further damages stock prices. The banks are forced to call in further margins on their lending. Some defaults in margin calls force the banks to sell the shares. This news dampens the sentiment and banks and financiers stop lending against the stock. With falling prices loss aversion dominates and investors panic. The market enters the bear phase. Now each one wants to get out faster than his neighbour does. Prices decline at a faster rate and news of wrongdoings and scams begin to surface. At this stage no good news about the stock can improve the stock price. The buyers

FIGURE 10.5



The Bubble Bursts

have turned sellers. The balancing loop is correcting the excesses of the reinforcing loop.

Everyone realises that it was a bubble and that it has burst. Investors pay heavily for their greed, and fortunes are lost. The sentiment turns hostile. The government orders the regulator to conduct an inquiry and find the culprit. But that's not easy. This operator knows how the system works and doesn't leave a trail. He understands the psychology of the various participants. This understanding benefits him, as he knows how to use each participant to his advantage. In such a complex stock market system you really don't have trails to fall back on. The regulator needs to know how the stock market system works, rather than go through the task of catching the culprits.

A Summation

"*To know the art of impressing the imagination of crowds, is to know at the same time the art of governing them.*"

—Gustav Le Bonn.

There are two basic questions we must ask and answer about the bull run and the bear bust. In the case of the bull market we need to know the source of the money and from where the money to fuel the boom is coming. In the case of a bear market we must know the source of information and the actor playing on insider information to depress the price.

The purpose of the chapter is to make the reader aware of the working of the system and how behaviour of different participants helps to build a bull run, which is ultimately busted due to a directly opposite behaviour from the same participants. Building a bubble is not easy as there are many variables attached. Nor is it that easy for anyone to rig the markets. Off course bubbles are much more easier to build in bull markets. Out of the many who try many of them fail and at each step the regulator becomes more learned and alert. However there is always someone waiting to beat the system. Investors must understand the workings of the stock market system and become aware of their own behavioural anomalies as well as that of others. As for the regulator it is important to be alert to every irrational or peculiar movement of stock prices.

Now we go to the last chapter of this book where we understand the paradigm of money and why investing in stocks is your gateway to achieving financial freedom.

Reference

1. Joseph O'Connor & Ian McDermott: *The Art of Systems Thinking*, Thorsons Publishers, April 1997.

CHAPTER 11

WHY MUST ONE INVEST

"*Modern man drives a mortgaged car over a bond financial highway on credit card gas*"

—Earl Wilson

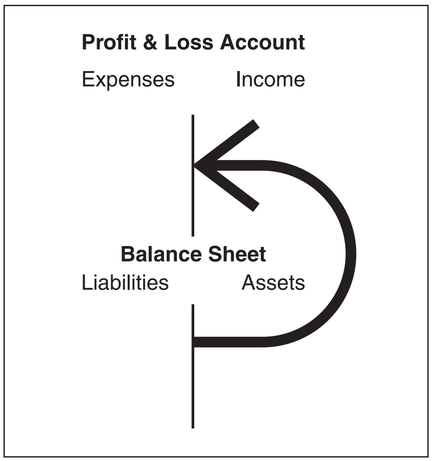
I would like to end the book with some thoughts on the paradigm of money and the basics of financial literacy. These concepts are very well explained in the Rich Dad, Poor Dad series authored by Robert T. Kiyosaki with Sharon L. Lechter, (C.P.A.). When it comes to money most people want to feel secure. We are afraid of losing money, of not having enough to pay our bills. It is this fear not passion that drives our decision-making. If you have a passion for anything you will excel as passion helps you to think positively. But when you are gripped by fear you always play it safe. And when you do that you will never have enough money to fulfil your desires. People believe that money can solve all their problems. But that idea is an illusion. Remember when you were just out of college. You had certain desires to be fulfilled and certain bills to be paid. So you were thrilled when you got a job. You believed that the pay cheque at the end of the month would solve all your problems. When the pay cheque arrived you paid the bills for your desires. You were happy about it, but this happiness was short-lived. As soon as you fulfilled your desires, they increased and you required more money to fulfil those new desires. When you got a hike in your salary the pleasure was again short-lived for your desires increased in proportion to your income. It's a never-ending story and you are always afraid that you will never have enough. So every time you think of money fear grips you and you make decisions not with your mind but with your heart.

What you need to do is to change your paradigm. Passion should drive you not fear. Think of what you can do with money and what you should do to make it. Money is an idea. You see it more clearly with your mind than your eyes. Learning to play the game of money is an important step on your journey to financial freedom.

Learning the Money Game[1]

To be a successful investor you must know how money works. There are some elementary facts about finance that unfortunately are not taught in schools and colleges. So let's begin learning now. What is an Asset? An asset is that which creates an income for the owner. See Figure 11.1

FIGURE 11.1

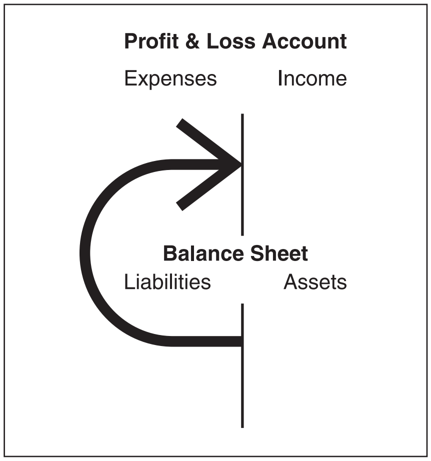


Asset Cash Flow Pattern

What is a Liability? A liability is that which creates an expense for the owner. See Figure 11.2.

Have you been approached by banks willing to lend you money to buy a house? Does your banker say he will help you buy an asset? Attractive deals in the form of low interest rates and long-term mortgage payments are offered. So you go ahead and buy your dream house thinking you are buying an asset. By the definition of an asset it should create an income for you. However, here it is creating an expense in the form of mortgages, taxes,

FIGURE 11.2



Liability Cash Flow Pattern

interest, etc. So common sense demands that you treat it as a liability rather than an asset.

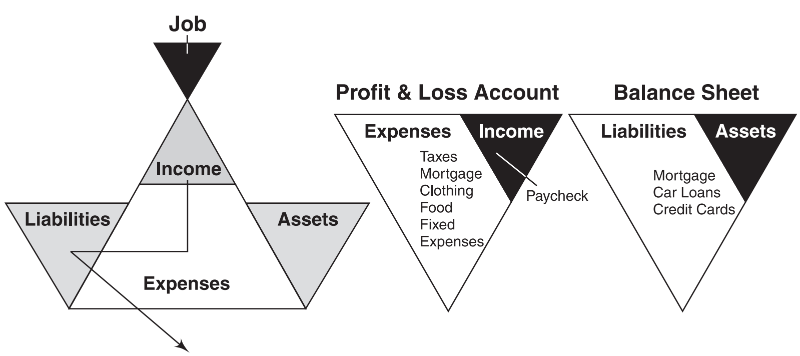
Yes, the banker did tell you that you are buying an asset. What he did not tell you was that he was buying the asset for the bank and a liability for you. There is nothing wrong in buying a house on mortgage, but understand that you are thereby creating a liability for yourself that will entail further expenses. Even if you buy a house with your own money and keep it locked you should treat it as a liability as you are incurring expenses for its upkeep in the form of maintenance charges, property tax, society charges, etc. However, if you buy a house on mortgage and rent it, and your rental is higher than the mortgage, then you have a positive cash flow. The house becomes an asset as it generates an income.

Understanding how assets and liabilities work is basic to financial literacy. Your cash flow is an indication of whether you are building assets or taking on liabilities. If it is coming in you have an asset, if it is going out it is a liability. Once you comprehend this you can work out your own financial future.

Cash Flow of the Middle Class

A majority of the customers of banks and consumer goods companies come from the middle class. It is not because of their inherent purchasing power but because they happen to be attractive borrowers. They are cautious about money yet, as they strive to improve their standard of living they get increasingly into debt. All their lives they work to pay off their mortgages, credit card bills, car loans, etc. They start small, like taking a loan to buy a two-wheeler, but soon their desires increase and they want to buy a car. So they go to the bank and take a car loan to fulfil their desire. With a bigger loan the outgoings increase and they desperately look for a hike in their salary. The hike comes and with it the desire to buy a bigger car. So the bank offers them a bigger loan. And this goes on and on. Expenses mount and any increase in salary is soon nullified. Only the liabilities increase; no effort is made to increase the asset. They don't realise that they have started working for the bank also (by taking up liabilities). Now they work for two bosses. One who provides the job, and the bank to whom they give the interest, mortgages, etc? This is the cash flow of the middle class. See Figure 11.3.

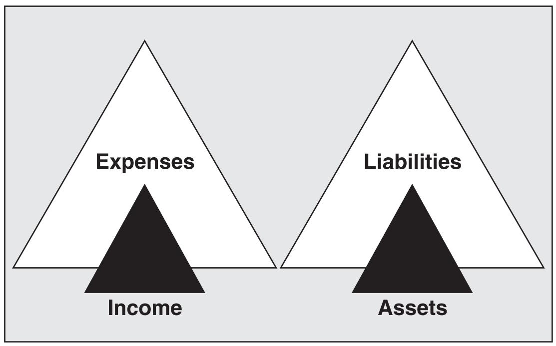
FIGURE 11.3



Cash Flow Pattern of the Middle Class

As the incomes of the middle-class increase so do their liabilities. They make little effort to create assets. Instant gratification and financial illiteracy dominates their decision-making. They believe they are creating assets in the form of house, car, etc., whereas they are only creating liabilities and increasing their expenses. See Figure 11.4.

FIGURE 11.4



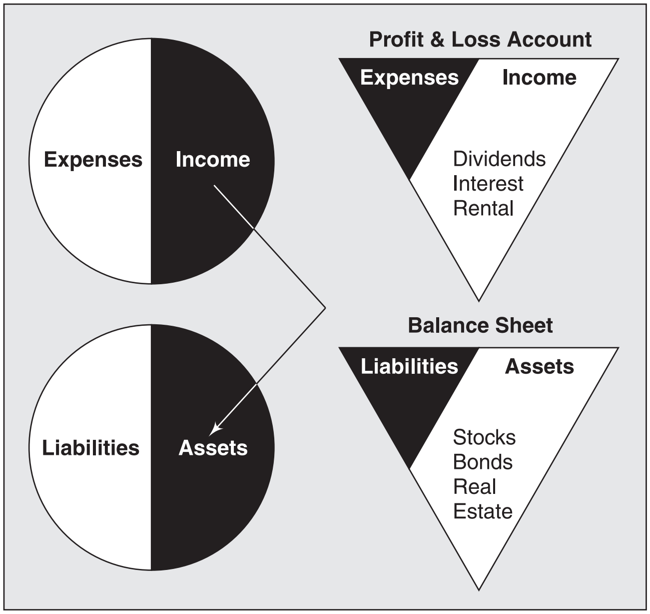
The Middle-Class Status Quo

What differentiates the middle class from the rich is their lack of financial literacy. It is the cash flow that makes all the difference. The rich understand the power of money and they make it work for them. They always have a positive cash flow.

Cash Flow of the Rich

The rich create assets. The assets create income. From the income they create more assets. Even if they buy a house on mortgage, they rent it and the rentals are higher than the mortgage and other charges they pay. So the house is an asset for them even if they take a bank loan to acquire it. See Figure 11.5.

FIGURE 11.5

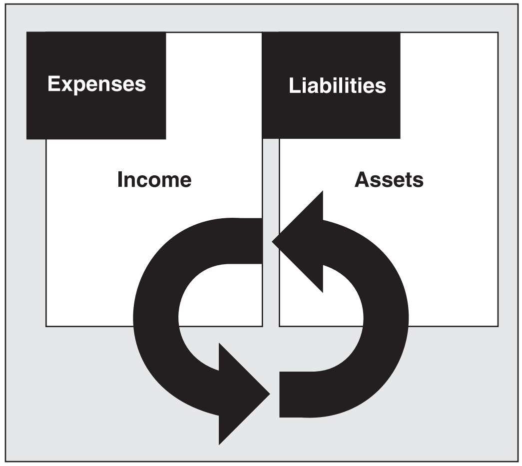


Cash Flow Pattern of the Rich

The balance sheet of the rich consists of assets like stocks, bonds, real estate, etc. Their income derives mainly from dividends, interest, rentals, etc. They make their money work for them and they do not create liabilities. Thus their expenses are under control. Any one can do what the rich do. Firstly it requires discipline to stay the course and avoid instant gratification of desires. Secondly it requires an understanding of the basic principles of assets and liabilities. It's easy to become financially literate if you have the patience.

Some say that money begets money. However many people like film stars, athletes, celebrities who made a lot of money in their heyday have lost all of it in a few years. If money begets money these people should have stayed rich. They lost only because they were not financially literate. They did not know how to harness the power of money. To become rich you must

FIGURE 11.6



The Road to Riches

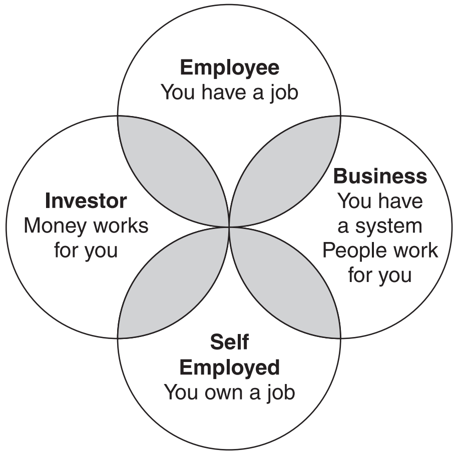
have a passion for money. Making money is a game and you must enjoy playing it. It is tough but worth the trouble.

There are four ways by which people make money and each method forms one quadrant of the income generation circle. Different people fall into different cash quadrants depending upon the source of their cash flow.[2]

1. Employee cash flow quadrant: They work for somebody and earn a salary as employees.
2. Self-employed cash flow quadrant: They are the professionals like doctors, lawyers, architects, who are self employed.
3. Business cash flow quadrant: They are the ones who own a business.
4. Investor cash flow quadrant: They are investors whose income comes from investments.

To which quadrant do you belong?

FIGURE 11.7



Modes of Income Generation

Whichever quadrant you may be, if you want to make your money work for you need to make every effort to get into the investor quadrant. Only then will you be able to achieve financial freedom. A lot of us would love to be in the business quadrant, but few of us are not blessed with the skills or the abilities or the resources to run a business. So the best alternative would be to take a share in a business that is run by someone else. This is nothing but buying a stock of a company. You become an investor in the company and share the profits of the company by way of dividends and capital appreciation. To gain a detail perspective on the above concepts I would strongly recommend to the reader the Rich Dad, Poor Dad Cash flow Quadrant by Robert T. Kiyosaki with Sharon L. Lechter, (C.P.A.).

Which brings us to the most important question: Why are stocks the best form of investment?

Why Stocks

Past performance is no guarantee for future performance. There are no guarantees that any asset will thrive in the future because it has in the past. This leaves us with two choices:

1. Keep hard cash with us and save enough during our working years to last our retirement years; or
2. Take some risks and invest the money in assets that have a reasonable chance of increasing in value over time.

Most of us would not choose the first option because most people cannot save enough to support them in retirement especially when inflation continuously erodes the purchasing power of money. This leaves us with the second choice of investing the money in different asset classes. Here is where the problem of choosing investment options comes in. Stocks would be my preferred choice as they increase in value faster than inflation decreases the buying power of money. The best way for us to have money in the future is to make money in the future. So we need to really forget about which asset class will appreciate in the future but rather focus on owning a business that profitably sells products or services. Of course most of us do not have the inclination, the money or the skills to start our own business, so the next best way to share in the profits is through the stock markets.

Stocks represent ownership interest in businesses. When you invest in stocks you become a partial owner of the concern that will hopefully make money in the future. Stock ownership will reward the owners either because the stock prices go up or because the firm's profits will be distributed as dividends. In the short period stocks may rise for reasons having nothing to do with profitability or dividends, as we saw during the Internet era. But over long periods of time it has been proved that stock prices rise in relation to a company's earnings and distribution of profits to shareholders in the form of dividends, bonus shares and rights. Most people may not be able to consistently identify specific companies that will thrive, so they would do well to employ the services of a professional.

I am not trying to suggest that one should only invest in stocks. It is definitely wise to spread your wealth across various asset classes like stocks, bonds, real estate, art or gold. But if you don't plan to tap into your long-term savings for a period of at least five years, stocks should probably constitute the bulk of your portfolio depending upon your emotional strength to deal with the ups and downs of the market. Even retirees who draw their current income from their investments should have a portion of their savings invested in stocks so that their money will grow faster than inflation. To be a savvy investor one must know the difference between investing and speculating. Investing is intriguing, and if you are still confused I suggest you go back to Chapter 1.

References

1. *Rich Dad, Poor Dad*, Robert T. Kiyosaki with Sharon L. Lechter, (PA), Published by Warner Books.
2. *Cashflow Quardrant*, Robert T. Kiyosaki with Sharon L. Lechter (PA), published by Warner Books.

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