Chapter – II

OBJECTIVE OF THE STUDY
The economic development takes place along with the passage of time. Over the years the economic activities increase in a country. As a result of this, the sum of national products and services increase. The total national income increases, the per capita income and per capita expenditure increases as well. There might be situation of slowing down of the economy and recession but in general we find growth in the economy --- sometimes at a slow pace, sometimes at a fast pace. As a result, the fundamental of the economic entities improve. The fundamental of the corporate sector also improves. It was demonstrated that all events might not be priced immediately in the stock prices at an appropriate level; it may take time to incorporate events into the prices. But, eventually, all the events get priced in someway or the other. So, the share prices as a whole should have an upward trend.

2.1 Economic Scenario in Indian Context
In the present context of India, the case of Liberalisation, Privatisation and Globalisation (LPG) should be considered. From the mid eighties the government of India started to adopt the policy of economic liberalisation. Opening up of the economy through liberalisation has enhanced the importance of the stock market in the Indian economy. The government policy was intending towards not to interfere too much in developing the economy. It rather wanted the economy to depend more on the market mechanism. Hence, the policy was to open up many sectors to the private enterprises that were reserved earlier for the public sectors only. It deliberately loosened its grip over starting of enterprises by abolishing licensing system. The government advocated the privatisation of the Public Sector Enterprises in different forms. The government policy is for more private participation in the industrialisation of the economy. Along with the Foreign Direct Investment (FDI) and investment by domestic industrialists, the government induces retail and institutional

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private participation to the industry through the stock market. Due to this, the
government also put forward reforms process in the stock market to make it a
modern, transparent and efficient system. During the period of economic
liberalisation, the government reduced interest rate in a phased manner to ensure
low cost fund to the industry in one hand and at the same time wanted to discourage
investment in fixed return financial instrument. This way government wanted to
induce the savings of the common people in the stock market directly.

2.1.1 Impact of Economic Liberalisation

The government of India initiated the policy of economic liberalisation that is
supposed to improve the economic development. So, apart from the normal
economic growth there should have been growth due to the economic liberalisation
also. The government is of the opinion that the process of economic reforms has
brought tremendous improvement in the economy. There is no denying the fact that
fundamental factors affect the stock market. It is said that stock market is the
barometer of the industrial environment of the economy. In this context, the positive
result in economy as claimed by the government should be reflected in the stock
market also.

2.1.2 Economic Liberalisation: Inflows from FII

The economic liberalisation has induced Foreign Institutional Investors (FII) to invest
in India. Presently, there are as high as eight hundred eighty two FIIs registered to
operate in India as on the financial year ended 31st March, 2006. In the post­
liberation era, India is one of the most preferred destinations of the Foreign
Institutional Investors. As per Morgan Stanley Composite Index (MSCI), India is
eighth preferred destination of the world as on 31.3.03. The rank has improved in the
past two years. The net investment by FIIs during the calendar year 2004 was Rs.
38, 965 cr. and during calendar year 2005 the it was Rs. 47,181 cr. Up to date total
accumulated net investment by FIs in the Indian stock market has risen to around two lakh crores in rupee terms. From the theory of demand & supply we understand that the higher cash inflow might have increased the share price without caring for fundamentals.

2.1.3 Impact on the Stock Market

The return from the stock market of India should be high enough to corroborate the above fact due to economic liberalisation and cash inflows by FIs. In fact, economic liberalisation has started from mid eighties. So, twenty years have been elapsed since then. It is high time to gauge the impact of liberalisation on the stock market. Had there been any impact on the stock market that should have come in this period only. In other words, the growth of Indian stock market should have been very high in this period if there is really any impact of liberalisation on the stock market.

Proposition I

The above discussion leads us to a proposition that the return from Indian stock market should show stupendous growth during 1991-2004.

2.2 Some features of the Stock Market

The stock market is very much volatile in nature. So, it is very difficult to measure representative return of the stock market. Let us discuss different features of stock market to understand how the return from the stock market could be measured. In this context, it may be important to discuss three aspects of the stock market the Efficient Market Hypothesis (EMH) irrationality and systematic pattern of the market.

2.2.1 Efficiency of the Stock Market

The market efficiency implied that all known information is immediately priced and reflected in the share prices. So, no information can be used to gain return. In the
EMH, the only price changes that would occur are those that result from new information. Since, the nature of information is random in its appearance --- positive and negative news come unpredictably. So, period-to-period price movement would also be unpredictable and random. In other words, if successive bits of new information arise independently across time and if noise and uncertainty concerning intrinsic value does not tend to follow any consistent pattern, successive price change of a common stock is independent. The level of stock prices under these conditions, describe what statisticians call a ‘random walk’ and physicists call Brownian motion. The author of the book “Money Game”, Adam Smith (pseudonym) commented, “Prices have no memory and yesterday has nothing to do with tomorrow.” It is an important property of such a market, so that one might do as well flipping a coin to decide instead to spending time analysing past price movements. If the prices of all the shares move randomly the sum of the movement should not only be random but might be somewhere near zero as well. There are several important studies to support at least some sort of efficiency of the stock market. Such as Fama (1991)\(^{10}\), Dhankar (1991 \(^{11}\), 1993 \(^{12}\), Dickinson & Murugan (1994)\(^{13}\) and Fama (1998)\(^{14}\). One very important study in this regard is Martingale Model by Mandlebrot (1966). The model concludes that even if there is inefficiency in the stock market, it is


not possible to beat the market consistently. Basu (1977) found out the anomaly in
the market. The low price earning stocks yield higher return compared to their peers.
But, investment in stocks with low price earning multiple would not ensure sufficient
return to cover brokerage and cost. This indirectly supports the efficiency of the stock
market in practical sense as well.

2.2.2 Irrationality of the Stock Market
Another issue about the stock market that should be kept in mind is irrationality. In
this respect Graham & Dodd (1934) commented long back. They are of the opinion
that the stock market is not a weighing machine to get an exact objective result. They
rather compared the stock market as a voting machine, where on countless
individuals register choices which are partly of reason and partly of emotions. No one
knows when the market would get rational and when it would get irrational. Thus, the
sum of reason and emotions can make the market irrational as a whole and hence
unpredictable. Another very important component of stock market volatility that
causes irrationality is noise trading. The noise trading is the trading by investors
whose demand for shares are determined for factors other than their expected return.
So, Bayesian theory gets violated. This noise trading causes transitory component in
the stock prices.

The ‘trend chasing’ is again another important cause of irrationality of the stock
market. The principle of trend chasing is that it does not care for fundamental worth
of the investment. There are several forms of trend chasing. Sometimes, people fall
in to the trap of Feed Back theory. The standard feed back theory raises the issue of

15 Benoit Mandelbrot (1966), ‘Forecasts of Future Prices, Unbiased Markets and
16 S. Basu (1977), ‘Investment Performance of Common Stocks in relation to their price-
no.3, pp. 663-682.
17 Benjamin Graham, David L. Dodd & Sidney Cottle (1962), Security Analysis: Principles
speculative bubbles. The speculative bubble arises when market prices as a whole rise substantially, this creates many success stories of investors and these stories entice the potential investors, who naively imagine that the same success will come to them if they invest too. Again, substantial decrease in market prices creates many stories of investors' failure and these discouraging stories drive investors away from the market.

There is another cause of irrationality. Many investors just extrapolate the recent result into the future. The trading by the trend chasers overvalues the firms that have done well in the recent past. On the other hand, those firms that performed poorly in the recent past would be sold and would be avoided by the trend chasers that would bring down the price of the share illogically. Due to the existence of over reaction and under reaction of the investors many a times instead of being satisfied with the justified price wait for the overreaction or under reaction to happen so that they can exploit the situation and get some extra return. It is showed by the researchers that it is not only the novice or retail investors who react disproportionately but also the professional experts and efficient fund managers and institutional investors also do the same mistake.¹⁸ Lakonishok, Shleifer and Vishney (1994) offered an agency explanation for this.¹⁸ The investment fund managers might be aware of the expected return associated with value stocks, but nonetheless prefer growth stocks because these are easier to justify to sponsors or higher authority. Some fund managers want to improve their curriculum vitae by doing some spectacular performances in the short span that leads them to take improper decision.²⁰ Hong & Stein (1999) comments that if information diffuses gradually across the population, prices under

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²⁰ ibid
react in the short run\textsuperscript{21}. The under reaction means momentum traders can make profit by trend chasing. However, if they can only implement the simple trend chasing then their attempts must inevitably lead to overreaction at the long run. In this light, we wish to analyse the stock return in the long run to check whether the stock prices of India is mean reverting or over reacting or not.

2.2.2.1 Effect of Irrationality

All these irrationality leads us to conclude that there is no specific pattern in the stock market. So, it seems that there can not be any representative return in the stock market. If anyone tries to find out true representative return of the stock market, he may get a return figure near zero because of this inconsistent volatility.

2.2.3 Systematic Pattern in the Stock Market

It is worthwhile to mention that some systematic pattern of stock prices and portfolios that were first observed from the mid eighties. Lehman (1990)\textsuperscript{22}, Bremer & Sweeney (1991)\textsuperscript{23} and Fabozzi (1995)\textsuperscript{24} observed return reversal in the short run. Poterba & Summers (1985)\textsuperscript{25}, Barberis (2000)\textsuperscript{26} and Lakhonishok, Shleifer and Vishney (1994)\textsuperscript{27}


observed that there are upswings and down swings in the market but long-term tendency is to reverse to the population mean. Hirchey (2003) observed that the price may not revert to mean but certainly there are instances of price reversals.28 So, due to price reversal the prices are bound to move in opposite direction after initial movement. It gives the impression that slope of long-term trend would be close to zero. In spite of specific pattern in the stock market, all the above discussion lead us to believe that gain of the investors in the stock market is equal to the loss of the other investors. The net gain of all the investors is equal to zero. In this context, some believe the stock market to be a "Casino" 29. In case of a casino, the sum of net expected benefit from all the concerned parties is expected to zero.

Proposition II
The above discussion leads us to second proposition that the return from Indian stock market might not have observed significant growth even during 1991-2004. Two convincing and contradictory Propositions I.

2.3 Three Issues to Determine the Return
Three issues are very important in this respect to gauge the return from the stock market. Those are investment horizon, the comparability and stock indices.

2.3.1 Case for Long Investment Horizon
Investment horizon is an important issue at the time of calculating stock market return. The different investment horizons yield different return in different time frame. The stock market is riskier in general. Some investors and academicians think that one can overcome some uncertainty or reduce risk when short-term gain be is high

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be it in the form of high dividend yield and short-term capital gain. That is one reason to keep the risk low by keeping short investment horizon. On the basis of this psychology, desperate attempt to reduce risk in the short-term makes the market more volatile and hence more risky. So, instead of reducing risk, short investment horizon increases risk in practice. The short horizon return would in no way be the representative market return. The long-term return may be much more acceptable as market return. It may be said that, higher the return horizon, more representative would be the return figure. So, instead of short-term return in this paper we have focused on long-term return. But, different studies on long-term suggest that there is a specific pattern which might be important to arrive at any conclusion.

2.3.2 Comparison of Growth of the Stock Index

The absolute return or growth does not speak much. A comparison always would be more meaningful to the analysis. So, it is decided to compare the return of the Indian stock market with some other countries to have an idea about the return about the stock market in general and the return from Indian stock market in comparison to other countries in particular.

2.3.3 Stock Index reflects the Market

It is difficult to determine acceptable rate of return from the stock market. During the period, prices of some stocks grow stupendously, prices of some stocks falls enormously and prices of many of the stocks remains almost range bound. So, from one, two, three scrips or even some more scrips selected randomly would not be able to represent market return. Rather the return of portfolios or some portfolios might be a good indicator of the stock market. The stock indices are formed taking important industrial sectors of the economy capturing shares of representative
companies of the market. So, return of stock index might be much better reflection of
the return of the stock market.

2.4 Finally
The objective of the study is to determine the long-term growth rate in the Indian
stock market through the stock index and to observe whether the long-term return is
positive and significantly different from zero. It is also to be seen whether the return
from Indian market is comparable to return of other markets of the world.