

## CHAPTER VI

# RETURN ON INVESTMENT

This chapter presents the important investment avenues and estimates the returns on investment.

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An investment is a commitment of funds made in the expectation of some positive rate of return. Investors in the capital market hope to achieve a higher reward than would have been possible by simply placing the same amount of money in a savings account. This reward or return must be measured and estimated for each security being considered. The true investor is interested in a good rate of return, earned on a rather consistent basis over a relatively long period of time (Fisher & Jordan 2)

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The prime goal of investment is getting good returns. The satisfactory levels of return are different for different people.

Investment climate refers to the state of optimism or pessimism in the minds of investors and entrepreneurs with regard to the prospects of an economy. Investment climate can be assessed from the nature of assets acquired by investors (Garg 14).

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Decision making is the process of selecting a particular course of action from among a number of alternatives. Choice and valuation is the central problem in decision making. If the outcome could be predicted with certainty, decision making would be a fairly simple process. Under conditions of uncertainty, it can be realised that many decisions involve risk. Risk is the chance that an objective or an end result, which is sought, may not be realised and loss may occur (Wheeler 230).

A.R.C. Duncan defines decision as the appropriate response of an intelligent being to a situation, which demands action. Decisions are generally taken on the basis of judgement, intuition, common sense, logic and scientific analysis (Duncan 387).

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### **6.1 Gambler, Speculator and Investor.**

To design a sound investment strategy one must clearly understand and distinguish gambling, speculation and investment.

Gambling is based on impulses, which cannot be explained, and a gambler fails to assess the potential risk. Speculation is an act based on tips and rumours for making quick returns. The speculator seeks opportunities promising very large returns earned rather quickly. Investment is based on careful analysis of risks and returns. The investor takes calculated risks and plays safe for moderate gains over a long period.

b) Bear, also known as 'Mundiwalla', is a speculator who sells securities in the expectation of a fall in their prices in future.

c) The difference between investment and speculation really lies in the degree of risk that one is willing to accept for attaining one's goal. An investor generally uses his own money, whereas a speculator often plays around with borrowed money (Grewal 26).

### 6.3 Savings and Investment in India

Speculation is an activity in which shares are purchased without an intention to take delivery and similarly shares are sold without any intention to give delivery. The sellers and the buyers would like to settle the differences in prices without physical delivery of shares (Yasaswy 197).

Table 6.1

## 6.2 Types of Speculators and Investment in India

(As per cent of GDP at current prices)

a) Bull: also known as 'Tejiwalla', is a speculator who buys shares in the expectation of selling it at higher prices later. The usual technique followed by a bull is to buy security without taking actual delivery to sell it in future when the price rises.

b) Bear: also known as 'Mundiwalla', is a speculator who sells securities in the expectation of a fall in their prices in future.

c) Stag: is a cautious speculator who neither buys nor sells but applies for subscription to the new issues expecting that he can sell them at a premium.

Source: Govt. of India, *Economic Survey*, 1998, p.3

## 6.3 Savings and Investment in India

Gross domestic capital formation as a proportion of GDP at current

market prices has continued to surge ahead of gross domestic savings rate to attain a high of 27.3 per cent in 1996-97.

per cent of Gross Domestic Product (GDP) at current market prices in

1996-97. As a proportion of GDP, private savings increased from 23

## 6.4 Types of Investment Opportunities

per cent in 1995-96 to a peak of 24.2 per cent in 1996-97.

An investor with some surplus funds has various alternative avenues of investment. An investor is expected to make a brief survey

Table 6.1

## Savings and Investment in India

(As per cent of GDP at current prices)

	1992-93	1993-94	1994-95	1995-96	1996-97
<b>Gross Domestic Savings</b>	22.0	22.7	25.6	25.3	26.1
Public	1.5	0.6	1.8	2.3	1.9
Private	20.5	22.1	23.8	23.0	24.2
<b>Gross Domestic Investment</b>	23.9	23.3	26.9	27.1	27.3
Public	8.9	8.6	9.0	7.9	7.4
Private	15.1	12.7	16.0	19.3	17.8
<b>Saving - Investment Gap</b>	-0.2	-2.0	-1.9	-0.1	-2.1
Public	-7.4	-8.0	-7.2	-5.6	-5.5
Private	5.3	9.4	7.8	3.7	6.4

Source: Govt. of India, *Economic Survey*, 1998, p.3

Gross domestic capital formation as a proportion of GDP at current market prices has continued to surge ahead of gross domestic savings rate to attain a high of 27.3 per cent in 1996-97.

#### 6.4 Types of Investment Opportunities

An investor with some surplus funds has various alternative avenues of investment. An investor is expected to make a brief survey

of various investment avenues before deciding upon the investment option. Table 6.2 shows the distribution of household savings in financial assets in India.

**Table 6.2**

**Composition of Household Savings in Financial Assets  
( At 1995-96 prices)**

Gross Savings	1980-81	1991-92	1992-93	1993-94	1994-95
1. Currency	13.4	11.6	8.7	13.6	12.6
2. Bank Deposits	45.8	29.3	36.4	29.8	45.2
3. Non-Bank Deposits	34.1	37.7	39.9	43.5	37.8
4. Shares & Debentures	3.4	9.3	9.7	9.0	6.7
5. Units of UTI	0.3	12.8	7.5	4.8	1.8

Source: *Report on Currency and Finance*, RBI, 1994-95, P.2.

Table 6.2 shows that the percentage shares of various financial assets in the total are not stable, but vary substantially from year to year. Distribution of household savings in shares and debentures has gone up nearly 3 times during 1981 and 1991 from 3.4% to 9.3%. In 1992 it further increased to 9.7%. Thereafter it has been declining.

psychological factors involved. As Lord Keynes observes:

There has been a marked shift in the composition of household savings with households putting more savings in financial assets than physical assets, rising from 10.1 per cent of GDP in 1991-92 to 11.4 per cent in 1997-98. The household sector's investment in shares and debentures relative to its total financial saving has been dwindling since 1995-96. As a percentage of GDP, household investments in shares and debentures has declined to 0.3 per cent of GDP in 1997-98 (*Report on Currency and Finance*, RBI, 1997-98 P.3).

## **6.5 Return on Investment**

Individual savings flow into investments for returns. A rational investor is primarily interested in comparative returns from alternative avenues such as equity investment, investment in gold and silver, investment in chit funds, and other investment options. Returns have been defined as the difference between anticipated flows and realised flows of interest/ dividend and asset prices.

### **6.5.1 Return on Equity Investment**

Valuations of the stock market and measurements of return on investment in shares are difficult because of the complexities and psychological factors involved. As Lord Keynes observes:

Table 6.3

Company	Invested in April 1974 (Rs.)	March 1994 (Rs.)	%
Baroda	1000	273780	27278
Kirlosker	1000	140540	13954
Raymonds	1000	30000	3000
Hindustan Lever	1000	128786	12779
<b>Total</b>	<b>5000</b>	<b>1767314</b>	<b>35246</b>

Source: Grewal, P. 28

Investors are attracted to shares mostly because they offer exciting possibilities for getting rich. Dividends and capital gains are the important ingredients that investors regard as return on investment. Capital market has risks but also offers higher returns for the intelligent and knowledgeable investor. Any investor with ample deposits would have become Rs. 30,000 only. Though the example is extreme and exaggerated, it shows the exciting chances of equity investment. To avoid wrong decisions, however, one might need expert and professional guidance. The prospects of equity investment can be substantiated with the help of an extreme example.

The task of measuring the return is complicated by the fact that most of the elements of the return are fluctuating and uncertain. The

**Table 6.3**  
**Prospects of Equity Investment**

Company	Amount Invested in April 1974 (Rs)	Value as in March 1994 (Rs)	Appreciation %
Bajaj	1000	834214	83321
Kirlosker	1000	273780	27278
Raymonds	1000	140540	13954
Indian Hotels	1000	389994	38899
Hindustan Lever	1000	128786	12779
<b>Total</b>	<b>5000</b>	<b>1767314</b>	<b>35246</b>

Source: Grewal, P.28

Table 6.3 above, depicts the unlimited scales of return on equity investment. An investment of Rs. 5,000 in 5 selected scrips turns to Rs. 17,67,314 in 20 years. The same amount of investment as bank deposits would have become Rs. 80,000 only. Though the example is extreme and exaggerated, it shows the exciting chances of equity investment.

The task of measuring the return is complicated by the fact that most of the elements of the return are fluctuating and uncertain. The

common approach adopted is to look at both the mean value of the rate of return and its variance or standard deviation (Gupta 82).

If equities are to be accorded a more respectable investment status and if they are not to remain a mysterious form of investment, measurements of investment performance should be made available as part of regular economic data. Variability in share prices is the reflection of the performance of companies and the dividend potential. There are different market indices to measure the trend of share prices.

### **Security Price Indices**

A security price index is a measurement of the trend of share prices. It is not just an average of share prices, but a weighted index. The different indices widely watched by investors are:

#### **a) BSE Sensitive Index (Sensex)**

The Bombay Stock Exchange (BSE) compiled this index with 1978-79 as the base year. It comprises equity shares of 30 companies, selected on the basis of market activity, and by giving industrial representation. The index for a day has been calculated as the

1987 1986 1985 1984 1983 1982 1981 1980 1979 1978 1977 1976 1975 1974 1973 1972 1971 1970 1969 1968 1967 1966 1965 1964 1963 1962 1961 1960 1959 1958 1957 1956 1955 1954 1953 1952 1951 1950 1949 1948 1947 1946 1945 1944 1943 1942 1941 1940 1939 1938 1937 1936 1935 1934 1933 1932 1931 1930 1929 1928 1927 1926 1925 1924 1923 1922 1921 1920 1919 1918 1917 1916 1915 1914 1913 1912 1911 1910 1909 1908 1907 1906 1905 1904 1903 1902 1901 1900

Source: Matastock, CSE

4500  
4000  
3500  
3000  
2500  
2000  
1500  
1000  
500  
100  
1.0  
0.5  
0.0  
-0.5  
-1.0

percentage of the aggregate market value of the equity shares of the sample companies relative to the aggregate market value of the equity shares of the same companies during the base period

b) BSE National Index

The Bombay Stock Exchange (BSE) compiled a more broad based index, the National Index, with 1983-84 as the base year. This index is made up of 100 scrips quoted on the major stock exchanges of Bombay, Delhi, Calcutta, Ahmedabad and Madras.

c) BSE 200 and Doll

BSE 200 is an index more representative of the recent changes and it is more balanced. It was introduced in May 1994, comprising equity shares of 200 companies selected on the basis of market capitalisation, volume of turnover and strength of the companies' fundamentals. 1989-90 has been chosen as the base year for BSE 200.

1987 1989 1991 1993 1995 1997 1998

Figure 6.1  
BSE Sensex 30 c

Source: Metastock, CSE

percentage of the aggregate market value of the equity shares of the sample companies on that day to the average market value of the equity shares of the same companies during the base period.

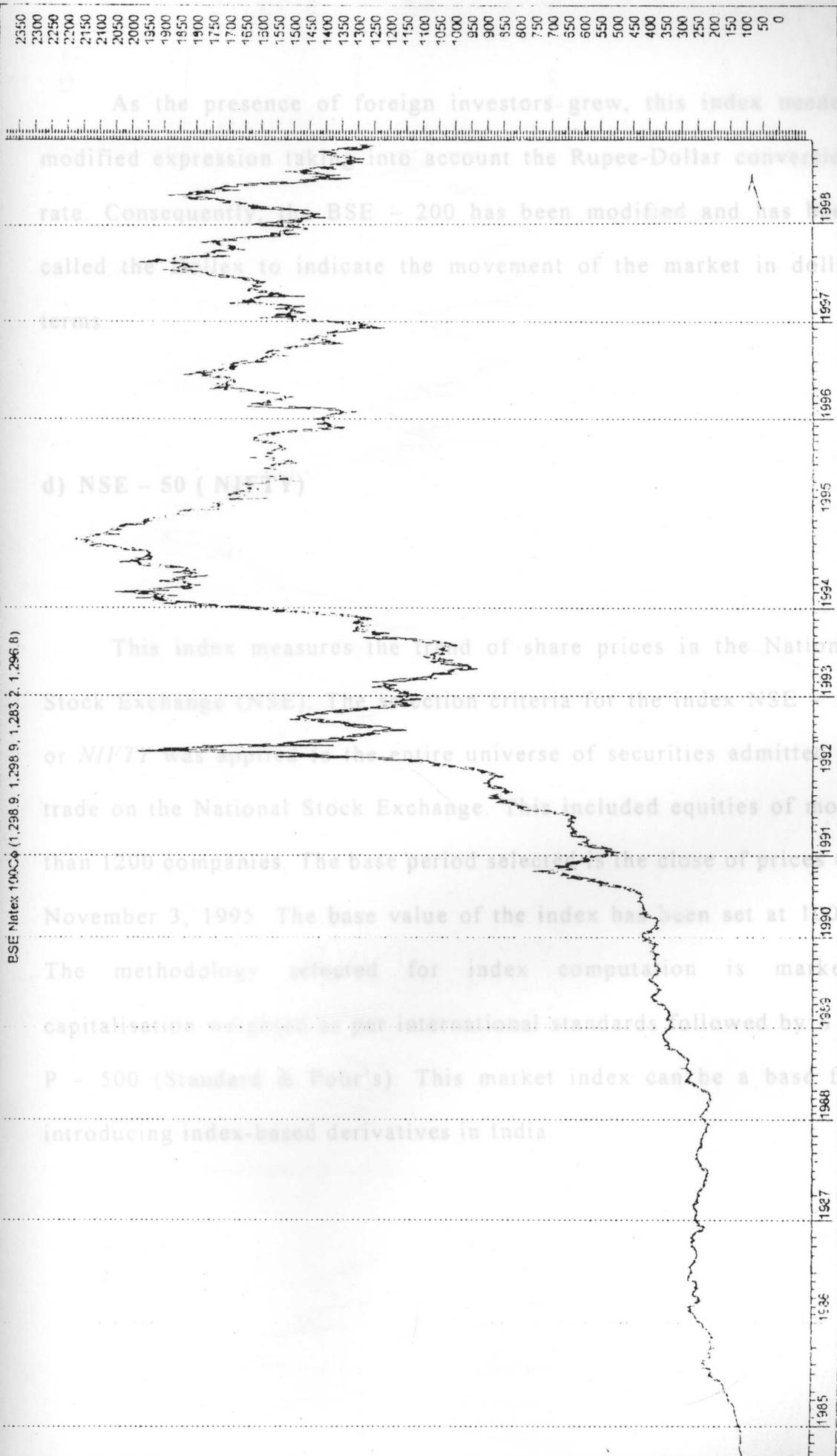
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Source: Metastock, CSE



Source: Metastock, CSE

As the presence of foreign investors grew, this index needed a modified expression taking into account the Rupee-Dollar conversion rate. Consequently, BSE - 200 has been modified and has been called the Nifty to indicate the movement of the market in dollar terms.

d) NSE - 50 (NIFTY)

This index measures the trend of share prices in the National Stock Exchange (NSE). The selection criteria for the index NSE 50 or NIFTY was to include an entire universe of securities admitted for trade on the National Stock Exchange. It included equities of more than 1200 companies. The base period selected for the index was from November 3, 1995. The base value of the index has been set at 1000. The methodology selected for index computation is market capitalisation weighted as per international standards followed by the FTSE - 500 (Standard & Poor's). This market index can be a basis for introducing index-based derivatives in India.

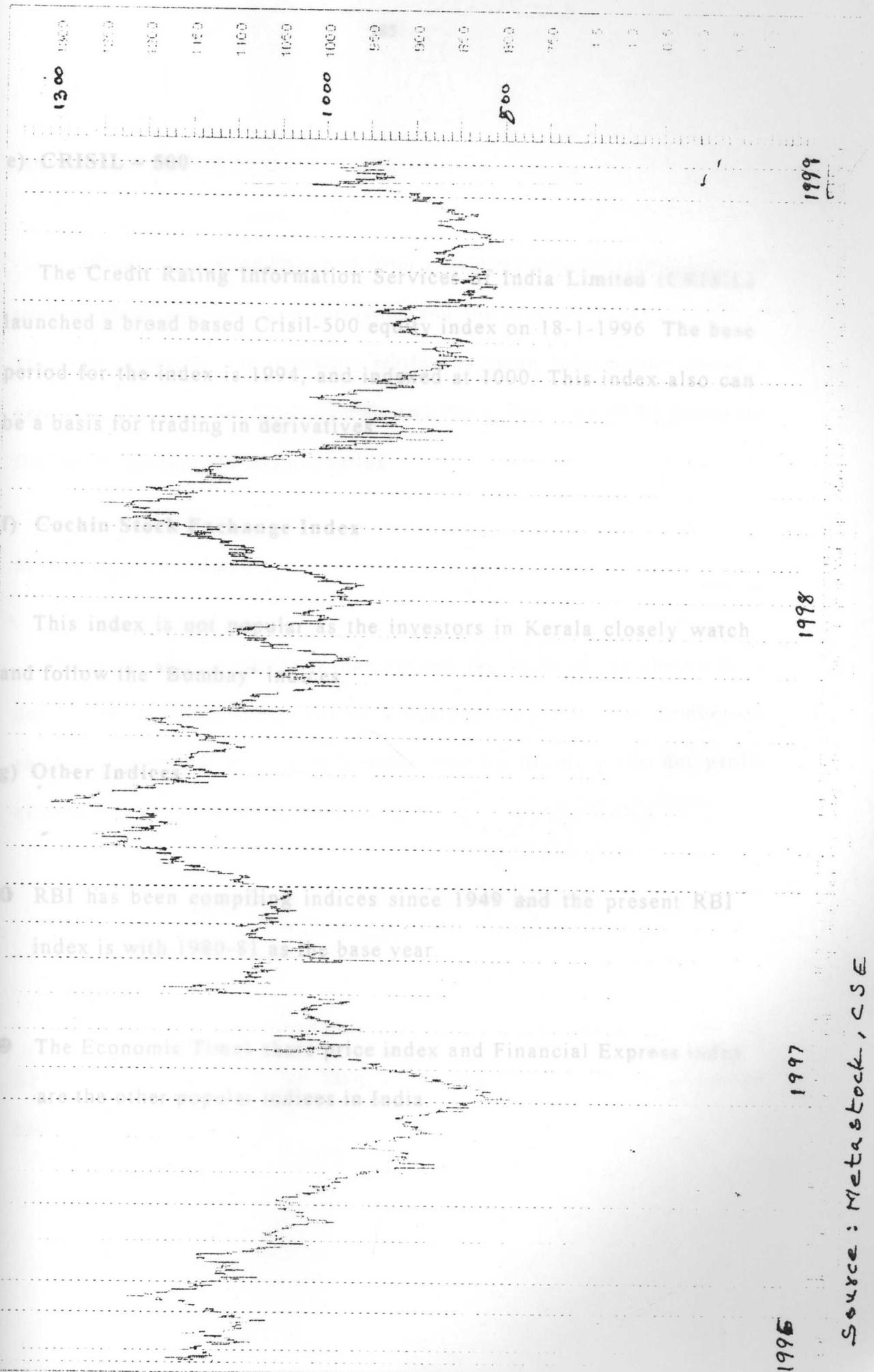
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1995 1997 1998  
Source: Metastock, CSE

Figure 6.3  
NSE 50 Index



e) CRISIL - 500

The Credit Rating Information Service of India Limited (CRISIL) launched a broad based Crisil-500 equity index on-18-1-1996. The base period for the index is 1994, and index set at 1000. This index also can be a basis for trading in derivatives.

f) Cochin Stock Exchange Index

This index is not new, as the investors in Kerala closely watch and follow the 'Bombay' index.

g) Other Indices

1) RBI has been compiling indices since 1949 and the present RBI index is with 1980-81 as base year.

2) The Economic Times Finance index and Financial Express index are the other indices in India.

### e) CRISIL – 500

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### f) Cochin Stock Exchange Index

This index is not popular as the investors in Kerala closely watch and follow the 'Bombay' indices.

### g) Other Indices

① RBI has been compiling indices since 1949 and the present RBI index is with 1980-81 as the base year.

② The Economic Times share price index and Financial Express index are the other popular indices in India.

## Investment Ratios

Investment ratios obtained from a firm's financial statements are used to study the firm's performance and the price of its shares. They are very important for investors while analysing information about a company. Earning Per Share (EPS), and Price –Earning (P/E) Ratio are the two important investment ratios.

### a) Earning Per Share

$$\text{P/E Ratio} = \frac{\text{Market price of the Share}}{\text{Earnings Per Share}}$$

It shows what a company has earned for each of its shares. It is derived by dividing the profit of a company, by the total number of shares outstanding. It is a ratio calculated by dividing the net profit after tax by the number of equity shares.

$$\text{EPS} = \frac{\text{Profit After Tax} - \text{Preference Dividends}}{\text{Total Number of Equity Shares}}$$

The company is completely free from any obligation to pay the EPS to shareholders in the form of dividend as it can be ploughed back into its free reserves.

Rs.19.5 for each rupee of earnings

## b) Price – Earning Ratio

Table 6.4

Cyclical Changes in 'Market P/E Ratios', 1990-1996

(It is the ratio of market price of the share to the earnings per share.

Index – 1990-1996)

It is an important source of identifying the investment worthiness of a

share. It shows by how many times the earnings of a company are discounted in the market. It is the market price of a scrip divided by the earnings per share (EPS).

	Cycle duration (Trough-Peak-Trough)	Trough	Peak	Trough
1	Jan 90-Oct 90-Jan 91	15.8	20.4	15.3
2	Jan 91	$\text{P/E Ratio} = \frac{\text{Market price of the Share}}{\text{Earnings Per Share}}$		21.3
3	Ap 93-Apr 94-Dec 96	21.3	43.3	10.5

P/E ratios provide the benchmark for judging the state of the

stock market. It also provides a very broad perspective on the market's

behaviour and pitfalls. This indicates the required amount of

investment for each rupee of earnings. Most of the investors consider

P/E ratio as an important indicator of the ongoing performance of a

company. The ratio tends to be high in the case of highly rated shares.

Its reciprocal i.e., earnings-price-ratio indicates return on investment.

Higher the P/E ratio, lower the return on investment. For example, P/E

ratio for ACC is 19.5, which means that it requires an investment of

Rs.19.5 for each rupee of earnings.

Table 6.4

## Cyclical Changes in 'Market P/E Ratios', 1990-1996

(Represented by Median P/E Ratio of 100 companies of BSE National Index - 1990-1996)

Cycle duration (Trough-Peak-Trough)	P/E Ratio		
	Trough	Peak	Trough
1 Jan.90-Oct-90-Jan91	15.8	20.4	15.3
2 Jan.91-Apr.92-Apr.93	15.3	37.5	21.3
3 Apr.93-Apr.94-Dec.96	21.3	43.3	10.5

Source: Gupta, P.6.

P/E ratio revealed that Indian shares have never been so cheap over the last 6 years from the beginning of 1990. A study by Dr. L C Gupta, shows that the median P/E Ratio sank to 10.5 in December 1996 and has been hovering around 10 ever since.

According to a detailed study entitled, Indian Stock Market P/E Ratios (1998), conducted by the Society for Capital Market Research and Development, the present average P/E ratio of about 9.1 - 9.5 is

far below its normal historical range of 13 –17. Internationally, an average of 14 – 15 is the norm.

Table 6.6

Return on Investment in Gold and Silver

Table 6.5

Year	Gold (Rs)	Return % Per Annum	Silver (Rs)	Return % P.A.
1975	540		1012	
1953-57		9.86		
1980	1330		2655	32.5
1958-62		15.28		
1985	2130		3955	9.8
1963-67		4.64		
1990	3200		6433	12.5
1968-72		11.33		
1991	3470		6668	3.7
1973-77		7.92		
1992	4300		8000	20.0
1978-82		20.15		
1993	4090		5500	-31.3
1983-87		18.50		
1994	4623		7346	33.5
1988-93		56.92		
1995	4675		6375	-13.2
1993-94		50.00		
1996	5192		7329	14.9
1994-95		47.10		
1997	4700		7325	-0.5
1995-96		31.50		

Source: RBI Bulletin, various issues.

Source : Prasanna Chandra, P.99.

The price and annual returns on investment in gold and silver given in table 6.6 reveal volatility in terms of unsteady price movements and inconsistent returns. Investment in gold was reasonably rewarding during the eighties. But the nineties witnessed consistent fall in returns. It shows negative returns in the year 1997. Return on investment in silver is also seen as not attractive.

## 6.5.2 Investment in Gold and Silver

**Table 6.6**

**Return on Investment in Gold and Silver**

Year	Std Gold Rs. Per 10gm	Return % Per Annum	Silver Rs. Per.Kg.	Return % P.A.
1975	540		1012	
1980	1330	29.3	2655	32.5
1985	2130	12.0	3955	9.8
1990	3200	10.0	6433	12.5
1991	3470	8.4	6668	3.7
1992	4300	23.9	8000	20.0
1993	4090	-4.9	5500	-31.3
1994	4623	13.0	7346	33.5
1995	4675	1.1	6375	-13.2
1996	5192	11.0	7329	14.9
1997	4700	-9.5	7325	-.05

Source: *RBI Bulletin*, various issues.

The price and annual returns on investment in gold and silver given in table 6.6 reveal volatility in terms of unsteady price movements and inconsistent returns. Investment in gold was reasonably rewarding during the eighties. But the nineties witnessed consistent fall in returns. It shows negative returns in the year 1997. Return on investment in silver is also seen as not attractive.

### 6.5.3 Investment in Chit Funds

Table 6.7

Investment Avenues and Return on Investment

The basic principle underlying a chit fund is accumulation of savings. Chit funds are saving devices through pooling of money by a group of persons by way of periodical installments. The unique feature of savings in a chit fund is that there is a sort of compulsion in effecting savings. Chit funds encourage savings not only by the rich, but also by the poor.

No.	Name of Security	Rate of Return p.a.
1	Post-office Savings Bank Accounts	5.5
2	Public Provident Fund	13.0
4	Bank Fixed Deposits	9 to 12
5	Post-office Recurring Deposit	13.5
6	Annual Savings Scheme	11
7	Vikas Patra	13.43
8	Investment in Bank Fixed Deposits	12 to 15
9	Debentures	14 to 17
10	Cumulative Preference Shares	10
11	Preference Shares	10
12	ELI (Employee Lending Institution)	10
13	PSU Bonds	9 to 13
14	Equity Shares	Variable
15	Chit Funds	15 to 30

While savings in banks and other institutions are made out of residual income, the subscriptions to chit funds are unavoidable expenditure on the part of the subscribers. While the depositors in a savings institution get back only his total savings at any time, the saver in a chit fund can take the future savings as well in advance. Chit funds offer, average returns of 15 to 30 per cent per annum. An auction chitty connects the borrowing class directly with the lending class. Since there are more than one borrower competing for the same amount, a competitive rate of interest is offered.

Due to the extreme difficulty in procuring reliable information on real estate investments, and the reluctance of the people to reveal data on those areas, returns on real estate investments have not been worked out.

## 6.6 Simulation Exercise

## 6.5.4 Other Investment Options

**Table 6.7**  
**Investment Avenues and Return on Investment**

No	Name of Security	Rate of Return p.a.
1	Post-office Savings Bank Accounts	5.5
2	Savings Deposits	4.5
3	Public Provident Fund	12.0
4	Bank Fixed Deposits	9 to 12
5	Post-office Recurring Deposit	13.5
6	National Savings Scheme	11
7	Vikas Patra	13.43
8	Company Fixed Deposits	12 to 15
9	Debentures	14 to 17
10	Cumulative Preference Shares	10
11	Preference Shares	14
12	UTI / Mutual Funds	Variable
13	PSU Bonds	9 to 13
14	Equity Shares	Variable
15	Chit Funds	15 to 30

Source: Avadhani, P.36

Bank deposits, Post Office Savings, Public Provident Fund and Mutual Funds are some other investment options available to the investors. An overview of investment options and returns are given in table 6.7.

## 6.6 Simulation Exercise

**Table 6.8**  
**Investor Preference to Investment Channels**  
 (A simulation exercise)

Investment Channels	Amount offered for Investment (Rs.)			
	50,000	1 Lakh	5 Lakh	10 Lakh
Gold	9.27	6.12	3.45	2.30
Real Estate	5.17	11.63	57.15	62.31
Shares	29.96	26.67	11.63	9.07
Debentures	3.04	4.15	1.69	1.61
Bank Deposits	23.82	18.15	7.77	5.77
Company Deposits	5.65	5.31	3.24	3.60
Mutual Funds	10.54	11.90	3.87	2.68
Private Financiers	3.29	3.00	1.54	1.17
Others	9.26	13.07	9.66	11.49
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

Source : Survey data

In a simulation exercise, in the event of offering different investment amounts, exclusively for investment purposes, the investment preference of individual investors to various investment avenues could be ascertained. As shown in Table 6.8, investors offered lower

amounts prefer investment in shares closely followed by bank deposits.

Individuals offered higher amounts go for investment in real estates.

It shows that investment in real estate is a rising function of income and invests 60 % of the increased income in real estate.

The table also reveals that individuals offered Rs. 5,000 and Rs. one lakh behave more or less similarly. People offered higher amounts, say Rs. 5 lakhs and Rs. 10 lakhs too behave similarly.

#### 6.7.1 Internal Rate of Return (I.R.R)

Investment avenues like Private Financiers, Company Deposits, Debentures; etc. attract less attention of the investors.

A genuine promoter of a company has to honour the shareholders. And the real way to honour the shareholders has been by giving better returns on their investment. Contribution to shareholder spectrum of investment goals. Profession-wise; bank employees and professionals take high risk and they do not restrict themselves to the performance of companies. The return varies from company to company. The overall return realised by investors consists of capital gains and dividends. The method used has been the Internal Rate of Return (IRR) which measures all the inflows and outflows from a given investment. Teachers and retired people give more importance to safety and invest in fixed income instruments like bank deposits, mutual funds and savings schemes.

### 6.7 Estimates of Return on Investment

Internal Rate of Return is the discount rate which equates for a given period, the present value of the cash inflows from the holding of shares to the acquisition cost. It is the rate of discount that equates

cannot afford to ignore the interests of the investors. The Internal Rate of Return (IRR) on investment is an important index of the performance of companies. Forty-five companies, whose shares are widely held by the respondents, have been taken up for scrutiny.

### 6.7.1 Internal Rate of Return (I.R.R)

A genuine promoter of a company has to honour the shareholders. And the real way to honour the shareholders has been by giving better returns on their investment. Contribution to shareholder value has been seen as the single most important parameter for judging the performance of companies. The return varies from company to company. The overall return realised by investors consists of capital gains and dividends. The method used has been the Internal Rate of Return (IRR) which measures all the inflows and outflows from a given share investment over a long period, and measures what investors actually gain. It calculates the initial investment outflow, the successive annual inflows in the form of dividends, and the final inflow on the exit date.

Internal Rate of Return is the discount rate which equates for a given period, the present value of the cash inflows from the holding of shares to the acquisition cost. It is the rate of discount that equates

gained by investing in the share of a company over a period of time the initial investment with the present value of future cash inflows. So it is the rate of earning on an investment.

The IRR is a variant of discounted cash flow method of evaluating the profitability of investment proposals and investments already made. The IRR is also known as the Marginal Efficiency of Investment (MEI). Investor returns have been determined by computing IRR expressed as a percentage figure per annum.

The formula used is:

$$P_0 = \frac{D_1}{(1+r)} + \frac{D_2}{(1+r)^2} + \dots + \frac{D_n}{(1+r)^n} + \frac{P_n}{(1+r)^n}$$

where,

- P<sub>0</sub> - the acquisition cost
- D<sub>1</sub>, D<sub>2</sub>... D<sub>n</sub> - the cash dividends received in respective years
- P<sub>n</sub> - the terminal price realised
- r - the IRR per rupee per annum.

60 companies whose shares are widely held by the respondents number of existing and new companies came out with public issues and have been selected for the study. Further it has been narrowed down to many new investors rushed into the market with great enthusiasm 45 subject to the availability of required data. The calculation has been based on the IRR method which estimates what investors actually

gained by investing in the share of a company over a period of time. Initial investment or the acquisition cost has been calculated as the cost of acquiring one market lot (100 shares) in each scrip on the entry date, i.e., April 1, 1991. On non-availability of data on that date, the earliest preceding traded day's closing price has been taken. The sum of the present values of the stream of annual inflows in the form of cash dividends and the terminal price realised over the proposed time period of six years, i.e., till March 31, 1997 has been calculated. The exit prices of the selected shares have been collected accordingly.

**Kerala Based Companies Listed on CSE**

Table 6.9 shows the market performance of 15 Kerala based regional companies listed on the Cochin Stock Exchange. Almost all companies in this category, except one, have reported positive one year IRR for 1992. It may be noted that during 1992, share prices skyrocketed in Indian stock exchanges. Any share, without discrimination, was for own regardless of the prospects of returns. A number of existing and new companies came out with public issues and many new investors rushed into the market with great enthusiasm.

Sl No	Name of the Company	1992 year IRR	1993 2 year IRR	1994 3 year IRR	1995 4 year IRR	1996 5 year IRR	1997 6 year IRR
1	Aplo Tyres	18	21	11			
2	Hanson Mayas	31	-16	03			
3	Cochin Refractories	29	35	45			
4	A Vision & Co	78	0	-02			
5	Kerala Chemicals	07	11	100			
6	Malabar Industries	16	-4	-20			
7	OE Industries	10	3	38			
8	Coastal Systems	22	3	03			
9	Neelgagan	14	0	03			
10	Vedant Woollens	20	-08	21			
11	Caran & Gemini	26	0	09			
12	Vyasa Pharmaceuticals	35	15	14			
13	Bhadrachari Engineering	0	10	-10			
14	Intimated Fabrics	5	18	10			
15	Asa Walaud (Traders)	0	-02	-04			
	Average	14	15.6	14.7			

Source: Survey Data

Barring 1992 - an atypical year - IRR on regional companies

exhibited discouraging trends. If we assume a secure secular return of

Sl.No	Name of the Company	Internal Rate of Return (IRR) Percent per annum					
		1992 1 year IRR	1993 2 year IRR	1994 3 year IRR	1995 4 year IRR	1996 5 year IRR	1997 6 year IRR
1	Appolo Tyres	178	23	11	03	05	-09
2	Harrison Malayalam	61	-16	03	-08	-12	-17
3	Cochin Refineries	329	35	45	29	16	05
4	A V Thomas & Co	278	07	-02	01	-16	-13
5	Kerala Chemicals	807	112	100	70	42	22
6	Malabar Buildings	116	-43	-20	-07	-08	-07
7	OEN Connectors	210	33	38	09	-09	-02
8	Concert Spices	122	34	03	08	-28	-23
9	Nedungadi Bank	14	09	03	03	06	06
10	Veera Treat Wood	-20	-08	21	09	-29	-34
11	Carbon & Chemicals	66	07	09	01	01	01
12	Vysali Pharmaceuticals	85	15	14	23	04	04
13	Bhageeratha Engineering	0	10	-10	19	-08	-08
14	Integrated Rubian	255	18	10	19	-24	-19
15	Aspin Wall and Co. (Trav.)	40	-02	-04	-01	-19	-16
	Average	169.4	15.6	14.7	7.7	-5.3	-7.3

Source: Survey data

Barring 1992 – an atypical year – IRR on regional companies exhibited discouraging trends. If we assume a secure secular return of 12 per cent in the form of opportunity cost, the investors have been incurring heavy losses. Five-year and six-year IRR of these companies have shown substantial fall in returns and about two-third of the companies reported negative IRR. This substantiates the finding that investors are not inclined to invest in Kerala based or regional companies.

**Companies Based Outside Kerala and Listed on CSE**

Table 6.10 shows the market performance of 15 selected companies based outside Kerala but listed on the Cochin Stock Exchange. Most of the companies in this category are good performers and investor friendly. 90 per cent of the companies have reported positive IRR. One year IRR calculated for the year 1992, the boom year, shows unusually high positive IRR, nearly 300 per cent per annum. Only one company, out of the 15 has recorded negative returns for the year 1994. Though all other companies have recorded positive returns, the average works out only to one-fifth of 1992. From 1994 onwards, there have been continuous fall in the rate of return. This has been a clear indication of the recent trends in the capital market.

Table 6.10  
IRR of Companies not listed on CSE but permitted to trade

Sl. No.	Name of the Company	Internal Rate of Return (IRR) percent per annum					
		1992 1 year	1993 2 year	1994 3 year	1995 4 year	1996 5 year	1997 6 year
1	Reliance Capital	286	27	45	26	16	17
2	Modi Cement	371	-11	-19	-07	-20	-26
3	Essar Shipping	213	27	59	29	29	-01
4	Jaiprakash Industries	475	54	43	28	04	-05
5	G E Shipping	346	79	71	40	31	24
6	ICICI	982	85	93	58	39	25
7	Lloyds Steel	124	-01	04	12	-02	-14
8	Silverline Industries	03	-09	38	43	18	05
9	Sanghi Polysters	710	54	77	36	13	-05
10	Essar Steel	232	08	25	12	-04	-11
11	Svam Software	0	0	01	25	-06	-08
12	Apple Finance	190	38	36	21	05	-04
13	Chokkani International	314	02	-12	-09	-22	-28
14	Blue Blend	138	-09	08	15	-05	05
15	D C L Polyester	198	11	38	20	01	-13
	Average	305.5	23.7	33.8	23.2	6.5	-2.6

Source: Survey data

## Companies Not Listed on CSE but Permitted to Trade

Sl.No.	Name of the Company	Internal Rate of Return (IRR) per cent per annum					
		1992 1 year	1993 2 year	1994 3 year	1995 4 year	1996 5 year	1997 6 year
1	Associated Cement Company	233	19	23	22	19	06
2	Reliance Industries	289	31	48	29	19	21
3	Tata Iron and Steel Co.	228	0.3	14	13	09	05
4	Finolex Cables	252	116	171	100	63	40
5	Hotel Leela Venture	390	52	139	85	64	44
6	Nagarjuna Fertilizer	425	09	47	38	22	16
7	TVS Electronics	197	-10	-01	30	08	03
8	Vedecocon Appliances	128	-05	21	-01	-14	-48
9	Vedecocon International	113	12	28	03	-08	-43
10	Wipro Limited	126	30	50	57	49	37
11	Hindustan Lever	316	29	93	53	48	46
12	Shree Cement	327	-13	05	13	04	-10
13	TELCO	186	18	40	26	35	23
14	Britania	267	23	42	20	09	11
15	ITC	880	139	106	68	47	49
	Average	290.5	30.2	55.1	37.1	25.0	13.3

Source: Survey data

## Companies Not Listed on CSE but Permitted to Trade

Table 6.11 shows the market performance of 15 selected companies, which are not listed on the CSE but permitted to trade. All the companies in this category have reported positive one-year IRR for the year 1992. Two out of the 15 companies have recorded negative three-year IRR for the year 1994. The average IRR for the year works out to only one-tenth of 1992. From 1993, there has been substantial fall in returns and around 50 percent of the companies reported negative IRR. Six-year IRR for the year 1997 have recorded moderate negative returns.

### 6.8 Conclusion

Institutions come into existence or grow in response to the requirement of time. Mutual trust and confidence become the basis on which the whole complex of financial institutions comes into existence in response to the needs of the society. There are different investment avenues and various investment instruments. The stock market is so sensitive and timid that any one factor can have its repercussions throughout the whole economy. Numerous factors – economic,

political, social, religious, psychological and natural – influence the investors' demand preferences for assets. Greed and fear are the emotions that influence hectic decisions in the industrial securities market, which make an investor a speculator or a gambler.

Distribution of household savings in shares and debentures in India has recorded a remarkable three- fold increase (3% to 9%) from the 1980s to 1990s. The prime objective of investment has been getting good return on funds invested. On a debenture an investor expects to receive interest and on a stock, capital gains and dividends. While most of the investment outlets have the unique feature of stability of return, investment in industrial securities offer infinite chances of earning fabulous gains. An investor expects price appreciation. But many stocks do not appreciate at all. An analysis of the per- share earning of the firms is a must before considering investment. But the past performance of equity may not be an indicator of the future course of performance. The price of equity shows changes from year to year and may depend on the amount of dividend declared each year.

Return on equity investment is highly variable. To accord a more respectable investment status to equities, some measurement of investment performance is imperative. The Internal Rate of Return

(IRR) on investment is an important index of the market performance of companies. Estimates on IRR of different categories of companies show that the worst performers are Kerala based or regional companies and most of them have recorded negative IRR.

## CHAPTER VII

### SUMMARY OF FINDINGS AND RECOMMENDATIONS