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A COMPARATIVE STUDY OF RETURN ON INVESTMENT OF SELECTED PUBLIC SECTOR AND PRIVATE SECTOR COMPANIES IN INDIA

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ABSTRACT

Out of two fields – public sector and private sector in the Indian economic structure, public sector units were considered to be the main engine of growth and accordingly many areas were reserved for public sector with few exceptions. But after a long period of operation, the functioning of public sector units in the matter of utilization of public money began to be questioned. As a result, in the new industrial policy of 1991, the thrust of industrialization has been shifted from nationalization to privatization and many areas were opened to the private sector with a view to initiating healthy competition between the public sector and private sector which, in turn, might lead to the economic progress of the country. In this backdrop the author has found it necessary to judge the capacity of earning reasonable return by effective investment and optimum utilization of procured funds on the part of selected public sector and private sector units. Hence an attempt has been made in this paper to make a comparative study of financial performance based on ROI of some selected public sector and private sector companies belonging to the steel industry in India being one of the pillar sectors of Indian economy. The study has found that on average the private sector companies achieved relatively better performance from the view point of earning return and maintaining consistency than the public sector companies. Some measures have also been suggested in this paper to uplift the performance of public sector companies.

KEYWORDS
Financial Performance, Public Sector and Private Sector units, ROI.

INTRODUCTION
The growing pace of industrialization, world-wide intense competition in liberal economic scenario, fiscal and monetary policies of the government have placed a number of challenges on the survival and growth of Indian corporate sector. One such challenge, perhaps the most important one, is effective investment of procured funds and earning reasonable return by their optimum utilization. How far a corporate enterprise is successful in combating this inevitable challenge can be judged by the rate of return earned on its investment. Hence the present researcher makes here a humble attempt to judge the return on investment of some selected public sector and private sector companies on a comparative basis. Out of two fields-public sector and private sector in the Indian economic structure, public sector units were expected to be the main engine of growth. But the questions have raised among various corners about their style of functioning and achievements over the years. The past controversy over the issue of privatization of IISCO a few years back is a testimony to the fact. There has been a considerable criticism about the performance of public sector units over the years. Misuse of funds, under-utilization of capacity, poor financial management, managerial problems etc. are only a few among a large number of complaints raised over time against the public sector undertakings leading to their privatization in some inevitable cases. All these have an adverse effect on the earning capacity of the companies. It is the intention of the present researcher to judge the validity of the objections raised against the public sector companies on the basis of facts rather than pre-conceived notions. Such judgement is done on the basis of return on investment as it is one of the most important criteria of judging the overall performance of a firm. In this backdrop, a comparative study of return on investment of public sector and private sector companies on the basis of empirical evidences finds importance to judge their relative performance. For the purpose of present study, Indian steel industry has been selected as it is one of the pillar sectors of the Indian economy.

In fact iron and steel sector is the backbone of an economy. It is one of the primary vehicles of economic development of a country. The per capita production and consumption of steel is considered to be the index of development of a country's economic infrastructure. Increase in the use of iron and steel leads to infrastructural development and rapid industrialization of the country. Steel is considered as a symbol of strength of the economy and a portent of the glory of India of the future.

In the early years, after independence, growth in steel industry was accepted by the national leaders as a pre-requisite for rapid industrialization. This industry was identified as one of the core sectors of the economy and accordingly Government reserved setting up of new integrated steel plants for the public sector only. It was stated in the Industrial Policy Resolution of 1956 that iron and steel industry had been reserved for the public sector only. In 1986 the private sector was allowed to open new units for producing steel using Electric Arc Furnace (EAF) technology. Thereafter in the new industrial policy of 1991, the Government removed iron and steel industry from the list of industries reserved for the public sector and this industry was opened to the private sector. The trade policy has been liberalized for this industry with the exemption of compulsory licensing and with the abolition of pricing and distribution controls.

In fact, the process of globalization has changed the basic focus of business and industrial activities all over the world. Indian iron and steel industry is not an exception to that. Since liberalization of economic and industrial policy of the country, the scenario of Indian iron and steel industry has been changed through a radical departure from the earlier public sector dominated controlled economy to the present private sector dominated market economy. A large number of private corporates have joined the iron and steel sector in various parts of the country. Thus the industry responded magnificently to the opportunities provided by the new policy regime and it has successfully made a transition from a controlled economy to a market-driven economy.

Hence steel is a sector which may be an area suitable for the present study to examine the return on investment of public sector and private sector companies on comparative basis.

REVIEW OF LITERATURE
Over the years, a lot of research works has been done on various aspects of profitability of Indian corporate sector; some of those are briefly reviewed below :

Banerjee, B. (1982) opined in a research article that corporate profitability is influenced by its liquidity in three different manners. Up to a certain level increase in liquidity leads to an increase in profitability, beyond that profitability remains constant with the increase in liquidity up to a certain point and thereafter increase in liquidity leads to decline in profitability.

Das (1998) attempted in his research study to estimate the influence of various factors, endogenous to banks, on return on equity of the Indian public sector banks for which the return on equity has emerged as a significant performance indicator.

A research study has been conducted by **Bose, Santanu Kumar** (2000) to evaluate the financial performance of Indian ports. He used five standard financial ratios viz. (i) operating ratio (ii) return on capital employed (iii) net surplus margin (iv) capital employed turnover and (v) fixed assets turnover ratio to judge the performance of the ports. Performance of the ports was found to be not satisfactory.

Yadav, Jain and Rastogi (2001) found in their research study based on three public sector oil companies that a sound financial performance assumes great importance for public sector undertakings because of their own existence, growth and stability on the one hand and the overall economic development of the country on the other. They mentioned that public sector undertakings have the social objectives along with other multiple objectives, but to serve the society

does not mean running into losses. Absence of profit and prudent financial management practices may bring down the growth rate and reduce their capacity to serve the society. So a sound financial position should exist for growth, stability and fulfillment of social obligations.

The evaluation of profitability performance of public sector banks and non financial non – govt. public limited companies has attracted the attention of some researchers like **Desai, Bhairav H.** and **Farmer, Mayuri J.** (2001) and **Sahu, R.K.** (2000) who have considered various profitability ratios in a single index assigning weights to the selected ratios on some appropriate basis.

A firm level study of the sugar industry of Tamil Nadu was conducted by **Vijaya Kumar** (2002) to find out the determinants of profitability and he found that there were various determinants of profitability viz., growth rate of sales, vertical integration and leverages. Apart from these three variables, he selected current ratio, operating expenses to sales ratio and inventory turnover ratio. The researcher noted in his conclusion that efficiency in inventory management and other current assets were important to improve profitability.

The Information Technology (IT) industry in India is among the fastest growing segments of the Indian industry at present. An attempt has been made by **Hamsalakshmi, R and Manicham, M** (2005) to analyse the financial performance of software companies in India taking a sample size of thirty four covering a period of five years from 1997-98 to 2001-2002. The study examines the structure of liquidity position, leverage position and profitability position on the basis of their average result over the years. The study revealed that liquidity position and working capital were favourable during the period of study. The companies under study relied more upon internal financing than on debt financing i.e. the companies followed a conservative financing policy. Return on investment and return on equity proved that overall profitability position of selected software companies had been increasing at a moderate rate.

An attempt has been made by **Khatik, S.K.** and **Singh, P.K.** (2005) to evaluate the profitability and financial health of IDBI through the application of the technique of ratio analysis. Capital adequacy ratio, non-performing assets, priority sector advances, statutory liquidity ratio, cash reserve ratio and credit deposit ratio have been used in the study and results have been interpreted based on the norms selected by RBI. The study revealed that the bank emphasized on lowering the cost of deposits, improving fee-based income, operational efficiency and managing cost. The challenges facing the bank were massive but not insurmountable. The study findings indicated that IDBI bank has made commendable progress during the last few years.

These are only a few among a large number of research studies undertaken on the subjects. But there is hardly any research work done regarding evaluation of profitability of public sector and private sector on comparative basis. Moreover the same study in steel industry is perhaps untouched by the researchers particularly in the post-liberalization period. This paper is a humble effort to make a comparative study of profitability based on ROI of some selected of public sector and private sector companies belonging to steel industry in India.

OBJECTIVES OF THE STUDY

The present study is conducted to achieve the following objectives:

1. To measure the Return on Investment (ROI) of selected public sector companies individually and as a group by combining their results together
2. To measure the ROI of selected private sector companies in the same way as for public sector companies
3. To make a comparative study of ROI of selected public sector and private sector companies with a view to identifying the sector having better earning capacity.

RESEARCH DESIGN AND METHODOLOGY

SELECTION OF COMPANIES

The above objectives have been pursued considering the case of some public sector and private sector companies belonging to the steel industry in India. According to the Public Enterprise Survey, there are seven public sector units operating in the Indian steel industry. But a large number of private corporates are operating in the steel industry at present. Total eight companies, four each from public sector and private sector, have been selected for the purpose of present study through a screening process based on capital employed in the base year (i.e.1997-98) of the research study. The list of companies so selected in the two sectors are presented below:

LIST OF SELECTED PUBLIC SECTOR COMPANIES

Sl.No.	Names of the Public Sector Companies	Abbreviated Form
1	Sponge Iron India Ltd.	SIIL
2	Ferro Scrap Nigam Ltd.	FSNL
3	Indian Iron & Steel Co. Ltd.	IISCOL
4	Rastriaya Ispat Nigam Ltd.	RINL

LIST OF SELECTED PRIVATE SECTOR COMPANIES

Sl.No.	Names of the Public Sector Companies	Abbreviated Form
1	Arati Steels Ltd.	ASL
2	Isibars Ltd.	IL
3	Bhusan Steel and Strips Ltd.	BSSL
4	Tata Steel Ltd.	TSL

COLLECTION OF DATA

The detailed financial data of the selected companies in the iron and steel industry have been collected from PROWESS, one of the most reliable database software package released by the CMIE. The researcher has also visited the websites of individual companies and other relevant websites for collection of data in some cases.

PERIOD OF STUDY

The data for a moderately lengthy period of ten years 1997-98 to 2006-07 during post-liberalization period is available to the present researcher from PROWESS database. Hence this period has been considered for the purpose of present study.

TECHNIQUES OF ANALYSIS

For analyzing the data simple mathematical tools like ratios, percentages, etc. have been used. Financial ratio analysis is the important and powerful technique of evaluation. Hence Return on Investment (ROI) ratio has been used in the study to compute ROI of selected companies. Moreover statistical techniques like measures of central tendency, measures of dispersion etc. have been used to analyse the consistency, stability and overall trend in return on investment of the selected companies.

LIMITATIONS OF THE STUDY

The present study suffers from the following limitations:

1. The study is based on secondary data collected from published sources. It was not possible to collect primary data from the company's office. So it is subject to all limitations those are inherent in the published financial data.
2. The present study is limited to ten years only.
3. The sample companies considered out of a large population may not be the proper representative of the entire public sector and private sector. So the results derived from this study may not necessarily reflect the picture of entire public sector and private sector.

RETURN ON INVESTMENT RATIO

This ratio has been used in the study to derive results of the selected companies from their empirical data. This ratio expresses the relationship between earnings before interest and tax (EBIT) and total tangible assets of the firm. In calculating total tangible assets, intangible and fictitious assets are excluded. This ratio is alternatively known as return on asset ratio. EBIT is the operating profit belonging to all sources of finance. This ratio throws light about how efficiently owner's fund and creditors' fund are being used. These funds are invested in the total assets of a firm. So in other words, it reflects the efficiency with which total asset of the firm is employed. This ratio helps to measure earning power of total assets, overall profitability and managerial efficiency of the business. Higher the ratio greater is the efficiency in utilizing total assets, higher is the profitability, and better is the management efficiency. A firm having higher return than that of other similar firms can attract more funds even at a lower rate.

RESULTS AND DISCUSSION

It is now aimed at examining the performance of selected companies by the Return on Investment (ROI) Ratio as depicted in Tables 1 and 2 below. Company-wise ROIs of selected public sector and private sector companies over the period of ten years have been presented in Table 1 and Table 2 respectively. The average, standard deviation and co-efficient of variation relating to ROIs of individual companies over a period of ten years have been calculated and also presented in last three columns of these tables.

TABLE 1: RETURN ON INVESTMENT RATIOS OF SELECTED PUBLIC SECTOR COMPANIES OVER TEN YEARS FROM 1997-98 TO 2006-07(IN %AGE)

Name of the Companies	1997-98	1998-99	1999-2000	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	Average	S.D.	C.V.
Sponge Iron India Ltd.	5.55	3.58	1.48	-5.95	-13.99	NA	NA	10.43	26.24	17.59	**5.62**	**12.71**	**2.26**
Ferro Scrap Nigam Ltd.	16.43	14.31	14.88	14.96	15.40	12.17	9.62	5.44	5.61	5.23	**11.41**	**4.54**	**0.40**
Indian Iron & Steel Co. Ltd.	-3.03	-6.23	-20.27	-12.40	-22.66	-22.26	-26.34	-25.17	6.19	9.36	**-12.28**	**13.19**	**-1.07**
Rastriaya Ispat Nigam Ltd.	2.58	NA	2.99	-1.30	-2.56	1.02	3.72	12.53	26.20	26.55	**7.97**	**11.26**	**1.41**

Source: Computed from PROWESS Database

S.D. means Standard Deviation
C.V.means Co-efficient of Variation
N.A.indicates Not Available

TABLE 2 : RETURN ON INVESTMENT RATIOS OF SELECTED PRIVATE SECTOR COMPANIES OVER TEN YEARS FROM 1997-98 TO 2006-07(IN %AGE)

Name of the Companies	1997-98	1998-99	1999-2000	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	Average	S.D.	C.V.
Arati Steels Ltd.	12.14	12.26	12.40	10.89	13.42	9.38	13.14	10.35	12.00	15.31	**12.13**	**1.67**	**0.14**
Isibars Ltd.	15.26	6.24	5.05	1.45	-0.48	1.24	-4.61	-6.65	-3.37	16.96	**3.11**	**7.95**	**2.56**
Bhusan Steel and Strips Ltd.	12.50	5.50	6.60	10.15	10.60	9.50	9.65	6.27	8.81	9.75	**8.93**	**2.18**	**0.24**
Tata Steel Ltd.	10.12	9.68	6.62	6.22	7.66	8.73	5.53	12.35	21.20	33.66	**12.18**	**8.79**	**0.72**

Source: Computed from PROWESS Database

S.D. means Standard Deviation
C.V.means Co-efficient of Variation
N.A.indicates Not Available

It is observed from Table 1 that ROIs of Sponge Iron India Ltd. (SIIL) deteriorated gradually from 5.55% to 1.48% during the first three years, then it came down to (-) 5.95% and (-) 13.99% in the next two years but an improvement is noticed for the last three years in which the ratio lay between 10.43% and 26.24%. The company showed an average ROI of 5.62% during the whole period of study. Ferro Scrap Nigam Ltd. (FSNL) registered a declining trend and the ratio declined significantly from 16.43% in 1997-98 to 5.23% in 2006-07 recording an average of 11.41% during the period of study. Indian Iron & Steel Co. Ltd. (IISCOL) showed negative ratio from the base year of study and continued with high negative ratio upto the eighth year of study. The situation was improved for the last two years yielding positive return to the extent of 6.19% and 9.36%. The average ratio was, however, (-) 12.28% during the period of study. The ROIs in case of Rashtriya Ispat Nigam Ltd. (RINL) were negative for two successive years from 2000-01 to 2001-02 to the extent of (-) 1.30% and (-) 2.56% respectively. Then the company recorded an improvement in succession from 1.02% in 2002-03 to the highest at 26.55% in 2006-07 yielding an average of 7.97% throughout the entire period of study.

The above analysis reveals that the highest average ROI was recorded by FSNL with 11.41% followed by RINL with 7.97% and SIIL with 5.62%. The lowest average ROI was (-) 12.28% for IISCOL. So in terms of average ROI, FSNL achieved the highest performance followed by RINL and SIIL, whereas IISCOL showed the worst performance. An effort has also been made to measure the consistency of these companies in maintaining ROI by considering the co-efficient of variation. The variables for which the co-efficient of variation is greater are said to be less consistent i.e. more fluctuating and vice-versa. The last column of Table 1 reveals that the highest variability was recorded by SIIL with a co-efficient of variation (C.V.) of 2.26, followed by RINL with 1.41, IISCOL with 1.07 (ignoring the negative sign) and FSNL with 0.40.

After examining the performance of selected public sector companies, it is now the time to judge the performance of selected public sector companies in terms of ROIs computed and shown in Table 2. It is observed from the table that the ROI in case of Aarti Steels Ltd. (ASL) increased marginally for the first three years; it also increased steadily for the last two years but recorded a fluctuation during the rest five years of the study. The ratio was minimum at 9.38% in 2002-03 and maximum at 15.31% in 2006-07 and strokes an average of 12.13% for the entire period under study. Isibars Ltd. (IL) witnessed a downward trend during the first five years of study. The ratio gradually deteriorated from 15.26% to (-) 0.48% during this period, then in the next year it shoot up to 1.24% but again turned to be negative over the next three years and ultimately recovered at the end in the last year reaching the highest level at 16.96%. On average the ratio was 3.11% during the period under study. In case of Bhusan Steel & Strips Ltd. (BSSL), the highest ratio of 12.50% in the year 1997-98 sharply declined to the lowest at 5.50% in the following year i.e., in 1998-99 then improved in succession for the next three years from 6.60% in 1999-2000 to 10.60% in 2001-02 but thereafter it fluctuated for the last five years with an average of 8.93% during the referred period. Tata Steel Ltd. (TSL) witnessed a downward trend during the first four years of study but marked an upward trend during the last seven years. The ratio deteriorated from 10.12% in 1997-98 to 6.22% in 2000-01, then except in 2003-04, the ratio improved remarkably over the years reaching the highest at 33.66% in 2006-07. The company recorded an average of 12.28% during the study period.

From the above discussion it appears that the highest average ROI was recorded by TSL with 12.18% followed by ASL with 12.13%, BSSL with 8.93% and IL with 3.11%. So in terms of average, TSL recorded the highest performance followed by ASL, BSSL and IL. Now if we have a look at the consistency performance of the individual private sector companies, we find that ASL recorded the highest consistency with a C.V. of 0.14 followed by BSSL with 0.24, TSL with 0.72 and IL with 2.56.

COMPARATIVE STUDY

This section examines the comparative performance in ROI between selected public sector and private sector companies in Tables 3 and 4. The average ROI of all selected public sector companies (taken together) over the years have been presented in Table 3. The standard deviation and co-efficient of variation of ROI among the public sector companies over the years have also been presented in the table. Similar computation in respect of private sector companies has been done and presented in Table 4.

TABLE 3: AVERAGE, S.D. AND C.V. OF RETURN ON INVESTMENT RATIO OF ALL SELECTED PUBLIC SECTOR COMPANIES OVER TEN YEARS FROM 1997-98 TO 2006-07

	1997-98	1998-99	1999-2000	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07
Average	5.38	3.89	-0.23	-1.17	-5.95	-3.03	-4.33	0.80	16.06	14.68
Standard Deviation	8.18	10.27	14.64	11.68	16.45	17.56	19.29	17.57	11.74	9.43
Co-efficient of Variation	1.52	2.64	-64.24	-9.97	-2.76	-5.81	-4.45	21.83	0.73	0.64

Source: Computed from Table - 1

TABLE 4: AVERAGE, S.D. AND C.V. OF RETURN ON INVESTMENT RATIO OF ALL SELECTED PRIVATE SECTOR COMPANIES OVER TEN YEARS FROM 1997-98 TO 2006-07

	1997-98	1998-99	1999-2000	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07
Average	12.5	8.42	7.67	7.18	7.80	7.21	5.93	5.58	9.66	18.92
Standard Deviation	2.12	3.14	3.24	4.33	6.00	4.00	7.68	8.54	10.15	10.30
Co-efficient of Variation	0.17	0.37	0.42	0.60	0.77	0.55	1.30	1.53	1.05	0.54

Source: Computed from Table - 2

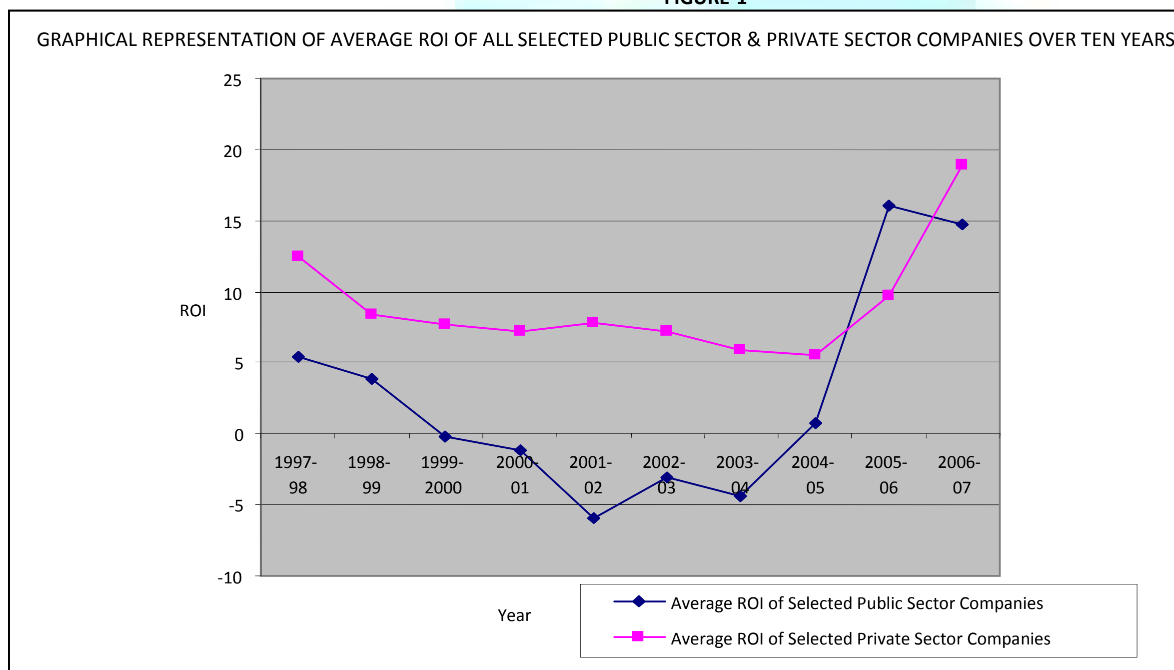
It is clear from the table 3 that the average ROI of all selected public sector companies deteriorated from 5.38% in 1997-98 to 3.89% in 1998-99, then it turned negative for the next five years ranging from (-) 0.23% to (-) 5.95%, thereafter recovering from the negative trend in the year 2004-05 it marked an impressive performance for the last two years reaching the highest at 16.06% in the year 2005-06. Thus public sector companies recorded a declining trend in terms of average ROI during the first seven years of study and the trend was increasing for the last three years. Except during the first two years and last two years of study, the companies under reference were very inconsistent in maintaining the ratio during the mid-six years of study as reflected by their co-efficient of variation (C.V.).

On the other hand, the average ROI of all selected private sector companies as shown in Table 4 reflects that the ratio deteriorated gradually from 12.50% in 1997-98 to 7.18% in 2000-01, then improved to reach 7.80% in 2001-02 but again deteriorated from 7.21% in 2002-03 to 5.58% in 2004-2005 and finally improved from 9.66% in 2005-06 to the highest at 18.92% in 2006-07. The overall trend was declining during the first eight years of study, and after that there was a signal of increasing trend for the future. The data relating to C.V. reflect that the private sector companies were more inconsistent during three years from 2003-04 to 2005-06 having relatively higher co-efficient of variation.

Now if we make a comparison between the two sectors based on the data reflected in Tables 3 and 4, we find that the public sector companies showed negative average ROI for five years whereas the private sector companies earned positive average return for the entire study period of ten years. We also find that except in 2005-06, the private sector companies on average earned higher rate of return than the public sector companies for the entire period of consideration. So in terms of average ROI, the private sector companies achieved better performance as compared to the public sector companies. Further if we compare the consistency pattern between these two sectors, we find that the values of C.V. in respect of private sector companies were always lower than the absolute values of C.V. relating to the public sector companies for the entire study period except in the year 2005-06. It indicates that higher consistency was observed among the private sector companies as compared to the public sector companies over the period of study except in the year 2005-06. Thus in aggregate, consistency performance of private sector companies was also better than that of public sector companies.

A graphical presentation has been made below in Figure 1 to have a clear picture about the profitability trend of public sector and private sector companies in terms of average ROI over the study period. The average ROIs of all selected public sector and private sector companies have been plotted in a line chart over the period of ten years. It is found from the graph that the ROI line of the private sector always lies above that of the public sector excepting in only one year i.e. 2005-06. So it can be said that in terms of average ROI, the performance of private sector is better than that of public sector.

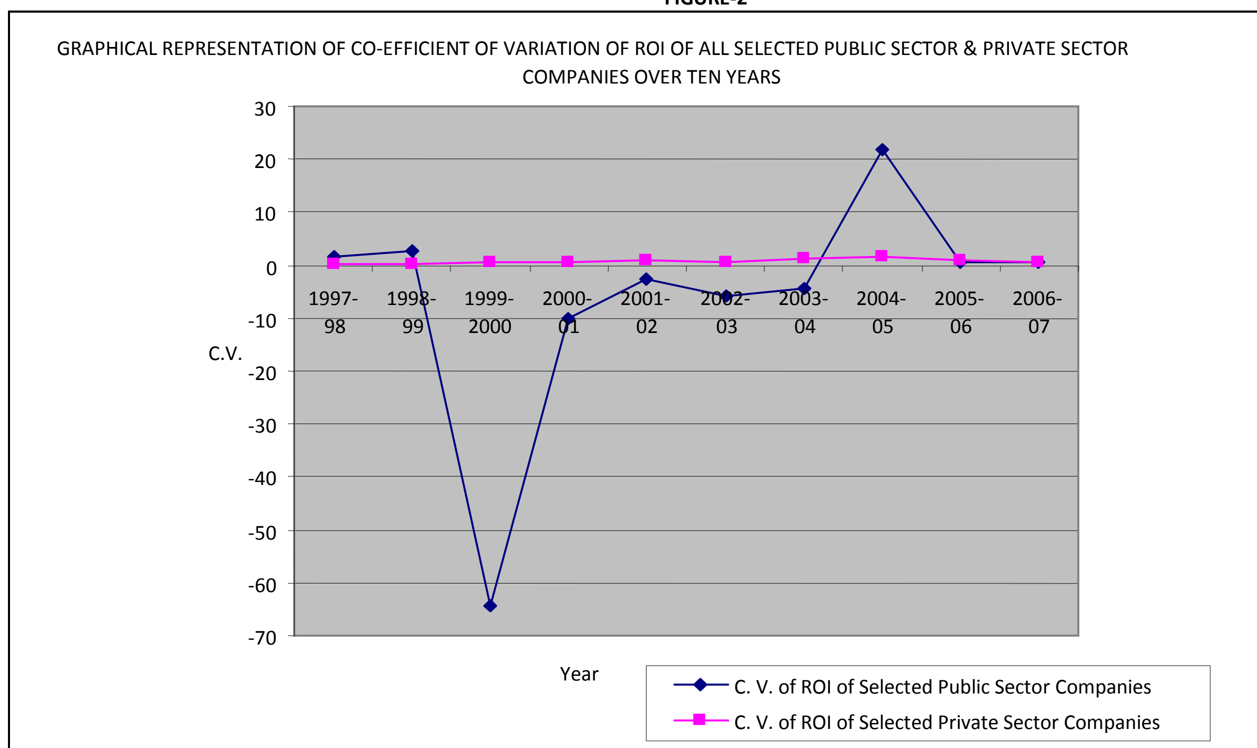
FIGURE-1



Source: Table 3 & Table 4

In Figure 2 as presented below an attempt has been made to have a picture of consistency in maintaining ROI among the companies in public sector and private sector over the years. The co-efficients of variation of public sector companies and private sector companies have been plotted in the line diagram over the period of ten years. The co-efficient of variation line of private sector companies was closer to the line at zero level and appears to be a straight line for the whole period of study. But the co-efficient of variation line of public sector companies was fluctuating over the years. It indicates that more consistency was found in maintaining the levels of ROI among the private sector companies as compared to the public sector companies.

FIGURE-2



Source: Table 3 & Table 4

SUMMARY OF THE FINDINGS

On the basis of the foregoing analysis relating to the **return on investment ratio (ROI)** of the companies under study the following observations may be presented in summarized form:

1. The study findings reflect that average ROI was negative for a public sector company viz. IISCOL indicating its worst profitability position.
2. Out of four public sector companies, only one viz. FSNL contributed positive return, whereas out of four private sector companies considered in this study, three viz. ASL, BSSL, and TSL contributed positive return for all the years of study. The remaining three public sector companies and one private sector company experienced operating losses in one or more years of study. Operating inefficiency was prominent in case of one public sector company viz. IISCOL.
3. A close observation at the data series reveals that in a particular year highest achievement was recorded by TSL with 33.66% return in 2006-07 among all the companies under study over the years.
4. On average the private sector companies achieved relatively better performance both in earning return and maintaining consistency than the public sector companies over the study period.

CONCLUSION AND SUGGESTIONS

The study of ROI portrays that the rate of return was not satisfactory for the majority of sample companies during the review period. This apart, as per trend, both public sector and private sector companies when jointly considered in two groups recorded gradual deterioration in performance over the years. But the performance of private sector companies was far better than that of public sector companies. It is also significant to note that public sector companies registered higher volatility amongst them for the six midyears of the study. So a clear distinction was observed in earning return on investment between the two sectors. Thus there is a ground for objections raised against the public sector companies over time.

After an enquiry into the state of profitability position of the companies under reference, it was found that high cost of production, increase in operating cost, defective investment policy, under-utilization of capacity etc. were responsible for their negative / inadequate earning capacity. Study findings also indicate that operating revenues were insufficient to cover interest on debt and tax obligation after meeting the operating expenses for the companies like SIIL, IISCOL and IL. Higher operating cost coupled with decline in sales volume has put some companies in an unhealthy situation.

There is thus an urgent need to adopt necessary measures to increase operating income and reduce operating cost to improve return on investment of the companies under sufferance. These companies are suggested to adopt different cost control and profit planning techniques such as cost-volume-profit analysis, marginal costing, standard costing, activity based costing, budgetary control etc. for their effective cost and profitability management. Utilization of full capacity, strengthening marketing functionaries and adoption of modernization programme with latest technology are some of the measures to improve the return on investment of the companies suffering from inadequate / negative return earning capacity. The public sector companies should take more care on these aspects.

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