

# Impact of Privatisation on Profitability and Efficiency of Public Sector Enterprises in India

## Abstract

Indian economy was plagued by deep financial crisis by the year 1990. The government was forced to raise resources through disinvestment of public enterprises. But at the same time disinvestment was also a part of programme of macro-economic stabilisation which commenced in 1991. Apart from the attempt to raise resources, the main objective of disinvestment has been to improve operational efficiency of public sector enterprises that may lead to higher profitability. One way of judging the impact of privatization on the profitability and efficiency of public sector enterprises is to compare the performance of disinvested public sector enterprises with that of non-disinvested public sector enterprises. On comparison it has been found that both profitability and efficiency of disinvested public sector enterprises have been higher than the profitability and efficiency of non-disinvested public sector enterprises. This has been not just because of change in ownership but also due to change in management leading to greater autonomy in disinvested public sector enterprises.

**Keywords:** Privatisation, Disinvestment, Profitability, Efficiency, Rate of return, Operating Profit Margin, Net Profit Margin, Total Assets Turnover Ratio, Fixed Assets Turnover Ratio, Current Assets Turnovers Ratio.

## Introduction

Privatisation in India generally goes by the name of disinvestment or disinvestment of equity. Due to increasing revenue deficit in the central budget and mounting burden of public debt since early 1980s, Indian economy plunged into a deep financial crisis by 1990. The situation forced the government to raise resources through disinvestment of public enterprises. But disinvestment has larger implications than just selling the government equity in Public Sector Enterprises. It is a part of an ambitious process of economic reforms covering industry, trade, financial sector and agriculture also involving a programme of macro-economic stabilization which commenced since 1991. Privatisation is seen as a necessary concomitant of deregulation of industry, necessary in order to enable firms in the public sector to compete and survive in the new environment. In operational terms, it was expected to contribute towards the growth of Indian economy by promoting competition, which, in turn, was likely to lead to reduction in cost, improvement in quality and increase in operational efficiency.

## Objective of the Study

The objective of this paper is to assess the impact of privatization on financial performance of disinvested public sector enterprises. The assessment is based on comparing the performance of disinvested and non-disinvested public sector enterprises based on parameters of profitability and efficiency.

## Methodology

The study is limited to non-financial central Public Sector Enterprises in India that have gone for disinvestment since 1991-92. The study is based on secondary data available in several volumes of Public Enterprise Survey. The sample consists of central Public Sector Enterprises where less than 50% of disinvestment has taken place during the period under reference. The rationale for choosing to cover disinvestment only up to the magnitude of 50% is that the organization ceases to be Public Sector Enterprise with disinvestment more than 50%. The sample has been chosen in a way that may adequately represent all the industrial groups in which disinvestment has taken place. For the



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purpose of the study, the financial performance of disinvestment PSEs has been compared with non-disinvested PSEs.

The performance of disinvested and non-disinvested PSEs has been analysed over a period of 20 years from 1991-92 to 2010-11. The ratio analysis, which is a well accepted tool to measure the financial performance has been used to analyse the data. Derived results of ratio analysis have been presented in the form of descriptive and positional values.

#### **Performance of Disinvested and Non-disinvested Public Sector Enterprises in India**

The primary objective of disinvestment has been to improve operational efficiency of Public Sector Enterprises leading to higher profitability. Therefore, profitability and efficiency are largely of higher significance in assessing the impact of partial privatization.

#### **Profitability**

Profitability is measured in terms of rate of return on investment and sales. Rate of return on the basis of investment includes rate of return on total assets (ROTA), rate of return on capital employed (ROCE) and rate of return on net worth (RONW). ROTA and ROCE measure the efficiency with which financial resources are utilized by PSEs and RONW

shows the return given to equity owners, primarily government in the context of PSEs. ROTA has been determined on the basis of earnings before interest and taxes (EBIT). It expresses the relationship between total income earned before interest and taxes and average total assets in use. ROCE indicates how efficiently the long-term funds of lenders and owners are being used. It is a ratio of operating profit and average capital employed. So far as RONW is concerned, it has been calculated by dividing net profit after taxes minus preference divided by average net worth.

Return on the basis of sales is based on operating profit margin (OPM) and net profit margin (NPM). OPM shows the magnitude of operating profit in relation to sales. NPM determines the relationship of reported net profit after taxes to sales. Return on sales indicates efficiency of the management to carry on the business profitably.

Profitability of disinvested and non-disinvested PSEs, measured in terms of three types of returns-return on net worth (RONW), return on capital employed (ROCE) and return on total assets (ROTA) has been presented in table no.1 to assess the impact of privatisation on performance of public enterprises.

**Table: 1 Mean values of key profitability ratios of disinvested and non-disinvested PSEs- 1991-92 to 2010-11 (Figures are in Mean percentage)**

Years	RONW		ROCE		ROTA	
	D	ND	D	ND	D	ND
1991-92	15.07	3.30	15.50	4.90	11.89	-0.35
1992-93	13.01	6.52	14.11	2.57	10.54	-0.48
1993-94	12.26	3.87	13.92	1.15	10.21	-0.85
1994-95	11.63	3.76	14.79	1.72	10.33	-0.52
1995-96	15.08	6.57	16.42	-0.04	11.16	0.05
1996-97	11.12	7.04	12.13	2.02	10.39	0.98
1997-98	12.41	6.77	12.51	0.20	10.84	0.10
1998-99	10.33	8.38	10.64	-1.81	9.03	-1.27
1999-2000	7.60	7.87	7.02	-4.73	7.67	-2.69
2000-01	6.28	7.57	7.70	0.08	9.14	-2.10
2001-02	5.55	9.73	7.42	-2.23	7.02	-1.98
2002-03	12.30	12.21	7.46	1.10	8.69	-1.62
2003-04	21.98	14.90	12.61	5.18	9.89	3.57
2004-05	23.85	14.71	17.72	7.17	14.43	1.24
2005-06	19.50	17.24	12.36	6.97	9.99	3.45
2006-07	18.68	16.28	12.85	4.05	12.82	3.96
2007-08	17.44	15.44	12.08	6.93	11.27	4.44
2008-09	10.91	15.43	7.61	6.26	7.22	4.49
2009-10	7.97	13.51	5.50	6.48	7.35	3.72
2010-11	10.58	11.53	8.45	8.27	10.13	5.02
Aggregate mean (1992-2011)	13.18	10.13	11.44	2.81	10.00	0.96

Source: Computed from Public Enterprises Survey: Different Issues

From the table it is clear that RONW of divested public enterprises has been much higher than RONW of non-divested enterprises from 1991-92 to 1990-99 and again from 2003-04 to 2007-08. But between the period 1999-2000 to 2002-03 and again after 2008-09, RONW of non-divested enterprises has been better than divested enterprises. When we see the rate of return on capital employed (ROCE), performance of divested enterprises is many times higher than the performance of non-divested enterprises throughout the period given in the table.

We get the similar picture on comparing ROTA of divested and non-divested enterprises. ROTA of non-divested enterprises has been in negative for many years. But ROTA for divested enterprises has always been positive and many times higher than the ROTA for non-divested firms.

Thus we see that in all three parameters profitability of disinvested enterprises has been many times higher compared to non-disinvested public enterprises except for the period between 2008-09 to 2010-11 when the profitability of non-disinvested

enterprises is almost at par with disinvested PSEs. The better performance of non-disinvested PSEs may be attributed to manifold increase in investment, focused approach opted by signing MOUs etc. For non-disinvested PSEs in contrast, the funds obtained from disinvestment had been used for meeting other social needs.

Returns on the basis of sales are operating profit margin (OPM) and net profit margin (NPM). The mean values of these profitability ratios of disinvested

and non-disinvested PSEs have been presented in table-2. From the table it is clear that OPM of disinvested enterprises has been much higher than that of non-disinvested enterprises except for the period 2008-09 to 2010-11 when OPM in both categories of PSEs have been similar. But the net profit margin of non-disinvested enterprises has always been negative up to 2003-04 and only after that it turned positive for non-disinvested PSEs.

**Table-2 Mean value of OPM and NPM of disinvested and non-disinvested PSES - 1991-92 to 2010-11 (Figures are in percentages)**

Year	OPM		NPM	
	D	ND	D	ND
1991-92	16.24	5.57	8.31	-4.8
1992-93	13.44	7.51	4.92	-2.16
1993-94	15.26	5.86	6.55	-4.60
1994-95	13.61	6.27	8.94	-4.06
1995-96	13.78	6.72	8.78	-1.65
1996-97	15.26	10.98	6.68	1.08
1997-98	15.11	6.75	6.57	-3.45
1998-99	13.54	4.59	5.27	-4.79
1999-00	10.83	0.03	3.92	-6.02
2000-01	11.74	4.39	5.68	-1.89
2001-02	9.66	2.83	2.14	-0.89
2002-03	8.79	2.99	1.53	-3.79
2003-04	11.43	7.47	4.81	-0.03
2004-05	17.24	6.42	9.84	4.79
2005-06	16.17	11.82	9.77	5.49
2006-07	16.03	10.09	10.78	5.87
2007-08	15.63	11.94	10.79	5.34
2008-09	10.96	10.08	7.27	4.05
2009-10	11.39	11.07	5.43	2.72
2010-11	9.81	11.12	8.89	4.41
Aggregate Mean (1992 - 2011)	13.30	7.21	6.84	-0.19

Source: Computed from Public Enterprise Survey-Different Issues

### Efficiency

Efficiency in utilisation of resources is even more important test in evaluating the impact of privatisation on public sector enterprises. Efficiency is determined in terms of three dimensions: assets turnover, inventory holding period and debtor's collection period. Turnover ratios are the main method for measuring efficiency in use of assets by relating to net sales. These are total assets turnover ratio (TATR), fixed assets turnover ratio (FATR) and current assets turnover ratio. TATR, FATR and CATR computed by

dividing average net sales to average total assets in use, average fixed assets and average current assets respectively.

Though assets turnover ratio indicates the efficiency of an enterprise, there is no set number that represents a good asset turnover value because every industry has varying business models. Usually higher the number, the better. A low turnover ratio is indicative of underutilisation of available resources. The following table presents turnover ratios of disinvested and non-disinvested PSEs.

**Table-3 Mean value of turnover ratios of disinvested non-disinvested PSEs – 1991-92 to 2010-11**

Year	TATR		FATR		CATR	
	D	ND	D	ND	D	ND
1991-92	1.02	0.74	2.84	3.50	1.78	1.19
1992-93	0.98	0.76	2.95	3.17	1.63	1.21
1993-94	1.07	0.75	3.14	3.01	1.62	1.17
1994-95	1.13	0.74	3.00	3.14	1.73	1.18
1995-96	1.10	0.81	3.16	3.43	1.75	1.29
1996-97	1.05	0.79	3.29	3.53	1.60	1.23
1997-98	1.02	0.79	3.28	3.46	1.62	1.24
1998-99	1.03	0.76	3.45	3.08	1.74	1.14
1999-00	1.10	0.73	3.16	3.07	1.87	1.17
2000-01	1.11	0.77	3.04	2.99	1.99	1.27
2001-02	1.08	0.67	3.40	2.82	1.91	1.10

2002-03	1.22	0.72	3.56	2.77	2.18	1.16
2003-04	1.16	0.68	4.28	2.76	2.10	1.12
2004-05	1.23	0.68	3.90	2.87	2.26	1.12
2005-06	1.15	0.68	3.98	3.09	2.7	1.07
2006-07	1.37	0.67	4.59	3.15	2.23	1.07
2007-08	1.23	0.68	4.88	3.22	1.92	0.98
2008-09	1.20	0.71	3.99	3.70	1.99	0.99
2009-10	1.06	0.66	4.10	3.63	1.77	0.92
2010-11	1.15	0.67	3.10	3.46	1.83	0.98
Aggregate Mean (1992 - 2011)	1.12	0.72	3.57	3.19	1.88	1.13

Source: Computed from Public Enterprise Survey Different Issues.

Analysis of the table indicates that the total assets turnover ratio, fixed assets turnover ratio (FATR) and current assets turnover ratio (CATR) of disinvested public sector enterprises are better compared to non-disinvested public sector enterprises over the entire period of time. TATR of non-disinvested enterprises is less than one in all the years which may be primarily attributed to low CATR as FATR in both types of public sector enterprises is quite satisfactory.

#### Conclusion

It is clear from the above analysis that profitability of disinvested enterprises in all the parameters has been many times higher compared to non-disinvested public enterprises except for the period between 2008-09 to 2010-11 when the profitability of non-disinvested enterprises has been almost at par with disinvested PSEs. The better performance of non-disinvested PSEs may be attributed to many fold increase in investment, focused approach opted by signing MOUS etc. for non-disinvested PSEs. In contrast funds obtained from disinvestment had been used for other social needs. Similarly better assets turnover has been observed in disinvested PSEs as compared to non-disinvest PSEs indicating improvement in efficiency after privatization.

#### Suggestions

Result of disinvestment experience shows that privatization has led to improvement in the profitability of public sector enterprises. It is suggested that in profitable enterprises equity should also be offered to the public and employees. This will give disinvestment process better acceptability. Disinvestment can lead to increase in the efficiency through better utilization of resources. But reckless privatization may not provide the ultimate solution for longer period of time. The emphasis should be on making public sector undertakings work more efficiently rather than reducing public ownership. Efficiency may also be achieved by changing the quality of management and not only by changing ownership. This can be done by enhancing the

autonomy as well as accountability of public sector enterprises.

#### References

1. *Public Enterprises Survey (2001-2002) Vol-1. Department of Public Enterprises, Ministry of Heavy Industries and Public Enterprises, Government of India, New Delhi.*
2. *Public Enterprises Survey (2002-2003), Vol-1, Department of Public Enterprises, Ministry of Heavy Industries and Public Enterprises, Government of India, New Delhi.*
3. *Public Enterprises Survey (2004-2005), Vol-1, Department of Public Enterprises, Ministry of Heavy Industries and Public Enterprises, Government of India, New Delhi.*
4. *Public Enterprises Survey (2005-2006), Vol-1, Department of Public Enterprises, Ministry of Heavy Industries and Public Enterprises, Government of India, New Delhi.*
5. *Public Enterprises Survey (2006-2007), Vol-1, Department of Public Enterprises, Ministry of Heavy Industries and Public Enterprises, Government of India, New Delhi.*
6. *Public Enterprises Survey (2008-2009), Vol-1, Department of Public Enterprises, Ministry of Heavy Industries and Public Enterprises, Government of India, New Delhi.*
7. *Public Enterprises Survey (2009-2010), Vol-1, Department of Public Enterprises, Ministry of Heavy Industries and Public Enterprises, Government of India, New Delhi.*
8. *Public Enterprises Survey (2010-2011), Vol-1, Department of Public Enterprises, Ministry of Heavy Industries and Public Enterprises, Government of India, New Delhi.*
9. *Helper EA (2003) Techniques of Financial Anaysis: A Guide to Valuation, McGraw Hill Irwin, New York.*
10. *Jain PK, Yadav SS (2005) Financial Management Practices: A Study of Public Sector Enterprises in India. Hindustan Publishing Corporation, New Delhi.*
11. *Naib S (2004) Disinvestment in India: Policies, Procedure, Practices, Sage, New Delhi.*