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Impact of Disinvestment on the Financial and Operating Performance of Competitive and Monopoly Units of Indian Public Sector Enterprises

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Abstract

The Government of India is following a policy of economic liberalization after 1991 and concept of disinvestment has been more or less accepted by at least all the parties whenever they are in Government. Disinvestment has supposed to be the tool in the hands of Government to improve the functioning and profitability of public sector enterprises and also raise funds to mitigate its fiscal deficits. Regarding utilization of disinvestment proceeds, there has been apprehension about its proper use. In the present

study an attempt has been made to examine the impact of disinvestment which took place during 1985-86 to 2004-05 on the performance of selected units of competitive and monopoly units of Indian PSEs. The grouping of enterprises has been done on the basis of their contribution to total industrial production/service. Operating performance of competitive firms based on sales has shown decline in the profitability during the post-disinvestment period. On the other hand, monopoly firms have been efficient in generating profit and controlling their expenditures.

Keyword

Disinvestment, Liberalization, Privatization, Competitive, Monopoly, Public Sector Enterprises,

INTRODUCTION

Public sector undertakings in India were viewed as a mechanism for structural transformation of the economy and for growth with equity and social justice. Eventually, the perception that public sector should acquire the commanding heights of the economy led to Government involvement in diverse areas of economic activity, many of which could have been performed by the private sector (Singh, V.S. 1986). The public sector thus lost its original role and strategic focus, which shifted to supply of goods and services on subsidized rates and creation of employment. This led to inefficiencies, neglect of resource mobilization for modernization, increased dependence on unproductive borrowings, lack of motivation to improve efficiency and increase in fiscal deficit of the Government. After 1991 the Government of India is following a policy of economic liberalization and concept of disinvestment has been more or less accepted by all the parties whenever they are in Government. The fact that the parties changed their tune when they are out of power probably is only an occupational hazard of our Indian style of democracy. The process of disinvestment in India began in 1992 under the aegis of new economic

liberalization policy put forward then Finance Minister, Dr. Manmohan Singh. The Disinvestment Commission was formed initially headed by Shri G.V. Ramakrishna and recently it has been reconstituted. At present, there is a separate a Department of Disinvestment.

Disinvestment has supposed to be the tool in the hands of Government to improve the functioning and profitability of public sector enterprises and also raise funds to mitigate its fiscal deficits. However, over the past decade, this exercise has been plagued by criticism and controversies and has not achieved desired results for the Government because of political bickering (Rao, Prakasha & Ramana). The question always arises in the context of unshackling the public sector as to why the public sector enterprises should be in change. There is a general perception that the same people become efficient if they are in the private sector and somehow when they are under the public sector, their human capital remains less productive. However, privatization without policy reforms may not be able to achieve efficiency, cost control and proper pricing. The benefits of privatization flow through greater competition leading to cheaper and better products and services. Public monopolies, therefore, should not yield place to private ones. With the result, it remains unknown as to where this money has been used. So the Government has not provided any clear-cut statement on this issue. Regarding utilization of disinvestment proceeds, there has been apprehension about its proper use. Either it should be used for the repayment for Government debt, which was initially taken to finance these PSEs, or this money should be used for restructuring loss-making PSEs. (Gangadhar, V, & Yadagiri, M., 2003)

In the past, some studies have been conducted to study the impact of disinvestment on public sector, these are:

Rao, Prakasha and Ramana (2001), concluded in his study “Disinvestment: An Indian Perspective” that public sector was thought of as engine for self reliant economic growth and development.

Tiwari and Prabhakar (2001) conducted a study on “Disinvestment in Public Sector Enterprises (PSEs) in India”. This paper aims at questioning the very purpose, procedure and timing of disinvestment in PSEs in India.

Gangadhar and Yadagiri (2003), made an attempt on “Disinvestment in Public Sector Enterprises”. The study of disinvestment of central Government public sector enterprises is aimed at examining the following: firstly, to analyze the objectives, existing procedures, administrative machinery for disinvestment and to present the progress and prospects of disinvestment.

Chundawat, Bhanawat and Mehta (2005), conducted a study on "Disinvestment and Corporate Performance." The main objective of this paper is to study the impact of the disinvestment on the corporate performance of the public sector undertakings.

The present research paper is divided into four sections. The present section deals with introduction and following section describes the research methodology of the research study. The third section makes the analysis of the data and interpretation thereof and the last section gives the concluding remarks.

NEED AND SCOPE OF THE STUDY

At the time of independence, it was felt that political independence without economic self-reliance would be detrimental to the country's sovereignty and autonomy in policy-making. Hence, in the three decades following independence, the public sector played a commanding role in the economy. However, after the initial exuberance, a number of problems began to manifest themselves in many of the public enterprises. Serious problems were observed in the insufficient growth in productivity, poor project management, overmanning, lack of continuous technological upgradation and inadequate attention to R & D and human resource development. Economic compulsions led to the adoption of new approach towards the public

sector in the early nineties. In July 1991, the Government issued statement on industrial policy, which states that in order to raise resources and encourage wider public participation, a part of the Government's shareholding in the public sector would be offered to mutual funds, financial institutions, general public and workers. In the present study, an attempt has been made to examine the impact of disinvestment which took place from the year 1985-86 to 2004-05 on the performance of selected competitive and monopoly units of Indian PSEs. It will throw light on whether the envisaged goal of improvement in performance was in fact achieved. The present study has been confined to study the impact of disinvestment on the financial and operating performance of Indian public sector enterprises which are divided into two groups: those who are operating in competitive environment (18) and those who are functioning in monopoly environment (12). The grouping of enterprises has been done on the basis of their contribution to total industrial production/services. (Naib, Sudhir, 2004) Competitive group includes enterprises in areas where private sector also a presence.

There are 16 sectors of Indian public sector enterprises in which Government has made disinvestment. In order to study the impact of disinvestment on public sector enterprises, competitive and monopoly units of Indian PSEs have been selected. The sector and the units along with their nature, percentage of disinvestment and percentage of Government holding after disinvestment in Indian PSEs is given in Table 1.

Table 1

Government Share after Disinvestment in the Public Sector Enterprises of India

Sector and Units	Nature of Enterprise	Percentage of Disinvestment	Percentage of Total Govt. Holding after Disinvestment
Enterprises Manufacturing/Producing Goods			
1. Steel			
(a) Steel Authority of India Ltd.	Competitive	14.18	85.82
2. Minerals & Metals			
(a) Hindustan Copper Ltd.	Competitive	1.24	98.76
(b) Hindustan Zinc Ltd.	Competitive	24.08	75.92
(c) Kudermukh Iron & Ore Co. Ltd.	Competitive	1.00	99.00
(d) National Aluminum Co. Ltd.	Competitive	12.85	78.38*
(e) National Mineral Development Co.	Monopoly	1.62	96.36*
3. Petroleum			
(a) Bharat Petroleum Corporation Ltd.	Monopoly	33.80	66.20
(b) Bongaingaon Refinery and Petro Chemical Ltd.	Monopoly	25.54	74.46
(c) Cochin Refinery Ltd.	Monopoly	6.12	55.04*
(d) Gas Authority of India Ltd.	Monopoly	17.03	82.97
(e) Hindustan Petroleum Corporation Ltd.	Monopoly	48.94	51.06
(f) Indian Oil Corporation Ltd.	Monopoly	18.74	81.14*
(g) Madras Refineries Ltd.	Monopoly	16.92	53.80*
(h) Oil and Natural Gas Corporation	Monopoly	16.38	83.62
4. Fertilizers			
(a) Fertilizers & Chemicals Ltd.	Competitive	1.70	97.30
(b) National Fertilizers Ltd.	Competitive	2.35	97.65
(c) Rashtriya Chemicals & Fertilizers Ltd.	Competitive	7.50	92.50
5. Chemical & Pharmaceuticals			
(a) Hindustan Organic Chemical Ltd.	Competitive	41.39	58.61
(b) Indian Petrochemicals Corporation Ltd.	Competitive	40.05	59.95
6. Heavy Engineering			
(a) Bharat Heavy Electrical Ltd.	Competitive	32.28	67.72
7. Medium and Light Engineering			
(a) Bharat Electronics Ltd.	Competitive	24.14	75.86
(b) Andrew Yule & Co. Ltd.	Competitive	9.60	62.84*
(c) Hindustan Machine Tools Ltd.	Competitive	8.44	91.56
(d) Indian Telephone Industries	Competitive	22.98	76.67*
8. Transport Equipment			
(a) Bharat Earthmovers Ltd.	Competitive	39.19	60.81
Enterprises Rendering Services			
9. Transport Services			
(a) Container Corporation of India Ltd.	Monopoly	36.92	63.08
(b) Dredging Corporation of India Ltd.	Competitive	1.44	98.56
(c) Shipping Corporation of India Ltd.	Competitive	19.88	80.12
10. Telecommunication Services			
(a) Mahanagar Telephone Nigam Ltd.	Monopoly	43.80	56.20
(b) Videsh Sanchar Nigam Ltd.	Monopoly	47.00	53.00

* The balance equity is held by state Governments/other collaborators.

OBJECTIVES OF THE STUDY

The following objectives have been visualized for the present study:

- to study the impact of disinvestment on the financial performance of competitive and monopoly units of Indian PSEs in terms of financial strength and corporate liquidity; and
- to study the impact of disinvestment on the operating performance of competitive and monopoly units of Indian PSEs based on sales, investment, employment and asset usage.

HYPOTHESIS

To achieve these objectives the following hypothesis has been tested:

- There is no significant impact of disinvestment on the financial and operating performance of the units.

METHODOLOGY

For the purpose of the present study, secondary data have been used. The secondary data has been collected from published reports of selected Indian public sector enterprises and records of Government of India. The data drawn from various sources has been analyzed with the help of various accounting tools and techniques. Statistical test has also been applied in appropriate context. Ratio analysis, mean, standard deviation, co-efficient of variation and student 't' test are used to analyze the sample data.

Measure of Central Tendency or Averages Mean

To find out average of various financial ratios of the competitive and monopoly enterprises for the given period w.e.f. 1985-86 to 2004-05, arithmetic mean has been used.

$$\bar{X} = \frac{\sum x}{N}$$

Standard Deviation

In order to find out the absolute dispersion in the various financial ratios over the period of 20 years, standard deviation has been applied on the data collected through various surveys of Public Sector Enterprises (PSEs).

$$\sigma = \sqrt{\frac{\sum x^2}{N}}$$

Co-efficient of Variation

Co-efficient of variation has been used to study the fluctuation in various financial and operating ratios over the study period.

$$C.V. = \frac{\sigma}{\bar{X}} \times 100$$

t-test

It has been used to test the difference between the mean of financial and operating performance based on different ratios of competitive and monopoly enterprises before and after disinvestment.

$$t = \frac{\bar{d}\sqrt{n}}{S}$$

The value of S is calculated as follows:

$$S = \sqrt{\frac{\sum(d - \bar{d})^2}{n-1}} \quad \text{or} \quad \sqrt{\frac{\sum d^2 - n(\bar{d})^2}{n-1}}$$

If the calculated value of t exceeds to t 0.01 percent, we say that the difference between various means is significant at 5 percent level, if it exceeds t 0.01 percent, the difference is significant at 1 percent level. If the calculated value of t is less than the table value at 5 percent and 1 percent level, we conclude that the difference between two means is not significant and hence the sample might have been from a population having same means.

RESULTS AND DISCUSSION

Operating performance of competitive firms based on sales (Table 2) has shown decline in the profitability during the post-disinvestment period due to their failures in controlling their various expenditures ratios in relation to sales. These firms are BEML, HOCL, RCFL, ITI, HCL, HZL and AYCL. In addition, there is a decline in their expenditure of R & D programmes, it is again a matter of great concern. Without making provision for their R & D programmes, it is not possible to developed new methods of production and cost control. In order to compete in this global competition the decline in the profitability should not be continued in the long-run. The change is statistically significant at 1 percent level of significance in the case of manpower cost and excise duty to net sales ratios. The examination of the operating performance based on investment reveals that there is a decline in the mean score of return on net capital employed ratio and upward movement in the mean score of return on total assets. It shows that the management of these firms failed in the efficient management of their capital after partial disinvestment. It has been recorded for units engaged in chemicals sector, fertilizers sector and transport

sector. In this era of global competition and to satisfy their investors, the management of these firms will have to improve their efficiency. However, the change is not statistically significant in any case.

Table 2

Financial and Operating Performance of Competitive Companies



Ratio	Pre-disinvestment Era			Post-disinvestment Era			t-value	P
	Mean	S.D.	C.V.	Mean	S.D.	C.V.		
OPERATING PERFORMANCE BASED ON SALES								
Gross Profit Ratio	13.34	11.54	86.50	12.02	15.43	128.36	-0.84	0.397
Net Profit Ratio	5.34	11.16	208.98	4.01	15.99	398.75	-0.83	0.402
Operating Profit Ratio	13.61	11.4	83.76	12.71	14.79	116.36	-0.59	0.551
Material Cost/Net Sales	40.18	17.96	44.69	42.12	47.43	112.60	0.42	0.671
Manpower Cost/Net Sales	12.81	7.14	55.73	16.18	9.77	60.38	3.29	0.001*
R&D Expenditure/Net Sales	1.19	1.64	137.81	0.97	1.42	146.39	-1.09	0.276
Excise Duty/Net Sales	6.99	5.93	84.83	9.64	6.43	66.70	3.39	0.001*
OPERATING PERFORMANCE BASED ON INVESTMENT								
Return on Total Assets	7.54	3.99	52.91	7.72	7.89	102.20	0.23	0.813
Return on Net Capital Employed	13.88	8.29	59.72	12.09	18.92	156.49	-1.02	0.306
OPERATING PERFORMANCE BASED ON EMPLOYMENT								
Net Profit Per Employee	49.17	93.98	191.13	270.48	1088.16	402.30	2.14	0.033**
Gross Profit Per Employee	96.24	124.42	129.28	422.01	1112.25	263.56	3.08	0.002*
Net Sales Per Employee	611.46	494.26	80.83	2281.59	3914.39	171.56	4.47	0*
FINANCIAL STRENGTH								
Debt Equity Ratio	2.3	2.44	106.08	5.12	16.34	319.14	1.95	0.051**
Proprietary Ratio	39.22	18.18	46.35	36.17	22.82	63.09	-1.3	0.192
Solvency Ratio	60.38	23.75	39.33	63.83	23.44	36.72	0.16	0.868
Fixed Assets to Net Worth	156.59	194.04	123.92	198.23	799.97	403.56	0.58	0.56
Interest Coverage Ratio	3.67	12.07	328.88	44.33	262.83	592.89	1.75	0.08
CORPORATE LIQUIDITY								
Current Ratio	2.26	0.91	40.26	2.14	0.96	44.85	-1.15	0.248
Liquid Ratio	1.26	0.66	52.38	1.44	0.86	59.72	2.01	0.045**
ASSET USAGE								
Inventory Turnover Ratio	5.92	11.62	196.28	9.72	18.27	187.96	2.12	0.035**
Inventory Conversion Ratio	145.87	81.35	55.76	104.02	60.14	57.81	-5.53	0*
Debtors Turnover Ratio	7.67	6.19	80.70	6.99	7.84	112.16	-0.84	0.401
Average Collection Period	86.54	69.77	80.62	104	80.04	76.96	2.06	0.039**
Fixed Assets Turnover Ratio	1.68	1.27	75.59	2.62	2.43	92.748	4.07	0*
Working Capital Turnover Ratio	4.37	14.36	328.60	1.76	159.85	9082.38	-0.99	0.319
Capital Turnover Ratio	106.21	53.34	50.22	119.83	60.12	50.17	2.13	0.034**

* Significant at 0.01 level, ** Significant at 0.05 level

Source: Public Sector Enterprises (PSEs) Survey, Various Issues

Table 3

Financial and Operating Performance of Monopoly Companies

Ratio	Pre-disinvestment Era			Post-disinvestment Era			t-value	P
	Mean	S.D.	C.V.	Mean	S.D.	C.V.		
OPERATING PERFORMANCE BASED ON SALES								
Gross Profit Ratio	17.1	25.45	148.83	18.61	14.98	80.49	0.56	0.572
Net Profit Ratio	8.41	25.07	298.09	11.71	9.61	82.06	1.42	0.156
Operating Profit Ratio	18.1	26.14	144.41	18.78	15.12	80.51	0.24	0.804
Material Cost/Net Sales	62.13	33.49	53.90	71.9	27.72	38.55	2.07	0.039**
Manpower Cost/Net Sales	5.24	9.51	181.48	4.4	5.98	135.90	-0.8	0.423
R&D Expenditure/Net Sales	0.26	0.46	176.92	0.16	0.27	168.75	-1.77	0.078
Excise Duty/Net Sales	14.04	15.77	112.32	10.76	10.48	97.39	-1.54	0.125
OPERATING PERFORMANCE BASED ON INVESTMENT								
Return on Total Assets	12.41	7.79	62.77	14.78	8.71	58.93	2.07	0.039**
Return on Net Capital Employed	30.98	34.53	111.45	29.56	20.92	70.77	-0.39	0.697
OPERATING PERFORMANCE BASED ON EMPLOYMENT								
Net Profit Per Employee	281.43	46.61	16.56	1251.32	1358.75	108.58	6.14	0*
Gross Profit Per Employee	496.89	550.47	110.78	1991.88	2047.67	102.80	6.27	0*
Net Sales Per Employee	4426.29	4664.63	105.38	16774.88	15911.99	94.85	6.67	0*
FINANCIAL STRENGTH								
Debt Equity Ratio	1.94	1.8	92.78	1.48	1.25	84.45	-2.28	0.023**
Proprietary Ratio	43.67	18.25	41.79	48.97	17.11	34.93	1.98	0.048**
Solvency Ratio	56.33	18.61	33.04	51.03	17.98	35.23	-2.16	0.031**

Fixed Assets to Net Worth	134.42	94.29	70.15	99.35	38.74	38.99	-3.98	0*
Interest Coverage Ratio	51.58	286.73	555.89	996.98	8513.32	853.91	1.01	0.313
CORPORATE LIQUIDITY								
Current Ratio	2.41	5.11	212.03	1.69	0.59	34.91	-1.68	0.094
Liquid Ratio	1.86	5.19	279.03	1.29	0.71	55.03	-1.29	0.197
ASSET USAGE								
Inventory Turnover Ratio	41.75	133.07	318.73	346.17	1469.26	424.43	1.88	0.061
Inventory Conversion Ratio	58.88	45.06	76.52	36.08	27.56	76.38	-4.75	0*
Debtors Turnover Ratio	43.02	56.47	131.26	43.89	66.69	151.94	0.1	0.92
Average Collection Period	47.5	75.19	158.29	36.07	59.61	165.26	-1.27	0.204
Fixed Assets Turnover Ratio	3.22	3.03	94.09	3.16	2.11	66.77	-0.18	0.856
Working Capital Turnover Ratio	14.88	34.24	230.10	65.09	625.43	960.86	0.73	0.461
Capital Turnover Ratio	294.7	266.84	90.54	267.9	192.94	72.01	-0.88	0.379

* Significant at 0.01 level

** Significant at 0.05 level

Source: Public Sector Enterprises (PSEs) Survey, Various Issues

The analysis of the operating performance based on employment reveals that there is a remarkable increase in the contribution of the employees in the profitability and the efficient utilisation of their resources. It has already been find out in the previous study that after facing the competition in the market, the management of these firms spending more on their development and training programme (Naib, Sudhir, 2004). It is good for their growth and development in this global market. As far as their financial strength is concerned, it has been found that the dependence of these firms on outsiders' funds

has increased significantly in the post-disinvestment period as compared to the pre-disinvestment period. In other words, the management of these firms relied more on debt as compared to the shareholders' funds. It has been recorded for SAIL, BHEL and HMT. The profit of these firms has been enough in order to meet out their fixed interest charges during the entire period of study. It is the duty and responsibility of the management of these firms to decide the use of their debt capital in order to finance its plans. However, the change is significant at 5 percent level of significance only in the case of debt equity ratio.

As far as the corporate liquidity of the competitive firms is concerned, it has found that there is a decline in the mean score of current ratio, but there is an upward movement in the mean score of liquid ratio in the post-liberalisation era. The firms who failed in the efficient management of their working capital are HOCL, NFL, AYCL, HMI, HCL and HZL and the firms who successfully managed their working capital are SAIL, BHEL, SCIL and BEL. But in order to improve their short-term solvency position and meet out their current obligations in time, the management of these firms has to manage their working capital efficiently. On applying t-test, it is found that the change is significant at 5 percent level of significance only in the case of liquid ratio. Studying the asset usage reveals that majority of the competitive firms are efficient in the management of their stock and debtors. It shows that the management of these firms has been efficient in the conversion of stock into sales and early recovery of their debts. In order to achieve improvement in the overall efficiency, there must be proper utilisation of their assets and resources. In this way, they can make proper utilisation of their scarce resources and. The change is significant at 1 percent level of significance in the case of inventory conversion period and fixed assets turnover ratios and significant at 5 percent in the case of inventory turnover, average collection period and capital turnover ratio.

Table 3 reveals that there is an upward movement in the mean scores of gross profit, net profit and operating profit ratio in the post-disinvestment period as compared to the pre-disinvestment period in case of monopoly firms. As far as various expenditure ratios of monopoly firms are concerned, there is a decline in the mean score of manpower cost in relation to net sales. It shows that monopoly firms have

been efficient in generating profit and in controlling their expenditure. But it is not satisfactory and statistically significant. As a whole, they failed in the case of their material cost during the post-disinvestment period. It has been recorded that NMDC, DNGC, HPCL have failed in controlling their material cost. The decline in the mean score of R & D expenditure to net sales is a matter of great concern. The examination of the mean score of excise duty to net sales indicates their less contribution in the economic development of the nation in the form of excise duty during the post-disinvestment period. The change is statistically significant at 5 percent level of significance only in the case of material cost to net sales ratio. The examination of the operating performance of the monopoly firms based on investment reveals that all these firms have been efficiently utilising their resources during the post-disinvestment period. But in the case of their capital employed management, they failed in their efficient management. It is due to the inefficient management of their capital employed by CRL, CCIL and VSNL at individual level. In order to satisfy their investors and shareholders', the proper utilisation of their resources must be efficient and effective. On applying t-test, it is found that the change is significant at 5 percent level of significance only in the case of return on total assets ratio.

Analysis of the operating performance based on employment reveals that there is a remarkable increase in the contribution of the employees in the development and in the profitability of the monopoly firms. It may be possible due to the competition in the market, because before disinvestment in these firms they had their monopoly in their business. The change is significant at 1 percent level of significance in all the ratios. As far as their financial strength is concerned, it has been found that there is a decline in the mean scores of debt equity and solvency ratios during the post-disinvestment period. It has been recorded for ONGC, HPCL and VSNL at individual level. The significant decline in the mean score of fixed assets to net worth ratio has been possible due to the petroleum companies at individual level. In other words, their shareholders' funds have been sufficient in order to finance their fixed assets. It is good for their long-term solvency position in this global market. The change is significant at 1 percent level of significance in

the case of fixed assets to net worth ratio and is at significant 5 percent in the cases of debt equity, proprietary and solvency ratios.

Study of the corporate liquidity of the monopoly firms reveals that these firms have failed in the efficient management of their working capital. The decline in the mean score of current ratio has been possible mainly due to decline in the mean score of current ratio of BORI, CIL, CCI and MTNL firms during the post-disinvestment period. It shows that after disinvestment in these firms, the management of these firms failed in the management of their working capital. In other words, they have not been in position to meet out their current obligations in time. However, the change is not significant in any case. As regards the asset usage of monopoly firms, it has been found that there is an upward movement in the mean scores of debtors turnover, inventory turnover and working capital turnover ratios in the post-disinvestment period as compared to the pre-disinvestment period. It shows that these monopoly firms have been efficiently managing their debtors, inventory and working capital. In other words, the management of these firms is efficient in the conversion of stock into sales and early collection of their debts. In case of management of their fixed assets and capital, they failed. On applying t-test, it is found that the change is significant at 1 percent level of significance only in the case of inventory conversion period ratio.

CONCLUSION

Operating performance of competitive firms based on sales has shown decline in the profitability, but monopoly firms shows an improvement in their profitability during the post-disinvestment period. It shows the inefficiency of competitive firms in controlling their various expenditures and efficiency of monopoly firms in controlling their various expenditures. As far as their dependence on outsiders' funds is concerned, it has been found that competitive firms relied more on outsiders' funds but monopoly firms relied more on shareholders funds. The management of the competitive and monopoly firms is efficient in the management of their inventory and early collection of their debts. In order to develop new methods

and techniques of production there should be more provision on their R & D programmes. It is suggested that in profitable enterprises, equity should also be offered to the public and employees. This will give the disinvestment process better acceptability. Disinvestment can lead to increase the efficiency through better utilization of resources but reckless privatization may not provide the ultimate solution for longer period of time. Efficiency may also be achieved by changing the quality of management and not only by changing the ownership. However, it is suggested that disinvestment programme should be so executed so as to encourage autonomy in management with accountability, broad based ownership and improved the competition.

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