IMMEDIATE IMPACT OF DISINVESTMENT IN THE CONTEXT OF INDIAN SCENARIO: IMPLEMENTATION OF 1991 INDUSTRIAL POLICY RELATED TO DISINVESTMENT

Abstract

Public sector undertakings (PSUs) have been playing a pivotal role in accelerating the pace of industrialization and achieving social and economic goals. However, from late 1980s PSUs face certain serious problems which required urgent corrective measures. Hence, new industrial policy1991 has been implemented for restructuring the PSUs in India. Disinvestment programme is one of the important steps of 1991 New Industrial Policy for improving the efficiency of the PSUs. In this paper we shall try to find out the immediate impact of disinvestment from India in its financial perspective.

Keyword: Industrialization, New Industrial Policy, Disinvestment, PSUs Financial Perspective

Author

Dr. Moumita Roy
Assistant Professor
Department of Commerce
Kanchrapara College
West Bengal, India.
moumita@kpcoll.ac.in

I. INTRODUCTION

In the present study the objective is to measure the financial performance of some divested PSUs. In this paper we shall try to find out the immediate effect of disinvestment. That means evaluating the financial performance of pre-and post-disinvestment periods. To measure the financial performance of the PSUs traditional tool, i.e. ratio analysis technique has been used. Under traditional method different types of ratios like liquidity ratio, profitability ratio, leverage ratio and activity ratio have been calculated. In order to know the immediate effect of disinvestment on the basis of various performance parameters the immediate impact has been analysed by comparing the parameters between pre-disinvestment period and post-disinvestment period. In this study we shall also compare two sets of companies individually, that means, we shall compare the performance of the divested companies with the non-divested companies during this period of time and the companies belonging to the same industry and the average turnover as a percentage of capital employed is compared to that of the divested company. Paired t-test is applied for observing, if there is any consistency or not in pre-and post-disinvestment periods as well as in different years for divested companies and control companies.

II. OBJECTIVE

To analyze the financial performance of selected divested PSUs during pre-and post-disinvestment periods and examine the immediate effects of disinvestment. Financial performance evaluation mainly depends upon the financial statement analysis.

III. METHODOLOGY

The inter-relationship that exists among the different items in the financial statement is revealed by accounting ratios. Ratios are one of the best tools for measuring liquidity, solvency, profitability and management efficiency of a firm. For measuring the financial performance, ratio analysis is the important traditional technique to judge the performance of the companies. In this study, for measuring the immediate effect of disinvestment some ratios like liquidity ratio, profitability ratio, activity ratio and capital structure ratio have been considered. In order to know the immediate impact of disinvestment we shall find out some ratios for the pre-disinvestment and post-disinvestment periods. Moreover, control methodology is also used for the purpose of comparing the two data sets between two periods. Paired statistical tool are also used for the purpose of testing the statistical significance of the result.

IV. DATA BASE

We selected 16 PSUs out of the 61 divested PSUs during the period 1990-91 to 2015-16. Companies have been selected mainly on the basis of availability of suitable data which we require for the study for the purpose of performance analysis. All the selected companies were analyzed according to the same set of parameters.

The companies selected for the study are all listed in Bombay Stock Exchange and securities of these companies are frequently traded in the stock market and all the selected companies which we consider are all PSUs after their disinvestment.

V. HYPOTHESIS

1. **H_{01}:** There is a significant difference between the liquidity positions of the post-disinvestment period and pre-disinvestment period of divested and control company.

2. **H_{02}:** There is a significant difference between the profitability positions of the post-disinvestment period and pre-disinvestment period of divested and control company.

3. **H_{03}:** There is a significant difference between the asset management position of the post-disinvestment period and pre-disinvestment period of divested and control company.

4. **H_{04}:** There is a significant difference between the solvency position of the post-disinvestment period and pre-disinvestment period of divested and control company.

VI. FINDINGS

1. **Summary Result of Liquidity Ratio:** Individual year-wise liquidity ratio of the divested companies along with their related control companies during both pre-disinvestment and post-disinvestment periods have been calculated. In table 1 the summary results of the divested companies along with their control companies have been presented.

Table 1:Summary Results of Liquidity Ratio

Changes in Ratio	Divested Company		Control Company	
	Number	Percentage	Number	Percentage
Immediate Impact on Current Ratio(CR)				
Increase in CR	11	69	9	56
Decrease in CR	5	31	7	44
Total	16	100	16	100
Immediate Impact on Liquid Ratio (LR)				
Increase in LR	10	63	8	50
Decrease in LR	6	37	8	50
Total	16	100	16	100

Source: Own Computation

Table 1 depicts that for 69 percent of the divested companies the current ratio and 63 percent liquid ratio for the first year of the post-disinvestment period have increased, while for the control companies this percentage is 56 and 50 percent respectively. Hence, from the table we can deduce the fact that divested companies could raise and improve their liquidity position just immediately after disinvestment in comparison to the control companies. The above view cannot be supported unless it is statistically tested and verified. So, in simple terms, it may be interpreted that apparently disinvestment has an immediate positive effect on liquidity position.

Now paired t-test has been applied to find out whether disinvestment has any immediate effect or not in the case of liquidity position. Same test has also been applied for the corresponding control companies. Test result is given in table 2

Table 2: Result of Paired Sample Test of Liquidity Ratio

Ratio	Company	T	df	Sig (2 tailed) P value
Current Ratio	Divested	-0.924	15	0.370
	Control	0.045	15	0.965
Liquid Ratio	Divested	-0.333	15	0.744
	Control	0.249	15	0.807

From the above table 2 it is observed that apparently there has been an immediate impact of disinvestment but statistically disinvestment doesn't have immediate impact. Statistically it is proven that the divested companies' liquidity position is insignificant.

2. **Summary Result of Profitability Ratio:** Individual year-wise profitability ratios of the divested companies along with their related control companies, both pre-disinvestment and post-disinvestment, have been calculated. In table 3 the summary result of the divested companies along with their control companies has been presented.

Table 3: Summary Results of Profitability Ratio

Changes in Ratio	Divested Company		Control Company	
	Number	Percentage	Number	Percentage
Immediate Impact on Gross Profit Ratio (GPR)				
Increase in GPR	11	69	11	69
Decrease in GPR	5	31	5	31
Total	16	100	16	100
Immediate Impact on Net Profit Ratio (NPR)				
Increase in NPR	7	44	6	37
Decrease in NPR	9	56	10	63
Total	16	100	16	100
Operating Profit Ratio (OPR)				
Increase in OPR	8	50	8	50
Decrease in OPR	8	50	8	50
Total	16	100	16	**100**
Cash Profit Ratio (CPR)				
Increase in CPR	7	44	5	31
Decrease in CPR	9	56	11	69
Total	16	100	16	100
Impact of Return On Investment (ROI)				
Increase in ROI	9	56	9	56
Decrease in ROI	7	44	7	44

Total	16	100	16	100
Impact of Return On Net worth (RONW)				
Increase in RONW	9	56	8	50
Decrease in RONW	7	44	8	50
Total	16	100	17	100

Source: Own Computation

Table 3 depicts that for 69 percent of the gross profit ratio, 44 percent of the net profit ratio, 50 percent operating profit ratio ,44 percent cash profit ratio 56 percent of the return on investment and 56 percent of the return on net worth of the divested companies for the first year of the post-disinvestment period have increased, while for the control companies this percentage is 69 for gross profit ratio, 37 percent for net profit ratio, 50 percent operating profit ratio, 31percent cash profit ratio 56 percent for return on investment and 50 for return on net worth. From the table 3 it is observed that immediate impact of disinvestment on profitability position of divested companies and corresponding control companies are same except net profit ratio and cash profit ratio. In these circumstances it is very difficult to draw any definite thought related to profitability position without applying any statistical measure. Hence, in this situation we applied paired t test for measuring the immediate impact of disinvestment related to profitability ratio.

Now paired t-test has been applied to find out whether disinvestment has any immediate effect or not in case of profitability position. Same test is also applied to the corresponding control companies. Test result is given in table 4

Table 4: Result of Paired Sample Test of Profitability Ratio

Ratio	Company	t	df	Sig (2 tailed) p value
Gross Profit Ratio	Divested	-0.977	15	0.344
	Control	-0.930	15	0.367
Net Profit Ratio	Divested	1.104	15	0.287
	Control	1.619	15	0.126
Operating Profit Ratio (OPR)	Divested	-0.323	15	0.751
	Control	0.215	15	0.833
Cash Profit Ratio (CPR)	Divested	0.392	15	0.700
	Control	1.221	15	0.241
Return on Capital Employed (ROI)	Divested	0.153	15	0.881
	Control	0.427	15	0.676
Return on Net worth or Equity	Divested	-2.262	15	0.039*
	Control	1.694	15	0.111

Source: Own Computation based on SPSS (Version 17)

Note: * indicate at 5% level significant

From the table 4 it is observed that apparently net profit ratio, cash profit ratio and return on net worth ratio has an immediate effect of disinvestment. But without applying any statistical measure it is difficult to draw any definite thoughts related to profitability ratio. After applying paired t test it is observed that that after disinvestment only return on net worth ratio, were statistically significant at 5 percent level.

3. **Summary Result of Activity Ratio:** Individual year-wise activity ratio of the divested companies along with their related control companies both pre-disinvestment and post-disinvestment have been calculated. In table 5 the summary result of the divested companies along with their control companies has been presented.

Table 5: Summary Results of Turnover Ratio

Changes in Ratio	Divested Company		Control Company	
	Number	Percentage	Number	Percentage
Immediate Impact on Fixed Asset Turnover Ratio(FATR)				
Increase in FATR	12	75	9	56
Decrease in FATR	4	25	7	44
Total	16	100	16	100
Immediate Impact on Cash Turnover Ratio (CTR)				
Increase in CTR	12	75	10	63
Decrease in CTR	4	25	6	37
Total	16	100	16	100
Immediate Impact on Inventory Turnover Ratio (ITR)				
Increase in ITR	9	56	7	44
Decrease in ITR	5	31	7	44
Unaltered ITR	2	13	2	12
Total	16	100	16	100
Immediate Impact on Trade Receivable Turnover Ratio (TRTR)				
Increase in TRTR	2	12	5	31
Decrease in TRTR	12	75	9	56
Unaltered TRTR	2	13	2	13
Total	16	100	16	100

Source: Own Computation

Table 5 depicts that for 75 percent of the fixed asset turnover ratio, 75 percent cash turnover ratio, 56 percent inventory turnover ratio, and 12 percent trade receivable turnover ratio of the divested companies for the first year of the post-disinvestment period have increased, while for the control companies this is 56 percent for fixed asset turnover ratio, 63 percent cash ratio and cash turnover ratio, 44 percent inventory turnover ratio and 31 percent trade receivable turnover ratio. Hence, from the table we can say that fixed asset turnover, cash turnover cash turnover ratio and inventory turnover ratio have an immediate impact of disinvestment compared to control company. On the other hand, trade receivable turnover ratio does not have any immediate effect. Trade receivable turnover ratio only increased by12 percent, after disinvestment due to small scale credit sales. The above view cannot be supported unless it is statistically tested and verified.

Now paired t-test has been applied to find out whether disinvestment has any immediate effect or not in case of asset utilisation position. Same test is also applied for the corresponding control companies. Test result is given in table 6

Table 6: Result of Paired Sample Test of Turnover Ratio

Ratio	Company	t	df	Sig (2 tailed) P value
Fixed Asset Turnover Ratio	Divested	-1.954	15	0.070**
	Control	-0.585	15	0.567
Cash Turnover ratio	Divested	-3.104	15	0.007*
	Control	-2.341	15	0.033**
Inventory Turnover Ratio	Divested	-0.629	15	0.539
	Control	0.489	15	0.632
Trade Receivable Turnover ratio	Divested	0.844	15	0.412
	Control	2.351	15	0.033**

Source: Own Computation using SPSS (Version 17.0)

Note: * indicates 1 % level of significance and ** indicate 5% level of significance

From the table it can be concluded that apparently fixed asset turnover, capital turnover cash turnover ratio and inventory turnover ratio has an immediate impact of disinvestment. Similarly, it is noticed that statistically, fixed asset turnover ratio is statically significant at 5% level and cash turnover ratio is significant at 1% level. On the other hand, it is also noticed that cash turnover ratio and trade receivable turnover ratio of Control Company are significant at 5% level.

4. **Summary Result of Solvency Ratio:** Individual year-wise capital structure ratio of the divested companies along with their related control companies both pre-disinvestment and post-disinvestment have been calculated. In table 7 the summary result of the divested companies along with their control companies has been presented.

Table 7: Summary Results of Capital Structure Ratio

Changes in Ratio	Divested Company		Control Company	
	Number	Percentage	Number	Percentage
Immediate Impact on Debt Equity Ratio (DER)				
Increase in DER	10	63	9	56
Decrease in DER	3	19	6	38
Unaltered DER	3	18	1	6
Total	16	100	16	100

Immediate Impact on Interest coverage Ratio (ICR)				
Increase in ICR	8	50	5	31
Decrease in ICR	6	38	10	63
Unaltered ICR	2	12	1	6
Total	16	100	16	100

Source: Own Computation

Table 7 depicts that for 63 percent of debt-equity ratio and 50 percent of interest coverage ratio of the divested companies for the first year of the post-disinvestment period has increased, while for the control companies this percentage is 56 for debt-equity ratio and 31 percent for interest coverage ratio. Thus more than 60 percent of the divested companies could raise and improve their long term solvency positions just immediately after disinvestment and 56 percent of the control companies also increased their long term liquidity position without disinvestment. Hence, disinvestment has some significant immediate effect on their capital structure. The above view should be statistically tested and verified.

Now paired t-test has been applied to find out whether disinvestment has any immediate effect or not in case of long term solvency position. Same test is also applied to the corresponding control companies. Test result is given in table 8

Table 8: Result of Paired Sample Test of Capital Structure Ratio

Ratio	**Company**	**t**	**df**	**Sig (2 tailed) P Values**
Debt Equity Ratio	Divested	-2.207	15	0.043**
	Control	-0.379	15	0.710
Interest coverage Ratio	Divested	-0.392	15	0.700
	Control	0.578	15	0.572

Source: Own Computation using SPSS (Version 17.0)

Note: ** indicate 5% level of significance

From the table 8 it is found that the difference between the divested companies and the control companies in their capital structure position is significant. Hence it can be inferred that capital structure of the divested PSUs is theoretically and statistically significant at 5% level.

VII. CONCLUSION

The study has examined the immediate impact of disinvestment. From table 9.1it can be observed that there has been no immediate impact of disinvestment in the liquidity position of the divested PSUs. If we give some focus on profitability position of the PSUs it is observed that return on net worth ratio is affected by disinvestment. After disinvestment the position of the share capital may be changed since, the immediate impact of disinvestment can be noticed in case of return on net worth. Similarly, in the case of asset utilisation ratio it is observed that fixed asset turnover ratio, and cash turnover ratio are also affected due to disinvestment and immediate impact can be noticed. Since capital structure position is changed due to disinvestment, immediate impact of disinvestment is also noticed in the case of debt-equity ratio.

Table 9: Summary Results of the Immediate Impact of Disinvestment

Name of the Indicators used	**Divested Company**		**Control company**		**Remarks**
	Increase %	**statistical Significance**	**Increase %**	**Statistical Significance**	
Current Ratio	69	Not Significant	56	Not Significant	There exists no immediate impact
Liquid Ratio	63	Not Significant	50	Not Significant	There exists no immediate impact
Gross Profit Ratio	69	Not Significant	69	Not Significant	There exists no immediate impact
Net Profit Ratio	44	Not Significant	37	Not Significant	There exists no immediate impact
Operating Profit Ratio	50	Not Significant	50	Not Significant	There exists no immediate impact
Cash Profit Ratio	44	Not Significant	31	Not Significant	There exists no immediate impact
Return on Investment	56	Not Significant	56	Not Significant	There exists no immediate impact
Return on Net Worth	56	Significant	50	Not Significant	Immediate impact exists
Fixed Asset Turnover Ratio	75	Significant	56	Not Significant	Immediate impact exists
cash Turnover Ratio	31	Significant	69	Significant	Immediate impact exists
Inventory Turnover Ratio	44	Not Significant	44	Not Significant	There exists no immediate impact
Trade Receivable Turnover Ratio	12	Not Significant	12	Significant	There exists no immediate impact
Debt Equity Ratio	63	Significant	56	Not Significant	Immediate impact exists
Interest Coverage Ratio	50	Not Significant	31	Not Significant	There exists no immediate impact

Source: Based on the analysis of chapter 5

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