Financial Performance of Public Sector Enterprises in India with Focus on Disinvestment and MOU

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The study is dedicated to Lord Sairam

CERTIFICATE

This is to certify that the thesis entitled **Financial Performance of Public Sector Enterprises in India with Focus on Disinvestment and MOU**, being submitted by Seema Gupta to the Indian Institute of Technology, Delhi, for the award of the Degree of Doctors of Philosophy is a record of bonafide research work carried out by her under our guidance and supervision. She has fulfilled the requirements for the submission of thesis, which has attained the standard required for a Ph.D. degree of this institute. The results presented in this thesis have not been submitted elsewhere for the award of any degree or diploma.

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(Seema Gupta)

ABSTRACT

Public sector enterprises (PSEs) have played a pivotal role in development of Indian economy to overcome socio-economic problems. Given the nature of their socio-economic responsibilities, their business operations have not been guided solely by the commercial principles. Their losses, to some extent, can be attributed to these responsibilities.

Further, liberalization and globalization have caused competition and have lowered the profit margins. At the same time, government has reduced subsidies and budgetary support for PSEs to curtail its own fiscal deficit. These socio-economic responsibilities, withdrawal of financial assistance and competitive environment have been identified as the major reasons for the non-profitable operations of large number of PSEs; this in turn, has caused heavy burden of borrowings on a large number of enterprises (leading to the incidence of high interest) and mounted losses, eventually causing a precarious situation; these factors have forced government to introduce strategic and economic reforms (in 1991) in the Indian PSEs also. It is to make PSEs's business operations commercially profitable, self-reliant and financially sound for meeting their financial requirements (for further expansion/ modernization) besides meeting social obligations/responsibilities. To what extent, the PSEs in India have achieved better financial performance, constitutes the rationale of the present study. The impact of disinvestment and signing of memorandum of understanding (MoU, recommendations of economic reforms which have direct bearing on the financial performance of PSEs) have also been assessed; disinvestment and MoU have larger implications than just selling the government equity.

The study covers 209 non-financial Central PSEs in India, based on their existence in the year 2001-02; there are 38 disinvested PSEs and 66 pure-MoU PSEs. An extensive study at aggregative and disaggregative level of the sample PSEs has been conducted for the period of twenty years (i.e., 1986-87 to 2006-07) which varies on the basis of subject requirement. The period of the study has been bifurcated into different phases. For instance, to measure the financial performance in the cases of all PSEs and of disinvested and non-disinvested PSEs, the broad phases are three in number, i.e., phase one (1991-92 to 1995-96) considered as initial phase of liberalization and disinvestment, phase two (1996-97 to 2000-01) as intermediate phase

and phase three (2001-02 to 2006-07) as strategic phase of disinvestment and matured phase of liberalization policies; in the case of disinvested PSEs, there are two broad phases; these are five years prior to and five years after disinvestment (on rolling basis) for the period 1986-87 to 2006-07; there are three broad phases for MoU PSEs, *viz.*, phase one (1994-95 to 2000-01), phase two (2001-02 to 2003-04) and phase three (2004-05 to 2006-07), based on the recommendations of National Council of Applied Economic Research (NCAER). From the statistical point of view, the 'first' phase, 'second' phase and 'third' phase have been considered as three independent samples.

We have relied primarily on the financial ratios pertaining to profitability, efficiency, liquidity, leverage and productivity of capital. Descriptive and positional values have been computed to analyze the trend and its implications. Statistical techniques, namely, paired t test, independent t test and analysis of variance analysis (ANOVA) tests have been carried out. In addition to secondary data analysis, the study has used primary data to validate the findings of secondary data in view of the responses received from the questionnaire.

The findings suggest that liberalization and economic reforms have yielded positive impact on the performance of the sample PSEs in India in majority of the ratios over a period of time. Survey findings have indicated satisfying compounded annual growth rate in their net-profits during 2003 to 2008 among the respondent PSEs.

Sector-wise disaggregative analysis delineates no statistically significant difference, though, better profitability and liquidity has been recorded in service sector PSEs than that of manufacturing sector PSEs. Another analysis based on profit-making (PM) and loss-incurring PSEs (LM) enumerates that losses of loss-incurring PSEs have mounted-up further; they are beset with dissatisfactory performance in the vast number of parameters in the subsequent phases (1996-97 to 2000-01 and 2001-02 to 2006-07). In contrast, the profitability of profit-making PSEs has indicated an improvement over the phases.

The study has indicated the better profitability, assets turnover, productivity of capital and liquidity position in disinvested PSEs *vis-à-vis* non-disinvested PSEs. Independent t test reinforces better operating efficiency in utilization of resources, productivity and liquidity of disinvested PSEs compared to non-disinvested PSEs.

Further, an aggregative analysis (with focus on before and after disinvestment) on disinvested PSEs suggests that disinvestment brings no major improvement in majority of the parameters after five years of disinvestment; profitability, assets turnover and capacity utilization have followed decreasing trend; improvement has been noted in respect of productivity of capital and liquidity only. In fact, actual findings are not in conformity with normal expectations that disinvested PSEs perform better.

Disaggregative analysis of disinvested PSEs have recorded considerable enhancement in liquidity, efficiency and productivity ratios (save profitability ratios which have shown only marginal improvement) in the listed PSEs at NSE after disinvestment. Whereas, the performance of non-listed PSEs is unsatisfactory subsequent to disinvestment in most of the financial parameters; for instance, profitability, assets turnover and liquidity ratios have substantially reduced after disinvestment. Independent t test also corroborates better performance of listed PSEs compared to non-listed PSEs.

Sector-wise disaggregative analysis of disinvested PSEs has observed a decline in the profitability and major efficiency ratios in both types of manufacturing and service PSEs after disinvestment. *Inter-se,* profitability, assets turnover and liquidity ratios of service PSEs have shown better position compared to manufacturing PSEs. No significant difference has been observed as per independent t test between both types of PSEs.

A high quantum of decline has been witnessed in majority of the parameters of loss-incurring PSEs (LME) subsequent to disinvestment; their position has deteriorated over the years of the study. In contrast, the financial performance of profit-making PSEs (PME) has shown improvement in majority of the parameters after disinvestment; some of these are statistically significant. Independent t test also suggests better performance of PME compared to LME. The survey findings suggest that nearly three-fourth of the responding LME are debarred with the power to increase selling price in tune with input cost and are governed with administrative prices.

Mixed results have been observed in the parameters of profitability among the six groups (based on the degree of disinvestment). The position of liquidity, leverage, inventory holding period (IHP) and productivity have shown improvement due to higher disinvestment. ANOVA test signifies positive relation between the quantum of disinvestment with higher financial performance.

Similarly, marginal increase in profitability and significant increase in productivity of capital have been observed during the post-disinvestment phase compared to pre-disinvestment phase in the industries having PSEs with higher quantum of disinvestment *vis-à-vis* decline in the industries having PSEs with relatively lower amount of disinvestment.

ANOVA test brings to fore that assets size has a significant bearing on the financial performance of disinvested PSEs.

MoU has brought salutary impact on the financial performance of MoU PSEs; the increase in profitability, efficiency, liquidity and productivity is commendable during the post-MoU phases; non-MoU PSEs have indicated unsatisfactory performance; t test has also corroborated significant difference between MoU and non-MoU PSEs in many ratios. Phase three has shown marked improvement in the parameters of profitability and productivity compared to previous two phases in MoU PSEs. Similarly, efficiency, liquidity and leverage ratios have also shown satisfactory results over the phases in sizable number of cases.

The study indicates that MoU has laid sizable impact in improving the profitability, operational efficiency, liquidity and productivity of MoU PSEs over the phases. It is important to note that the loss-incurring MoU PSEs have reduced their losses and have turned their losses into profits by enhancing their productive and operational efficiency over period of time. Further, manufacturing PSEs which have lower-edge over service PSEs in majority of the ratios have shown better profitability and higher edge after signing MoUs against their counterpart. In sum, MoU has yielded the desired results. Therefore, it is recommended that MoU should be mandatory for all the PSEs (instead of the current practice of its being voluntary in nature).

It is reasonable to infer from the study that economic reforms, liberalization policies and MoU have brought positive and salutary impact in improving the financial performance of PSEs in sizeable number of cases over the phases. The same is not true with disinvestment; it has not brought out better financial performance of PSEs in majority of the cases; however, PSEs-listed at NSE, having higher degree of disinvestment and of larger assets size have shown better financial performance after disinvestment. These better showings in majority of the cases are not statistically significant. The study is useful for the government, ministries and academician to draw the policies and strategies for the better functioning of PSEs in India.

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