

# **Does Disinvestment Improve Financial Performance? A Case of Bharat Heavy Electricals Ltd. (BHEL)**

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## **Abstract**

The basic difference between private and public ownership is the difference in objectives, viz; welfare maximization by the public sector and profit maximization by the private sector. Therefore, there are good reasons for the thinking that the ownership of a firm will have significant effects on its behaviour and performance of an enterprise. Present study is an attempt to analyze the impact of change in the ownership on financial performance of public sector enterprises in general and Bharat Heavy Electricals Limited in particular. In this study, disinvestment of the government shareholding has been taken as an event and pre - disinvestment mean value of various financial parameters for financial years (1986-91) is compared with post-disinvestment mean value of financial years (1992-2000). Our result shows that disinvestment improves the profitability and liquidity position of BHEL while it has affected the dividend payout negatively.

## 1. INTRODUCTION

Strategies are formulated in the light of objectives, and therefore play an important role in their accomplishment. An important aspect in the management of public sector enterprises is the relevance of the strategic financial planning technique in dealing with conflicting objectives.

Objectives of public sector enterprises are conflicting because majority shareholder is the government. In the case of public ownership, the management of firms can be regarded as agents acting for the government to which they are responsible. As compared to private ownership, differences between managers and their immediate principals in public ownership arise from following facts:

- (a) Principals do not typically seek to maximize profits.
- (b) There are no marketable ordinary shares in the firm, and hence no market for corporate control.
- (c) There is no direct equivalent of the bankruptcy constraint on financial performance.

Thus the purpose of the present study is to analyze the impact of change in the ownership (reduction in government's ownership) on various financial parameters of a public sector company.

**The paper is further organized as follows. Section 2 reviews the literature related to the topic. Section 3 facilitates discussion on research methodology. The background of BHEL is given in section 4. Section 4 also justifies the selection of BHEL for the present study with the help of SWOT Analysis and its strategic analysis. Hypotheses are tested and results are presented in section 5 while section 6 gives conclusion.**

## 2. LITERATURE REVIEW

Joshi and Little (1994) have attempted to estimate the real rates of return to investment in the public and private sectors. Bhaya (1990) based his findings on the time series data from 1981-82 to 1985-86 published annually for the public and private sector by the survey of industries. He used three indicators of efficiency (managerial efficiency – things that can be controlled by managers). They are money, workforce and material. On the basis of the evidence available over the period 1981-82 and 1985-86, Bhaya concluded that barring the burden of the fixed capital over which the public sector management has no control and despite higher wages and administered prices over which the management has no control, efficiency in public sector is in no way inferior to the private sector. Jha and Sahni (1992) use Annual Survey of Industries data for the years 1960-61 to 1982-83 for our industries: cement, cotton textiles, electricity, and iron and steel in another study. The latter two industries, they claim are primarily in the public sector while the first two are owned predominantly by private interests. The authors have no evidence of allocative inefficiencies in general and each of them is relatively as efficient as one another. Sharma and Sinha (1995) have used Cobb- Douglas production function to study productive efficiency (or Economic efficiency), which combines both technical and allocative efficiencies for the cement industry in India. Majumdar (1995) evaluated relative performance difference between the government owned, joint sector and private sectors of Indian industry. Kaur (1998) compared TFPI of 15 public and 15 private enterprises from diverse sectors, viz., aluminum, steel, fertilizers, engineering, drugs and chemicals and consumer goods.

Naib (2002) compared efficiency of 26 enterprises (13 public and 13 private) for a 12 year period from 1988-89 to 1999- 2000. The results indicated that both public and private firms experienced modest positive average annual growth rate during this period. Thus this study also revealed that at the enterprise level there is little empirical justification for general presumption in favour of either type of ownership and a case by case examination may be more revealing.

Thus for the present study case study method has been taken. The present study is a case of Bharat Heavy Electricals Limited (BHEL), which is a multi product, multi division, Public Sector Company operating in highly competitive environment.

### 3. RESEARCH METHODOLOGY

The methodology of research is based upon case study method. It is the method of study in depth rather than breadth. In this approach performance of the enterprise before disinvestment is compared with its performance after disinvestment, attributing any observed change to the disinvestment. For the purpose of the present study Pre- disinvestment mean value of various financial parameters for Financial Years (1986-91) is compared with their Post disinvestment Mean value for Financial Years (1992-2000)

#### Research Hypothesis

In the present study it has been assumed that due to maintaining accordance with government's Economic, Social, Fiscal and Political expectations the public sector enterprises are not able to accomplish their internal financial goals.

It was thus expected that disinvestment would lead to increase in public enterprises profitability and increase in operating efficiency.

Hypothesis:

After Disinvestments of BHEL, it is expected:

*(H1) That the dilution of government equity in ownership will cause profitability and operating efficiency to improve. For measuring profitability we have computed mean value of Return on Sales Ratio before and after disinvestment period.*

$$ROS_A > ROS_B$$

*(H2) There will be decrease in the proportion of debt in the capital structure both because of the state's withdrawal of debt guarantees and increase in enterprises cost of borrowing. For measuring proportion of debt in capital structure we have computed mean value of Debt to Asset Ratio for before and after disinvestment period.*

$$LEV_A < LEV_B$$

*(H3) That dividend payout will increase on disinvestments as private investors would demand higher dividends; for measuring the impact of dilution of government equity on dividends we have computed mean value of Dividend Payout Ratio for before and after disinvestment.*

$$PAYOUT_A > PAYOUT_B$$

*(H4) That the liquidity will improve. It is expected that sales volume will improve after disinvestment and that will result into higher inventory. Also recovery of short term and*

*long terms loans and credit allowed to customers (mainly State Electricity Boards whose financial health is poor) will also get improved after dilution in the government equity. For the measurement of liquidity we have computed Current Asset to Current Liability Ratio for before and after disinvestment period.*

$$LQTDY_A > LQTDY_B$$

## **Data and Variables**

For the purpose of the present study Pre- disinvestment mean value of various financial parameters for Financial Years (1986-91) is compared with their Post disinvestment Mean value for Financial Years (1992-2000). Since there is no further dilution in the government equity after F.Y 1999-2000 we have not taken into consideration the data after that duration. Various financial ratios calculated Pre and Post disinvestment for measuring the financial performance of BHEL are as follows: (i) to measure profitability position, Profit before Depreciation, Interest and Taxes to Sales Ratio (PBDIT/ Sales) and Profit after Tax to Sales Ratio (PAT/ Sales); (ii) To measure leverage position, Debt to Assets (Debt/ Total Assets); (iii) to measure liquidity, Current Assets to Current Liability Ratio (Current Assets/ Current Liabilities) and (iv) to measure dividend payout, Dividend Pay Out Ratio (Dividend Paid/ PAT).

## **(4) BACKGROUND OF BHEL**

Bharat Heavy Electricals Limited. (BHEL) was set up in November 1964, with three plants at Haridwar, Hyderabad, and Trichy. It is one of the *Navaratna* PSEs. It is a multi product, multi division, Public Sector Company. It is generally believed that in the state owned enterprises neither incentives nor sanctions are closely related to performance. Most employees have job security and get advancement within a well-defined promotional hierarchy. Further objectives of PSEs are likely to induce certain social obligations, which may be poorly defined and hard to quantify. The resulting looseness of the objectives makes monitoring of the PSEs much difficult.

B.H.E.L is a market leader in power and industrial products that it manufactures. Its major competitors are MNCs like Siemens and ABB. It has a sound institutional system of analyzing environment. BHEL has a good system of undertaking modernization of its major products and thus reducing costs. Prices of BHEL's products are not fixed like that of consumer goods. Following SWOT analysis of BHEL justify its selection for the purpose of present study. SWOT analysis of BHEL clearly depicts that BHEL is functioning in globally competitive environment and there is not level playing field available to it because of its very nature of being a public sector company. Thus we assume here that if we dilute the government ownership in BHEL through disinvestment it will provide level playing field to it and all round performance of BHEL will improve.

## **SWOT (Strength, Weaknesses, Opportunities and Threats) analysis of BHEL:**

### **Strengths:**

- Sound engineering base and ability to assimilate
- Relatively stable industrial relationship
- Access to contemporary technologies with the support from renowned collaborators.

- Ability to set up power plants on turnkey basis, complete know-how for manufacture of entire equipment is available with the company.
- Ability to manufacture or procure to supply spares.
- Fully equipped to take capital maintenance and servicing of the power plants.
- Largest source of domestic business leading to major presence and influence in the market.
- Ability to successfully overhaul and renovate power stations equipment of different international companies.
- Low labour cost.
- For non-BHEL products, services and spares are not easily available and if they are, price charged are very high.
- Sound financial position in terms of profitability and solvency.
- Low debt equity ratio (even lower than 0.5:1) for all the years under study, enabling company to raise capital.

**Weaknesses:**

- Difficulty in keeping up the commitments on the product delivery and desired sequence of supplies.
- Larger delivery cycles in comparison with international suppliers of similar equipment.
- Inability to provide supplier's credit, soft loans and financing of power projects.
- Lack of effective marketing infrastructure.
- Due to poor financial position of state electricity boards, which are the major customers of BHEL in India, liquidity position of BHEL is not satisfactory.
- Being a public sector company BHEL is suffering from sub optimality of control due to:
  1. Displacement of social objectives by political objectives, which may lead to redundant costs and also rising costs.
  2. Direct political intervention in managerial decision over an arm length relationship that would restrict government's task of setting appropriate managerial incentive structure.
  3. Private goals that lead to budget growth and employment growth.
  4. Internal inefficiencies in bureaucratic activity.

**Opportunities:**

- Demand for power and hence plant equipment is expected to grow.
- Private sector power plants to offer expanded market as utilities suffers resource crunch.
- Ageing power plants would give rise to more spares and services business.
- Life expansion program for old power stations.
- Export opportunities.
- Easy processing of joint ventures/ collaboration/import/ acquisition of new technology.
- Financial and operational autonomy for profit making public sector enterprises. To make the public sector more efficient government has decided to grant enhanced autonomy and delegation of powers to the profit making public sector enterprises.

**Threats:**

- Increased competition both national and international.

- Multilateral agencies reluctant to lend to power sector because of poor financial management of S.E.Bs
- More concessions to private sector and not to government owned utilities like NTPC or S.E.Bs, so future power projects would be opened up in private sector.
- Level playing ground not available, foreign companies spending much more on business promotion tactics.

### ***STRATEGIC ANALYSIS OF BHEL***

A business's position within the planning grid is calculated by subjectively quantifying the two dimensions of the grid.

#### **Industry attractiveness factors for BHEL**

<b>Industry Attractiveness factors</b>	<b>Weight</b>	<b>Ratings</b>	<b>Score</b>
Market Size	30	0.5	15
Projected Market Growth	35	1	35
Technological Requirement	15	0.5	7.5
Political and Regulatory factors	20	0	0
<b>Total</b>	<b>100</b>	<b>-----</b>	<b>57.5</b>

Ratings: High = 1.0, Medium = 0.5, Low = 0.0

#### **Business Strength for BHEL**

<b>Business Strength Factors</b>	<b>Weight</b>	<b>Ratings</b>	<b>Score</b>
Relative Market Share	30	1	30
Ownership	20	0	0
Production Capacity	5	1	5
Production Efficiency	5	0.5	2.5
R&D	10	0.5	5
Strategic Capability	10	1	10
Marketing	10	0	0
Finance	10	1	10
<b>Total</b>	<b>100</b>	<b>-----</b>	<b>62.5</b>

Ratings: High = 1.0, Medium = 0.5, Low = 0

Power Plant Equipment (PPE) and others various related industries in which BHEL operates seems to be fairly attractive for it. As far as overall business strength is concerned it is in favour of BHEL. It is market leader in PPE and other related industries. There is enough production capacity available with BHEL and scope of its expansion is also very good. Finance and Strategic capability of BHEL is outstanding. Company is performing fairly well on production efficiency and R&D front. Only areas of concern for the company are its ownership and marketing. Being a public sector company it does not put much effort on the marketing. Majority of its client are financially sick State Electricity Boards (SEBs) and BHEL is a preferred supplier to these SEBs because its competitor MNCs are hesitant to supply equipments to these SEBs because of their sick financial position. Its ownership structure also sometime restrain it form cheap foreign financing and cross border joint ventures, which may result into expanded international market for its products. Thus we assume here that dilution of

the government ownership in BHEL, which is a globally competitive company functioning in fairly attractive industry, would result into improved overall performance.

## 5. RESULT ANALYSIS

### Profitability (PBDIT/Sales) before and after disinvestment:

<b>Pre-disinvestment Period (1986-1991)</b>	0.1552	0.1323	0.1216	0.1566	0.1548				
<b>Post disinvestment Period (1992-2000)</b>	0.180	0.170	0.161	0.187	0.220	0.186	0.163	0.157	0.078

### Leverage (Debt/ Asset) before and after disinvestment:

<b>Pre-disinvestment Period (1986-1991)</b>	0.501	0.430	0.417	0.455	0.462				
<b>Post disinvestment Period (1992-2000)</b>	0.590	0.548	0.463	0.400	0.306	0.130	0.052	0.063	0.211

### Dividend Payout Ratio (Div/ PAT) before and after disinvestment:

<b>Pre-disinvestment Period (1986-1991)</b>	0.298	0.321	0.309	0.378	0.364				
<b>Post disinvestment Period (1992-2000)</b>	0.276	0.268	0.260	0.140	0.116	0.085	0.112	0.122	0.235

### Liquidity (Current Asset to Current liability Ratio) before and after disinvestment:

<b>Pre-disinvestment Period (1986-1991)</b>	1.132	1.170	1.316	1.225	1.387				
<b>Post disinvestment Period (1992-2000)</b>	1.474	1.446	1.318	1.355	1.429	1.474	1.474	1.531	1.820

**Test of Hypothesis:**

Performance Variable	Pre disinvestment Mean Value of FY (1986 - 91)	Post Disinvestment Mean Value of FY (1992-2000)	Difference (Post - Pre)	Hypothesis Accepted/ Rejected
Profitability Return on sales (ROS)	0.1449	0.1640	+ 0.0191	Accepted
Leverage	0.453	0.307	- (0.146)	Accepted
Dividend Payout Ratio	0.334	0.180	- (0.154)	Rejected
Liquidity	1.246	1.480	+ 0.234	Accepted

**Profitability:**

Hypothesis:  $ROS_A > ROS_B$

Hypothesis is accepted as  $ROS_A - ROS_B = + 0.0191$

Profitability after disinvestment has been increased, which is in accordance with our hypothesis. Mean of Return on Sales Ratio for post disinvestment period is significantly higher than the same ratio for pre disinvestment period.

**Leverage:**

Hypothesis:  $LEV_A > LEV_B$

Hypothesis is accepted as  $LEV_A - LEV_B = (-0.146)$

Leverage after disinvestment has been reduced, that is again in accordance with our hypothesis. Debt –Equity Ratio for post disinvestment period is significantly lower than the same ratio for pre disinvestment period, which shows an increase in cost of debt after dilution of government equity.

**Dividend Payout Ratio:**

Hypothesis:  $PAYOUT_A > PAYOUT_B$

Hypothesis is rejected as  $PAYOUT_A - PAYOUT_B = (-0.154)$

Dividend Payout Ratio of BHEL has been reduced after disinvestment, however it was expected that private investors would demand more dividends. Reason behind this decline is expansion opportunities available to BHEL, which resulted into more retained earning and higher growth rate, which can be observed from the increased market capitalization of BHEL after Disinvestment.

**Liquidity:**

Hypothesis:  $LQTDY_A > LQTDY_B$

Hypothesis is accepted as  $LQTDY_A - LQTDY_B = + 0.234$

Liquidity of BHEL has been improved after disinvestment. Reason for this improvement in liquidity can be allocated to its huge investment in inventories after disinvestment, as its sales volume has also increased significantly.

## 6. CONCLUSION

In BHEL government equity has been disinvested up to 32.28 per cent till 31 March 2001. The share holding pattern of BHEL as on 31 December 2007 is: Union Government (67.72 per cent), Foreign Institutional Investors (19.54 per cent), Banks, financial institutions and insurance companies (7.74 per cent) and others including general public (5.00 per cent). For the public sector companies like BHEL which is operating in globally competitive environment, disinvestment is a good solution as it has resulted into improved profitability and operational efficiency.

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