

# An Enquiry into the Liaison between Disinvestment Receipts and Operating Profit of CPSEs in India

OPEN ACCESS

Manuscript ID:  
COM-2022-10045146

Volume: 10

Issue: 4

Month: October

Year: 2022

E-ISSN: 2582-6190

Received: 20.07.2022

Accepted: 28.08.2022

Published: 01.10.2022

Citation:

Ghosh, Sudipta, and PS Aithal. "An Enquiry into the Liaison between Disinvestment Receipts and Operating Profit of CPSEs in India." *ComFin Research*, vol. 10, no. 4, 2022, pp. 6–9.


DOI:

<https://doi.org/10.34293/commerce.v10i4.5146>




This work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

**Sudipta Ghosh**

*Post-Doctoral Research Fellow, Faculty of Management & Commerce  
Srinivas University, Mangalore, India &  
Assistant Professor (Academic Level 12), Department of Commerce (UG & PG)  
Prabhat Kumar College, Contai, West Bengal, India*  
 <https://orcid.org/0000-0003-0862-0645>

**P.S. Aithal**

*Professor, Faculty of Management & Commerce  
Srinivas University, Mangalore, India*  
 <https://orcid.org/0000-0002-4691-8736>

## Abstract

*Disinvestment of Government's equity is a method in which equity capital owned by the Govt. is withdrawn either in fraction or in whole. From the pecuniary year 1991-92, the Govt. of India started the process of disinvestment in CPSEs. The basic law behind divestment is to augment wealth, encourage broader civic participation and to achieve enhanced market responsibility. The essential goal of disinvestment is to make sure best use of nationwide capital and to expand prolific effectiveness of the enterprises. A Public Sector Enterprise (PSE) refers to an enterprise that is owned and proscribed by the Government. In this type of enterprise, investment is made wholly or partially by the Govt. The basic goal of a public enterprise is to deliver commodities and services to the society at a reasonable price, apart from earning profit. In this backdrop, the current study is an effort to enquire the liaison between and aggregate disinvestment receipts and aggregate operating profit of the CPSEs in India during the study episode 2010-11 to 2019-20. Both positive and negative liaisons are observed between aggregate disinvestment receipts and aggregate operating profit of the CPSEs in India during the study episode, although the outcome is found to be noteworthy for the entire study episode. In finale, it may be concluded that the process of disinvestment considerably helps the Indian CPSEs to augment their operating profit during the entire period under study.*

**Keywords:** CPSEs, Correlation Coefficient, Disinvestment Receipts, Liaison, Operating Profit, PSEs.

## Prologue

Disinvestment of Government's equity is a method in which equity capital owned by the Govt. is withdrawn either in fraction or in whole. From the pecuniary year 1991-92, the Govt. of India started the process of disinvestment in CPSEs. The basic law behind divestment is to augment wealth, encourage broader civic participation and to achieve enhanced market responsibility. The essential goal of disinvestment is to make sure best use of nationwide capital and to expand prolific effectiveness of the enterprises.

A Public Sector Enterprise (PSE) refers to an enterprise that is owned and proscribed by the Government. In this type of enterprise, investment is made wholly or partially by the Govt. The basic goal of a public enterprise is to deliver commodities and services to the society at a reasonable price, apart from earning profit. Under PSEs, the Central Public Sector Enterprises (CPSEs) occupies a noteworthy position in the Indian economy. The CPSEs in India began their voyage with only 5 CPSEs. As on March 2019, there are 348 CPSEs.

The CPSEs are viewed as tactical enterprises in the formation of a nation. They supply necessary wares and services. Moreover, they occupy a considerable market position in essential segments like petroleum, electricity, steel, mining, etc.

### Literature Review

Mishra, R.K. and Nandagopal, R. (1989), indicated that the procedure of privatization in the industries could make welfare for most of the customers. Galal, A. et al. (1994), stated that the problems related with transition cannot be attributed to privatization. However, economic recital discovered enrichment in profitability and sales competency. Megginson, W.L. and Netter, J.M. (2001), stated that companies in which privatization took place were more efficient and achieved improved fiscal wellbeing. Gupta, K.L. and Kaur, H. (2004), observed that ailing PSEs should be clogged through the sale of their assets. Such seriously ailing PSEs were restricted to those PSEs which were formerly taken over as ailing units from the private segment. Therefore, these PSEs became a focal matter for shoddy recital of the PSEs.

Nagaraj, R. (2005), observed that monetary recital is unlikely to be pretentious by disinvestment since the Govt. would go on to be the foremost investor. The cram recommended that disinvestment may lead to optimistic outcome in the country provided the organizations work in a cutthroat milieu. Singh, G. and Paliwal, D. (2010), revealed that working recital of the cutthroat firms that are related to revenues and earnings had reduced in the post-disinvestment phase. However, the monopoly units were competent in terms of income. Seema, G., Jain, P.K., Yadav, S.S., and Gupta, V.K. (2011), stated that the process of disinvestment did not brought favourable outcomes in terms of parameters selected in the study. The unsatisfactory performance of the divested CPSEs

may be attributed to high level of intervention in the working of the CPSEs by the Govt., surroundings limitations, etc. Menaka, R. (2015), assessed the fiscal recital of Navratna companies in Indian CPSEs. The researcher stated that CPSEs played an important part in the fiscal escalation process. George, E. and Vinod, R. (2016), observed that expansion pace of loss creation CPSEs augmented at an escalating pace, whereas expansion pace of profit creation CPSEs augmented at a diminishing pace. Achini, A. and Begum, S. (2018), in their research paper showed that disinvestment had lead to momentous collision in Maharatna companies, whereas insignificant collision was observed in Navratna companies. Choudhary, V.K., Singh, K. and Gupta, V. (2021) revealed positive collision on financial recital in the Indian CPSEs. Nevertheless, income, leverage, and operational efficacy of the CPSEs did not change drastically.

### Study Objective

The principal objective of the study is to enquire the liaison between and aggregate disinvestment receipts and aggregate operating profit of the CPSEs in India.

### Premise of the Study

- $H_0$ : There is no momentous liaison between aggregate disinvestment receipts and aggregate operating profit.
- $H_A$ :  $H_0$  is untrue.

### Research Blueprint

Sample: Based on the accessibility of data, the sample of our cram comprises of CPSEs that are functioning in India. However, it excludes PSEs that are running on a departmental basis, indemnity organizations, and banking organizations.

The year-wise numeral of working CPSEs for the chosen cram episode is shown in Table 1 below:

**Table 1 Number of Working CPSEs**

| Years                | 2010-11 | 2011-12 | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 |
|----------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| No. of Working CPSEs | 220     | 225     | 229     | 234     | 235     | 244     | 257     | 257     | 249     | 256     |

**Source:** Yearly Reports of PEs, Dept. of Public Enterprises, Govt. of India.

**Study Epoch:** The study epoch is chosen from 2010-2011 to 2019-2020. Furthermore, the whole study epoch is sub-divided into two sub-periods which are shown below:

- First sub-period: 2010-11 to 2014-15, and
- Second sub-period: 2015-16 to 2019-20.

**Data Source**

Resultant statistics is used in the study. The relevant data is composed from available yearly information of the Public Enterprises Survey, Govt. of India. Aggregate data is taken in order to reach at a meaningful conclusion.

**Methodology**

The liaison between aggregate disinvestment receipts and aggregate operating profit of the CPSEs is tested by Karl Pearson Correlation Coefficient (r) which is articulated in the subsequent way:

$$r = [ n(\Sigma xy) - (\Sigma x)(\Sigma y) ] \div [ \sqrt{n\Sigma x^2 - (\Sigma x)^2} \times \sqrt{n\Sigma y^2 - (\Sigma y)^2} ]$$

The significance of the experiential correlation coefficient (r) is measured by ‘t’ test. The ‘t’ value is presented below:

$$t = [ r \sqrt{n-2} ] \div [ \sqrt{1-r^2} ]$$

The ‘t’ value follows Student’s ‘t’ allocation with (n-2) d.f.

**Results and Discussion**

The liaison between aggregate disinvestment receipts and aggregate operating profit of the CPSEs in India is examined during the entire epoch and also during the two sub-periods. In this respect, Earning before Interest and Tax (EBIT) is used as proxy for operating profit. The outcomes of coefficient of correlation between aggregate disinvestment receipts and aggregate operating profit of the CPSEs in India are presented in Table 2 below:

From Table 2, it is observed that there is a positive liaison between aggregate disinvestment receipts and aggregate operating profit in the whole period and also in the second sub-period, while negative liaison of the same is observed in the first sub-period. However, the result is significant at 1% level for the entire study episode, thereby leading to the refusal of null hypothesis of our study. In rest of the cases, the outcomes are observed to be insignificant.

**Table 2 Karl Pearson Correlation Coefficient between Aggregate Disinvestment Receipts and Aggregate Operating Profit of CPSEs in India**

| Time Episode   | r                          |
|----------------|----------------------------|
| 1st Sub-Period | -0.05 <sup>i</sup> (-0.09) |
| 2nd Sub-Period | 0.72 <sup>i</sup> (1.80)   |
| Whole period   | 0.79*** (3.64)             |

Notes:  
 \*\*\* marked value indicates significant at 1% level (2 – tailed).  
 i marked values indicate insignificant.  
 Figures in bracket indicate the value of t-statistic.

**Source:** Author’s Calculation.

**Conclusion**

Both positive and negative liaisons are observed between aggregate disinvestment receipts and aggregate operating profit of the CPSEs in India during the study episode, although the outcome of the stated liaison is found to be noteworthy for the entire study episode only.

In finale, it may be concluded that the process of disinvestment considerably helps the Indian CPSEs to augment their operating profit during the entire period under study. However, it is suggested that disinvestment in Indian CPSEs may be conducted on a selective basis.

**References**

Achini, Ambika, and Shahnaaz Begum. “Impact of Disinvestment on Financial Performance: A Comparative Study of Maharatna and Navratna Companies.” *International Journal of Pure and Applied Mathematics*, vol. 118, no. 15, 2018, pp. 65-69.

*Annual Reports of Public Enterprises Survey 2010-11 to 2019-20*. Department of Public Enterprises, Government of India.

Chandra, Prasanna. *Financial Management: Theory and Practice*. Tata McGraw-Hill Education, 2011.

Choudhary, Vijay Kumar, et al. “Impact of Disinvestment on Performance of Select Central Public Sector Enterprises in India.” *Mudra: Journal of Finance and Accounting*, vol. 8, no. 2, 2021.

- Galal, Ahmed, et al. *Welfare Consequences of Selling Public Enterprises: An Empirical Analysis*. World Bank Publications, 1994.
- George, Elsa, and Roshini Vinod. "A Study on the Performance of Central Public Sector Enterprises in India." *International Journal of Engineering Science and Computing*, vol. 6, no. 5, 2016.
- Ghosh, R.K., and S. Saha. *Business Mathematics & Statistics*. New Central Book Agency, 1987.
- Gupta, K.L., and Harvinder Kaur. *New Indian Economy and Reforms*. Deep and Deep Publications, 2004.
- Magginson, William L., and Jeffrey M. Netter. "From State to Market: A Survey of Empirical Studies on Privatization." *Journal of Economic Literature*, vol. 39, no. 2, 2001, pp. 321-89.
- Menaka, R. "Financial Performance of Navratna Companies in India – Central Public Sector." *Journal in Management and Social Science*, vol. 3, no. 3, 2015, pp. 488-504.
- Mishra, R.K., and R. Nandagopal. *Capital Market and Privatization of Public Enterprises: The Case of India*. 1989.
- Nagaraj, R. *Disinvestment and Privatization in India - Assessment and Options*. Asian Development Bank Policy Networking Project, 2005.
- Seema, Gupta, et al. "Financial Performance of Disinvested Central Public Sector Enterprises in India: An Empirical Study on Select Dimensions." *Journal of Applied Finance & Banking*, vol. 1, no. 4, 2011, pp. 57-106.
- Singh, Gagan, and Deepak Paliwal. "Impact of Disinvestment on the Financial and Operating Performance of Competitive and Monopoly Units of Indian Public Sector Enterprises." *International Journal of Research in Commerce & Management*, vol. 1, no. 2, 2010, pp. 40-57.

#### Author Details

**Sudipta Ghosh**, Post-Doctoral Research Fellow, Faculty of Management & Commerce, Srinivas University, Mangalore, India & Assistant Professor (Academic Level 12), Department of Commerce (UG & PG), Prabhat Kumar College, Contai, West Bengal, India, **Email ID:** [sgcostmanagement@gmail.com](mailto:sgcostmanagement@gmail.com)

**P.S. Aithal**, Professor, Faculty of Management & Commerce, Srinivas University, Mangalore, India