

# Disinvestment and its Impact on the Performance of CPSEs

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## ABSTRACT

Government of India had adopted the policy of disinvestment back in 1991 after the enactment of New Industrial Policy mainly due to poor performance of public sector enterprises for several past years. India had experienced huge losses in public enterprises, heavy foreign assistance, adverse foreign trade, high budget deficit etc., all of these unfavorable conditions forced the government to take some serious economic decision to address the various interlinked issues. The policy of disinvestment of public enterprises is one of them. The decision of disinvestment is also influenced by the experience of other countries with disinvestment. From the above analysis and observations of various literatures, research papers, reports and data it can be concluded that the overall performance of CPSEs shown an improvement in the post disinvestment era.

**KEYWORDS:** Disinvestment, Public Sector Enterprises (PSEs), Performance of CPSEs

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## INTRODUCTION

Public Sector Enterprises in India have always been considered as engines of growth for their potential to foster and increase the pace of development in the country. The role of these enterprises in Pre – Independent India was negligible, given that private enterprises governed the development in the country during those times. With Independence, PSUs in the country gained importance and had the opportunity to promote rapid development in the country. The public sector was structured to spearhead a chain of revolutions leading to the path of economic growth. In the initial years of planning, the public sector was used as strong tool by the government to maintain its control over the key industries.

Right from the beginning of governments policy of disinvestment it faces lot of criticism from various experts. Some argued that performance of PSUs should not judge on the sole criteria of profit making. As according to them, public enterprises are guided by a variety of considerations in determining prices and it would not be appropriate to use profit as a criterion of their efficiency for instance, in social utility services such as railways, post, water supply, electricity distribution, etc.

## Public Sector Enterprises

Section 2 (45) of Companies Act, 2013 defines a Government company to mean – any company in which not less than fifty-one per cent of the paid-up share capital is held by the Central Government, or by any State Government or Governments, or partly by the Central Government and partly by one or more State Governments and includes a company which is a subsidiary company of such a Government company. The Public Enterprises Survey

traditionally covers, besides statutory corporations, those Government companies wherein more than 50 % equity is held by the Central Government. This Report is no exception. The subsidiaries of these companies, if registered in India, wherein any CPSE has more than 50% equity are also categorized as CPSEs. The Survey, does not cover departmentally run public enterprises, banking institutions, and insurance companies. In simple words, Public Enterprises means an activity of a business character, owned and managed by the Government - Central, State or local authority, providing goods and services for a price.

For an activity to become Public Enterprises, the Government should not only own it but also manage it. The ownership with the Government should be 51 percent or more. In some cases, this ownership may be indirect. For example, the Government owns Air India Ltd., which in turn owns the Hotel Corporation of India Ltd. The latter thus becomes Public Enterprises indirectly. If ownership is through financial institutions, e.g., LIC, UTI, and IDBI, then a unit would not be treated as Public Enterprises. There are many cases where 51% or more of equity of a company is held by the one or more than one public financial institutions. Such entities are “deemed Government companies” under section 619B of the Companies Act.

The Central Public Sector Enterprises (CPSEs) form a part of the public sector as a whole and have been established either as Government companies, registered under the Companies Act of 1956 or Statutory Corporations, established by a special Act of the Parliament. The role of the PSEs in the economy was earlier limited to basic, heavy and core industries, having strategic importance and vital for mass

consumption but gradually the overall profile of PSEs evolved as a heterogeneous conglomerate of basic and infrastructural industries, industries producing consumer goods and industries engaged in trade & services, etc.

## LITERATURE REVIEW

1. **Ritika Jain (2016)** in her research paper titled **Do political factors influence performance of Public Sector Enterprises? The Indian Disinvestment Experience** found that it is a combination of both internal and external factors that influence efficiency of enterprises. It is found that disinvestment has a strong positive impact on firm performance as measured by all three variables and estimated by different estimation techniques. Further, results suggest that ideology of the state plays an important role in explaining better performance of firms in an indirect way. The effect of disinvestment on performance is driven by a more right state and low ideological difference between the centre and the state where the public enterprises is located.

2. **Dr. Gagan Singh (2015)** in his research paper titled **Disinvestment and Performance of Profit and Loss Making Central Public Sector Enterprises of India** concluded that public sector reforms in India are the need of the hour. The preliminary results of the disinvestment experience shows that with the movement from public to private led to improvement in the profitability of the loss making CPSEs and the contribution of the employees of all these sample units has also been increased. 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, the stress should be on making PSU's work more efficient rather than reducing the public ownership. Efficiency may also be achieved by changing the quality of management and not only by changing the ownership.

3. **Mr. Ashish Shrivastava (2014)** in his paper entitled **DISINVESTMENT IN INDIA: AN EMPIRICAL STUDY** concluded that the disinvestment is good for a country's economy as it provides revenue for the government, increases operating and financial performance of enterprises and also restructure those units which are continuously loss making enterprises. But the main problem behind non achievement of disinvestment targets is passive behavior of government. No government review policies for disinvestment after fixing the targets.

4. **Priyanka Sinha (2014)** in her Journal entitled **The Disinvestment Policy in India Through a Prism of Policies** found that the disinvestment of PSUs in India is politicized policy program which in the last almost two and half decades have failed to generate the desirable results. Disinvestment policy with too many twist and turns, during the last several years remained hazy with each political party mounding it according to its need for resources and bringing their budgetary deficit, rather than bringing about a real improvement in the working of the concerned PSUs. One of the main causes of low realization is the nature of Indian political system. A political party that favors

disinvestment/privatization could just as quickly oppose this when it is no longer in power.

5. **Seema Gupta, P.K. Jain, Surendra S. Yadav and V.K. Gupta (2011)** in their paper entitled **financial performance of disinvested central public sector enterprises in India: An empirical study on selected dimensions** studied the impact of disinvestment on the PSEs and compared their performance in the post in pre disinvestment periods. They found that the performance of disinvested loss making unit does not improve. On the other hand, the disinvested profit making units showed tremendous improvement in profitability and performance. They also concluded that partial disinvestment would not be successful, as majority control was still in the hands of the government resulting in inefficiency in operation, along with a lack of competitive industrial structure resulting in high cost incurred.

6. **Rakesh Garg (2011)** in his article titled **Impact of Disinvestment on Corporate Performance** observed that economic reforms that commenced in 1990 met with strong opposition from other political parties slowing down the process and infusing inefficiency and lethargy into the entire process. He studied how disinvestment has improved the performance of public sector units, if correct and timely implementation is carried out.

7. **Neelam Jain (2002)** in her article titled **Privatisation and Disinvestment in Public Sector Undertakings in India** was of the opinion that National Policy Initiative like Liberalisation, Privatisation and Globalisation are significant innovations in the recent history of economic policy aimed at the faster development of the economy. Public Sector reforms require reduction of state control of the economy and expect participation of the private enterprises and market forces in the production process.

## METHODOLOGY OF RESEARCH

For completing this Study, secondary data have been used. The data have been collected from various websites of Government of India like website of Department of Disinvestment, website of Department of Public Sector Enterprises etc. and the "Indian Economy" book of Datt and Sundharam's. Many research papers have been also used for the completion of the work.

## OBJECTIVES

- To analysis the performance of CPSEs in pre and post disinvestment era.
- To analysis the Governments disinvestment policy and CPSEs performance in recent years.

## HYPOTHESIS

Parameters of performance:

- Gross profit to capital employed.
- Net profit after tax to capital employed.

### Set 1: Gross profit to capital employed

**H0** : There is no significant difference between "Gross profit to capital employed" in pre and post disinvestment era.

**H1** : There is significant difference between "Gross profit to capital employed" in pre and post disinvestment era.

**Set 2: Net profit after tax to capital employed**

- H0** : There is no significant difference between "Net profit after tax to capital employed" in pre and post disinvestment era.
- H1** : There is significant difference between "Net profit after tax to capital employed" in pre and post disinvestment era.

**DISINVESTMENT:****ANALYSIS OF THE CPSEs PERFORMANCE**

Disinvestment refers to the sale or liquidation of an asset or subsidiary of a Government's Enterprise to the private players i.e., private owners. During the 1991 financial crisis when the gross fiscal deficit of the central government reached 8.4 per cent of the GDP, the annual rate of inflation peaked at 17 per cent (1990-1991) while the external debt rose from 12 per cent of GDP in 1980-81 to 23 per cent of GDP in 1990-91; and India's foreign exchange reserves were barely adequate for two weeks import. In this situation the PSUs were considered as one of the main causes of the fiscal crisis as they failed to generate investible resources and there was unbridled government expenditure. The crisis led to a fresh look being taken at the philosophy of public sector dominance. The New Industrial Policy (1991), as a part of economic reform, deregulates the industrial economy in a substantial manner. The major objective of new policy is to build on the gains already made, correct the distortion or weaknesses that might have crept in, maintain a substantial growth in productive and gainful employment, and attain international competitiveness. The disinvestment of government shareholdings started in 1991 as a process of public sector reform; immediately after the congress regained political power after election to parliament in June 1991. Though the possibility of sale of equity was first explored in 1991 by the coalition government headed by socialist Prime Minister Chandrashekhar, but the full swing was given by the congress government headed by the late Prime Minister P.V. Narasimha Rao.

**Employment in CPSEs**

The total number of personnel employed in Central Public Sector Enterprises (CPSEs) during 2017-18 at 1.426 million was lowest as compared to 1.472 million in 2016-17, 1.501 million in 2015-16 and 1.566 million in 2014-15. The proportion of regular employees to total employees during the last four years i.e. 2014-15 to 2017-18 has reduced from 82% to 76%. The reasons for change in manpower employment include prevailing business conditions & requirements and other factors like future operations, expansion / investment plan, retirement etc. The other reasons for changes in manpower employment include retirement, attrition and Voluntary Retirement Scheme (VRS) / Voluntary Separation Schemes (VSS) etc. in CPSEs.

**Voluntary Retirement Scheme (VRS):** As a result of the restructuring in some Central Public Sector Enterprises (CPSEs), Government announced the Voluntary Retirement Scheme (VRS) in October, 1988. A comprehensive scheme was later notified by the Department of Public Enterprises in May, 2000. From the introduction of VRS Scheme in October, 1988, till March, 2017, approximately 0.625 million employees have been released under VRS.

VRS in CPSEs that can support the scheme on their own Enterprises, which are financially sound and can sustain VRS

on their own, can frame their own schemes of VRS and make it attractive enough for employees to opt for it. They may offer as compensation upto 60 days salary for every completed year of service. Such compensation will, however, not exceed the salary for the balance period of the service left. VRS in marginally profit or loss making / sick / unviable CPSEs Marginally profit /loss making CPSEs as well as sick and unviable units may adopt either of the following models:

**Gujarat Model,** under which the compensation is computed by allowing 35 days salary for every completed year of service and 25 days for each year of the balance service left until superannuation subject to the condition that compensation, shall not exceed the sum of salary for the balance period left for superannuation.

**Department of Heavy Industry (DHI) model,** under which ex-gratia payment made, is equivalent to 45 days emoluments (Pay + DA) for each completed year of service or the total emoluments for the balance period of service, whichever is less. The employees who have completed not less than 30 years of service will be eligible for a maximum of 60 months salary/wage as compensation and this will be subject to the amount not exceeding the salary/wage for the balance period of service left.

**Table 4.1: Number of Employees**

Year	No. of operating firms	No. of employees (in millions)
1980-81	168	1.775
1989-90	233	2.279
2006-07	217	1.614
2016-17	257	1.131

(Source: Government of India (2008-2009), Public Enterprises Survey Public Enterprises Survey 2016-17: Vol. I)

In Table 4.1, Number of employees in CPSEs has been shown. The figures of employment do not include the contract and casual workers. It can be observed from the table that number of employees increased in the time period 1980-81 to 1989-90. But it shows a decreasing trend especially after 1991. The reasons are cited above.

**CPSEs in Pre and Post Disinvestment Era**

In the pre-liberalization period, the role of PSEs in economic activities was dominant. The government provided protection to PSEs through various policy measures like IPR [1948 and 1956], MPTP, Industrial Licensing, etc. for their development. These protective measures did not provide any incentive to the PSUs to upgrade their technology and consequently improve productivity. As a result of this, a large number of PSEs have become economically unviable. To improve the performance of the PSEs, the government adopted some policy measures in the early 1990s under the name of Structural Adjustment Program (SAP). With the implementation of SAP, the existing industrial policy was revised to improve the performance of existing enterprises. The major policy initiatives introduced in the 1990s are listed here. Under 1991 IPR, the number of reserved industries for PSEs was reduced from 18 to 8 in 1991 and further to 3 in 2001. The focus of public sector was reduced to strategic, high-tech and essential infrastructure. In 2004, the government established the Board for Reconstruction of Public Sector Enterprises (BRPSE) to advise the government



on strengthening the central PSEs and financing the PSUs, and also to suggest chronically sick units for disinvestment (or close down). As per Sick Industrial Company Act, 1985, if a company accumulated loss in any financial year equal to

50%, then it is considered as a sick unit. Once the ministry refers any PSU unit to the board, the board should make recommendations within two months.

**Table 4.2: Number of profit/loss making firms**

Year	No. of operating firms	No. of profit making firms	No. of loss making firms
1980-81	168	90	78
2008-09	213	158	55
2017-18	257	184	71

(Source: Government of India (2008-2009), Public Enterprises Survey Public Enterprises Survey 2017-18: Vol. I)

Table 4.2, represents the No. of profit/loss making CPSEs for three different time period that is 1980-81, 2008-09 and 2017-18 which gives an idea about the performance of all central public sector undertakings taken together. If the No. of loss making firms increases with a decline in the No. Of loss making firms it is considered as an overall improvement in their performance. As clear from the above table and figure that the number of loss making firms shows a decreasing trend and the number of profit making firms shows an increasing trend. Thus, an inference can be drawn that in disinvestment era the performance of CPSEs improved if this has taken as a parameter

**Table 4.3: Financial Performance of CPSEs**

(₹ Crores)

Year	No. of operating enterprises	Capital employed	Gross profit before tax and interest	Net profit after tax	Gross profit to capital employed (%)	Net profit after tax to capital employed (%)
1980-81	168	18207	1418	-203	7.8	-1.1
1981-82	188	21935	2654	446	12.1	2.0
1982-83	193	26590	3469	618	13.1	2.3
1983-84	201	29856	3565	240	11.9	0.8
1984-85	207	36382	4628	909	12.7	2.5
1985-86	211	42965	5287	1172	12.3	2.8
1986-87	214	51835	6521	1771	12.6	3.4
1987-88	220	55617	6940	2030	12.5	3.6
1988-89	226	67629	8572	2993	12.7	4.4
1989-90	233	84760	10622	3789	12.5	4.5
1990-91	236	101702	11359	2368	11.2	2.3
1991-92	237	117991	13675	2355	11.6	2.0
1992-93	239	140110	15597	3271	11.4	2.3
1993-94	240	159836	18555	4544	11.6	2.8
1994-95	241	162451	22630	7187	13.9	4.4
1995-96	239	173948	27587	9574	15.9	5.5
1996-97	236	231178	30915	10188	13.4	4.4
1997-98	236	249855	37206	13582	14.9	5.4
1998-99	235	265093	39727	13203	15.0	5.0
1999-00	232	302947	42270	14331	13.9	4.7
2000-01	234	331372	48767	15653	14.7	4.7
2001-02	231	389934	63190	25978	16.2	6.7
2002-03	226	417160	72539	32344	17.4	7.5
2003-04	230	452336	95039	52943	21.0	10.8
2004-05	227	504407	108420	64963	21.5	12.7
2005-06	226	585484	114422	69536	19.5	11.3
2006-07	217	661338	139008	81055	21.0	11.7
2007-08	214	724009	152579	81274	21.1	11.0
2008-09	213	792232	142395	83867	18.0	8.7
2009-10	217	908007	160017	92203	17.6	10.2
2010-11	220	1153947	159298	92129	13.8	8.0
2011-12	225	1337821	186671	98246	13.4	7.1
2012-13	230	1508177	289390	114982	12.6	7.6
2013-14	234	1715684	221758	122859	12.9	7.2

(Source: Public Enterprises Survey, (2013-14), Vol. 1, and Earlier issues)

**Financial performance of CPSEs** in pre and post disinvestment era is illustrated in the **Table 4.3**. Table shows the performance of CPSEs from time period 1980-81 to 2013-14. It can be explained as follows:

**No. of operating enterprises:** As shown in the table 4.3, that the number of operating enterprise was 168 in 1980-81 this shows the increasing trend till 1994-95 when it was on its all time high that was 241. After that it shows continuously decline till 2000-01 after that a mix trend can be seen till 2009-10. After that it has shown an increasing trend till 2013-14.

**Total capital employed:** It is calculated by adding up working capital to the fixed assets minus depreciation. Total capital employed = working capital + (fixed assets – depreciation). Table 4.3 shows that the capital employed was 18207 in 1980-81 which increased to 1715684 in 2013-14. It showing continuous increasing trend.

**Gross profit before tax and interest:** It is calculated by adding up net profit, interest and corporate tax paid. Gross profit = net profit + interest + corporate tax paid. Table 4.3 shows that it was ₹ 1418 crores in 1980-81 and increased to ₹ 221758 crores in 2013-14.

**Net profit after tax:** It is calculated by subtracting interest, corporate tax, and depreciation from Gross profit. Net profit = Gross profit – (interest + corporate tax + depreciation). Table 4.3 shows that it was ₹ -203 crores in 1980-81 and increased to ₹ 122859 crores in 2013-14.

**Gross profit to capital employed** = (Gross profit before tax and interest ÷ Capital employed) × 100. Table 4.3 shows that Gross profit to capital employed was 7.8 in 1980-81 which had increased to 11.2 in 1990-91. And further in disinvestment era it shows an increasing trend. It was 21.1 in 2007-08 (all time high) and then after it has shown a decreasing trend and was 12.9 in 2013-14.

**Net profit after tax to capital employed** = (Net profit after tax ÷ Capital employed) × 100. It is shown in the table 4.3 that the Net profit after tax to capital employed was negative in 1980-81, that is -1.1. It has shown an improvement and was 4.5 in 1989-90. It was on its all time high at 11.7 in 2006-07. And it was 7.2 in 2013-14.

### CPSEs in recent years

The Department of Public Enterprises (DPE) under the Ministry of Heavy Industries and Public Enterprises is the nodal department coordinating matters of general policy and evaluating and monitoring the performance of all Central Public Sector Enterprises (CPSEs). The Public Enterprises (PE) Survey is a consolidated report on the performance of all CPSEs providing an overview of their annual financial and operational performance.

CPSEs continue to play a major role in fulfilling the developmental priorities of the country. They contribute to both macroeconomic objectives such as growth, advancement in manufacturing and technology, price stabilization etc., as well as to socio-economic objectives such as employment generation and skill development. 331 CPSEs came within the scope of the Survey in 2016-17 (as on 31.03.2017) as against 320 CPSEs in 2015-16 (as on 31.03.2016). Seventeen (17) new public sector enterprises have been added to the list of CPSEs as per the information received from the concerned administrative Ministry/Department whereas 6 enterprises were closed.

Total Gross Revenue from Operation of all CPSEs during 2016-17 stood at ₹ 1954616 crores compared to ₹ 1834635 crores in the previous year showing a growth of 6.54 %. Total Income of all CPSEs during 2016-17 stood at ₹ 1821809 crores compared to ₹ 1764232 crores in 2015-16, showing a growth of 3.26%. Profit of profit making CPSEs (174 CPSEs) stood at ₹ 152647 crore during 2016-17 compared to ₹ 144998 crores in 2015-16 showing a growth in profit by 5.28%. Loss of loss incurring CPSEs (i.e. 82 CPSEs) stood at ₹ 25,045 crores in 2016-17 compared to ₹ 30759 crores in 2015-16 showing a decrease in loss by 18.58 %. Overall Net Profit of all 257 operating CPSEs during 2016 17 stood at ₹ 127602 crore compared to ₹ 114239 crores during 2015-16 showing a growth in overall profit of 11.70%. Foreign Exchange Earnings through exports of goods and services increased from ₹ 76644 crores in 2015-16 to ₹ 87616 crores in 2016-17.

### HYPOTHESIS TESTING AND RESULT

Set 1: Gross profit to capital employed

H0: There is no significant difference between "Gross profit to capital employed" in pre and post disinvestment era.

H1: There is significant difference between "Gross profit to capital employed" in pre and post disinvestment era.

Gross profit to capital employed (%) (Samples)		
Pre Disinvestment Era	Post Disinvestment Era	d(difference)
12.1	11.6	0.5
13.1	13.9	-0.8
11.9	15.9	-4
12.7	13.4	-0.7
12.3	14.9	-2.6
12.6	15.0	-2.4
12.5	13.9	-1.4
12.7	14.7	-2
12.5	16.2	-3.7
11.2	17.4	-6.2
		d/n= -2.33
		Standard Deviation(d)= 1.935085413

Test Statistic:

$$T_c = \frac{\bar{d}}{s_d / \sqrt{n}}$$

$$= -2.33/1.935085413/\sqrt{10}$$

$$= -2.33/0.61192773720476$$

$$= -3.807639135$$

Here, Degree of freedom (d.f.) = (10-1) = 9

So, by using t-distribution with 9 d.f. and significance level of 5% and 1% (for two-tailed test) the critical values are -2.262 and -3.250 respectively.

Since, the computed value > critical values (at both 1% and 5% significance levels), which implies that the computed value lies in the rejection region. Therefore null hypothesis will be rejected.

Set 2: Net profit after tax to capital employed

H0: There is no significant difference between "Net profit after tax to capital employed" in pre and post disinvestment era.

H1: There is significant difference between "Net profit after tax to capital employed" in pre and post disinvestment era

Net profit after tax to capital employed (%) (Samples)		
Pre Disinvestment Era	Post Disinvestment Era	d(difference)
2	2.8	-0.8
2.3	4.4	-2.1
0.8	5.5	-4.7
2.5	4.4	-1.9
2.8	5.4	-2.6
3.4	5.0	-1.6
3.6	4.7	-1.1
4.4	4.7	-0.3
4.5	6.7	-2.2
2.3	7.5	-5.2
		d/n= -2.25
		Standard Deviation(d)= 1.585524799

Test Statistic:

$$T_c = \frac{\bar{d}}{s_d / \sqrt{n}}$$

$$= -2.25/1.585524799/\sqrt{10}$$

$$= -2.25/0.50138696515207$$

$$= -4.487551844$$

Here, Degree of freedom (d.f.) = (10-1) = 9

So, by using t-distribution with 9 d.f. and significance level of 5% and 1% (for two-tailed test) the critical values are -2.262 and -3.250 respectively.

Since, the computed value > critical values (at both 1% and 5% significance levels), which implies that the computed value lies in the rejection region. Therefore null hypothesis will be rejected.

## CONCLUSION

Profit should not be the sole criteria for the analysis of Public enterprises; it should be kept in mind that Public enterprises are not opened for maximizing profit but for social welfare. No doubt that their financial performance can be ignored completely, but other factors needs to be considered. Only a shift in ownership or sale of minority stock cannot be the

only solution. As at that time and also now the Public enterprises were facing many issues like inefficient management, lack of capital utilization, more manpower than required, location of enterprises etc. These issues can be addressed without disinvestment.

Nevertheless, the performance of Public enterprises improved significantly but it cannot be said that it is only because of the disinvestment policy partially because there were many other policies adopted in that time period and partially because in the post disinvestment era the competition from public sector increased which pushed the Public enterprises to perform well

## REFERENCES

- [1] Anjana Mani. "The Disinvestment Programme in India - Impact on Efficiency and Performance of Disinvested Government Controlled Enterprises (1991-2010)." International Journal of Business from Bharatiya Vidya Bhavan's (2017): 32-41.
- [2] Business Line newspaper
- [3] Department of Investment and Public Asset Management, Ministry of Finance, Government of India. "Summary of Disinvestment."
- [4] Department of Public Enterprises, Ministry of Heavy Industries and Public Enterprises. "Public Enterprises Survey 2015-16, Vol. 1."
- [5] Department of Public Enterprises, Ministry of Heavy Industries and Public Enterprises. "Public Enterprises Survey 2016-17, Vol. 1."
- [6] Department of Public Enterprises, Ministry of Heavy Industries and Public Enterprises. "Public Enterprises Survey 2017-18, Vol. 1."
- [7] Garg, Rakesh. "Impact of Disinvestment on Corporate Performance." (2011).
- [8] Gaurav Datt and Ashwani Mahajan. Indian Economy. New Delhi: S.CHAND, 72nd edition
- [9] Gupta, Dr. Om Shankar. "Public Sector Reforms in India- Disinvestment". (2015).
- [10] Jain, Dr. Parul. Union Finances in India (An Empirical Analysis). (2018): 157-177.
- [11] Jain, Neelam. "Privatisation and Disinvestment in Public Sector Undertakings." (2002).
- [12] Jain, Ritika. "Do political factors influence performance of Public Sector Enterprises? The Indian Disinvestment Experience." October 2016: 29.
- [13] Kakkar, Ms. Bhawana. "A Study of Disinvestment of Central Public Sector Enterprises in India (1991-2016)." (2017): 20.
- [14] Mr. Ashish Shrivastava. "Disinvestment in India: An Empirical Study." International Journal of Management (2014): 19-24.
- [15] N. Renuka. "Performance of disinvested public sector enterprises in India." International Journal of Advanced Multidisciplinary Research (2016): 64-68.
- [16] Seema Gurta, P. K. Jain and V. K., Gupta. "Financial performance of disinvested central public sector enterprises in India: An Empirical study on selected dimensions." (2011).
- [17] Singh, Dr. Gagan. "Disinvestment and Performance of Profit And Loss Making Central Public Sector Enterprises of India." PARIPEX - INDIAN JOURNAL OF RESEARCH (2015): 4-7.
- [18] Sinha, Priyanka. The Journal of Institute of Public Enterprises, Vol. 37, No 1&2 (2014): 111.
- [19] The Hindu newspaper