Chapter I
Introduction

At the time of independence the economic growth rate was so poor. Increasing population, unemployment and regional imbalances put forward a challenge to the policy makers for taking some extravagant economic reform. Private Sector was inadequate to undertake profound investments in core sectors. In such a situation, ‘to build a base for solid infrastructure and to bring about a planned development of the entire country, Indian Government had entered into business’\(^1\). Prior to the independence, there were a small number of public sector enterprises (Managed Departmentally) in the country like Railways, the Posts and Telegraphs, the Port Trusts, the Ordinance Factories, and All India Radio.

Public Sector Enterprises in India have grown from only five enterprises post independence at a merger investment of INR\(^2\) 0.3 billion in 1951 to 246 enterprises as on FY2009 with a total investment of INR 5289.5 billion\(^3\). A brief review of Public Sector Enterprises in India will help to have an understanding of the subject.

Evolution of Public Sector Undertakings in India:

“The Public Sector Undertakings are government-owned corporations where majority (51% or more) of the paid up share capital is held by central government or by any state government or partly by the central governments and partly by one or more state governments. In India Public Sector Undertakings are classified as:

i) Public Sector Enterprises (PSEs).

ii) Central Public Sector Enterprises (CPSEs) and

iii) Public Sector Banks (PSBs).

2. Indian Rupee
3. An Overview of Central Public Sector Enterprises in India, Dr. S.MD. GHOUSE(Prof. and Head, Department of Management Studies, Gates Institute of Technology Gooty, Anantapur Dt., Andhra Pradesh)
The Central Public Sector Enterprises (CPSEs) are also classified into 'strategic' and 'non-strategic'. Areas of strategic CPSEs are:

- Arms & Ammunition and the allied items of defense equipments, defense aircrafts and warships.
- Atomic Energy (except in the areas related to the operation of nuclear power and applications of radiation and radio-isotopes to agriculture, medicine and non-strategic industries) and
- Railways transport.

All other Central Public Sector Enterprises are considered as non-strategic."

The first Public Sector Undertaking in India; ITI (Indian Telephone Industries Ltd) established its roots in 1948 in India since then the growth rate has been rapid. We can classify the evolution of the Public Sector Undertakings in to two different phases:


1st Phase - The Pre Liberalisation Period (1947-1991):

The growth of public Sector Undertakings starts with Nehruvian Model of economic reforms. Prior to independence, public sector had not much importance in Indian economy. So very few Public Sector Undertakings like; Railways, The Posts and Telegraphs, the Post Trusts, the Ordinance and Aircraft Factories and a few state managed undertakings like the government salt factories, quinine factories etc. were operated in that era. “These existing public sector undertakings were in the country for the British industries in England.”

The evolution and growth of public sector in India related to various industrial and development policies formulated by Government of India. Government of India since from its first industrial policy started its wave for economic reforms through Public Sector Undertakings. The first Industrial Policy 1948 as Mixed Economy Model is an Example for the same.

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The main features of IPR-1948

- This Policy provides the exclusive monopoly to Central Government regarding the following activities:
  - The manufacture of arms and ammunition,
  - The production and control of atomic energy and
  - The ownership and management of railway transport.

- This Policy vested the exclusive monopoly to State Government for the establishment of new undertakings in the following areas
  - Covered coal,
  - Iron and steel,
  - Aircraft manufacture,
  - Ship building,
  - Manufacture of telephone,
  - Telegraphs and wireless apparatus etc

- The third category was reserved for industries of basic importance as per central governments’ view with the power to plan and regulate them.

- The fourth category was left open to Private Enterprises.
  (including sole proprietorship and co-operative Sector)
This reveals the priority given by this policy to Public Sector Undertakings for economic growth. "In short this policy envisaged for the Public Sector an increasingly active role."* 

The industrial policy 1956

The second Five Year Plan in 1951 witnessed a period of planned economic development with an objective to solve the problems like crucial food shortage, increasing inflation and the rigorous flow of refugees. So this Policy prioritized agro based development than industrialization. With the implementation of this Policy, Public Sector Undertakings became the key sector and they had to play an inevitable role in strategic formulation and development of heavy industries.

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This policy classified the industries in three broad categories in resemblance to earlier classification, but with broader coverage to public sector.

1) Schedule A:

This schedule includes the following seventeen industries which were exclusively reserved for state government.

1. Arms and ammunition,
2. Atomic energy,
3. Iron and steel,
4. Heavy castings and forgings of iron and steel;
5. Heavy machinery required for
   - Iron and steel production,
   - Mining,
   - Machine tool manufacture; etc.,
6. Heavy electrical industries;
7. Coal,
8. Mineral oil,
9. Mining;
10. Iron and other important minerals like copper, lead and zinc,
11. Aircraft;
12. Air transport,
13. Railway transport,
14. Shipbuilding;
15. Telephone,
16. Telegraph and wireless equipment;
17. Generation and distribution of electricity.
II) Schedule B:

Those which were to be progressively state owned and in which state would generally set up new enterprises, but in which private enterprise would be expected only to supplement the effort of the state.

The following twelve industries were included in this schedule –

- Other Mining Industries,(I.E. Industries Not Included In Schedule A)
- Aluminum And
- Non Ferrous Metals Not Included In Schedule A;
- The Chemical Industry;
- Antibiotics And
- Other Essential Drugs;
- Fertilizers;
- Synthetic Rubber,
- Carbonization Of Coal;
- Chemical Pulp;
- Road Transport And
- Sea Transport.

III) Schedule C:

Under this schedule all the remaining industries and their future development would, in general be left to the initiative and enterprise of the private sector.”

Thus the second Industrial Policy Resolution clearly defined the roles of public and private sectors. This Policy had some flexible steps under which private sector can produce an item in Category A for meeting the industry's own requirements or as by products. In addition to that, heavy Industries in Public sector could acquire some of their requirements of advanced components from private sector. Even in Category C the state set aside its right to enter, when the needs of planning required so.

"Though the State was, now to act as the senior partner unlike under the 1948 policy, the public and the private sector were still expected to work closely together."  

After achieving agricultural targets in the First Five Year Plan, the Nehru Model of Democratic Socialism initiated the process of giving force to public sector in socioeconomic development process of India. So the second five year plan aimed at rapid industrialization by emphasizing on the development of basic and heavy industries and this modal of Democratic Socialism came into full practical shape with heavy pubic investments in industrial sector.

While drafting the outlines of Third Five Year Plan Pandit Jawahar Lal Nehru argues that, “If we are to industrialize, it is of primary importance that we must have the heavy industries which build machines”.  

There were only 5 central public sector undertakings in 1951, with an investment of Rs. 29 Crores and at the end of second five year plan, the number of these undertakings went up to 47 with an investment of Rs. 950 crores. The first Industrial Policy was embryonic form for the development of these PSUs and it took some shape by the end of 2nd Five Year Plan.

**The next three five year plans** (i.e. up to the Fifth Five Year Plan)  
These plans followed Nehruvian Model of development with minor modifications in the second. When the government came with another five year plan, on 2nd of February, 1973, the Industrial Policy during this five year plan decided to follow the earlier resolution of 1956 pertaining to the joint sector and re-emphasized the objectives of the resolution of 1956*.

**The industrial policy resolution of 1977:**  
This policy was introduced by Late Morarji Desai based on the Gandhi Model of development; by giving preference to the encouragement of small scale industries through the principles of Industrial Policy Resolution 1956.

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This policy had some convincing outcome but the increasing Unemployment rate, alarming regional disparities have wiredrawn and the rate of real investment has stagnated. The growth of industrial output has been up to 3% to 4% per annum on the average”.

**Salient features:**

a) Development of Small Scale Industries

b) Categorizing Small Scale Industries as

- Cottage and household industries,
- Tiny Industries (with maximum investment of one lakh in machinery and equipment) &
- Small Scale industries (with maximum investment of Rs. 10 lakh and in case of ancillary industries investment up to Rs. 15 lakh).

c) Large-scale Industries:

- Basic industries, essential for assuring infrastructure and the development of small scale and village industries.
- Capital goods industries for meeting the machinery requirements of basic industries as well as small scale industries
- High technology industries which were required for large scale production related to agricultural and small scale industries development such as fertilizers, pesticides and petrochemicals etc.

d) Other industries which were outside the list of reserved items for the small scale Industries but were indispensable for the development of the economy like machine tools, organic and inorganic chemicals etc.

(This policy has revamped the Khadi and Village Industries Commission.)

**The Industrial Policy 1980:**

This Policy introduced some suggestions for improving the operational efficiency of public sector and abolished the licensing pattern for large industries.

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For public sector this policy issued a statement known as "gigantic task of rehabilitating faith" on 23rd of July, 1980. This period showed an increasing trend of Public Sector Undertakings in terms of their number and investment. This created a strong industrial base for the development of heavy industries which would subsequently increase employment. Even after the death of Nehru, his model of economic reform was followed in all Five Year Plans till the beginning of Liberalization Period\textsuperscript{12}.

\textbf{Table 1.1}
An overview of Five Year Plans and Public Sector Undertakings in Pre liberalized Era.

<table>
<thead>
<tr>
<th>Period (Five Year Plan)</th>
<th>Impact of the policy</th>
<th>Amount spent on Public Sector (% of total Investment)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1\textsuperscript{st}</td>
<td>Developing an agriculture base Economy</td>
<td>46.4% (of total investment)</td>
</tr>
<tr>
<td>2\textsuperscript{nd}</td>
<td>developing heavy and basic goods industries through dominance of public sector</td>
<td>54.6%</td>
</tr>
<tr>
<td>3\textsuperscript{rd}</td>
<td>Industrial development with the establishment of basic and heavy Industries.</td>
<td>60.6%</td>
</tr>
<tr>
<td>4\textsuperscript{th}</td>
<td>Industrial growth by way of huge investment in public sector.</td>
<td>60.3%</td>
</tr>
<tr>
<td>5\textsuperscript{th}</td>
<td>Industrial growth by way of huge investment in public sector.</td>
<td>66.06%</td>
</tr>
<tr>
<td>6\textsuperscript{th}</td>
<td>Public sector had failed to generate enough resources and that the problem of regional disparities in industrial development was as serious as ever(production has increased by about 5 times) \textsuperscript{*1}.</td>
<td>52.9%</td>
</tr>
<tr>
<td>7\textsuperscript{th}</td>
<td>Concentrated on pricing policies which suited the poor but not profitability to public sector units.</td>
<td>48%</td>
</tr>
</tbody>
</table>


\textsuperscript{12} Jagdish Prakash, Nageshwer Rao, Major Badal Shihal, \textit{Administration of Public Enterprises in India}, Himalaya Publishing House, 1996.
After the end of 7th Five Year Plan the Indian private sector had reached in a stage to function in almost all areas of business.

2nd Phase – The Post Liberalisation Period:

The end of pre liberalization period was the turning point in India's economic reforms. “Depleted official reserves, large deficits in balance of payments, and sharp decline in GDP growth which was reflected in similar declines in almost all sectors of the economy demanded urgent attention”\textsuperscript{13}. In these circumstances, the then Union Finance Minister, Dr. Manmohan Singh had announced the New Industrial Policy on July 24, 1991. The major objectives of this New Industrial policy were "to build on" the gains already made, correct the distortions or weaknesses that might have crept in, maintain a sustained growth in productively and gainful employment, and attain international competitiveness\textsuperscript{14}. For achieving these objectives, the Government introduced various initiatives. Announcement of a separate package for the Small and Tiny sectors one among them.

Public Sector Policy in New Economic Policy, 1991:

“The Government of India required to 'reforming' the public sector of the country by its new economic policy on public sector”\textsuperscript{15} it focused on the following major events in this direction:

\begin{enumerate}
  \item The number of industries reserved for public sector reduced from 17 to 8 (it further reduced to 3) and the opening of competition in the reserved area;
  \item To increase resources the disinvestment of shares of selected public sector enterprises took place.
  \item Participation of general public and workers in the ownership of public sector enterprises;
  \item The policy towards sick public enterprises to be similar as that for private sector; and
\end{enumerate}

\textsuperscript{13} Rudder Dutt, K.P.M-Sundharam, n.1 p. 194.
\textsuperscript{14} R.K. Mishara, n. p. 316
\textsuperscript{15} S. K. Misra and V.K. Puri, 21 p. 356
v. An improvement of performance through memorandum of understanding system has been introduced by which managements are granted greater autonomy but held accountable for specified results.

This Policy imparted the following main decisions regarding public sector undertakings:

(i) "Portfolio of public sector investments was reviewed with a view to focus the public sector on strategic, high tech and essential infrastructure. Some areas were exclusively reserved for the public sector. Apart from this, the public sectors were permitted in the areas not reserved for it.

(ii) Loss making Public enterprises was subject to the Formulation of revival/rehabilitation schemes is referred to the Board for Industrial and Financial Reconstruction (BIFR), or other similar high level institutions created for the purpose.

(iii) In order to protect the interests of workers affected by such rehabilitation packages a social security scheme has been created.

(iv) To raise resources and encourage wider public participation, a part of the government's share holding in the public sector has been offered to mutual funds, financial institutions, general public and workers.

(v) Boards of public sector companies were made professional and awarded with greater powers.

(vi) MoU negotiations and implementation made effectively by giving more thrust on performance improvement (MoU) system. This system ensured granted greater autonomy and accountability to managements.

(vii) To facilitate a discussion on performance of MoU signed public enterprises, the matter on major management issues would be placed in Parliament."16

The Industrial Policy 1991 was to bring major economic development of the nation including the public sector. It was like “beginning of relicensing, deregulation and dismantling of inspector raj”.17

Partial disinvestments Programs in selected Public Sector undertaking was started in this period and the same continued by the next government on a large scale. Later on the UPA government followed this with systematic manner by introducing the policy of more disinvestment. For promoting wider participation and larger accountability, the government equity in a number of central public sector undertakings was offered to Mutual Funds, financial institutions, workers and the general public. Areas reserved for public sector were opened to private sector also.

**The approaches of New Industrial policy towards public sector enterprises are as under:**

To ensure managerial and commercial autonomy to successful profit making companies, government introduced the following measures-

(i) Not to privatize Profit-making companies.

(ii) Restructuring and modernization of sick public sector companies.

(iii) Chronically loss-making companies to be either be sold off, or closed, after clearing all the dues and compensation of workers.

(iv) Private industries having more potential for revival to be introduced.

(v) Revenues generated from privatization will be utilized for designated social sector schemes.

(vi) Public sector companies will be motivated to enter capital market for raising resources and new investment avenues.

**Policy of De-reservation in New Economic Policy of 1991**

The new Industrial Policy was dismantling of inspector raj system. Industrial Policy1956 had reserved as many as 17 industries exclusively for public sector but the New Economic Policy reduced this number to 8 only as under:

1. Arms and ammunition
2. Atomic energy
3. Coal and lignite
4. Mineral oils
5. Mining of iron ore, manganese ore, chrome ore, gypsum, sulphur, gold and diamond
6. Mining of copper, lead, zinc, tin, molybdenum and wolframs
7. Minerals specified in the schedule to the atomic energy (control of production and use order),
8. Rail transport

Up to 1998-99 item no (v), (vi), (iii) and (iv) were deleted from above reserved list chronologically and again on May 9, 2001 the government dereserved arms and ammunition to private sector.

At present only three industries i.e., atomic energy, minerals specified in the schedule (control of production and use order) 1953 and rail transport are reserved for public sector.\(^\text{18}\)

**Policy Regarding Sick Units in New Economic Policy, 1991**

As per this policy the Sick Public Sector Undertakings were brought within the jurisdiction of the Board for Industrial and Financial Reconstruction (BIFR) either to restructure or to close down. As on March 31, 2008, 66 Public Sector Undertakings were registered with Board for Industrial and Financial Reconstruction. Board for Industrial and Financial Reconstruction allowed, only nine Public Sector Undertakings to revival schemes, 3 cases were dismissed as man maintainable, 5 companies were declared as no longer sick and 5 other cases were dropped on account of net worth becoming positive. ‘The Government of India has approved revival of 25 central public sector undertakings with total financial support of Rs. 7200 crore (Rs.1950 crore of cash infusion and Rs. 5250 crore of write off of loans, waiver of interests and guarantee fees etc.,’ as pointed out by R.K. Misra\(^\text{19}\).

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\(^\text{18}\) R. K. Misra n. p. 332

\(^\text{19}\) Government of India, India 2009- A Reference Annual, New Delhi, 2009, p. 610p
The merger of Air India and Indian Airlines, Rashtria Ispat Nigam and Steel Authority of India and Oil Group of industries were considered by the government under restructuring schemes. Indian Post is another excellent example which came back with tough competition from private players. Voluntary Retirement Scheme (VRS) has been introduced in central public sector undertakings to shed down the extra financial burden due to surplus manpower. As a result of this 5.90 lakh employees had opted for VRS.

The introduction of Memorandum of understanding (MoU) system for evaluating the performance of Public Sector Undertakings was another milestone in the New Economic Policy. This system clearly defines the targets to be achieved by Public Sector Undertakings with operational autonomy. (later on this system has gone under many changes.)

**Policy for Navratna and Miniratnas after New Economic Policy, 1991**

New Economic Policy in 1991 bought a number of reformative initiatives like rising up of some highly successful enterprises to the special status of Navratnas/ Miniratna depending on their eligibility. These Public Sector Undertakings were delegated superior financial powers in the following areas.

- Incurring Capital expenditure,
- Entering into joint ventures,
- Organizational restructuring,
- Creation and winding up of posts below Board level,
- To raise capital from domestic and international markets and,
- To set up financial joint ventures subject to equity investments with special limits.

(Navratna Companies have powers to do business without government approval up to a limit of Rs. 1000 crore or 50 percent of their net worth, whichever is less. These PSUs have to perform in consistently good manner otherwise these can be delisted from the list of Navratnas.)

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The Public Sector Undertakings which operate profitably but yet to attain the target to become Navratna Status awarded Miniratna (category I and II) status. If the Public Sector Undertakings are running profitably for the last three years with a net profit of 30 crore or more in one of the three years are categorized Miniratna-I and if it made profits for the last three years continuously and should have a positive net worth are granted Miniratna-II status.

Miniratna-I The Public Sector Undertakings are permitted certain autonomy like incurring capital expenditure up to Rs. 300 crore or equal to their net worth, whichever is lower, without government sanction. Miniratna-II has the power for capital expenditure without governmental consent up to Rs. 150 crore or 50 percent of their net worth whichever is low.

Considering the growth of Navratna Companies, Government of India came up with 'Maharatna' Scheme. The Maharatna Status Public Sector Enterprises are blessed with some extra powers like capital expenditure without government sanction up to Rs. 5000 crore or 50 percent of their net worth, whichever is less. The classifications of C Public Sector Enterprises are listed below with their eligibility criteria:

### Table 1.2

**Conditions and Eligibility Criteria to Become Navratna Companies**

The following criteria are eligible to be considered for grant of Navaratna status:

- Schedule ‘A’ and Miniratna Category-1 status.

- At least three ‘Excellent’ or ‘Very Good’ Memorandum of Understanding (MoU) ratings during the last five years.

- A composite score of 60 or above out of 100 marks based on its performance during the last three years on the following six identified efficiency parameters:
### Performance Parameters

<table>
<thead>
<tr>
<th>Performance Parameters</th>
<th>Maximum Marks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Profit to Net Worth</td>
<td>25</td>
</tr>
<tr>
<td>Manpower cost to cost of production or services</td>
<td>15</td>
</tr>
<tr>
<td>Gross margin as capital employed</td>
<td>15</td>
</tr>
<tr>
<td>Gross profit as Turnover</td>
<td>15</td>
</tr>
<tr>
<td>Earnings per Share</td>
<td>10</td>
</tr>
<tr>
<td>Inter-Sectoral comparison based on Net profit to net worth</td>
<td>20</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

The list of Navratna Companies is available in Annexure 1.1

#### Table 1.3

**Maharatna Companies with Eligibility Criteria**

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Name of Companies</th>
<th>CPSEs fulfilling the following criteria are eligible to be considered for grant of Maharatna status:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Bharat Heavy Electricals Ltd.</td>
<td>• Having Navratna status</td>
</tr>
<tr>
<td>2.</td>
<td>Coal India Ltd.</td>
<td>• Listed on the Indian stock exchange, with a minimum prescribed public shareholding under SEBI regulations</td>
</tr>
<tr>
<td>3.</td>
<td>Gail (India) Ltd.</td>
<td>• An average annual turnover of more than Rs. 20,000 crore during the last three years</td>
</tr>
<tr>
<td>4.</td>
<td>Indian Oil Corp.Ltd.</td>
<td>• An average annual net worth of more than Rs.10,000 crore during the last three years</td>
</tr>
<tr>
<td>5.</td>
<td>Ntpc Ltd.</td>
<td>• An average annual net profit of more than Rs. 2,500 crore during the last 3 years</td>
</tr>
<tr>
<td>6.</td>
<td>Oil &amp; Natural Gas Corp.Ltd.</td>
<td>• Significant global presence or international operations</td>
</tr>
<tr>
<td></td>
<td>Steel Authority Of India Ltd</td>
<td>• Having Navratna status</td>
</tr>
</tbody>
</table>

*Source: Department of Public Enterprises (as of June, 2014)*

22. R. K. Misra n. p. 332
Table 1.4
Miniratnas (I and II) Companies with Eligibility Criteria

These CPSEs have to meet the following eligibility conditions and criteria:

- They have not defaulted in the reimbursement of loans/interest payment on any loans due to the Government.
- They shall not depend upon budgetary support or Government guarantee.
- The Boards of these CPSEs should be updated by inducting at least three non-official Directors as the first step before the exercise of better delegation of authority.
- The administrative ministry concerned shall decide whether a public sector enterprise fulfilled the requirements of a category I/category II company before the exercise of superior powers.

The list of Miniratnas (I and II) Companies are available in Annexure 1.2

Table 1.5
An overview of Five Year Plans and Public Sector Undertakings in Post liberalized Era.

<table>
<thead>
<tr>
<th>Period (Five Year Plan)</th>
<th>Focus of the policy</th>
<th>Amount spent on Public Sector (% of total Investment)</th>
</tr>
</thead>
<tbody>
<tr>
<td>8th</td>
<td>Economic Reforms And Liberalization Of Economic And Industrial Policies (Public Sector was to face a tough competition from private sector)</td>
<td>45.2% (of total investment)</td>
</tr>
<tr>
<td>9th</td>
<td>The Government came with Navratna and Miniratna status scheme for profit making central public sector undertakings. Profit making Public Sector companies preformed very well but the government was eyeing on them with its disinvestment Policies.</td>
<td>33.4%</td>
</tr>
<tr>
<td>10th</td>
<td>The government policy for disinvesting public sector continued even with illogical disinvestment in highly profit making central public sector companies.</td>
<td>***</td>
</tr>
<tr>
<td>11th</td>
<td>Rapid increase in private sector investment, through reduced restrictions on private investment and created a more favorable investment climate.</td>
<td>23%</td>
</tr>
</tbody>
</table>

*1. The profit making Public Sector companies preformed very well but the government was eyeing on them with its disinvestment policies.
Growth of Public Sector Undertakings in number of undertakings:

Growth rate of Public Sector Undertakings in investment wise are given below

Figure: 1.1

Growth of PSU’s in Number of Units

The increasing trend of Public Sector was amazing from 1951 to late 80’s. From the figure it is clear that in 1951 there were only five PSUs and within three decades further 239 PSUs has been started. In order to clear the depth of importance given to PSUs by the government it is better to understand the amount invested in these undertakings and share of PSUs in total investment. The following figures will clear this matter.
Growth of Public Sector Undertakings in Investments in Crores:
Investment wise growth rate of Public Sector Undertakings are given below:

Figure: 1.2
Growth of PSU’s in Investments

![Investment in PSUs (Crores)](image-url)

Figure: 1.2  
Sources: Public Enterprises Survey 2009-10

Growth of Public Sector Undertakings in Five Year Plan Wise:
Five year plan wise growth rate of Public Sector Undertakings are given below:
The trend of investment in Public Sector was such that after having reached the peak during the third plan, the share of Public Sector in total investment in each of the plans has been declining.

By the end of late nineties, the situation of Indian economy were changed. There was critical shortage of official reserves, huge deficits in balance of payments and sharp decline in GDP growth forced the Indian government to take corrective measures. Reforming the Public Sector of the country was one amongst them.

Devastation of Public Sector Undertakings is impracticable one. Because various studies by economist magazine reveal that a country cannot maintain its economic growth rate without peculiar power of Public Sector undertakings in both the procurement & maximum utilization of short-term as well as long...
term financial resources as in case of Indian PSU banks the facts will be much clearer that Indian economy could not drop Public Sector Enterprises.

Considering the importance of these organisations then the government of India started its economic reform. Disinvestment of public sector undertakings, rising up of some highly successful public enterprises to the special status of Navratnas/ Miniratna depending on their eligibility by assigning superior financial powers and Memorandum of Understanding with ‘Balance Score Card’ system was some among them.

After Disinvestment, Memorandum of Understanding with ‘Balance Score Card’ system was the major techniques of economic reforms to be claimed for the better performance of Public Sector Enterprises by Government. So the Disinvestment and Memorandum of Understanding were considered to be the two major economic reforms ever introduced by Government’ on Public Sector Undertakings. The present study - Impact of Disinvestment Policy on the financial performance of some selected Public Sector Undertakings with special reference to Maharashtra - mainly aimed to carry out a comparative analysis of the Pre and Post revamped Regime of selected Public Sector Undertakings during major economic reforms’ (i.e performance of Public Sector Undertakings before and after ‘MoU with Balance Score Card’ system) on the basis of the latest financial data, to know how far the economic reforms was helpful to improve the operational efficiency and profitability of Public Sector undertakings in India and to know the impact of these reforms undertaken in Public Sector Undertakings on the socio-economic development of Maharashtra state.

Significance of the Study:
A recent study by The Economist magazine reveals that an emerging economy cannot maintain sustainable economic growth without Public Sector. These organizations occupy a peculiar power in both the procurement and maximum utilization of short-term as well as long term financial resources. Indian PSU banks are the best example which offered lower interest rates for development of the sectors like real estate, SMEs or agriculture. In short Indian economy could not drop Public Sector Enterprises bearing in mind of the country's prevailing socio-economic configuration.
Considering the importance of these organizations in the economy a comparative financial analysis of the Pre and Post revamped Regime major initiatives/reforms technique introduced in Public Sector Enterprises will have a remarkable influence to highlight the performance than any other studies in this area. To the best of my knowledge, there is no comprehensive study which will assess the impact of MoU on the performance of Public Sector Enterprises and thereby the social enhancement has been taken place especially in the Maharashtra State. Perhaps there may not be a single study covering the time span of ten to twelve years by using all financial parameters such as profitability, efficiency, liquidity, and productivity in assessing their performance. Since the study covers all the gaps inference drawn may be beneficial to government regulatory bodies, policy formulators, investors and Public Sector Enterprises.

**Scope and limitations of the study:**

All the Navratna Status Public Sector Enterprises within Maharashtra State has been for study. But still the present study suffers from the following limitations.

- The research is based on secondary data (Either from Published Sources or the website of individual companies/other relevant websites)

- The period of study is limited to twelve Years (2000-2011) of the entire sample Companies.

  Pre-revamped Regime – 2000 - 2005 and


- The study is based on Navratna Status Public Sector Enterprises within the Maharashtra State, so the results derived from this study may not necessarily applicable to entire Public Sector Enterprises as it is.
**Objective of the study:**

The main objectives of the study are as follows-

1. To study the Evolution of Public Sector undertakings and recognize the importance given by the Industrial policies for Public Sector undertakings in India.

2. To assess the major reforms initiated by Government of India for rising the competency of Public Sector Undertakings with global standards.

3. To carry out a comparative financial analysis of the Pre and Post revamped Regime of selected Public Sector Undertakings during major economic reforms’ era on the basis of the latest financial data.

4. To know how far the economic reforms were helpful to improve the operational efficiency and profitability of Public Sector undertakings in India.

5. ‘The Disinvestment and Memorandum of Understanding were considered to be the two major economic reforms ever introduced by Government’. The present study aimed to determine the financial performance of MoU Public Sector undertakings over the period of time.

6. To know the impact of these reforms undertaken in Public Sector Undertakings on the socio-economic development of Maharashtra state.
**Hypothesis tested:**

In order to improve the operational efficiency and competency the Indian Public Sector Undertakings undergone several economic reforms. It is believed that this would have improved the profitability of these Public Sector Undertakings. Hence the following hypotheses have been framed and validated to address the main objectives.

**H-1)** Public Sector Undertakings were handicapped during the Pre revamped Scenario and were not in a position to grow as fast as global majors.

After Disinvestment, Memorandum of Understanding with 'Balance Score Card' system was the major techniques of economic reforms to be claimed for the better performance of Public Sector Enterprises by Government. The following hypotheses are validated based on this criterion:

**H-2)** The financial performance of Public Sector Undertakings in the Post Disinvestment Scenario is higher.

**H-3)** The performance of MoU Public Sector Undertakings has rapidly improved over a period of time.

**H-4)** The revitalization in MoUs with government enhanced the competency of Public Sector Enterprises and there by the socio economic conditions of the society.

**Research Methodology:**

Research Methodology adapted in this study relates to financial performance of the Navratna Status Public Sector Undertakings (selected PSUS) belongs to Maharashtra State. For this purpose, all the data and information have been classified equally in to two distinct periods from 2000 to 2011 for addressing the objectives and to test hypotheses.
The comparative analysis of these two periods will give a clear picture of the financial performance during the Pre revamped MoU Period (from 2000 to 2005) and the Post revamped MoU Period (from 2005 to 2011). As mentioned in objectives and hypotheses even though the focal point is on assessment of financial performance of selected Indian Public Sector Enterprises during Pre and Post revamped MoU period this study also consider various qualitative factors (non financial parameters) along with the following key financial parameters to analyze and draw the conclusion.

1. Sales Growth
2. Asset Growth
3. Net Profit Margin
4. Capital Structure
5. Liquidity
6. Working Capital
7. Operating Cash Flow
8. Earnings per Share
9. Return on Investment and Equity

This study is based on publicly available historical records, such as Annual Reports, financial statements, ratio analysis etc., of following Indian Public Sector Enterprises which comes under the area of study

1. Bharat Petroleum Corpn. Ltd.
2. Hindustan Petroleum Corpn. Ltd, and
3. Shipping Corporation of India Ltd).
To derive at a meaningful conclusion various relevant ratios and statistical tools have been applied against selected parameters. While commenting on the performance of sample Public Sector Undertakings during the two study periods i.e. Pre revamped MoU period (from 2000 to 2005) and post revamped MoU period (2005 to 2011), both, rolling averages (3-years) as well as absolute figures were measured. Significant tables and graphs have been presented to support the summary, conclusion and findings.

Since the research mainly focuses on the assessment of financial performance during Pre and the Post revamped MoU Period, the data used for analysis selected primarily from Balance Sheet, Profit & Loss Statements and Cash Flow Statements of Navratna Status public sector enterprises from Maharashtra state. Apart from this, for total data, Annual Reports of sample companies for the significant period and PSU database were used.

In this study it was expected that Post revamped MoU period will lead to raise in profitability, enhance competitiveness and efficiency. The main aim of this study is to find out whether the envisaged goal or expectations was achieved. The impacts of revamped MoU have been measured on profitability, sales growth, asset growth, returns on investment, capital structure, dividend etc.

For the comparative analysis of financial performance of the sample Public Sector Enterprises, this research has been carried out through the Wilcoxon signed rank test which is non parametric test. Among the other types of non parametric analysis this method is most suitable because this involves ‘difference between dependant groups’ [the variables are dependent to each other and they are taken from the same sample]. The variation between two study periods has been examined to test the hypotheses. The following figure represents Null Hypothesis.
Figure 1(4)
Null Hypothesis

Reference
• Navratna Status Public Sector Enterprises [Maharashtra State]

Test Conditions:
• A=Pre revamped MoU Period (2000 - 2005)
• B=Post revamped MoU Period (2005 - 2011)

Hypotheses
• H0 = the companies in considerations behave like each other between the two time periods.
• H1 = the companies in considerations behave differently from each other between the two time periods.
This study concentrates on the financial aspects, as examined for variations resulting from revamped MoU. In the Null Hypothesis symbols “A” stand for “Pre revamped MoU Period (from 2000 to 2005) and “B” for “the Post revamped MoU Period” (from 2005 to 2011). i.e. 6 years in the Pre revamped MoU Period and 6 years after revamped MoU period over a twelve-year total timeframe. For testing significant changes in the variables based on Pre and Post revamped MoU period, this study has relied non-parametric test by using “Wilcoxon Signed Rank Test” (with its ‘Z’ statistics). This is a Non-Parametric Test which assumes no knowledge of the distribution or it does not criticize any sample data. This test methodology has been used in many researches\textsuperscript{21} involving similar situations\textsuperscript{22}. This study also tries to find out whether the median difference in variable values between Pre and Post revamped MoU period is “Zero”. The methodology of this analysis is mentioned below:


Methodologies for Non parametric analysis

✓ To split the observations in Pre and Post revamped MoU period in the two sets of observations as Pre revamped MoU period and Post revamped MoU period.

✓ The Hypothesis are:

\[ H_0 = \text{the companies in consideration behave like each other between the two time periods;} \]
\[ H_1 = \text{the companies in consideration behave differently from each other between the two time periods.} \]

✓ To calculate the variations between the paired observations:

   **Reject any variances of zero.**

✓ To rank the value of the variances from lowest to highest, Tied differences are recorded with the average ranking of their positions.

✓ To grant the ranks the sign of the original difference in the data and sum the signed ranks and denote it as \( T \)

✓ **Calculation of the test statistics:**

\[ Z = \frac{T - m}{\sigma}; \text{ where } m = \frac{n (n + 1)}{4}, \sigma = \sqrt{\frac{n(n+1)(2n+1)}{24}} \text{ and } n = \text{no of observations} \]

✓ Accept / Reject criterion for this two tailed tests:

   **Accept H0 -if the test statistics Z is in the range -1.96 < Z < 1.96.**
The performance of all Navratna Status Public Sector Enterprises within Maharashtra State have been analysed through the Wilcoxon signed rank test in the Pre and Post revamped MoU period. Apart from this analysis of elected financial parameters and non-parametric test, the research also concentrate on some qualitative and quantitative review of enhancement in competitiveness and efficiency of sample Public Sector Enterprises’ during Pre and Post revamped MoU periods.

For the above purpose, certain templates has been created for assessing the competitiveness and efficiency factors by analyzing the data based on Pre and Post revamped MoU period to know if competitiveness and efficiency have enhanced during post revamped MoU period compared to Pre revamped MoU period. As mentioned earlier, if the sample company’s financial information’s along with growth rates are available then it is effortless to know about their competitiveness and efficiency for the time periods in Pre as well as Post revamped MoU periods so the growth rates have been worked out for the Pre and Post revamped MoU period.

The assumptions regarding weight distribution of financial parameters for this study is given below:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Competitiveness</th>
<th>Efficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asset Growth</td>
<td>33.33%</td>
<td>33.33%</td>
</tr>
<tr>
<td>Current ratio</td>
<td>16.67%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Net Profit Margin</td>
<td>16.67%</td>
<td>16.67%</td>
</tr>
<tr>
<td>ROI</td>
<td>0.00%</td>
<td>16.67%</td>
</tr>
<tr>
<td>Operating Cash Flow/Net Sales</td>
<td>16.67%</td>
<td>16.67%</td>
</tr>
</tbody>
</table>
The logic considered in this study for the above weight allocation of the parameter is given below:

- One of the main factors which influence the performance of an Organisation is its size i.e. the investment in total Assets. So as compared to other parameters this variable is assigned a higher weight age.

- Other important factors representing the performance of an Organisation are its Sales, Profits, operating efficiency, current ratio and cash flow, so all these elements have been assigned with equal weight age.

The assumptions based on weight distribution of the parameters for the study are as under-

**Competency Rating:**

Competitiveness is the gathering of three major variables (assets, performance and processes). The significant financial parameters for these variables are given in the following figure.
As per the above diagram, 100% score assigned to Competitiveness, which are further dispersed amongst the key variables i.e. the assets, performance and processes with 33.33%. Further these key variables are divided to related financial parameters for the study. For example, overall performance of the Company mainly depends on its Assets growth so 33.33% score is assigned to asset growth. Performance depicts by sales growth and net profit margin so 16.67% are assigned to concerned element of the parameter on equivalent basis. As in the same way, Current Ratio & Operating Cash Flow/Net Sales Ratio assumed as part of financial orbit processes and is vested with 16.67% for each.
**Efficiency:**

The efficiency of a company depends on its size, research & development, and its internal systems. Because of the dissimilarity and non-quantifiable nature of financial parameters, promoting Research & Development intensity, the remaining financial elements as cited below to be considered for this study.

**Figure 1(7)**

**Efficiency rating parameters**

- As shown in the above diagram, efficiency score of 100% divided among the financial parameters leading towards its efficiency as, the size, internal systems and other parameters of 33.33% each.
• Then the individual financial parameters are sub divided to corresponding financial parameters. For example, Asset Growth is the only sub element of size so 33.33 % weight age is allocated to asset growth.

• Parameters other than Size and Internal System influencing efficiency of a Company can be assigned in terms of sales growth and net profit margin (which comes under Other Parameters with 33.33% Score).

• Being sub element of other parameters, 16.67% assigned to each as part of other parameters. As in the same mode, the scores of Internal System have been diversified between Return on Investment and Operating cash flow/Net Sales ratio of 16.67% each as the factors influencing efficiency of organization.

**Concluding Remark:**

Prior to the independence, there were only a small number of Public Sector Undertakings. But after independence Indian Government had entered into business through Public Sector Undertakings in order to build a base for solid infrastructure and a planned development of the entire country. Then the Public Sector Enterprises in India have grown tremendously (from five enterprises post Independence at a meager investment of INR 0.3 billion in 1951 to 246 enterprises as on FY2009 with a total investment of INR 5289.5 billion).

The trend of investment in Public Sector was such that after having reached the peak during the third plan, the share of Public Sector in total investment in each of the plans has been declining. By the end of late nineties due to critical shortage of official reserves, huge deficits in balance of payments and sharp decline in GDP growth forced Indian government to take corrective measures. Reforming the Public Sector of the country was one amongst them.

Since devastation of Public Sector Undertakings is impracticable one; disinvestment of public sector undertakings, rising up of some highly successful public enterprises to the special status
of Navratnas/ Miniratna depending on their eligibility by assigning superior financial powers and Memorandum of Understanding with ‘Balance Score Card’ system were the kind of reforms adapted by Indian government.

It is said that after Disinvestment, Memorandum of Understanding with ‘Balance Score Card’ system was the major techniques of economic reforms initiated by the Government for the better performance of Public Sector Undertakings. So the Disinvestment and Memorandum of Understanding were considered to be the two major economic reforms ever introduced by Government’ on Public Sector Undertakings. The present study - **Impact of Disinvestment Policy on the financial performance of some selected Central Public Sector Undertakings with special reference to Maharashtra** - mainly aimed to carry out a comparative analysis of selected Public Sector Undertakings, before and after the setting up of these major techniques of economic reforms. (i.e performance of Public Sector Undertakings before and after ‘MoU with Balance Score Card’ system).

Initially MoU has been introduced with a view to provide encouragements for better performance and assessing the performance of management by removing the fuzziness in goals and objectives of Public Sector Enterprises. This system was restored from five-point scale of performance measurement to balanced score card methodology. The present study focus on the impact of this revamped MoU, on financial performance. For the same a hypothetical scenario has been generated with some assumed parameters to analyse the overall performance sample companies.

This study covers the time span of twelve years by using all financial parameters such as profitability, efficiency, liquidity, and productivity in assessing their performance. Since the study covers all the quantitative and qualitative aspects, the study will be beneficial to government regulatory bodies, policy formulators, investors and Public Sector Enterprises.

Quantitative aspects of the test are based on the analysis of financial records of the sample company during the pre and post revamped regime. In this research data collection may not be credible for testing the hypotheses.
Apart from the financial analysis of Navratna Status, Maharashtra based Public Sector Enterprises in the Pre and Post revamped MoU period this study also covers the qualitative aspects of sample companies. For this purpose some parameters and weight ages have been assigned in this study to highlight the competitiveness and efficiency of the revamped MoU period. The assumptions and the way of conducting research is same for all sample companies and is described in the upcoming chapters. Brief profiles of all the sample companies were reviewed for enrichment of the comparison.

At last, this research will leads to inferences drawn from the financial analysis and hypotheses testing and also the findings and conclusions. In addition to this, the study highlights further area of research by others.

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Websites:

1. Ministry of Disinvestment website
