Chapter III
Financial Analysis of Selected Companies

This chapter concerned with a brief introduction of the sample companies along with the analysis of financial performance indicators and its comparisons during the Pre and Post Revamped region. Pre revamped regime is a period of six years starting from 2000 to 2005 and Post revamped regime of six years which starts from 2005 to 2011. As mentioned in research methodology even though the focal point is on assessment of the financial performance of selected Indian Public Sector Enterprises during Pre and Post revamped MoU period this study will also consider various qualitative factors along with the key financial parameters mentioned below.

A) Sales Growth  
B) Assets Growth  
C) Net Profit Margin  
D) ROI & ROE  
E) Current Ratio  
F) Working Capital  
G) Capital Structure  
H) Earnings Per Share  
I) Operating Cash Flow / Net Sales  
J) Dividend per Share.

23. Sample Companies are
   I. Bharat Petroleum Corporation Ltd.
   II. Hindustan Petroleum Corporation Ltd.
   III. Shipping Corporation of India.
I. Bharat Petroleum Corporation Ltd. (BPCL)

Bharat Petroleum Corporation Ltd, the Navratna Public Sector Company is one of the largest Public Sector oil and marketing companies in India. It was incorporated as Burmah Shell Refineries Ltd on 3rd November 1952 as a private limited company. Thereafter it was taken over by government of India on 24th January 1976 and formed a new company named Bharat Refineries Ltd.

Ultimately on 1st August 1977 Bharat Refineries Ltd was renamed as Bharat Petroleum Corporation Ltd. This was the first refinery to process indigenous crude in the country. It has various subdivisions into exploration of oil and gas. In short BPCL is an Indian state-controlled oil and gas company headquartered in Mumbai, Maharashtra.

The company has always been given priority to qualitative excellence for maximizing customer satisfaction. Its vision is to be the first choice of customers. It has an employee base of more than 14,154 individuals. BPCL has its own refinery units (Mumbai Refinery, Kochi Refinery, Numaligarh Refinery and Bina Refinery).

Being a Public Sector Company BPCL provide quality products with reasonable price to attain customer satisfaction. It provides fuels to about 8000 industrial customers extended across India. These include industries from private sector as well as public sectors, of the core and non-core segments and various government establishments like Railways, Defense, State Electricity Board and State Trading Corporations etc.

BPCL product lines consist of fuels (including marine fuels, white oils and black oils), solvents and special offerings, bitumen, lubricants gases (including Polypropylene feed stock, natural gas, liquefied petroleum gas and metal cutting gas), and Sulphur.
Vision of the Company:

- To be the mainly accepted global energy company leveraging talent and technology.
- To be the first choice of customers always.
- To exploit profitable growth opportunities outside energy.
- To be the role model for Health, Safety, Security and Environment.
- To be a model corporate entity with social responsibility.

Mission:

- To make Bharat Gas a dominant brand in the segments they market, by becoming trend setters in Customer Service, Safety and Quality.
- Contribute notably in nation building by meeting its growing energy needs, and to support this chase economic surplus by efficiently arranging all available resources and aiming towards international competitiveness in the energy sector.
- Build up and expand areas of core competencies throughout the country, total quality management in all.
- Expanding the business and maintain the status of a leading national company.
- Promote ecology, environmental up gradation and national heritage.

Awards / Recognition

Bharat Petroleum’s LPG Business has established an irresistible identification throughout the era. In order built competition and to improve their safety performance ‘Oil Industry Safety Awards’ were introduced among the oil companies. Safety performance of the oil companies were evaluated with the help of a novel condition developed by OISD. It takes into attention of the total loss concept i.e. fatalities, fires, lost time, direct & indirect losses etc. and also the hazard potentials. **BPCL LPG has been winners of this prestigious award for 12 times** during the years 2009 to 1992.
BPCL, being one of the largest Public Sector oil and marketing company in India, the analysis of its financial performance indicators and its comparisons during the Pre and Post Revamped region will enrich the study.

**A) Sales Growth**

**i. Pre Revamped Period (2000-2005)**

The pre revamped regime of Bharat Petroleum Corporation Ltd shows a declining trend in case of sales up to 2003. In 2002 BPCL recorded its ever poor record of sales growth i.e. 10.7% decline. In the subsequent years BPCL regained its growth rate but if we compare it with the initial growth rate then it was more than 50% below. The three years rolling average trend line shows significant growth in the initial stage followed by constant decline in the subsequent years up to 2003. From 2003 Bharat Petroleum Corporation Ltd regained its sales growth rate moderately.

**Figure: 3.1**

![Sales (Rate of Growth)](image)

**Bharat Petroleum Corporation Ltd. Source: financial Statement.**

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ii. **Post Revamped Period (2006-2011)**

Post revamped regime was a period of less volatile as compared to pre revamped regime but Bharat Petroleum Corporation Ltd could not sustain its growing trend line of sales which it achieved after the worst performance in 2003. From 2008 there was a negligible sales growth rate 2009 but followed by a drastic decline in 2010 (sales growth rate declined by 1.75%). But as per the management discussion and analysis report, Bharat Petroleum Corporation Ltd ended the year with a sharp decline in the sales of HSD$^{26}$. It was declined from 782.37 TMT$^{27}$ in 2008-09 to 274.07 TMT$^{27}$ in 2010. In order to overcome the situation management commissioned 304 new retail outlets during the current year. In case of three years rolling average of Bharat Petroleum Corporation Ltd, Pre revamped period recorded highest growth rate [which was 28.03%] than in case of post revamped. The post revamped period growth rate never crossed 19.67%.

**B) Assets Growth**

i. **Pre Revamped Period (2000-2005)**

The pre revamped regime started with considerable growth in the investment of fixed assets. But this followed a significant decline (-10.7%) of fixed assets investment in 2002. The subsequent years shows a continuous improvement in BPCL$^{28}$ assets growth rate but as per three years rolling average the growth line was downward slopping which indicates that the growth rate was negligible as compared to its early Pre revamped era.

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$^{26}$ Bharat Petroleum Corporation Limited  
$^{27}$ High Speed Diesel.  
$^{28}$ Thousand Metric Tonnes.

As in case of Pre revamped regime this period too started with considerable growth but thereafter BPCL\(^{29}\) could not maintain the improved growth rate. Apart from the negligible growth of investment in fixed assets 2010 shows -1.75% declines in the growth. The three years rolling average was less volatile and not much downward slopped as compared to the pre revamped regime.

\(^{29}\) Bharat Petroleum Corporation Limited
C) Net Profit Margin

i. Pre Revamped Period (2000-2005)

The pre revamped regime was a period of negligible growth and decline. If the highest growth rate was 3.2% in 2004, 1.53% was recorded in the immediate following year. As per the management discussion and analysis report the procurement cost of crude oil and products were increased severely in the international market and the domestic prices of the products – particularly the mass consumption products like MS and HSD did not rise in the same proportion. This resulted in a squeeze in the marketing margins of these products. This has a crucial impact on the profitability of oil making companies. In order to enhance the refinery profitability of BPCL management decided to put up a new Hydrocraker by August 2005. Government’s efforts by way of reducing customs duties and conversion of excise duties from ad valorem to specific were far too short of the uncovered gap.

Table No: 3.3

<table>
<thead>
<tr>
<th>Year</th>
<th>Actual Values</th>
<th>Three Years Rolling Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>1.96</td>
<td>2.39</td>
</tr>
<tr>
<td>2001</td>
<td>1.77</td>
<td>2.15</td>
</tr>
<tr>
<td>2002</td>
<td>2.00</td>
<td>1.91</td>
</tr>
<tr>
<td>2003</td>
<td>2.63</td>
<td>2.13</td>
</tr>
<tr>
<td>2004</td>
<td>3.20</td>
<td>2.61</td>
</tr>
<tr>
<td>2005</td>
<td>1.53</td>
<td>2.45</td>
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<tr>
<td>2006</td>
<td>0.35</td>
<td>1.69</td>
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<tr>
<td>2007</td>
<td>1.76</td>
<td>1.21</td>
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<tr>
<td>2008</td>
<td>1.39</td>
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<td>0.57</td>
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<td>2010</td>
<td>1.20</td>
<td>1.05</td>
</tr>
<tr>
<td>2011</td>
<td>1.00</td>
<td>0.92</td>
</tr>
</tbody>
</table>

Bharat Petroleum Corporation Ltd. Source: financial Statement.

30. Bharat Petroleum Corporation Limited
31. Motor Spirit
32. High Speed Diesel.
ii. Post Revamped Period (2006-2011)

The post revamped regime started with a drastic decline in Net Profit Margin. In 2006 international prices of crude oil & allied products have been raised and domestic prices were not increased in line with them. This has had a significant impact on the margin of the oil companies and the same is reflected in the substantial reduction in profitability of the oil marketing companies during 2005-06. In this year management of Bharat Petroleum Corporation extended the pipeline from Mumbai refinery to Delhi for reducing the cost of moving the products and thereby increasing profitability. The three years rolling average too was much volatile having 1.76% as the highest Net Profit Margin and where as 0.35% recorded as the lowest.

D) ROI & ROE

The following figure represents Return on Investment & Return on Equity of Bharat Petroleum Corporation Ltd during the two study period.

Figure: 3.4

Bharat Petroleum Corporation Ltd. Source: financial Statement.
i. Pre Revamped Period (2000-2005)

The pre revamped regime shows a continuous growth in both Return on Investment and Return on Equity (till 2004) but the growth rate during pre revamped regime was no so creditworthy due to higher crude oil prices in the international market. Apart from this there was significant gap between Return on Investment and Return on Equity trend line during the late pre revamped regime which indicates that Bharat Petroleum Corporation focused on debt financing. The absolute variation trend line and three year rolling average line are almost symmetrical for this period.

ii. Post Revamped Period (2006-2011)

As compared to pre revamped regime this period shows drastic decline in both Return on Investment & Return on Equity due to reduced Net profit Margin. Unlike the pre revamped regime ROI & ROE along with is three years rolling average trend lines are almost symmetrical for the period which indicates that the corporation focused on low financial leverage.

E) Current Ratio

i. Pre Revamped Period (2000-2005)

Bharat Petroleum Corporation Ltd recorded almost steady Current Ratio during the Pre Revamped regime. In 2004 the Corporation recorded 0.99 as its lowest current ratio of the pre revamped regime. The three years rolling average too was less volatile. Bharat Petroleum Corporation’s current ratio shows an increasing trend in early pre revamped period but after 2002, current ratio continued to decline up to 2005. In 2005 BPCL regained its growth rate. In short the ratio has been steady throughout the era (i.e. Bharat Petroleum Corporation Ltd maintained its ideal position) as the proper financial management system were in place. The three years rolling average too was less volatile.

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33. Return on Investment & Return on Equity.
34. Bharat Petroleum Corporation Limited.
ii. Post Revamped Period (2006-2011)

The absolute value of trend line during this period was in a zigzag position, but its viability is negligible means (i.e, in between 1.2 to 1.4) the three years rolling average trend line smoothen the variation of absolute data. Both absolute trend and rolling average trend reflects similar trend. In short the current ratio has been almost stable during this period too as the Barat Petroleum Corporation maintained improved position through efficient cash and working capital management.

F) Working Capital

The following figure demonstrates working capital requirement of Bharat Petroleum Corporation Ltd., during the Pre and Post Revamped period with absolute data and rolling average data. This will help to highlight the performance and upcoming projects of BPCL.35
i. Pre Revamped Period (2000-2005)

In pre revamped regime an overall requirement of working capital was comparatively less. Increase or decrease of working capital requirement in each year of the era was negligible so the absolute value trend line and the three year rolling average are on the same position. The working capital requirement of the era was in between 1496 crores to 3071 crores. In short the growth of Bharat Petroleum Corporation Ltd. was negligible during this period.

Figure: 3.6

![Graph showing working capital requirement]

Bharat Petroleum Corporation Ltd. Source: financial Statement.

ii. Post Revamped Period (2006-2011)

In comparison to pre revamped period, the working capital requirement increased more sharply as the business portfolio of the company started growing more rapidly. However due to liquidity crunch in later years, demand came down by the end of 2010. As per management discussion and analysis report in order to mitigate the burden of petroleum industries government of India adapted various initiative measures during the year. Cash compensation
was one among them, but the time lag in receipt of cash led the oil companies to borrow large amount to meet working capital requirements. The resultant increase in the interest cost has an adverse impact on their ability to undertake investment opportunities. The three years rolling average trend line commensurate with the growth of actual value up to 2010 with a decline in working capital requirement thereafter.

G) Capital Structure

i. Pre Revamped Period (2000-2005)

During the pre revamped period Bharat Petroleum Corporation Ltd. took special initiatives to reduce its debt portfolio. The Corporation’s improved performance allowed it to reduce debts and with improved net worth, in short the Corporation’s capital structure remained healthy.

**Figure: 3.7**

![Capital Structure Graph](image)

<table>
<thead>
<tr>
<th>Year</th>
<th>Debt Ratio (Actual Data)</th>
<th>Debt Ratio (3 Years Rolling Average)</th>
<th>Equity Ratio (Actual Data)</th>
<th>Equity Ratio (3 Years Rolling Average)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>42.59</td>
<td>38.29</td>
<td>57.41</td>
<td>61.71</td>
</tr>
<tr>
<td>2001</td>
<td>50.48</td>
<td>42.87</td>
<td>49.52</td>
<td>57.13</td>
</tr>
<tr>
<td>2002</td>
<td>53.22</td>
<td>48.76</td>
<td>46.78</td>
<td>51.24</td>
</tr>
<tr>
<td>2003</td>
<td>45.93</td>
<td>49.88</td>
<td>54.07</td>
<td>50.12</td>
</tr>
<tr>
<td>2004</td>
<td>37.51</td>
<td>45.55</td>
<td>62.49</td>
<td>54.45</td>
</tr>
<tr>
<td>2005</td>
<td>43.16</td>
<td>42.20</td>
<td>56.84</td>
<td>57.80</td>
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<td>2006</td>
<td>51.57</td>
<td>44.08</td>
<td>48.43</td>
<td>55.92</td>
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<td>2007</td>
<td>54.31</td>
<td>49.68</td>
<td>45.69</td>
<td>50.32</td>
</tr>
<tr>
<td>2008</td>
<td>58.56</td>
<td>54.81</td>
<td>41.44</td>
<td>45.19</td>
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<tr>
<td>2009</td>
<td>63.79</td>
<td>59.25</td>
<td>35.11</td>
<td>40.75</td>
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<td>2010</td>
<td>58.7</td>
<td>62.41</td>
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<tr>
<td>2011</td>
<td>58.7</td>
<td>62.46</td>
<td>41.3</td>
<td>37.54</td>
</tr>
</tbody>
</table>

*Bharat Petroleum Corporation Ltd. Source: financial Statement.*

In comparison to pre revamped period, the Bharat Petroleum Corporation Ltd., debt ratio was bit more high as the business portfolio of the company started growing more rapidly. BPCL\textsuperscript{36} recorded 64.89 as its ever highest debt ratio. Due to lowest net profit margin company adopted a policy of improving Earnings per share through leverage.

**H) Earnings Per Share**

**i. Pre Revamped Period (2000-2005)**

Earnings per share during the pre revamped regime shows steady increase commensurate with growth in income up to 2004 followed by a drastic decline. As per the management discussion and analysis report the increasing cost of procurement due to increase in international prices of crude oil and products could not be passed on to the consumers fully. This has resulted in a sharp decline of income and thereby EPS\textsuperscript{37}. The three years rolling average also shows a steady increase followed by a decline in EPS\textsuperscript{37}.

**Figure: 3.8**

![Earnings Per Share Graph](image)

*Bharat Petroleum Corporation Ltd. Source: financial Statement.*

\textsuperscript{36} Bharat Petroleum Corporation Limited.

\textsuperscript{37} Earnings per Share
ii. Post Revamped Period (2006-2011)

As compared to pre revamped regime the post revamped regime shows an overall poor EPS due to drastic decline in Net Profit Margin (reasons explained earlier). In 2006 the corporation significantly increased its turnover but its profit after tax was pitiable as compared to last year so Rs.8.7, recorded as the lowest EPS during the era. After 2009 BPCL regained its growth rate but still it was much below than the EPS  of pre revamped regime. The three years rolling average was less volatile which indicate that the variation in EPS was moderate.

I) Dividend Per Share

i. Pre Revamped Period (2000-2005)

The pre revamped regime was a period of significant growth and decline of dividend per share. Due to frequent fluctuations in internal cash generation (international crude oil issues) and high contribution to the exchequer by way of taxes and duties BPCL could not maintain consistent and growing DPS during this era. Even though, it recorded Rs.15.5 per share (including interim dividend) as the highest and Rs. 7.5 as the lowest DPS.

Figure: 3.9

<table>
<thead>
<tr>
<th>Year</th>
<th>Actual Values</th>
<th>Three Years Rolling Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>12.5</td>
<td>10</td>
</tr>
<tr>
<td>2001</td>
<td>7.5</td>
<td>10.83</td>
</tr>
<tr>
<td>2002</td>
<td>11</td>
<td>10.33</td>
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<td>2003</td>
<td>15</td>
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<td>2004</td>
<td>15.5</td>
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<td>2005</td>
<td>7.5</td>
<td>12.67</td>
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<td>2006</td>
<td>8.5</td>
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<td>2007</td>
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<td>2009</td>
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<td>7</td>
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<tr>
<td>2010</td>
<td>14</td>
<td>8.33</td>
</tr>
<tr>
<td>2011</td>
<td>14</td>
<td>11.67</td>
</tr>
</tbody>
</table>

Bharat Petroleum Corporation Ltd. Source: financial Statement.

38. Earnings per Share
40. Dividend per Share.
ii. Post Revamped Period (2006-2011)
The early post revamped period shows a poor dividend payout ratio up to 2010. Rs.4 per share was recorded as the lowest and Rs.14 as the highest Dividend per Share of the regime but the corporation regained its growth rate in the subsequent years. The three years moving average was less volatile as compared to actual values.

J) Operating Cash flow / Net Sales
The following figure represents the trend of Operating Cash Flow / Net Sales during the Pre and Post Revamped region of Bharat Petroleum Corporation. The study periods cover both absolute data and three years rolling average data.

i. Pre Revamped Period (2000-2005)
The pre revamped regime started with a declining trend but in 2002 there was significant improvement. As per directors report a pool of receivables has been received during this year coupled with increase in refining capacities in the country. But BPCL\textsuperscript{41} could not sustain this trend in the following years. The operating cash flow/ sales continued to decline thereafter. If the highest ratio during the period was 7.64%, the era ends with 0.4% as the lowest ratio.

41. Bharat Petroleum Corporation Limited.
Figure: 3.10

**Operating Cash Flow / Sales (Rate of Growth)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Actual Values</th>
<th>Three Years Rolling Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>3.08</td>
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<td>2001</td>
<td>2.43</td>
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<td>2004</td>
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<td>1.25</td>
</tr>
<tr>
<td>2011</td>
<td>2.03</td>
<td>1.8</td>
</tr>
</tbody>
</table>

Bharat Petroleum Corporation Ltd. Source: financial Statement.


As compared to pre revamped period Bharat Petroleum Corporation shows much volatile zigzag trend line that too much below during this period. As per the analysis and discussion report of management this was the result of the challenges and changes in external environment. During this period crude oil prices remained at high levels in the international markets. BPCL\(^2\) has to deal with the issue of high under-recoveries on the sale of sensitive petroleum products. The interest rates were also on the uptrend due to the increase in key monetary rates by Reserve Bank of India. Under these circumstances effective management of cash flows remained a challenge to Bharat Petroleum Corporation. But still as compared to pre revamped regime the three years rolling average of Bharat Petroleum Corporation was less volatile and decline in the trend line was trifling.

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\(^2\) Bharat Petroleum Corporation Limited.
Non-Parametric Analysis

As per the research methodology cited in the previous chapter, in order to check the hypothesis Non parametric analysis has been performed through Wilcoxon signed Rank Test for Bharat Petroleum Corporation.

Table No: 3.1
Bharat Petroleum Corporation Ltd.
Comparative Analysis of Financial Parameters

<table>
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</thead>
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<tr>
<td>Current Assets</td>
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<td>69877.81</td>
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<td>Total Assets</td>
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<td>122000</td>
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<td>7</td>
</tr>
<tr>
<td>Current Liabilities</td>
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<td>51903.77</td>
<td>51903.77</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Total Debt</td>
<td>103889</td>
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<td>57782</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Equity (Stockholders + R&amp;S)</td>
<td>28481</td>
<td>70271</td>
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<td>41790</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Share Capital</td>
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<td>1</td>
</tr>
<tr>
<td>Net Profit After Taxes</td>
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<tr>
<td>Net Sales</td>
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<td>422712</td>
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<tr>
<td>Sum of Rank</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>36</td>
</tr>
</tbody>
</table>

43. Chapter –II, Research Methodology.
44. The Wilcoxon signed – rank test is a non-parametric statistical hypothesis test used when comparing two related samples, matched samples, or repeated measurements on a single sample to assess whether their populations mean ranks differ.
Calculation of Test Statistics

No of observations 8

M = 0

$W^+ = 36$ and $W^- = 0$

Sum of the ranks (ignoring the signs) will always equal $n \times (n+1)/2$

$n \times (n+1)/2 = 8 \times (9)/2 = 36$, which is equal to $36 + 0$

The test statistic is $W = 0$

For sample size $n=8$ critical value of $W$ is 4

Decision rule is to reject $H_0$ if $W \leq 4$

\[ \therefore \text{Test Result Reject } H_0 \]

Result:

The test result suggests that the $H_0$ is to be rejected which means the performance of Bharat Petroleum Corporation Ltd, in the pre revamped period and post revamped period was not similar and BPCL behaved differently between the two study periods. The result suggests that the Petroleum Corporation Ltd significantly enhanced its performance during the post revamped period.

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45. Bharat Petroleum Corporation Limited.
II. Hindustan Petroleum Corporation Ltd.

Hindustan Petroleum Corporation, a Navratna status Public Sector Undertaking is an Indian State owned oil and natural gas Company with its head quarters at Mumbai, Maharashtra. HPCL* has a strong marketing infrastructure. The government of India owns 51.11% shares in HPCL* and the remaining shareholders are financial Institutes, public and other investors.

Hindustan Petroleum Corporation was incorporated in 1974 by the takeover and merger of Erstwhile Esso Standard and Lube India Limited by the Esso under Acquisition of Undertakings in India Act 1974. Caltex Oil Refining India Ltd – CORIL was taken over by Govt. of India in 1976 and merged with Hindustan Petroleum Corporation in 1978 by CORIL - Hindustan Petroleum Corporation Limited Amalgamation Order 1978. Thereafter Kosan Gas Company was merged with Hindustan Petroleum Corporation Limited in 1979 by the Kosangas Company Acquisition Act 1979.

Hindustan Petroleum Corporation Limited works in two refineries, one in Mumbai and the other in Visakhapatnam by producing a verity of petroleum fuels and specialties. HPCL* also owns and operates the largest Lube Refinery in the country which produces Lube base oil of international standards with a capacity of 428 TMT. Apart from this in collaboration with M/S Mittal Energy Investments Pte., Ltd is operating at Bathinda in Punjab and also holds equity of 16.95% in Mangalore Refinery and Petrochemicals Ltd. HPCL* has also an MOU with Rajastan Government called HPCL* – Rajastan Refinery Limited near Barmer.

The product line of Hindustan Petroleum Corporation consists of Petrol renowned as MS* in Oil industry, Diesel known as HSD*, Lubricants, Liquefied Petroleum Gas, Aviation Turbine Fuel Bitumen, Emulsion etc.

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46. Hindustan Petroleum Corporation Limited.
47. Motor Spirit.
48. High Speed Diesel.
Vision of HPCL™:
• “To be a world class energy Company known for caring and delighting the customers with high quality products and innovative services across domestic and international markets with aggressive growth and delivering superior financial performance.
• The company will be model of excellence in meeting social commitment, environment, health and safety norms and in employee welfare and relations.”

Mission:
• “HPCL™, along with its joint ventures, will be a fully integrated company in the hydrocarbons sector of exploration and production, refining and marketing, focusing on enhancement of productivity, quality and profitability, caring for customers and employees, caring for environment protection and cultural heritage.

   It will also attain scale dimensions by diversifying into other energy related fields and by taking up international operations.”

Awards / Recognition
Hindustan Petroleum’s Business has achieved the following awards on behalf of it’s an irresistible performance:

1) NDTV Profit Business Leadership award.
2) Readers Digest ‘Trusted Brand Asia Platinum’ Award.
3) Golden Peacock Corporate Governance Award 2008
4) CIO 100 Award 2008
5) India Star Award
6) OISD Safety Award
7) National Award For Excellence in Cost Management
8) Green Tech Environment Excellence Award 2008
9) Best HR Practices in People Management.
Hindustan Petroleum Corporation has an efficient workforce of more than 11000 employees working all over the India at its various refineries and marketing locations. HPCL’s focus areas are in the field of Child Care, Education, Health Care, Skill Development and Community Development and touching lives of weaker section of society.

ii) Comparative Analysis of Financial Performance indicators of HPCL are:

A) Sales Growth

i. Pre Revamped Period (2000-2005)

Even though the pre revamped regime started with significant growth in sales, HPCL faced decline of sales in the following year. From 2003 HPCL recorded moderate growth of 2.9% as against then the industry growth rate of 2%. The three years rolling average was less volatile except in case of 2002.

Figure: 3.12

![Sales (Rate of Growth)](chart)

Hindustan Petroleum Corporation Ltd. Source: financial Statement.

51. Hindustan Petroleum Corporation Limited.
ii. **Post Revamped Period (2006-2011)**

Post revamped regime was a period of less volatile as compared to pre revamped period but the sales growth rate was also negligible with drastic decline in 2010. As per the director’s discussion and analysis report industrial & consumer business line of the company was adversely affected by loss of Naphtha, Furnace Oil, Low Sulphur Heavy Stock volumes to natural gas due to considerable improvement in the availability of the latter. However sales of other major products have been increased moderately during this period.

**B) Assets Growth**

i. **Pre Revamped Period (2000-2005)**

Pre revamped period started with considerably good amount of investment in fixed assets, but it drastically declined during 2001 and 2002. In 2003 Hindustan Petroleum Corporation recorded momentous growth of investment in fixed assets, but this was followed by significant decline in the subsequent years.

**Figure: 3.13**

![Assets Growth Chart](image)

*Hindustan Petroleum Corporation Ltd. Source: financial Statement.*

82
ii. Post Revamped Period (2006-2011)

As compared to Pre revamped regime, during the early post revamped regime HPCL\textsuperscript{52} maintained considerably good amount of investment with negligible decline in fixed assets. If 2009 and 2011 shows significant decline of investment in fixed assets, 2010 recorded its ever poor decline in fixed assets growth rate. But as per 58\textsuperscript{th} auditor’s report (2009-2010) fixed assets disposed off during the year were not substantial and, therefore, do not affect the going concern assumption. The three years rolling average was less volatile and not much downward slopped as compared to the pre revamped regime.

C) Net Profit Margin

i. Pre Revamped Period (2000-2005)

Even though the pre revamped regime started with considerably good net profit margin, HPCL\textsuperscript{52} could not maintain its growth rate in the subsequent years. The NPM\textsuperscript{53} continued to decline till 2004. In 2004 HPCL\textsuperscript{52} recorded its ever highest record of NPM\textsuperscript{53} growth rate (i.e. 3.31\%) but, again this followed a decline in the subsequent year (in 2005). As per the chairman’s report\textsuperscript{53} one of the main reason for HPCL’s\textsuperscript{52} lower profit for the year was due to the wide mismatch between the crude & product prices and the need for corporation to bear the burden of subsidies on products like Kerosene and LPG. According to the speech this lower profit was the result apart from increased physical performance in terms of increased refinery throughputs, increased refinery margins and increased sales volume.

\textsuperscript{52} Hindustan Petroleum Corporation Limited.

\textsuperscript{53}
i. Post Revamped Period (2006-2011)

As compared to the pre revamped period post revamped regime shows poor Net Profit Margin. Actual value of NPM\(^3\) trend line was much volatile while that of three years rolling average was downward slopping. If pre revamped period recorded it’s ever lowest NPM\(^3\) growth rate as 1.74\%, the ever highest NPM\(^3\) growth rate was 1.62\% during the post revamped period. Hindustan Petroleum Corporation Ltd; recorded its ever pitiable Net Profit Margin in 2009. As per the chairman’s\(^4\) speech HPCL\(^4\) achieved highest ever turnover of Rs. 116428 crores during the year as against 103837 crores. The profit after tax for the year was 575 crores compared to Rs. 1135 crores for the previous year. The financial performance of the corporation was affected by the higher interest cost of Rs.2083 crores, an increase of Rs.1317 crores over the previous year. The increase in the interest cost was mainly on account of higher borrowings due to increase in gross under-recoveries and delay in receipt of oil bonds to finance the working capital requirements.

---

\(^3\) Net Profit Margin

\(^4\) Hindustan Petroleum Corporation Limited.

\(^5\) 53\(^{rd}\) annual report (2004-2005)
D) ROI & ROE

The following figure represents Return on Investment & Return on Equity of the company during the two study period.

i. Pre Revamped Period (2000-2005)

The pre revamped regime shows significant growth rate of ROI up to 2005. But in 2005 Hindustan Petroleum Corporation recorded worse ROI. The reason for drastic decline in ROI was pitiable net profit margin due to the wide mismatch between the crude & product prices and the need for corporation to bear the burden of subsidies on products like Kerosene and LPG. Actual values of Return on Equity were much volatile during the pre revamped regime. The Return on Equity trend line varied from 13.3% to 24.5% during the regime. The three rolling average was less volatile which indicates that the variation in trend line was negligible.

Figure: 3.15

<table>
<thead>
<tr>
<th>Year</th>
<th>ROE (Actual Values)</th>
<th>ROE (Three Years Rolling Average)</th>
<th>ROI (Actual Values)</th>
<th>ROI (Three Years Rolling Average)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>18.3</td>
<td>17.5</td>
<td>29.9</td>
<td>32.8</td>
</tr>
<tr>
<td>2001</td>
<td>16.7</td>
<td>17.6</td>
<td>32.9</td>
<td>32.9</td>
</tr>
<tr>
<td>2002</td>
<td>13.3</td>
<td>16.1</td>
<td>34.5</td>
<td>32.4</td>
</tr>
<tr>
<td>2003</td>
<td>23.0</td>
<td>17.7</td>
<td>36.1</td>
<td>34.5</td>
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<td>2004</td>
<td>24.5</td>
<td>20.3</td>
<td>47.0</td>
<td>39.2</td>
</tr>
<tr>
<td>2005</td>
<td>15.1</td>
<td>20.9</td>
<td>28.2</td>
<td>37.1</td>
</tr>
<tr>
<td>2006</td>
<td>4.64</td>
<td>14.7</td>
<td>13.1</td>
<td>29.3</td>
</tr>
<tr>
<td>2007</td>
<td>16.3</td>
<td>12.0</td>
<td>32.2</td>
<td>4.64</td>
</tr>
<tr>
<td>2008</td>
<td>10.7</td>
<td>10.5</td>
<td>25.8</td>
<td>24.5</td>
</tr>
<tr>
<td>2009</td>
<td>5.36</td>
<td>10.8</td>
<td>35.1</td>
<td>37.1</td>
</tr>
<tr>
<td>2010</td>
<td>11.2</td>
<td>9.12</td>
<td>36.2</td>
<td>32.4</td>
</tr>
<tr>
<td>2011</td>
<td>12.2</td>
<td>9.63</td>
<td>36.9</td>
<td>36.1</td>
</tr>
</tbody>
</table>

Hindustan Petroleum Corporation Ltd. Source: financial Statement.
ii. Post Revamped Period (2006-2011)

As compared to pre revamped regime this period shows moderately volatile ROI\(^7\) both in actual values and three years rolling average. However the variation was negligible from 24.5\% to 36.1\%, the ROE\(^8\), both actual values and three years rolling average trend line were downward slopping due to lower Net Profit Margin.

A rising ROE\(^8\) suggests that a company is increasing its ability to generate profit without needing as much capital. A diminishing ROE\(^8\) is usually a problem but some industries tend to have higher ROE\(^8\) than other companies. So if we compare ROE\(^8\) of other companies within the same industry during the same period HPCL\(^9\) shows better result than others (e.g., as compared with Bharat Petroleum Corporation Ltd.)

E) Current Ratio

i. Pre Revamped Period (2000-2005)

Current Ratio has been almost steady during the Pre Revamped regime. In 2003 HPCL\(^9\) recorded 1.08 as its lowest current ratio of the regime. The three years rolling average too was less volatile. As per the financial experts view 1:1 is considered as an ideal ratio. Throughout the regime current ratio of HPCL\(^9\) neither goes beyond 1.75 nor below one. In short the ratio has been steady throughout the era (i.e. HPCL\(^9\) maintained its ideal position) as the proper financial management system were in place. The three years rolling average too was less volatile.

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57. Return on Investment.
58. Return on Equity
59. Hindustan Petroleum Corporation Ltd.
ii. Post Revamped Period (2006-2011)

During this period also Current Ratio has been almost steady and the three years rolling average trend line smoothens the variation of absolute data. As compared to pre revamped region the current ratio during this period seems to be healthier because it was in between 1.25 to 1.38.

F) Working Capital

The following figure demonstrates working capital requirement of the company during two study periods with absolute data and rolling average data.
i. Pre Revamped Period (2000-2005)

In pre revamped regime an overall requirement of working capital was comparatively less. Increase or decrease of working capital requirement in each year of the era was negligible excluding in 2003. The absolute value trend line and the three year rolling average are on the same position. The working capital requirement of the era was in between 646.7 crores to 3037 crores. In short the growth of HPCL\(^60\) was negligible during this period.

**Figure: 3.17**

![Working Capital Chart]

_Hindustan Petroleum Corporation Ltd. Source: financial Statement._

\(^60\) Hindustan Petroleum Corporation Ltd.
ii. Post Revamped Period (2006-2011)
As compared to pre revamped period, the working capital requirement increased more sharply as the business portfolio of the company started growing more rapidly. As per management discussion and analysis report in order to mitigate the burden of petroleum industries government of India adapted various initiative measures during the year. The three years rolling average trend line commensurate with the growth of actual value up to 2008 with a significant decline of working capital requirement in 2010 thereafter HPCL\textsuperscript{61} increased its investment in net current asset.

G) Capital Structure
i. Pre Revamped Period (2000-2005)
During the pre revamped period HPCL\textsuperscript{61} took special initiatives to reduce its debt portfolio. The Corporation’s improved performance allowed it to reduce debts and with improved net worth, in short, the Corporation’s capital structure remained healthy. The three years rolling average too was less volatile and towards a healthy trend. Equity ratio was stable throughout the era. The three years rolling average too was less volatile.

\textsuperscript{61} Hindustan Petroleum Corporation Ltd.
H) Earnings Per Share

i. Pre Revamped Period (2000-2005)

EPS\textsuperscript{62} during the early pre revamped regime shows negligible growth up to 2002 followed by a drastic decline in 2002. Thereafter HPCL\textsuperscript{62} regained its EPS\textsuperscript{63} growth rate significantly with a moderate decline in 2005. As per the management discussion and analysis report the increasing cost of procurement due to increase in international prices of crude oil and products could not be passed on to the consumers fully. This has resulted in a decline of income and thereby EPS\textsuperscript{64}. The three years rolling average also shows a steady increase.
ii. Post Revamped Period (2006-2011)

As compared to pre revamped regime the post revamped regime was a period of high volatile. Even though the three years rolling average shows negligible decline in EPS there were huge difference in actual values. If 11.9 were recorded as poor EPS of the era, Rs.46.3 was recorded as the highest EPS. In 2009 HPCL recorded its poor EPS but there after corporation regained its growth rate. The three years rolling average was less volatile which indicate that the variation in EPS was moderate.

I) Dividend Per Share

i. Pre Revamped Period (2000-2005)

The early pre revamped regime witnessed saturation in dividend payment. But from 2003 the company maintained a whooping dividend payment, i.e., as compared to last year the dividend payment has been doubled.
Due to frequent fluctuations in internal cash generation (international crude oil issues) and high contribution to the exchequer by way of taxes and duties, HPCL could not maintain consistent and growing DPS from 2005. Even though, it recorded Rs. 22 per share (including interim dividend) as the highest and Rs. 11 as the lowest DPS. The three years rolling average trend line was less volatile and moving upward.

**Figure: 3.20**

![Dividend Per Share graph](image)


The post revamped period of Hindustan Petroleum Corporation Ltd was a period of high fluctuation in dividend payment due to poor net profit margin. During this period three rupees per share was recorded as the lowest where as eighteen rupees per share as the highest Dividend per Share of the regime. As compared to early post revamped regime of Hindustan Petroleum Corporation Ltd, late revamped regime shows a growing trend. The three years moving average was less volatile as compared to actual values.

---

66. Hindustan Petroleum Corporation Ltd.
67. Dividend per Share.
J) Operating Cash flow / Net Sales

The following figure represents trends of Operating Cash Flow / Net Sales during the two study periods on absolute data and three years rolling average data.

**Figure: 3.21**

<table>
<thead>
<tr>
<th>Year</th>
<th>Actual Values</th>
<th>Three Years Rolling Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>5.09</td>
<td>7.35</td>
</tr>
<tr>
<td>2001</td>
<td>4.37</td>
<td>5.63</td>
</tr>
<tr>
<td>2002</td>
<td>4.56</td>
<td>4.67</td>
</tr>
<tr>
<td>2003</td>
<td>1.29</td>
<td>3.40</td>
</tr>
<tr>
<td>2004</td>
<td>7.52</td>
<td>4.46</td>
</tr>
<tr>
<td>2005</td>
<td>2.22</td>
<td>3.68</td>
</tr>
<tr>
<td>2006</td>
<td>0.96</td>
<td>3.57</td>
</tr>
<tr>
<td>2007</td>
<td>4.53</td>
<td>2.57</td>
</tr>
<tr>
<td>2008</td>
<td>-1.70</td>
<td>1.24</td>
</tr>
<tr>
<td>2009</td>
<td>5.34</td>
<td>2.70</td>
</tr>
<tr>
<td>2010</td>
<td>3.24</td>
<td>2.27</td>
</tr>
<tr>
<td>2011</td>
<td>0.81</td>
<td>3.13</td>
</tr>
</tbody>
</table>

*Hindustan Petroleum Corporation Ltd. Source: financial Statement.*

i. Pre Revamped Period (2000-2005)

The pre revamped regime shows a constant growth rate of operating cash flow/ sales up to 2003 followed by a drastic decline. In 2004 Hindustan Petroleum Corporation Ltd regained its growth rate but it could not sustain this trend in the following years. If the highest ratio during the period was 7.52%, the era ends with 1.29% as the lowest ratio.
ii. Post Revamped Period (2006-2011)
As compared to pre revamped period the trend line was much below during this period because of the challenges and changes in external environmental. During this period crude oil prices remained at high levels in the international markets. Hindustan Petroleum Corporation Ltd has to deal with the issue of high under- recoveries on the sale of sensitive petroleum products. The interest rates were also on the uptrend due to the increase in key monetary rates by Reserve Bank of India. Under these circumstances effective management of cash flows remained a challenge. But still as compared to pre revamped regime the three years rolling average was less volatile.

Non- Parametric Analysis
Non parametric analysis has been performed through Wilcoxon signed rank test for the Hindustan Petroleum Corporation Ltd, as per the research methodology cited in the previous chapter.\(^{68}\)

\(^{68}\) Chapter –II, Research Methodology.
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Assets</td>
<td>48011.7</td>
<td>104997.7</td>
<td>56985.96</td>
<td>56985.96</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Total Assets</td>
<td>59513.3</td>
<td>177787.2</td>
<td>118273.9</td>
<td>118273.9</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Current Liabilities</td>
<td>36724.5</td>
<td>78425.59</td>
<td>41701.1</td>
<td>41701.1</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Total Debt</td>
<td>14894.7</td>
<td>103046</td>
<td>88151.32</td>
<td>88151.32</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Equity (Stockholders + R&amp;S)</td>
<td>41018.2</td>
<td>63732.09</td>
<td>22713.94</td>
<td>22713.94</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Share Capital</td>
<td>2032.81</td>
<td>2036.7</td>
<td>3.89</td>
<td>3.89</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Net Profit After Taxes</td>
<td>7652.03</td>
<td>6527.04</td>
<td>-1124.99</td>
<td>1124.99</td>
<td>2</td>
<td>-2</td>
</tr>
<tr>
<td>Net Sales</td>
<td>302224</td>
<td>675024</td>
<td>372800.3</td>
<td>372800.3</td>
<td>8</td>
<td>8</td>
</tr>
</tbody>
</table>

| **Sum of Rank**         |                                  |                                  |                   |                     |      | 32          |

Table No: 3.2

Hindustan Petroleum Corporation Ltd.
Comparative Analysis of Financial Parameters
Calculation of Test Statistics

No of observations 8

M = 0

W^+ =34 and W^- = -2

Sum of the ranks (ignoring the signs) will always equal n (n+1)/2

n (n+1)/2 = 8(9)/2 = 36, which is equal to 34 + 2

The test statistic is W = 2

For sample size n=8 critical value of W is 6

Decision rule is to reject H_0 if W ≤ 6

\[ \therefore \text{Test Result Reject } H_0 \]

Result:

The test result suggests that the H0 is to be rejected which means the performance of Hindustan Petroleum Corporation Ltd, in the pre revamped period and post revamped period was not similar and HPCL\(^69\) behaved differently between the two study periods. The result suggests that the HPCL\(^69\) significantly enhanced its performance during the post revamped period.
III. Shipping Corporation of India Ltd.

ISCO is a Navratna status (in 2008) Public Sector Enterprises with its headquarters in Mumbai. This company operates and manages vessels of national and international lines. SCI was incorporated on 2nd October 1961 by the amalgamation of Eastern Shipping Corporation and Western Shipping Corporation. Thereafter in 1973 and 1986 two more shipping companies, Jayanti Shipping Company and Mogul Lines Limited were merged into Shipping Corporation of India.

With just 19 vessels SCI started its business as a marginal Liner Shipping Company and at present Shipping Corporation of India progressed into the largest Indian Shipping Company. This company also evolves in various segments of the shipping trade. SCI today occupy a considerable presence on the global maritime map by sailing through for nearly five decades apart from owing fleet including Bulk carriers, Crude Oil tankers, Product tankers, Container vessels, Passenger-cum-Cargo vessels, Phosphoric Acid / Chemical Carriers, LPG / Ammonia carriers and offshore Supply Vessels.

Considering the nations interest SCI has diversified its extend to large number of areas and now SCI is the only Indian shipping company providing break – bulk services, international container services, liquid/dry bulk services, offshore services, passenger services. The contribution of SCI towards EXIM trade and the national exchequer by being earner or saver of foreign exchange is incredible.

The present global scenario helped Shipping Corporation of India by getting a lot of growth and diversification opportunities. SCI has a remarkable record of profitability since its commencement of business. Shipping Corporation of India maintained this growth rate by a slew of pioneering and timely strategic measures like inter alia, judicial and maximum utilization of obtainable tonnage, introducing new services in niche markets, identification and disposals of destroyers or non-performing assets etc. adopted by the management.
Considering the commitment of Shipping Corporation towards society and its emphasis on the safety of life, vessels, cargo and the environment it operates in SCI has received numerous awards and accolades from various national and international organizations for brilliance in satisfying the customer, operational efficiencies and emergency preparedness.

**Vision:**

- “To be a corporate with its strategies, policies and actions aligned with wider social concerns, through initiatives in education, health, environment and socially relevant matters.”

**Mission:**

“SCI aims at spending a defined portion of net profit for the betterment of Indian society through:

- Providing financial and other assistance to students who belong to socially weaker sections.
- Supporting efforts for community health in slum and areas inhabited by weaker sections.
- Supporting the programs and efforts for environment protection and enhancement.
- Promoting, encouraging and supporting the social and cultural heritage and traditions of our society.
- Taking proactive measures for the well being of the society as per

Taking proactive measures for the well-being of society, as per needs.”

SCI occupy all the essential elements required for becoming a world class international shipping company. The management of Shipping Corporations are capable to take initiative streams, which will be required for channelizing the growth and prosperity of the company and there by the nation.

71. Shipping Corporation of India Ltd.
Comparative Analysis of Financial Performance indicators of HPCL are:

A) Sales Growth

i. Pre Revamped Period (2000-2005)

Even though the pre revamped regime started with a significant growth in sales, SCIL\textsuperscript{73} could not sustain the growth rate. SCIL\textsuperscript{73} continued to decline the sales till 2003 and from 2004; it regained the sales growth rate. But if we compare initial sales growth rate with era ending sales growth rate then it was moderately high. The three years rolling average was significantly volatile with a record of 23.3%.

![Figure: 3.23](image)

**Figure: 3.23**

Sales (Rate of Growth)

<table>
<thead>
<tr>
<th>Year</th>
<th>Actual Values</th>
<th>Three Years Rolling Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>0.99</td>
<td>1.67</td>
</tr>
<tr>
<td>2001</td>
<td>16.7</td>
<td>6.69</td>
</tr>
<tr>
<td>2002</td>
<td>-5.8</td>
<td>3.97</td>
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<tr>
<td>2003</td>
<td>-19.1</td>
<td>-2.8</td>
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<tr>
<td>2004</td>
<td>23.3</td>
<td>-0.6</td>
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<tr>
<td>2005</td>
<td>31.3</td>
<td>5.71</td>
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<tr>
<td>2006</td>
<td>0.96</td>
<td>12.5</td>
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<tr>
<td>2007</td>
<td>10.6</td>
<td>8.26</td>
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<tr>
<td>2008</td>
<td>-3.0</td>
<td>2.84</td>
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<td>2009</td>
<td>10.5</td>
<td>6.03</td>
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<tr>
<td>2010</td>
<td>-17.3</td>
<td>-3.2</td>
</tr>
<tr>
<td>2011</td>
<td>3.07</td>
<td>-1.1</td>
</tr>
</tbody>
</table>

*Shipping Corporation of India Ltd. Source: financial Statement.*

ii. Post Revamped Period (2006-2011)

Post revamped regime was a period of more volatile as compared to the actual values of pre revamped period but the sales growth/decline rate was negligible. So the three years rolling average was comparatively less volatile (except in case of 2010). The three years rolling average of SCIL\textsuperscript{73} during 2010 recorded a drastic decline in sales growth.

\textsuperscript{73} Shipping Corporation of India Ltd.
As per the discussion on financial performance with respect to operational performance, the overall financial performance of bulk carriers and tankers though had been on a decline on Y-O-Y basis has, however, remained competitive despite poor market conditions. Apart from this the container ship markets experienced the worst ever conditions with freight rates and charter rates decline.

B) Assets Growth

i. Pre Revamped Period (2000-2005)

The pre revamped regime started with a mild decline in assets growth, but year after year it continued to grow (In 2002 there was negligible decline) significantly. In short the pre revamped regime shows considerable growth in assets and if we compare the growth line with three years rolling average then the actual value graph line too goes along with the three years rolling average.

Figure: 3.24

![assets growth chart]

Shipping Corporation of India Ltd. Source: financial Statement.
ii. Post Revamped Period (2006-2011)

As compared to Pre revamped regime the growth rate of assets during this period was moderate. The three years rolling average was more volatile in the post revamped regime. If 2010 recorded just 3.92% assets growth rate, in 2011, SCIL⁷⁴ set a new record of 23.9% growth rate. As per the discussion on financial performance during 2010, the ship building market appears to have been stabilized and SCIL⁷⁴ had to initiate its vessel acquisition and investment in assets procurement programs. Improvement in assets growth rate during 2011 was the result of this decision.

C) Net Profit Margin

i. Pre Revamped Period (2000-2005)

The early pre revamped regime shows a negligible growth and decline of net profit margin as compared to the end of this era. The pre revamped regime started with a poor net profit margin growth rate i.e. of 6.36%, but there after SCIL⁷⁴ continued the growth rate and at the end of this era SCIL⁷⁴ recorded a remarkable growth rate of net profit margin (36.1%). The three years rolling average line also shows continuous increasing trend.

⁷⁴. Shipping Corporation of India Limited.
ii. Post Revamped Period (2006-2011)

Unlike the pre revamped regime the post revamped regime shows a declining trend. Even though the decline in case of net profit margin was negligible, there was wide gap between the highest and lowest NPM\textsuperscript{75} growth rate. If 9.67% was the lowest NPM\textsuperscript{75} growth rate, SCIL\textsuperscript{76} recorded 28.1% as the highest NPM\textsuperscript{75} growth rate. The three years rolling average too shows a downward slopping direction with negligible variation.

\textsuperscript{75} Net Profit Margin.
\textsuperscript{76} Shipping Corporation of India Limited.
D) ROI & ROE

The following figure represents Return on Investment & Return on Equity of the company during the two study period.

i. Pre Revamped Period (2000-2005)

The pre revamped regime shows a continuous growth in both ROE\textsuperscript{77}. Even though the growth rate was negligible during the early pre revamped regime, it ends with a high record of ROE\textsuperscript{77} (39.5). The three years rolling average too was less volatile. But unlike ROE\textsuperscript{77}, ROI\textsuperscript{78} was much volatile during the pre revamped regime, both in actual value and three years rolling average. Apart from this there was significant gap between ROE\textsuperscript{77} & ROI\textsuperscript{78} trend line during the pre revamped regime which indicates that SCIL\textsuperscript{79} focused on debt financing.

Figure: 3.26

\textbf{ROI & ROE}

<table>
<thead>
<tr>
<th></th>
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<th></th>
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</thead>
<tbody>
<tr>
<td>ROE (Actual Values)</td>
<td>8.42</td>
<td>17.3</td>
<td>11.3</td>
<td>11.8</td>
<td>26.1</td>
<td>39.5</td>
<td>23.9</td>
<td>19.8</td>
<td>14.4</td>
<td>15.3</td>
<td>5.95</td>
<td>7.94</td>
</tr>
<tr>
<td>ROE (Three Years Rolling Average)</td>
<td>11.4</td>
<td>12.2</td>
<td>12.3</td>
<td>13.5</td>
<td>16.4</td>
<td>25.8</td>
<td>29.8</td>
<td>27.7</td>
<td>19.4</td>
<td>16.5</td>
<td>11.9</td>
<td>9.74</td>
</tr>
<tr>
<td>ROI (Actual Values)\textsuperscript{2}</td>
<td>28.6</td>
<td>24.9</td>
<td>41.8</td>
<td>31.2</td>
<td>20.6</td>
<td>29.2</td>
<td>34.6</td>
<td>29.2</td>
<td>22.5</td>
<td>24.1</td>
<td>14.3</td>
<td>16.6</td>
</tr>
<tr>
<td>ROI (Three Years Rolling Average)\textsuperscript{2}</td>
<td>33.5</td>
<td>29.0</td>
<td>31.8</td>
<td>32.6</td>
<td>31.2</td>
<td>27.0</td>
<td>28.1</td>
<td>31.0</td>
<td>28.8</td>
<td>25.3</td>
<td>20.3</td>
<td>18.3</td>
</tr>
</tbody>
</table>

\textit{Shipping Corporation of India Ltd. Source: financial Statement.}

\textsuperscript{77} Return on Equity.

\textsuperscript{78} Return on Investment.

\textsuperscript{79} Shipping Corporation of India Limited.
ii. Post Revamped Period (2006-2011)

As compared to pre revamped regime this period shows declining trend both in ROE\textsuperscript{80} & ROI\textsuperscript{81}. Even though the variation was negligible, the trend lines were downward slopping, both in actual value and three years rolling average of ROE\textsuperscript{80} & ROI\textsuperscript{81}. Unlike the pre revamped regime both graph lines were almost symmetrical for the entire period which indicates that the SCIL\textsuperscript{82} focused on low financial leverage.

E) Current Ratio

i. Pre Revamped Period (2000-2005)

Current Ratio was almost steady during the Pre Revamped regime. The Corporation’s current ratio shows an increasing trend from 2002. The three years rolling average too was less volatile (except in case of 2001). Only in 2001, that’s too the three years rolling average of SCIL\textsuperscript{82} recorded 2.30 against the standard ratio 1:1. In short the SCIL\textsuperscript{82} has been maintained its ideal position as the proper financial management system were in place.

\textsuperscript{80} Return on Equity.
\textsuperscript{81} Return on Investment.
\textsuperscript{82} Shipping Corporation of India Limited.
ii. Post Revamped Period (2006-2011)

The absolute value and three years rolling average trend line during this period was less volatile. The three years rolling average trend line smoothens the variation of absolute data means the variation was negligible. As compared to pre revamped regime this era shows a high current ratio. This ratio gives an idea of company’s operating efficiency and a high ratio indicates ‘safe’ liquidity, but also it can be a signal that the company has problems getting paid on its receivable or have a long inventory turnover, both, symptoms that the company may not be efficiently using its current assets.

F) Working Capital

The following figure demonstrates working capital requirement of the company during two study periods with absolute data and rolling average data.
i. Pre Revamped Period (2000-2005)

In pre revamped regime an overall requirement of working capital was comparatively less. Increase or decrease of working capital requirement in each year of the era was negligible so the absolute value trend line and the three year rolling average are almost on the same position. In short working capital being a financial metric represents a part of operating capital. Throughout the era Shipping Corporation of India maintained positive working capital which indicates that the firm is able to continue its operations and has sufficient funds to satisfy both maturing short term debt and upcoming operational expenses.

Figure: 3.28

<table>
<thead>
<tr>
<th>Working Capital</th>
<th>Actual Values</th>
<th>Three Years Rolling Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>434</td>
<td>457</td>
</tr>
<tr>
<td>2001</td>
<td>442</td>
<td>430</td>
</tr>
<tr>
<td>2002</td>
<td>188</td>
<td>426</td>
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<td>2003</td>
<td>328</td>
<td>468</td>
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<td>2004</td>
<td>372</td>
<td>543</td>
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<tr>
<td>2005</td>
<td>161</td>
<td>949</td>
</tr>
<tr>
<td>2006</td>
<td>223</td>
<td>214</td>
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<tr>
<td>2007</td>
<td>259</td>
<td>238</td>
</tr>
<tr>
<td>2008</td>
<td>234</td>
<td>238</td>
</tr>
<tr>
<td>2009</td>
<td>264</td>
<td>252</td>
</tr>
<tr>
<td>2010</td>
<td>250</td>
<td>249</td>
</tr>
<tr>
<td>2011</td>
<td>243</td>
<td>252</td>
</tr>
</tbody>
</table>

Shipping Corporation of India Ltd. Source: financial Statement.

ii. Post Revamped Period (2006-2011)

As compared to pre revamped regime, during the post revamped regime working capital requirement increased more sharply, as the business portfolio of the company started growing more rapidly. However due to liquidity crunch in later years, demand came down negligibly by the end of 2008. But Shipping Corporation of India regained the growth rate immediately and on an average it sustained the trend.
G) Capital Structure

i. Pre Revamped Period (2000-2005)

The pre revamped period started with high debt ratio, but thereafter SCIL\textsuperscript{83} took special initiatives to reduce its debt portfolio. The Corporation’s improved performance and thereby with improved net worth, allowed SCIL\textsuperscript{83} to reduce debts. The three years rolling average was also less volatile. In short the Corporation’s capital structure remained healthy.

**Figure: 3.29**

<table>
<thead>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Debt Ratio(Actual Data)</td>
<td>43.86</td>
<td>36.84</td>
<td>30.97</td>
<td>30.96</td>
<td>33.98</td>
<td>28.18</td>
<td>23.99</td>
<td>19.62</td>
<td>20.52</td>
<td>28.47</td>
<td>29.85</td>
<td>39.68</td>
</tr>
<tr>
<td>Debt Ratio(3 Years Rolling Average)</td>
<td>49.35</td>
<td>43.68</td>
<td>37.22</td>
<td>32.92</td>
<td>31.97</td>
<td>31.04</td>
<td>28.71</td>
<td>23.93</td>
<td>21.38</td>
<td>22.87</td>
<td>26.28</td>
<td>32.67</td>
</tr>
<tr>
<td>Equity Ratio(Actual Data)</td>
<td>56.14</td>
<td>63.16</td>
<td>62.50</td>
<td>62.60</td>
<td>58.70</td>
<td>71.83</td>
<td>76.01</td>
<td>80.38</td>
<td>79.48</td>
<td>71.52</td>
<td>70.15</td>
<td>60.32</td>
</tr>
<tr>
<td>Equity Ratio(3 Years Rolling Average)</td>
<td>50.65</td>
<td>56.32</td>
<td>60.60</td>
<td>62.75</td>
<td>61.27</td>
<td>64.37</td>
<td>68.85</td>
<td>76.07</td>
<td>78.62</td>
<td>77.13</td>
<td>73.72</td>
<td>67.33</td>
</tr>
</tbody>
</table>

*Due to non availability of data during 1998 - 1999 the three years rolling average during 2000 & 2001 was not of three years but it represent two years and current years respectively.*

\textsuperscript{83} Shipping Corporation of India Limited
ii. Post Revamped Period (2006-2011)

As compared to its pre revamped period, the corporation’s debt ratio was bit more low during the early post revamped period but there after it continued to increase. But still the ratio never rose above 39.68% as against the 43.86% during the pre revamped period. The three years rolling average line was also less volatile during the era. Due to lowest net profit margin or declining trend of net profit margin SCIL adopted a policy of improving EPS through leverage by the end of the era.

H) Earnings Per Share

i. Pre Revamped Period (2000-2005)

Earnings per share during the pre revamped regime shows steady increase commensurate with growth in income (except in 2002). The three years rolling average trend line was also an upward curve which indicates that the Corporations earnings per share were also shows an increasing trend.

Figure: 3.30

![Earnings Per Share Graph]

Shipping Corporation of India Ltd. Source: financial Statement.

84. Shipping Corporation of India Limited.
85. Earnings per Share.
ii. Post Revamped Period (2006-2011)

Even though the early post revamped regime shows an excellent EPS, SCIL couldn’t maintain this record. From 2007 it continued to decline with a pitiable record of 8.9 rupees due to drastic decline in Net Profit Margin. The three years rolling average trend line was less volatile but it also goes in line with actual value. As compared with the three years rolling average trend line during the pre revamped period, this period shows noticeably good record. It was in between 14.4 to 41.0 rupees during this era, as against 5.92 to 27.4 rupees during the pre revamped period.

I) Dividend Per Share

i. Pre Revamped Period (2000-2005)

The pre revamped regime was a period of negligible growth and decline of dividend per share (Except in 2004). The early pre revamped regime shows similar DPS trend line both, in actual values and three years rolling average up to 2004. The pre revamped regime shows considerable growth of DPS from 2004.

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86. Earnings per Share.
87. Shipping Corporation of India Limited.
88. Dividend Per share.
ii. Post Revamped Period (2006-2011)

The early post revamped period shows a constant dividend payout ratio up to 2009. Thereafter SCIL\textsuperscript{88} couldn’t maintain this and DPS\textsuperscript{89} continued to decline. The growth or decline of DPS\textsuperscript{89} was negligible so the three years rolling average and actual DPS\textsuperscript{89} trend line were almost symmetrical for the entire period. If SCIL\textsuperscript{89} recorded Rs. 5 as the lowest DPS\textsuperscript{89}, it never crossed 8.5 rupees throughout the regime.

J) Operating Cash flow / Net Sales

The following figure represents trends of Operating Cash Flow / Net Sales during the two study periods on absolute data and three years rolling average data.

\textsuperscript{88} Dividend per Share.
\textsuperscript{89} Shipping Corporation of India Limited.
i. Pre Revamped Period (2000-2005)

The pre revamped regime started with a sluggish Operating Cash Flow / Net Sales but SCIL succeeded to improve the ratio in the subsequent years (except in case of 2002). The growth or decline during the era was negligible so the trend line was less volatile. If the highest ratio during the pre revamped period was 36.0%, the era ends with 13.3% as the lowest ratio.

![Operating Cash Flow / Sales (Rate of Growth)](image)

**Figure: 3.32**

ii. Post Revamped Period (2006-2011)

As compared to pre revamped period the trend line was much below during this period because of the challenges and changes in external environmental. During this period Operating Cash Flow / Net Sales varied very negligibly so the actual value and three years rolling average trend line were almost symmetrical for the entire period. If the highest ratio during the post revamped period was 27.1%, the era ends with 13.4% as the lowest ratio.

---

91. Shipping Corporation of India Limited.

- Due to non availability of data during 1998 - 1999 the three years rolling average during 2000 & 2001 was not of three years but it represent two years and current years respectively.
Non- Parametric Analysis

Non parametric analysis has been performed through Wilcoxon Signed rank test for the Shipping Corporation of India Limited, as per the research methodology cited in the previous chapter\(^9\).

**Table: 3.3**

**Shipping Corporation of India Limited**

**Comparative Analysis of Financial Parameters**

<table>
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</tr>
</thead>
<tbody>
<tr>
<td>Current Assets</td>
<td>10746.1</td>
<td>22011.55</td>
<td>11265.45</td>
<td>11265.45</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Total Assets</td>
<td>22803.65</td>
<td>48757.84</td>
<td>25954.19</td>
<td>25954.19</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Current Liabilities</td>
<td>7360.9</td>
<td>7296.67</td>
<td>-64.23</td>
<td>64.23</td>
<td>1</td>
<td>-1</td>
</tr>
<tr>
<td>Total Debt</td>
<td>7680.5</td>
<td>13957.02</td>
<td>6276.52</td>
<td>6276.52</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Equity (Stockholders + R&amp;S)</td>
<td>14560.77</td>
<td>34713.78</td>
<td>20153.01</td>
<td>20153.01</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Share Capital</td>
<td>1693.8</td>
<td>2159.6</td>
<td>465.8</td>
<td>465.8</td>
<td>2</td>
<td>2</td>
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<tr>
<td>Net Profit After Taxes</td>
<td>3107.5</td>
<td>4755.51</td>
<td>1648.01</td>
<td>1648.01</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Net Sales</td>
<td>18140.74</td>
<td>24537.41</td>
<td>6396.67</td>
<td>6396.67</td>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>

| Sum of Rank                    | 34                              |                                  |                   |                     |      |             |

\(^9\) Chapter –II, Research Methodology.
Calculation of Test Statistics

No of observations 8

\[ M = 0 \]

\[ W^+ = 35 \text{ and } W^- = 1 \]

Sum of the ranks (ignoring the signs) will always equal \( n(n+1)/2 \)

\[ n(n+1)/2 = 8(9)/2 = 36, \text{ which is equal to } 35 + 1 \]

The test statistic is \( W = 1 \)

For sample size \( n=8 \) critical value of \( W \) is 4

Decision rule is to reject \( H_0 \) if \( W \leq 4 \)

\[ \therefore \text{ Test Result } \text{Reject } H_0 \]

Result:

The test result suggests that the \( H_0 \) is to be rejected which means the performance of Shipping Corporation of India Limited, in the pre revamped period and post revamped period was not similar and Shipping Corporation of India behaved differently between the two study periods. The result suggests that Shipping Corporation of India Limited significantly enhanced its performance during the post revamped period.


**Concluding Remark:**

As per the research design quantitative aspects of the analysis are considered to be one of the major parts of the study. This chapter not only concerned with quantitative aspects i.e. the analysis of financial performance indicators and its comparisons but also a brief profile of all the sample companies reviewed for enrichment of the comparison.

As mentioned in research methodology this chapter covers the analysis of financial performance indicators and its comparisons for a time span of twelve years, by splitting to two regime of six years starting from 2000 and ending on 2011 by using key financial parameters such as Sales Growth, Assets Growth, Net Profit Margin, ROI & ROE, Current Ratio, Working Capital, Capital Structure, Earnings Per Share, Operating Cash Flow / Net Sales etc. in assessing their performance. Assumptions and the way of analysing the financial performance were same for all sample companies.

Analysis of financial performance of the sample companies through its key financial indicators suggests that almost all companies’ performance during the post revamped regime was better as compared to the performance of pre revamped regime. Even though this phenomena could not achieve 100% support. But still almost all key financial parameters (majority) prove that their financial performance during post revamped regime was better as compared to pre revamped regime.

As per the research methodology in order to check the hypothesis, non parametric analysis has been performed through **Wilcoxon signed Rank Test** for all sample companies. The Wilcoxon **signed Rank Test** of the first sample company; Bharat Petroleum Corporation - a Navratna status Public Sector Undertaking - proves that $H_0$ is to be rejected. This means that the performance of Bharat Petroleum Corporation Ltd, in the pre revamped period and post revamped period was not similar and it behaved differently between the two study periods. The result further suggests that the Corporation significantly enhanced its performance during the post revamped period.
Hindustan Petroleum Corporation Ltd. being the next Navratna status Public Sector Undertaking in its Wilcoxon signed Rank test result proves that the H0 is to be rejected. This means that the performance of Hindustan Petroleum Corporation Ltd, during the pre and post revamped period was not similar and the sample company behaved differently between the two study periods. The result also suggests that the Hindustan Petroleum Corporation Ltd significantly enhanced its performance during the post revamped period.

Wilcoxon signed Rank test result of Shipping Corporation of India Limited, being the next Navratna status Public Sector Undertaking of the study too suggests to rejecting the H0. i.e. the performance of Shipping Corporation of India Limited, in the pre revamped period and post revamped period was not similar and the sample company behaved differently between the two study periods. The result further suggests that Shipping Corporation of India Limited significantly enhanced its performance during its post revamped period.

Thus in short the financial analysis and non parametric test of all the sample companies proves that performance of these sample companies during the pre and post revamped period was not similar and the sample companies behaved differently between the two study periods. The result further suggests that all the sample companies significantly enhanced its performance during its post revamped period.
References:


4. Liquidity Management in Indian Corporate Sector : A study of selected companies during the Post Liberalisation period, thesis by Dr. Pratap Bandyopadhyay.


Websites:

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2. Financial reports of Hindustan Petroleum Corporation for the study period - mainly from www.hindustanpetroleum.com

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