8.1 Findings of the Study

Followings are the main findings of the study:

1. The trend for raw material ratio was marked fluctuating during the period of study.
2. The trend for Power and Fuel ratio is marked fluctuating.
3. The Employee cost ratio was marked fluctuating trend due to several government policies.
4. The manufacturing and selling cost ratio during the period of study was found good in IOCL as compared to the other companies.
5. The p value of all the variables is more than 0.05 which shows that null hypothesis is accepted i.e. there is a significant difference between the factors of operational efficiency of selected oil and gas companies during the period of study.
6. The ANOVA table defines that p–value of raw material ratio is 0.000 thus the null hypotheses is rejected. The p-value of power and fuel ratio is .003 which is less than .05 thus null hypotheses is rejected. The p-value of employee cost ratio is .001 is less than .05 thus again null hypotheses is rejected.
7. The p-value for manufacturing and selling cost ratio is 0 thus null hypotheses is rejected. The p-value for Miscellaneous cost ratio is 0.003 thus null hypotheses is rejected. The p-value for Excise duty ratio is 0.093 which is more than 0.05 thus null hypothesis is accepted.

8. BPCL and IOCL is identified good operating position during the period of study.

9. Overall, the IOCL is identified good operating efficiency during the period of study.

10. Overall, the IOCL is marked good operating performance as compared to the other companies but since, last three years the BPCL is highest in managing the return on total assets.

11. The p value of all the variables in chi square test is more than 0.05 which shows that null hypothesis is accepted i.e. there is a significant difference between the factors of operational efficiency of selected oil and gas companies during the period of study.

12. The value of Anova and its significance values of gross profit ratio (0.37) and returns on total assets(0.50) is more than the p value 0.05 thus null hypothesis is accepted. Whereas, for operating profit margin the value is 0.000 which is less than the p value 0.05 thus, null hypothesis is rejected.

13. The variation in the operating profit ratio may be the due to the market fluctuations affects the operating performance of the selected companies during the period of study.
14. The current ratio is in good condition in IOCL as compared to the other companies during the period of study.

15. The quick ratio is good in BPCL as compared to the other companies. It shows that the operational efficiency of BPCL and IOCL is good as compared to HPCL.

16. Overall, it can be said that the working capital turnover ratio is showing good operating performance as compared to the other companies during the period of study.

17. The p value of chi square of current ratio and quick ratio is more than 0.05 which shows that null hypothesis is accepted i.e. there is a significant difference between the factors of operational efficiency of selected oil and gas companies during the period of study. While, in case of working capital turnover the hypothesis is rejected, this shows that there is no significant difference among operational efficiency of the selected companies.

18. The Anova test results indicates that p-value of current ratio is 0.04 which is more than the significance value 0.05.thus the null hypothesis (H0) is rejected. Similarly the p value of quick ratio and working capital turnover ratio are 0.46 and 0.34 respectively. These p values are more than 0.05 significant values thus null hypothesis is rejected.

19. The shareholder’s fund of IOCL was marked highest as compared to the other companies which shows major operating efficiency in this company.

20. The fixed asset turnover ratio of IOCL was again marked highest which shows a good financial position of the company.
21. Fixed Asset turnover ratio of HPCL was marked highest which shows that the company is managing a good proportion into fixed assets.

22. The Return on Capital Employed ratio of IOCL was highest as compared to the other companies due to adequate capital structure.

23. The p value of chi square test of return on shareholders’ fund; fixed assets turnover ratio and return on capital employed is more than 0.05 which shows that null hypothesis is accepted i.e. there is a significant difference between the factors of operational efficiency of selected oil and gas companies during the period of study.

24. The results from the Anova indicate that p-value of all the ratios is less than the p value (0.05). Thus, the null hypothesis (H0) is rejected. Hence, it can be said that the operating efficiency of the selected oil and gas companies having significant relationship.

### 8.2 Suggestions of the Study

Followings are the main suggestions of the study:

1. The companies should maintain proper finance to manage the operating expenses.

2. The raw material prices should be managed on the basis of daily demand and supply.

3. The government should control over the oil and gas companies to protect the consumer’s shares.
4. The management of the companies should start some training programme for the staff to maintain financial risk management.

5. The management of the companies must evaluate the costing of raw materials and other components by their own.

6. It should also be found during the study that these companies that there is no proper cost center to determine the actual cost of a product.

7. The government should increase the volume of subsidies on the products of oil and gas companies.

8. There should be proper channel of evaluation of these companies.

9. The technical and operating staff must be trained so that they can control the cost of the products as well as the administrative cost.

10. Some new techniques must be developed by the management to their production house so that the cost of production can utilise minimum cost.

11. The companies can use listing process for market capture with the help of the government.

12. The cost of the product can be minimize by taking tenders.

8.3 Limitations of the Study

Followings are the main limitations of the study

1. The present study is based on the secondary data.

2. The selected period of study may be the cause of differ results

3. The selection of companies under study may be caused for different results

4. The selected techniques of operating efficiency can vary the results.
8.4 Scope of the Future Research

The main scope for future research is as follows:

1. A comparative study can be made between public and private sector companies.
2. The period of study can be increased in future research.
3. The number of companies can be increased in future research.
4. The other financial tools and techniques can be used in future research.