CHAPTER - VII

FINDINGS, SUGGESTIONS AND CONCLUSION

In the preceding chapters effectiveness of firm’s actions and decisions is evaluated using the effective financial management and statistical tools. The application of relevant tools has helped in providing an answer to the problems relating to the Financial Management of the sample units. The study has also provided suggestions for raising the financial resources and their effective utilisation for achieving the organisations’ goals. Financial tools have become the logical method or technique to be employed for the purpose of measuring the validity of the decisions to be taken either to accept or reject the future projects of the firms. Financial tools have greatly reduced the uncertainty existing in the environment of firms and these tools have helped to find out the reality of the problems existing in the sample units. Some of the important findings of the study based on the analysis are given below:

FINDINGS

In MFL there is a consistent increase of 52 per cent in share capital during the study period. However there is a consistent decline in reserve and surplus during the study period. During 1998-99, the position of reserves and surplus is negative which was Rs.-473.90 million. MFL has met a huge loss during the year 1998-99. Again in 2000-01 the loss increased to -706.90
million and the reserves and surplus in 2002-03 is Rs.(-)4032.60 million. This shows that there is consistent decrease in reserves and surplus during the study period in MFL.

Index analysis also reveals that there is a steep decline in Reserves and Surplus in MFL during the study period.

The mean reserves and surplus of MFL during the study period is Rs.(-) 403.26 million and the standard deviation is Rs.569.79 million. The co-efficient of variation is negative and is (-) 141.30 percent.

Correlation analysis reveals that in MFL, the correlation between Share Capital and reserves and surplus is (-) 0.58. This shows that some problems in earnings and operations have occurred in MFL during the study period.

It is found that the reserves and surplus position of MFL is not in good condition and it requires immediate attention and necessary action. This may be due to the various internal and external factors. If the same trend continues, the reserves and surplus will become worst and it will be around Rs.2322.92 million in 2009-10.

The correlation co-efficient for secured and unsecured loans in MFL during the study period is -0.09. This shows that there is the least negative relationship between secured and unsecured loans.

Trend analysis shows that secured loans in MFL in 2009-10 will be Rs.7508.17 million and unsecured loans in MFL in 2009-10 will be Rs.4087.25 million if the present trend continues.
There is significant increase in secured and unsecured loans during the study period and the standard deviation is more in the case of unsecured loans. Similarly the co-efficient of variation is also higher in unsecured loans. The rate of increase in unsecured loans is higher than that of secured loans. This shows that the firm can borrow even without security.

Correlation co-efficient as well as slope between secured loans and unsecured loans in MFL is negative during the study period.

Analysis reveals that the increase in total loan funds is higher than that of increase in share capital. The co-efficient of variation is higher in total loan funds that of share capital. Increase in total loan funds may be higher due to consistent losses or declining reserves and surplus in MFL during the study period.

Highest variation is seen in reserves and surplus in MFL during the study period. Correlation analysis reveals that the correlation between share capital and reserves and surplus is -0.58; between the reserves and surplus and secured loans is -0.35; between the secured loans and unsecured loans is -0.09 and that of the unsecured loans and share capital is -0.15. Regression analysis shows that the slope between share capital and reserves and surplus, reserves and surplus and secured loans and secured loans and unsecured loans are negative. However, regression is positive between the unsecured loans and the share capital.
Trend analysis reveals that share capital, secured loans and unsecured loans will increase to a significant extent during 2009-10. However, the deficiency in loans, reserves and advances will also significantly increase if the present management practices continue.

It is found that there is significant increase in share capital, secured loans and unsecured loans during the study period, and the correlation between unsecured loans and share capital is positive. Trend of reserves and surplus is highly affecting the organization and special attention is to be taken to correct this aspect.

In SPIC, there is slight increase in share capital during the study period. Highest value of reserves and surplus is noted in 2000. However a slight decrease is seen in 2000-01 and 2002-03. During the year 2002-03 it has become negative and is Rs.(-)896.13 million. This shows that there is a significant change in the management of the organisation during the years 2001-02 and 2002-03.

There is slight fluctuation in share capital in SPIC. Index number for Reserves and Surplus in SPIC in 1993-94 is 100 and it has increased to 209.98 in 1998-99. It has increased to 264.54 in 2000. However, it is negative in 2002-03, that is (-)20.87. It is significant to note that there is higher decline in reserves and surplus from the year 2000-01 in SPIC.

Correlation analysis shows that the correlation co-efficient between share capital and reserves and surplus in SPIC is +0.72. Trend is calculated
and it is found that in SPIC, share capital in 2009-10 will be Rs.1318.44 million and reserves and surplus will be Rs.7604.41 million in 2009-10.

There is significant increase in reserves and surplus in the first seven years. There is significant decline in reserves and surplus in the last 3 years. This may be due to some internal and external factors in SPIC. The standard deviation in Reserves and Surplus and co-efficient of variation in SPIC is significantly higher during the study period. Significant decline in reserves and surplus in the last 3 years requires special attention.

The standard deviation and co-efficient of variation are higher in secured loans than unsecured loans.

Correlation co-efficient between secured loans and unsecured loans is +0.52; the slope is also positive in both cases. Trend analysis reveals that secured loans in 2009-10 will be Rs.27786.71 million and unsecured loan in 2009-10 will be Rs.11067.24 million.

There is significant increase in secured loans and unsecured loans in SPIC. The increase in unsecured loan is more than that of secured loan and there is positive correlation between secured loans and unsecured loans. This may be due to the increasing financial needs in the company.

The correlation co-efficient between share capital and total loans funds in SPIC is calculated and it is +0.53; the slope is positive in both cases. The trend for 2009-10 for total loan funds is Rs.38853.95 million. Index analysis
shows that there is 293.76 per cent increase in total loan funds during the study period.

Correlation analysis reveals that in SPIC the correlation between share capital and reserves and surplus is 0.72; reserves and surplus and secured loans is 0.13 secured loans and unsecured loans is 0.52 and that of unsecured loans and share capital is 0.45. There is the highest relationship between reserves and surplus and secured loans in this organization.

Regression calculations show that the slope between share capital and reserves and surplus, reserves and surplus and secured loans and secured loans and unsecured loans are all positive. However, regression is highly positive between unsecured loans and share capital. Trend analysis reveals that share capital, secured loans and unsecured loans will increase to a significant extent during 2009-10.

There is significant increase in share capital, secured loans and unsecured loans during the study period and the correlation between unsecured loans and share capital is positive. Significant increase in secured and unsecured loan is noted in 2010 if the present trend continues. This may be due to the better management aspects followed in the firm.

In PARRY, during the study period, the co-efficient of variation of share capital is 44.84 per cent; that of reserves and surplus is 56.44 per cent; that of secured loans is 77.13 per cent and that of unsecured loans is 59.90 per cent variation is seen in secured loans in this company during the study period.
Correlation analysis reveals that the correlation between share capital and reserves and surplus is -0.19; reserves and surplus and secured loans is -0.08; secured loans and unsecured loans is -0.15 and that of unsecured loans and share capital is 0.57. There is positive correlation between unsecured loans and share capital in this company. Regression calculations show that the slope between share capital and reserves and surplus, reserves and surplus and secured loans and secured loans and unsecured loans are negative. However, regression is positive between unsecured loans and share capital.

Trend analysis reveals that share capital, secured loans and unsecured loans will increase to a significant extent during 2009-10. However, the increase in secured loans will be more than that of unsecured loans in this company.

It is found that significant increase is seen in reserves and surplus, and this shows the stability of the firm in this industry. Trend reveals that increase in secured loans will be higher in future years if the present trend continues. This may be due to the reason that the firms are now going in for loans rather than for increasing share capital as the cost of debt is less in the present days.

There is significant increase in reserves and surplus in PARRY during the study period. It is found that co-efficient of variation and standard deviation is more in reserves and surplus than in share capital.

Correlation co-efficient is calculated and it is found that there is slight negative correlation between share capital and reserves and surplus slope is
also negative in both cases. Trend for 2009-10 in PARRY for share capital will be Rs.228.65 million and for reserves and surplus will be Rs.3300.52 million.

There is significant increase in share capital and Reserves and surplus. Increase in Reserves and surplus is very high and it has negative correlation with share capital. This may be due to the fact that more profits in PARRY are retained during the study period and this may be due to the falling interest rate in the environment.

It is found that in PARRY there are high fluctuations in unsecured loans during the study period. There is low negative correlation between secured loans and unsecured loans. Trend is calculated and it is found that the secured loan in 2010 will be Rs.6242.65 million and unsecured loan will be Rs.1592.25 million.

It is found that the increase in secured loan is more than that of unsecured loans. Standard deviation and co-efficient variation of secured loan are more than that of unsecured loan. It may be due to the reason that the lending agencies are insisting for providing security before sanctioning loans for companies in the recent days.

It is found that the increase in loan funds is higher than that of increase in share capital, and increase in total loan funds will increase significantly in 2010. This may be due to the fact that loan interest rates are falling in the environment. The standard deviation and co-efficient of variation are higher in net fixed assets than in current assets in MFL during the study period.
Correlation analysis is done and it is found that there is high positive relationship between net fixed assets and current assets employed in the firm during the study period. Slope for net fixed assets is 0.89 and that for current assets is 0.49. This shows that slope is positive in both cases. Trend shows that net fixed assets in the firm during 2000-01 will be Rs.11021.89 million and Current Assets will be Rs.10709.78 million.

It is found that increase in net fixed assets is higher than that of current assets in the organisation and this is because of expansion activities going on in the organisation. Standard deviation and co-efficient of variation is higher in net fixed assets than current assets and this may be due to increased cost in maintaining the balance in net fixed assets in the firm.

In SPIC, there is significant higher increase in current assets during the study period. Fluctuations are also seen during the study period. This shows that the increase in net fixed assets is only 6.07 per cent during the study period. However, the increase in current assets is around 160.30 per cent during the study period. The co-efficient of variation of net fixed assets is 34.23 per cent and that of current assets is 31.52 per cent. The standard deviation is higher in the case of current assets and co-efficient of variation is higher in the case of net fixed assets during the study period.

In SPIC, correlation analysis shows that there is higher positive relationship, that is +0.74 between net fixed assets and current assets employed in the firm during the study period. Slope for net fixed assets is 0.52 and that
for current assets is 1.06. Trend shows that net fixed assets in the firm during 2009-10 will be Rs.15962.76 million and current assets will be Rs.33743.30 million.

It is found that in SPIC, increase in current assets is higher than that of increase in net fixed assets. There is high positive correlation between net fixed assets and current assets in the firm. Trend shows that net fixed assets will be much less than that of current assets during the year 2009-10. This may be due to the increased holding of current assets in the organization during the study period.

Mean fixed assets and mean current assets are nearly equal to some extent in PARRY. However trend shows that increase in net fixed assets will be more than that of current assets in future.

In PARRY there is positive relationship i.e. 0.48 between net fixed assets and current assets employed in the firm during the study period. Slope for net fixed assets is 0.52 and that for current assets is 0.45. Trend is calculated and it is found that net fixed assets in the firm during 2009-10 will be Rs.9419.63 million and current assets will be Rs.4866.72 million. In future the increase in net fixed assets will be more than that of current assets if the present trend continues. It can be said that there is significant increase in fixed assets and current assets in the company. However, the increase in fixed assets in future will be more than that of current assets in this company.
Analysis reveals that in MFL there is increase in current assets with some fluctuations. Similarly, there is significant increase in current liabilities with many fluctuations. Increase in current liability is more than that of current assets. Standard deviation is more in current assets and coefficient of variation is more in current liabilities in MFL.

In MFL, Trend analysis reveals that the trend for current assets in 2009-10 will be Rs.10709.78 million and for current liabilities will be Rs.9196.80 million. There is high positive correlation i.e. +0.93 between current assets and current liabilities in the company.

Increase in current assets is less than that of increase in current liabilities as per index analysis. This may lead to lowering current ratio in the company. Correlation among current assets and current liability is highly positive and this shows the stability of the firm in maintaining current ratio to certain extent. Trend predictions show that the rate of increase of current liabilities will be higher than that of current assets. This may be due to the high product life cycle and due to some internal financial management practices.

In SPIC, increase in current assets and current liability is significant but fluctuating. The rate of increase is higher in the case of current assets than current liabilities. Standard of deviation is higher in the case of current assets but co-efficient of variation is higher in the case of current liabilities.

In SPIC, Trend analysis reveals that the trend for current assets in 2009-10 will be Rs.33743.32 million and for current liabilities will be
Rs.9926.02 million. This shows that significant increase can be seen in future in current assets if the present trend continues. There is high positive correlation between current assets and current liabilities in the company that is +0.91.

In SPIC the increase in current assets is higher than that of increase in current liabilities in the company during the study period, and this may be due to present fertiliser product life cycle and due to some flexible cash management policies. This may lead to lowering current ratio in the company. Trend analysis shows that current assets will be very high in 2009-10 compared to current liabilities and hence steps are to be taken to manage current assets in more purposeful manner.

In PARRY, there is consistent increase in current assets than in current liabilities. The increase is fluctuating in current liabilities during the study period. Standard deviation is higher in the case of current assets and co-efficient of variation is higher in the case of current liabilities. There is high positive correlation between current assets and current liabilities that is +0.84.

In PARRY, it is found that the rate of increase in current assets is higher than that of current liabilities. More fluctuations in current liabilities may be due to some conventional current liability management of the company. A null hypothesis is framed as, the investments, current assets, current liabilities do not influence the net fixed assets of the selected companies.
In MFL, the correlation is calculated at its found that the correlation between net fixed assets and investments: +0.8442, investments and current assets: +0.8682, current liabilities and net fixed assets +0.842. The correlation. The correlation co-efficients are found positive and significant.

There exists high multicollinearity between investments, current liabilities and current assets, current liabilities. The autocorrelation co-efficient exists which is insignificant.

In SPIC the influence of current assets, current liabilities towards fixed assets is significant.

In SPIC the correlation co-efficient between net fixed assets and investments: +0.537; investments and current assets: +0.929; current assets and current liabilities: +0.909 and current liabilities and net fixed assets: +0.813.

The correlation co-efficients calculated between the factors are all positive and significant. There exists high multicollinearity between investment, current assets and current assets, current liabilities. There exists negative autocorrelation co-efficient which is insignificant.

Analysis shows that the mean net fixed assets in PARRY is Rs. 3974.1 million; mean investment is Rs. 920.46 million, mean current assets is Rs.4214.23 million and current liabilities is Rs. 2348.89 million. The correlation co-efficients between the factors are all positive.
In PARRY the influence of investments and current liabilities towards total net fixed assets is significant. There exists autocorrelation-coefficient which is insignificant.

The mean gross income of the MFL is Rs.9044.84 million; correlation between gross income and gross profit is +0.79 and it is highly positive. Trend analysis reveals that gross income in 2009-10 will be Rs.19523.95 million and gross profit will be Rs.1787.11 million if the present trend continues in the company. Index analysis reveals that gross income in gross income is around 138.99 per cent. But there is increase in gross profit during the study period and however this requires immediate attention. It can be said that increase in gross income and gross profit is highly significant but the fluctuations in gross profit is to be carefully studied.

The mean gross income of the SPIC is Rs.19183.10 million; correlation between gross income and gross profit is 0.60 and it is highly positive. Trend analysis reveals that gross income in 2009-10 will be Rs.24928.45 million and gross profit will be Rs.-573.02 million if the present trend continues in the company. Index analysis reveals that gross income is only 30.88 per cent but the decline in gross profit is somewhat higher. It can be said that increase in gross income is higher but it shows a declining trend. Further, the decline in gross profit is also to be carefully looked into by the company.

The mean gross income of the PARRY is Rs.9807.68 million; correlation between gross income and gross profit is 0.89 and it is highly
positive. Trend analysis reveals that gross income in 2009-10 will be Rs.23123.08 million and gross profit will be Rs.2585.24 million if the present trend continues in the company. Index analysis shows that increase in gross income is 188.34 per cent and gross profit is 176.02 per cent. It can be said that the rate of gross profit seems to be declining in the company. However, there is high correlation between gross income and gross profit in the company.

Significant increase is noted in depreciation and interest charges in the company. This may affect the profitability of the organisation to certain extent. Standard deviation and co-efficient of variation are very high in the case of Interest than that of depreciation. Increase interest charges may show losing hold of the management to some extent.

There is higher increase in depreciation and interest in the organisation. Correlation analysis shows that correlation co-efficient is -0.02. This shows that there is least negative correlation between depreciation and interest charges. Trend analysis reveals that in 2009-10, Depreciation charge will be Rs.858.96 million and the interest charge will be Rs.313.42 million. It can be said that increase in depreciation charge is more than that of the interest charge. It can be said that increase in depreciation and interest may affect the profitability of the company to some extent.

The mean depreciation in SPIC is Rs.425.99 million; standard deviation is Rs.126.30 million and co-efficient of variation is 29.65 per cent. The mean interest charge is Rs.1370.47 million; standard deviation is Rs.570.52 million
and co-efficient of variation is 41.63 per cent. Standard deviation and co-efficient of variation are higher in the case of interest than that of depreciation. This shows that rate of increase of interest is more than that of depreciation. Correlation analysis shows that correlation co-efficient is 0.66. This shows that positive correlation between depreciation and interest charges in the company. Trend analysis reveals that in 2009-10, depreciation charge will be Rs.729.31 million and for interest charge will be Rs.3400.71 million. It can be said that depreciation may be more than twice that of interest charges in this company in future.

High fluctuations are noted in the case of interest charge in PARRY. The mean depreciation is Rs.285.06 million; standard deviation is Rs.145.02 million and co-efficient of variation is 50.87 per cent. The mean interest charge is Rs.343.95 million; standard deviation is Rs.209.84 million and co-efficient of variation is 61.01 per cent. Standard deviation and co-efficient of variation are higher in the case of Interest charge. Depreciation expenses will be more than 1.8 times of interest charges in the company. Correlation analysis shows that correlation co-efficient is +0.90. This shows that there is high positive correlation between depreciation and interest charges in the company. Trend analysis reveals that in 2009-10, depreciation charge will be Rs.818.77 million and for interest charge will be Rs.982.95 million.

In MFL Index for interest in 1997-98 is 1432.23 and for 2002-03 is 268.03. Correlation co-efficient is calculated between gross income and
interest and it is found to be -0.15. Trend analysis shows that in 2009-10 gross profit will be Rs.19523.95 and interest charges will be Rs.313.42 million.

In SPIC mean gross income during the study period is Rs.19183.10 million; Standard deviation is Rs.4173.20 million and co-efficient of variation is 21.75 per cent. Mean interest during the study period is Rs.1370.47 million; Standard deviation is Rs.570.52 million and co-efficient of variation is 41.63 per cent.

In PARRY mean interest during the study period is Rs.343.95 million; Standard deviation is Rs.209.84 million and co-efficient of variation is 61.01 per cent. Index analysis shows that the index for gross income in 1997-98 is 198.13 and for 2002-03 is 288.34. Index for interest in 1997-98 is 229.79 and for 2002-03 is 239.15. Trend analysis shows that in 2009-10 gross profit will be Rs.23123.08 and interest charges will be Rs.982.95 million.

In MFL mean PAT during the study period is Rs.-38.45 million; Standard deviation is Rs.345.46 million and co-efficient of variation is -898.47 per cent. Index analysis shows that index for PAT in 1997-98 is 94.63 and in 2002-03 is -74.60. Correlation between gross income and profit after tax is calculated. It is found that correlation co-efficient is +0.47. Trend for PAT for 2002-03 is Rs.475.57 million.

In SPIC mean PAT during the study period is Rs.-167.23 million; Standard deviation is Rs.1601.16 million and co-efficient of variation is -957.46 per cent. Index analysis shows that index for PAT in 1997-98 is
155.58 and in 2002-03 is -783.63. Correlation between gross income and profit after tax is calculated. It is found that correlation co-efficient is 0.28. Trend for PAT for 2002-03 is Rs.-4701.05 million.

In PARRY mean PAT during the study period is Rs.341.66 million; Standard deviation is Rs.118.88 million and co-efficient of variation is 34.50 per cent. Index analysis shows that index for PAT in 1997-98 is 244.95 and in 2002-03 is 170.35. Correlation between gross income and profit after tax is calculated. It is found that correlation co-efficient is 0.56. Trend for PAT for 2002-03 is Rs.586.60 million.

In MFL there is significant increase in depreciation and interest. However, high fluctuations are seen in gross profit, PBT and PAT.

A null hypothesis is framed as there is no significant influence of gross profit, depreciation, interest, profit before tax towards profit after tax of selected fertilizer units.

The contribution of gross profit and profit before tax is significant. There is multicollinearity between explanatory factory. There exists negative autocorrelation co-efficient which is insignificant.

In SPIC there is significant increase in depreciation and interest. However, high fluctuations are seen in gross profit, PBT and PAT.

The contribution of interest towards PAT is significant. The correlation between gross profit and depreciation; gross profit and PBT; Depreciation and interest and PBT and gross profit are positive. There exists high
multicollinearity between gross profit and depreciation. The negative autocorrelation co-efficient exist which is insignificant.

In PARRY the correlation, coefficients are all positive. There exists positive autocorrelation co-efficient which is insignificant.

The relationship between various variable in PARRY is highly positive whereas it is not so in the case of SPIC. In MFL negative correlation is noticed in two cases. This may be due to reasons such as labour problems and higher loan funds which are becoming a consistent problem in other firms.

In MFL, the percentage of share capital to total liabilities ranges between 8.53 per cent and 19.82 per cent during the study period. The fluctuations are also seen in share capital. Wide fluctuations are noticed in the structure of Balance sheet of MFL during the study period between 1993-94 and 2002-2003.

In SPIC, the percentage of share capital to total liabilities ranges between 2.73 per cent to 5.92 per cent during the study period. The fluctuations are also seen in share capital. Higher fluctuations are noticed in the structure of Balance sheet of SPIC during the study period between 1993-94 and 2002-2003.

In PARRY, the percentage of share capital to total liabilities ranges between 1.39 per cent and 5.70 per cent during the study period. The fluctuations are also seen in share capital. Slight fluctuations are noticed in the

In MFL the mean owners’ fund is Rs.683.78 million; in SPIC it is Rs.7866.77 million and in PARRY it is Rs.4016.32 million. This shows that mean owners’ fund is more in SPIC, then comes MFL and the third one is PARRY among the sample companies. This shows that standard deviation of owners’ fund is higher in SPIC than that of other two companies. Co-efficient of variation of owners’ fund is MFL is 152.27 per cent; in SPIC it is 47.34 per cent and in PARRY it is 52.26 per cent. This shows that co-efficient of variation of owners’ fund is maximum in MFL than that of other two companies. Negative Index is something serious and is to be carefully studied. This shows that there are significant losses in MFL and SPIC during the study period. This has created huge accumulated losses and had affected the position of owners’ fund in MFL as well as in SPIC.

In MFL the mean Secured loan is Rs.3739.10 million; in SPIC it is Rs.10423.21 million and in PARRY it is Rs.1972.02 million. This shows that mean secured loans in more in SPIC, then comes MFL and the third one is PARRY among the sample companies. The standard deviation of secured loans in MFL is Rs.1645.48 million; in SPIC it is Rs.4640.16 million and in PARRY it is Rs.1521.12. This shows that the standard deviation of secured loan is higher in SPIC than that of other two companies. Co-efficient of variation of secured loans in MFL is 39.19 per cent; in SPIC it is 44.52 per cent.
and in PARRY it is 77.13 per cent. This shows that co-efficient of variation of secured loan is maximum in PARRY than that of other two companies. It can be said that increase in secured loans shows that the companies are going in for outsiders fund for business activities as the rate of interest is getting cheaper in the environment. Further, almost all financial institutions are insisting on security for providing loans at present.

In MFL the mean unsecured loan is Rs.3102.51 million; in SPIC it is Rs.6311.30 million and in PARRY it is Rs.1075.82 million. This shows that mean unsecured loan is more in SPIC, then comes MFL and the third one is PARRY among the sample companies. Standard deviation of secured loan is higher in MFL than that of the other two companies. Index analysis reveals that the increase in unsecured loans is higher in the case of SPIC; then comes MFL. It can be said that increase in unsecured loans shows that the companies are going in for outsiders fund for business activities as the rate of interest is getting cheaper in the environment. It is also important to note that the companies are able to get loans on unsecured basis.

In MFL the mean total loan is Rs.5947.23 million; in SPIC it is Rs.16734.51 million and in PARRY it is Rs.6374.22 million. This shows that mean total loan is more in SPIC, then comes PARRY and the third one is MFL among the sample companies. The standard deviation of secured loan is higher in SPIC than that of the other two companies. Co-efficient of variation of total loan is maximum in MFL than that of the other two companies.
The increase in total loans is higher in the case of SPIC; then comes MFL. It can be said that increase in total loans shows that the companies are going in for outsiders fund for business activities as the rate of interest is getting cheaper in the environment. It is also important to note that the companies are able to get loans on Total basis.

The mean capital employed in MFL is Rs.6631.01 million; in SPIC is Rs.24601.28 million and in PARRY is Rs.10390.54 million. The standard deviation is more in SPIC than in MFL and PARRY. The co-efficient of variation is more in MFL than in SPIC and PARRY. Slight decline in capital employed is seen in 2003. Increase in capital employed is more in PARRY than in other companies. This may be due to the reason that PARRY may be setting more profits in this industry and others may not be gains much in this field. The mean is more in the case of SPIC than that of MFL and PARRY. The standard deviation is more in SPIC than in MFL and PARRY. The co-efficient of variation is more in MFL than in SPIC and PARRY.

Gross fixed assets is more in SPIC than PARRY and MFL, standard deviation is more in SPIC and Increase is more in PARRY. This may be due to fast expansion in PARRY than that of SPIC and MFL during the study period. The mean is more in the case of SPIC than that of MFL and PARRY. The standard deviation is more in SPIC than in MFL and PARRY. The co-efficient of variation is more in MFL than in SPIC and PARRY. Index Analysis reveals
the increase in MFL is 243.14 per cent; in SPIC is 228.13 per cent and in PARRY is 453.59 per cent.

Increase in depreciation is more in PARRY; co-efficient of variation is more in PARRY and standard deviation is more in SPIC. This may be due to fast expansion in activities in PARRY than in other sample companies.

The mean net fixed assets in MFL is Rs.4061.41 million; in SPIC is Rs.9084.08 million and in PARRY is Rs.3803.39 million. This shows that the mean is more in the case of SPIC than that of MFL and PARRY. The standard deviation is more in SPIC than in MFL and PARRY. The co-efficient of variation is more in MFL than in SPIC and PARRY. The increase in MFL is 580.94 per cent; in SPIC is 37.98 per cent and in PARRY is 515.26 per cent.

Co-efficient of variation is more in PARRY; increase in rate of increase is more in PARRY and standard deviation is more in SPIC. This may be due to the increase in fixed assets in PARRY during the study period which is more than that of MFL and SPIC.

The mean capital work in progress is more in the case of SPIC than that of MFL and PARRY. There is overall decline in capital work in progress in all the sample firms in 2003.

The mean total net fixed assets is more in the case of SPIC than that of MFL and PARRY. The standard deviation is more in SPIC than in MFL and PARRY. The co-efficient of variation is more in MFL than in SPIC and PARRY.
The increase in net fixed assets is more in PARRY and the rate of
increase is least in SPIC. This may be due to increased activities PARRY and
due to higher loss in SPIC in the later years of study period in SPIC.

The mean investment is more in the case of SPIC than that of MFL and
PARRY.

There are vast fluctuations of investments in MFL, fluctuations are less
in SPIC than PARRY and co-efficient of variation is higher in PARRY. This
may be due to modified investment pattern in PARRY during the study period.

The mean current assets more in the case of SPIC than that of MFL and
PARRY. The standard deviation is more in SPIC than in MFL and PARRY.
The co-efficient of variation is more in MFL than in SPIC and PARRY.

Index analysis reveals that the index in 2003 in MFL is 181.96; in SPIC
it is 260.30 and in PARRY it is 301.70. The increase in MFL is 81.90 per cent;
in SPIC it is 160.30 per cent and in PARRY it is 201.70 per cent.

The rate of increase in current assets is more in PARRY; the increase in
current assets is least in MFL and variation is more in MFL. This may be due
to the increasing current assets in PARRY during the study period.

The mean current liabilities is more in the case of SPIC than that of
MFL and PARRY. The standard deviation is more in SPIC than in MFL and
PARRY. The co-efficient of variation is more in MFL than in SPIC and
PARRY. The increase in MFL is 210.92 per cent; in SPIC it is 157.77 per cent
and in PARRY it is 195.31 per cent.
The rate of increase in current liabilities is more in MFL and co-efficient of variation is least in SPIC. This may be due to unmodified current liability management aspects in MFL and SPIC.

The mean net current assets is more in the case of SPIC than that of MFL and PARRY. The standard deviation is more in SPIC than in MFL and PARRY. The co-efficient of variation is more in MFL than in SPIC and PARRY. Index analysis reveals that the index in 2003 in MFL is 70.31; in SPIC is 261.37 and in PARRY is 318.65.

There is decline in net current assets in MFL; increase in net current assets is more in PARRY and rate of increase in net current assets is more in PARRY. This may be due to changing net current assets management in PARRY. Decline in net current asset is not a favorable sign in MFL.

It is found that miscellaneous expenses are now being written off in MFL and SPIC, and some more miscellaneous expenses are added during the period of study. This may be due to modified restructuration policies in MFL and SPIC during the last the three years of the study period.

The mean total assets is more in the case of SPIC than that of MFL and PARRY. The standard deviation is more in SPIC than in MFL and PARRY. The co-efficient of variation is more in MFL than in SPIC and PARRY. Index analysis reveals that the index in 2003 in MFL is 208.12; in SPIC it is 208.76 and in PARRY it is 518.92. The increase in MFL is 108.12 percent; in SPIC it is 108.76 per cent and in PARRY it is 418.92 per cent.
Total assets has significantly increased in SPIC. Slight decline in total assets in all the companies and co-efficient of variation is more in PARRY. This may be due to the slow progress of fertiliser industry in the later part of study period.

The mean operating Income in MFL is Rs.9044.84 million; in SPIC it is Rs.1918.10 million and in PARRY it is Rs.9807.68 million. This shows that the mean is more in the case of SPIC than that of MFL and PARRY. The standard deviation is more in SPIC than in MFL and PARRY. The co-efficient of variation is more in MFL than in SPIC and PARRY.

Operating income has significantly increased in PARRY and the increase in operating income is least in SPIC. This may be due to the modifications that are being carried out in SPIC. PARRY seems to expand its market base.

A null hypothesis is framed as, there is no variation in operating income among the selected companies. One way ANOVA shows the mean operating income differs significantly among the selected units at 1 per cent level; the hypothesis is rejected. The mean operating income of MFL – SPIC and SPIC – PARRY is significantly differing and MFL – PARRY combination is not significant.

It is found that profit is not earned in SPIC and MFL during 2003, but PARRY has got a profit of 176.02 per cent more than that of the previous year.
This may be due to the losses incurred by MFL and SPIC in some years. PARRY has managed to maintain profit during the period of study.

Depreciation charge has significantly increased in MFL and PARRY and consistent increase is noticed in PARRY. This may be due to the increased fixed assets employed in MFL and PARRY during the period of study.

The mean interest is more in the case of SPIC than that of MFL and PARRY. The standard deviation is more in SPIC than in MFL and PARRY. The co-efficient of variation is more in MFL than in SPIC and PARRY.

Significant increase in interest charge is noted in all the companies and increase is higher in the case of SPIC and PARRY except 2003. This may be due to the employment of more loan funds in the sample companies during the study period.

A slight increase in profit before tax is noticed in MFL; consistent increase in profit before tax is seen and Loss is sustained by SPIC in late years of study period. This may be due to the internal structural charges in SPIC. PARRY has been consistently increasing its market share.

Analysis shows that the mean profit after tax in MFL is Rs.38.45 million; in SPIC it is Rs.-167.23 million and in PARRY it is Rs.341.66 million. This shows that the mean is more in the case of SPIC than that of MFL and PARRY. The standard deviation is more in SPIC than in MFL and PARRY.

There is significant increase in profit after tax in PARRY, but SPIC has incurred a loss in 2003 and it has impact on profit after tax. This may be due to
modified managerial activities in SPIC. PARRY is maintaining a controlled profit after tax during the study period.

There is slight decline in material expenses in SPIC and there is higher increase in material expenses in PARRY. This may be due to the decline in usage of material in SPIC and the increased sales in PARRY during the study period.

There is decline in manufacturing expenses in SPIC. There is high increase in manufacturing expense in MFL and moderate increase is noticed in PARRY. This may be due to the outsourcing activities in SPIC. PARRY consistently controlling manufacturing expenses.

A null hypothesis is framed as, there is no variation in manufacturing expenses among the selected companies. One way ANOVA shows the mean operating income differs significantly among selected units at 1 per cent level; the hypothesis is rejected. The mean operating income of MFL – SPIC and SPIC – PARRY is significantly differing and MFL – PARRY combination is not significant.

There is slight decline in personnel expenses in SPIC, higher increase in personnel expenses in PARRY and moderate increase in this in MFL. This may be due to outsourcing activities in SPIC, expanding its market in PARRY and the same is being continued in MFL during the study period.

It is found that there is higher increase in cost of sales in PARRY; moderate increase in cost of sales in MFL and SPIC. This may be due to the
fact that PARRY is consistently increasing its market. MFL and SPIC are trying only to mountain their markets.

The mean recurring income is more in the case of SPIC than that of MFL and PARRY. The standard deviation is more in SPIC than in MFL and PARRY. The co-efficient of variation is more in SPIC than in MFL and PARRY. This may be due to income from various other activities such as interest on investment in PARRY.

MFL has not paid any dividend during the study period. SPIC has given dividend in four out of ten years. However dividend is paid in PARRY in all the years. This may be due to the accumulated losses in MFL; occurring loss in SPIC and increased profitability in PARRY. MFL has not spent for preference dividend. SPIC has paid it for five out of ten years and PARRY has paid in eight out of ten years.

The mean retained earnings is more in the case of PARRY than that of MFL and SPIC. The standard deviation is more in SPIC than in MFL and PARRY. The co-efficient of variation is more in SPIC than in MFL and PARRY. Index analysis reveals that the index in 2003 in MFL is -129.37; in SPIC it is -471.35 and in PARRY it is 54.44.

The losses are accumulating in MFL and SPIC. Retaining of profit has not increased in PARRY also. This may be due to the lower interest rates for loans in the outside environment.
In MFL significant fluctuations in personnel, selling and administrative expenses are seen. The relationship between operating income and other expenses is studied.

A null hypothesis framed as, there is no significant influence of material, manufacturing expenses, personnel expenses, selling and administrative expenses towards operating income of selected fertiliser units.

The contribution of manufacturing expenses towards operating income is significant. The correlation calculated between operating income and explanatory factors are all positive. There exists high multicollinearity between manufacturing expenses and personnel expenses, material and selling and administrative expenses.

In SPIC the operating income has increased in the first phase and then declined. Other expenses also shows fluctuating trends.

In SPIC material has 25 per cent impact, manufacturing expenses has 20 per cent impact. Selling and administrative expenses has 45 per cent impact toward’s operating income. The contribution of selling and administrative expenses towards operating income is significant.

The correlations calculated between operating income and material; material, personnel expenses and manufacturing expenses and personnel expenses are positive. There is no multicolinearity between explanatory factors. There exists negative auto correlation co-efficient which is insignificant.
In PARRY there is increase in material expenses, manufacturing expenses, personnel expenses, selling and administrative expenses. Consistence increase is notified in operating income except in 2003. Manufacturing expenses has 85 per cent impact towards operating income. The contribution of manufacturing expenses towards operating income is significant.

The correlation calculated between material and personnel expenses, material and selling and administrative expenses, personnel expenses and selling and administrative expenses are all positive. There exists multicollinearity between material and personnel expenses. There exists negative autocorrelation co-efficient which is insignificant.

Relationship between cost sales and expenses is studied. A null hypothesis is framed as, there is no significant influence of material, manufacturing expenses, personnel expenses, selling and administrative expenses towards cost of sales of selected companies.

The contributions of manufacturing expenses, and personnel expenses towards cost of sales are significant. The correlation calculated between explanatory factors are all positive. There exists autocorrelation coefficient which is insignificant.

In SPIC cost of sales has increased but fluctuations are very high. Similar is the case with other expenses are relationship between cost of sales to expenses is studied. Personnel expenses towards cost of sales in significant.
The correlations calculated between cost of sales and material, material and personnel expenses, material, selling and administrative expenses, manufacturing expenses and personnel expenses are positive.

There is no multicollinearity between explanatory factors. The autocorrelation co-efficient exists and negative further insignificant.

Analysis shows that in PARRY, there is significant increase in cost of sales except in the year 2003. The contribution of manufacturing expenses towards cost of sales is significant. The correlation between cost of sales and personnel expenses, cost of sales and selling and administrative expenses, maternal and personnel expenses, and personnel expenses and selling and administrative expenses are positive.

In the case of PARRY, the mean share capital is only 3.14, whereas in the case of MFL, it is 13.81 per cent. In SPIC the mean share capital is 4.06 per cent of total liabilities. MFL has more capital than required during the study period. In the case of reserves and surplus, the mean percent is 33.61 for PARRY, 23.08 for SPIC and (-) for MFL. This shows that SPIC and PARRY are in an advantages position than MFL during the study period. The percentage of secured loans is maximum in SPIC and minimum in PARRY. Similarly, the percentage of unsecured loans is maximum in MFL and is minimum in PARRY. The current liabilities are more in MFL than SPIC and PARRY.

In respect of assets, the mean percentage of fixed assets is 41.97 in PARRY, 41.25 in MFL and 36.21 in SPIC. Investments percentage is more in
PARRY and least in MFL. Current assets to total assets percentage is 55.51 in SPIC, 46.25 in MFL and 49.12 in PARRY. This shows that the value of PARRY seems to be higher than that of other firms during the study period.

The net sales to working capital ratio in MFL is 1993-94 is 2.49; in 1998 it is 15.56 and in 2002-03 it is 8.47. These are high fluctuation in the ratio during the study period. In SPIC, net sales to working capital ratio ranges between 1.18 and 2.77. The fluctuations are somewhat less in this company. In PARRY, net sales of working capital ratio ranges between 4.10 and 9.06. The fluctuations are somewhat higher compared to SPIC.

The mean net sales to working capital ratio in MFL is 7.21; in SPIC it is 1.82 and in PARRY it is 5.65. This shows that this ratio is least in SPIC and highest in MFL. The standard deviation and co-efficient of variation of Net sales to working capital ratio is more in MFL; then comes PARRY and the third one is SPIC. It can be said that SPIC and PARRY maintains reasonable net sales to working capital ratio during the study period. This may be due to existing standardised management practices.

The current ratio in MFL ranges between 1.08 and 2.16 during the study period. In SPIC the current ratio ranges between 2.54 and 3.92 during the study period. In PARRY the current ratio ranges between 1.38 and 2.37 during the study period. The mean current ratio in MFL is 1.47; in SPIC it is 3.25 and in PARRY it is 1.86. SPIC is having more liquidity than MFL and PARRY. However PARRY is also having liquidity in the organization. It can be said that
the presence of more liquid assets in SPIC has created higher liquidity ratio. MFL has to manage current liabilities in a more specific manner.

The quick ratio in MFL fluctuates in this company. In SPIC, the quick ratio ranges between 1.90 and 3.41 in this company. In PARRY, quick ratio ranges between 0.67 and 1.27 during the study period. The mean quick ratio in MFL is 0.78; in SPIC it is 2.60 and in PARRY it is 0.96. This shows that mean quick ratio in all the selected companies are less than 1. This may be due to fluctuations in current assets over a period of time. However quick ratio is 0.96 in PARRY which is nearest to 1.

The standard deviation of quick ratio in MFL is 0.15; in SPIC it is 0.52 and in PARRY it is 0.20. This shows that standard deviation is more in SPIC than in other companies for quick ratio. The co-efficient of variation in quick ratio is highest in PARRY that is 20.64 per cent and least in MFL that is 18.90 per cent. The co-efficient of variation is 20.06 in SPIC during the study period. This may be due to fluctuation in current assets in the companies during the study period. Prudent working capital management measures are needed for the selected companies.

The ratio of total fixed assets to long term funds has consistent increase in MFL. There is fluctuation in this ratio in SPIC during the study period. It ranges between 0.25 and 0.52 during the study period. There are fluctuations in this ratio during the study period PARRY.
Mean fixed assets to total long term funds in MFL is 0.72; in SPIC it is 0.44 and in PARRY it is 0.38. The mean ratio is least in PARRY and highest in MFL and least in PARRY. The co-efficient of variation in this ratio is higher in MFL and least in SPIC. The variations in this ratio may be due to added work-in-progress in the companies and modified depreciation aspects in the company. Further, it may also due to high fluctuation in debts in the sample units.

In MFL the ratio of external funds to internal equity is highly fluctuating and even negative ratio is seen. This shows the internal weaknesses in the company. In SPIC, fluctuations are seen in this ratio during the study period. The mean ratio in MFL is 6.27; in SPIC it is 22.82 and in PARRY it is 1.76. This shows that there is significant change in this ratio in SPIC than other companies. Standard deviation and co-efficient for variation are very high in SPIC than MFL and PARRY. Standard deviation and co-efficient of variations are least in PARRY. This shows that fund management practices are more or less consistent in PARRY than in SPIC and MFL. Both MFL and SPIC have to modify their fund management to achieve better results in future.

In MFL total tangible assets to proprietors’ funds in 1993-94 is 0.36; in 1997-98 it is 0.26 and in 2002-03 it is (-0.15. The fluctuations are high and even negative ratios are noticed in MFL. The ratio is consistent to certain level in SPIC except in 2003. In PARRY, the ratio ranges between 0.45 and 3.08 during the study period. Standard deviation is 0.21 in MFL; 0.13 in SPIC and
0.81 in PARRY. The highest variation in MFL may be due to changes in proprietor funds or accumulated losses. This needs immediate correlation in that unit.

In MFL proprietors' fund to operating profit ratio in 1993-94 is 4.91; in 1997-98 it is 1.14 and in 2002-03 it is 2.47. There is high fluctuation in the ratio during the study period. In SPIC the ratio in 1993-94 is 12.10; in 1997-98 is 9.68 and in 2002-03 is (-) 7.58. This shows high fluctuations in the ratio during the study period. Even negative figures are noted in SPIC. In PARRY the ratio in 1993-94 is 17.19; in 1997-98 is 9.88 and in 2002-03 is 10.13. There are fluctuations but growth in this ratio is noticed during the study period.

The mean operating profit ratio is high in PARRY and this shows that there is proprietor in PARRY than in other companies. The standard deviation is high in MFL and SPIC than PARRY. The co-efficient of variation is least in PARRY. This shows the consistency in earning in PARRY than in other companies. This may be due to the high fluctuation in profit in MFL and SPIC during the study period.

In MFL, there are high fluctuations in net operating ratio during the study period. In SPIC, high fluctuations are noted in this ratio during the study period. In PARRY there are some fluctuations in the ratio during the study period. The mean ratio in MFL is 1.04; in SPIC it is 1.02 and in PARRY it is 4.01. This shows that there is high profit in PARRY than other companies during the study period.
Standard deviation and co-efficient of variation in operating ratio are high in MFL and SPIC to that of PARRY. This may be due to losses incurred in MFL during the study period; Losses in SPIC in the last two years of study period and Consistent profit earning of PARRY during the study period.

In MFL the ratio of net profit after interest and tax to share holders funds in 1993-94 is (-)51.81; in 1997-98 is (-)28.90 and in 2002-03 is (-)41.98. This shows that there are high fluctuations and periodical losses in MFL during the study period. In SPIC, the ratio in 1993-94 is 9.64 in 1997-98 is 8.59 and in 2002-03 is (-)3636.92. This shows that huge loss is incurred in SPIC during the year 2002-03. This may be due to some sudden changes in managing the finance in the company. In PARRY the ratio of net profit after interest and tax to share holders’ funds in 1993-94 is 16.06; in 1997-98 is 10.52; and in 2002-03 is 6.90. There are fluctuations in the ratio during the study period. A slight decline is noted in this ratio in this company.

Mean of net profit after interest and tax to share holders’ funds ratio in MFL is -2.57; in SPIC it is -360.12 and PARRY it is 9.93. This shows that the ratio is not in favour of MFL and SPIC. Huge losses are noticed in SPIC as well as in MFL. In the case of PARRY, there is consistent profit. Very high standard deviation is noted in these two companies. In PARRY the standard deviation is 3.75. Co-efficient variation is very high in MFL and SPIC, and they are also negative. In the case of PARRY it is 37.80. This may be due to
the fluctuating profits earned by PARRY. The negatives are due to losses sustained by MFL and SPIC.

Net profit after interest and tax to total assets ratio in MFL is highly fluctuating and negative ratios are shown in MFL during the study period. There are fluctuations in the ratio in SPIC and even negative ratios are seen during the study period. There is a declining trend in this ratio in PARRY during the study period.

The mean net profit after interest and tax to total assets ratio is negative in the case of MFL and SPIC. However, the mean ratio in PARRY is positive and is 5.75 during the study period. The standard deviation in MFL is 7.39; in SPIC it is 6.90 and in PARRY it is 2.27. However the co-efficient of variation is negative in the case of MFL and SPIC. Co-efficient of variation is 39.43 per cent in PARRY. The negative ratios may be due to the increasing losses in MFL and SPIC. SPIC seems to have incurred heavy expenditure in 2003 and hence, the ratio is negative.

The mean EPS in MFL is Rs.(−)1.17; in SPIC it is Rs.-2.07 and in PARRY it is Rs.14.45. This shows that PARRY has earned profits in the study period and other two companies have incurred losses. The co-efficient of variation is highest in MFL and is least in PARRY. This is due to more fluctuation losses in MFL and SPIC. The ratio is less in PARRY due to its consistent profits earned.
In MFL the ratio of gross profit to net sales ranges between -3.44 to 14.84 during the study period. In SPIC, there are fluctuations in the ratio during the study period. In PARRY the ratio is positive in all the years. It fluctuates between 6.83 and 14.49. This shows that the gross profit is consistently earned in the company during the study period.

The mean gross profit to net sales ratio in MFL is 6.61; in SPIC it is 8.07 and in PARRY it is 10.19. The standard deviation and co-efficient of variation are more in MFL and SPIC than in PARRY. This shows that PARRY has consistent profits where as the other companies are not doing so during the study period.

In MFL the ratio of net profit to net sales is highly fluctuating between -12.27 and +3.19. In SPIC, there are very high fluctuations in the ratio. In PARRY the ratio in 1993-94 is 3.38; in 1997-98 is 4.18 and in 2002-03 is 2.00. This shows that the ratio is positive in all the years and shows the profitability of the firm. PARRY also has consistent profits during the study period. The standard deviation and co-efficient of variation are higher in MFL and SPIC than in PARRY. This may be due to higher profitability in PARRY than in MFL and SPIC during the study period. Further the restructuring measures in SPIC have also resulted in significant changes in SPIC financial structure.

The financial charge interest ratio in MFL has significantly increased in 2002. Interest coverage may have affected profitability in 2001-02 in MFL. In SPIC, there is significant drop in interest ratio during the study period. This
may be due to falling interest rates in the environment. In PARRY the ratio is positive in all the years during the study period. The standard deviation is more in PARRY and less in MFL and SPIC. This is due to negative figures in MFL and SPIC. The co-efficient of variation is higher in MFL and SPIC than in PARRY. This may be due to the loss incurred by MFL and SPIC in the previous years. However, the ratio is favourable for PARRY as there are continuous profits in the company.

The ratio of net operating profit to sales in MFL is between -0.03 and 0.14 during the study period. In SPIC the ratio in 1993-94 is 0.11; in 1997-98 it is 0.12; and in 2002-03 it is 0.03. In PARRY the ratio in 1993-94 is 0.05; in 1997-98 it is 0.09 and in 2002-03 it is 0.06. The mean ratio in MFL is 0.08; in SPIC it is 0.09 and in PARRY it is 0.08. The standard deviation and co-efficient of variation are higher in MFL and SPIC than PARRY. The co-efficient of variation is least in PARRY, that is 39.42 per cent during the study period. This shows that there is some consistency in earning net operating profit in PARRY than in other two companies.

The ratio of sales to capital employed in MFL is between 0.59 and 1.87. There is significant increase in this ratio during the study period. In SPIC, the ratio ranges between 0.55 and 1.22 during the study period. However, a steep decline is noticed in this ratio in SPIC. In PARRY the ratio ranges between 0.43 and 1.96. High fluctuations are noticed in this ratio during the study period. The standard deviation and co-efficient of variation are higher in
PARRY than in MFL and SPIC. This may be due to fluctuation in sales in PARRY than that of other companies during the study period.

The ratio of fixed assets to turnover ratio in MFL fluctuates between 0.26 and 1.47 during the study period. In SPIC the ratio oscillates between 0.63 and 1.51 during the study period. In PARRY the ratio fluctuates between 0.28 and 0.64 during the study period.

Mean fixed assets to turnover ratio in MFL is 0.61; in SPIC it is 1.00 and in PARRY it is 0.53. This shows that relative turnover is less in SPIC than that of MFL and PARRY. The standard deviation and co-efficient of variation are less in PARRY than in MFL and SPIC. This may be due to high fluctuating turnover in MFL and SPIC than in PARRY during the study period.

A null hypothesis is framed as, there is no variation in fixed assets to turnover ratio among the selected companies. One way ANOVA shows the mean fixed assets to turnover ratio differs significantly among the selected companies at 5 per cent level; the hypothesis is rejected. The mean fixed assets to turnover ratio of MFL-SPIC and SPIC-PARRY is significantly differing and MFL-PARRY combination is not significant.

In MFL the materials to operating income ratio ranges between 0.53 and 0.82 during the study period. In SPIC the ratio ranges between 0.56 and -.92 their shows that the share of material expenses is higher in operating income. In PARRY the ratio ranges between 0.58 and 0.88 during the study period.
The mean materials to operating Income ratio in MFL is 0.63 in SPIC it is 0.66 and in PARRY it is 0.67. This shows that the cost of materials seems to be higher in ratio than that of MFL and SPIC. The standard deviation and co-efficient of variation are less in PARRY than in SPIC. This may be done to fluctuating material cost in MFL and SPIC than in PARRY during this study period compared to that of operating income.

In MFL the ratio of manufacturing expenses to operating income has significantly increased in MFL. This shows that manufacturing expenses have significantly increased in MFL during the study period. In SPIC the ratio fluctuates between 0.12 and 0.59 during the study period. Their shows that the ratio has high fluctuations. In PARRY the ratio has significant decrease during the study period.

The mean ratio of manufacturing expenses to operating income in MFL is 0.14 in SPIC it is 0.28 and in PARRY it is 0.08. The standard deviation is less in PARRY. But co-efficient of variation is less in MFL. This may be due to the controlled manufacturing expenses in PARRY. It is also to be noted their mean ratio is least in PARRY and then comes MFL.

The ratio of operating income to personnel expenses in MFL in 1993-94 is 0.04; in 1997-98 is 0.05; and in 2002-03 is 0.04. The ratio in SPIC in 1993-94 is 0.11; 1997-98 is 0.05; and in 2002-03 is 0.06. The ratio ranges between 0.04 and 0.11 during the study period. In PARRY the ratio in 1993-94 is 0.04 in 1997-98 is 0.04; and in 2002-03 is 0.05. The ratio is highly
consistent in PARRY. The mean ratio in MFL is 0.04; in SPIC it is 0.06 and in PARRY it is 0.05. The ratio is lower in MFL and higher in SPIC. The standard deviation is least in PARRY and is higher in SPIC; the co-efficient of variation in PARRY is 7.59 per cent; in MFL it is 22.26 per cent; and in SPIC it is 32.82 percent. This may be due to the controlled personnel expenditure in MFL and controlled expenditure in PARRY for personnel.

The ratio of operating income to cost of sales in MFL ranges between 0.86 and 1.63 during the study period. In SPIC the ratio in 1993-94 is 0.97; in 1997-98 is 0.97; and in 2002-03 is 0.97. The ratio ranges between 0.77 and 0.99 during the study period. In PARRY the ratio in 1993-94 is 0.81; in 1997-98 is 0.78; and in 2003 is 0.90. The ratio oscillates between 0.78 and 1.07.

The mean operating income to cost of sales ratio in MFL is 1.20; in SPIC it is 0.94 and in PARRY it is 0.86. This shows that operating probability is higher in PARRY than in MFL and SPIC during the study period. The standard deviation and co-efficient of variation are least in SPIC than in MFL and PARRY. The lower ratio in PARRY may be due to the operating efficiency of PARRY during the study period in selected areas.
DISCRIMINANT ANALYSIS RESULTS

For MFL

1. The standardised beta value of proprietor's fund to operating profit ratio shows significant high contribution to the gross profit ratio followed by a negative contribution made by sales to capital employed and materials to operating income ratio.

2. The standardised beta value of earning per share shows significant high contribution to the net profit ratio followed by manufacturing expenses to operating profit ratio and also the quick ratio made negative contribution.

3. The standardised beta value of proprietors' funds to operating profit ratio shows significant high contribution to the net operating profit before interest and tax to total capital employed ratio followed by a negative contribution made by the quick ratio.

4. The standardised beta value of proprietors' funds to operating profit ratio shows significant high contribution to the net profit after interest and tax to share holders fund ratio.

5. The standardised beta value of earning per share shows significant high contribution to the net profit after interest and tax to total assets ratio followed by the quick ratio.
6. The standardised beta value of earning per share shows significant high contribution to the net operating profit to sales ratio followed by the operating income to cost of sales ratio.

7. The number of efficient years comes to 5 and the index score for that years was 6.26 which is greater than the low efficiency index and the mean efficiency index for both levels significantly differ.

8. The Wilk’s test of significance for the group means of various financial ratios based on the level of efficiency shows that, the calculated value of Wilk’s Lambda (0.327) is nearly close to zero which reveals that the discrimination between various financial ratios based on the level of efficiency is a better one. Although the discrimination is better, chi-square test shows that the group means of the ratio does not significantly differs at 5 per cent level.

9. In the future years, the level of efficiency of MFL can be discriminated by the quick ratio, fixed assets to long term funds ratio and proprietors fund to total tangible assets ratio.

For SPIC

1. The standardised beta value of proprietor's fund to operating profit ratio shows significant high contribution to the gross profit ratio followed by
earning per share and a negative contribution made by sales to capital employed.

2. The standardised beta value of earning per share shows significant high contribution to the net profit ratio followed by proprietors’ fund to operating profit ratio.

3. The standardised beta value of proprietors’ funds to operating profit ratio shows significant high contribution to the net operating profit before interest and tax to total capital employed ratio followed by manufacturing expenses to operating income ratio and a negative contribution made by the quick ratio.

4. The standardised beta value of proprietors’ funds to operating profit ratio shows significant high contribution to the net profit after interest and tax to share holders fund ratio, earning per share, fixed assets to long term funds, proprietors’ fund to total tangible assets, debt equity ratio.

5. The standardised beta value of proprietors’ funds to operating profit ratio shows significant high contribution to the net profit after interest and tax to total assets ratio.

6. The standardised beta value of earning per share shows significant high contribution to the net operating profit to sales ratio followed by debt equity ratio and operating income to cost of sales ratio.
7. The standardised beta value of earning per share shows significant high contribution to the net profit before interest and tax to interest charges ratio followed by manufacturing expenses to operating income, operating income to personnel expenses ratio, quick ratio.

8. The number of efficient years comes to 9 and the index score for that years was 3.1508 which is greater than the low efficiency index and the mean efficiency index for both levels significantly differs.

9. The Wilk’s test of significance for the group means of various financial ratios based on the level of efficiency shows that, the calculated value of Wilk’s Lambda (0.00) is zero which reveals that the discrimination between various financial ratios based on the level of efficiency is a excellent one. The chi-square test shows that the group means of the ratio significantly differs at 1 per cent level.

10. In the future years, the level of efficiency of SPIC can be discriminated by the debt equity ratio, proprietors’ fund to total tangible assets, sales to capital employed and proprietors’ fund to operating profit ratio.
For PARRY

1. The standardised beta value of proprietors’ fund to tangible assets ratio shows significant high contribution to the gross profit ratio followed by a negative contribution made by the materials to operating income ratio.

2. The standardised beta value of quick ratio shows significant high contribution to the net profit ratio followed by the operating income to cost of sales ratio.

3. The standardised beta value of proprietors’ funds to operating profit ratio shows significant high contribution to the net operating profit before interest and tax to total capital employed ratio followed by the manufacturing expenses to operating income ratio.

4. The standardised beta value of proprietors’ funds to operating profit ratio shows significant high contribution to the net profit after interest and tax to share holders fund ratio followed by a negative contribution made by the earning per share and net sales to working capital ratio.

5. The standardised beta value of quick ratio shows significant high contribution to the net profit after interest and tax to total assets ratio followed by a negative contribution made by the fixed assets to turnover ratio.

6. The standardised beta value of materials to operating income ratio shows significant negative contribution to the net operating profit to sales ratio.
7. The standardised beta value of earning per share shows significant negative contribution to the net profit before interest and tax to interest charges ratio.

8. The number of efficient years comes to 4 and the index score for that years was 6.3136 which is greater than the low efficiency index and the mean efficiency index for both levels significantly differs.

9. The Wilk’s test of significance for the group means of various financial ratios based on the level of efficiency shows that, the calculated value of Wilk’s Lambda (0.016) is close to zero which reveals that the discrimination between various financial ratios based on the level of efficiency is a better one. The Chi-square test shows that the group means of the ratio significantly differs at 5 per cent level.

In the future years, the level of efficiency of PARRY can be discriminated by the proprietors’ fund to total tangible assets, fixed assets to long term funs ratio and net sales to working capital ratio.

**SUGGESTIONS**

Among the selected units for the study the financial position of PARRY is found to be better than other units. Its share capital position is strong. As the firm is able to generate more gross income, it could earn more reserves and surplus. In other words, this unit should either reduce the operating expenses or the interest burden.
Similarly, its current financial position is sound which adds more strength to financial position of the firm. As the control on operating expenses and other items helped to maintain the financial position of the firm, the existing position can be improved by concentrating more on the same.

The SPIC, another unit included in the study is showing some what better performance. However, the share capital, reserves and surplus and current assets, require improvement. In other words, the financial position can be strengthened by reducing the employment of borrowed capital, which would ultimately reduce the interest burden. More over, effective utilisation of fixed assets may ensure the generation of more income.

Finally, the financial position of MFL is serious and its present financial position is alarming. If steps are not taken to reduce the use of outsiders' funds and current liability, the company may collapse. Immediate measures should be taken by the Government to redeem the MFL from the financial crisis.

In overall, the fertiliser companies in Tamil Nadu area may be improved by pumping more fund into the operation by the Government or from the public which result in reducing the burden of the company.

Similarly, the existing fixed assets should be used to a maximum extent possible in order to generate more income and profit to the firm. Instead of going to new projects, the company should concentrate on the economical use of the existing plant capacity. By concentrating on long term permanent
capital, these units can reduce their dependence on short term current liability which take away most of the income of the firm. This may boost the profit position of the firms.

The fertiliser industry should focus on joint venture projects for easy and cheap availability of feedstock.

In the liberalised environment, economies of scale and productivity likely have become very important. Consolidation of fertiliser companies has to be done through acquisitions and mergers.

Finally, the government has to take necessary relief measure for the purpose of strengthening the financial position of the fertiliser companies.

CONCLUSION

In India, a free economy is not workable in fertilisers with varying investments, varying technology, diverse vintage, different patterns of financing, differing feedstock and input prices, location of manufacturers, consuming areas, freight factors and impossibility of avoiding exploitation of the farmers. The fertiliser industry including the older plants would have to necessarily adapt themselves to recent developments such as computerized automation technology which not only facilitates convenience of operation but also greatly helps in terms of production efficiency, quality control, safety and environmental standards. It is essential that all old generation units resort to this modernization by ploughing back a part of their financial resources. A
national policy should be developed for the fertilizer industry keeping the basic objectives in mind in terms of increased agricultural productivity as well as sound financial structure. Huge investments are to be attracted from private sector, and thereby self-reliance should be ensured in this field. Government has to provide suitable opportunities to reconstruct fertiliser industry so that this agro-oriented industry does not suffer due to inadequate profits and earnings. Financial leverage or Trading on equity and other related tools are to be used effectively for increasing the return to equity shareholders. Capital budgeting appraisal methods such as, pay-back period, average rate of return, internal rate of return, net present value and profitability index are to be prudently used by the firms to increase the return to equity shareholders to certain extent. Corrective actions in financial management aspects are also to be considered by the firms in the industry, otherwise, they may have to leave the field within a short span. If suitable and adjustable measures are taken, the industry will grow to its dizzy heights and contribute positively in the building up of Indian nation, the torchbearer in this field to the entire world.