CHAPTER – VII

IMPACT OF CAPITAL STRUCTURE DECISIONS ON CORPORATE PERFORMANCE OF SELECT CPSEs: AN ANALYSIS

The subject of corporate performance has received significant attention from scholars in the various areas of business and strategic management. It has also been the primary concern of business practitioners (managers and entrepreneurs) in all types of organizations since corporate performance has implications to organization’s health and ultimately its survival. High performance reflects management effectiveness and efficiency in making use of company’s resources and this in turn contributes to the country’s economy at large.

Performance is a difficult concept, in terms of both definition and measurement. It has been defined as the result of activity, and the appropriate measure selected to assess corporate performance is considered to depend on the type of organization to be evaluated, and the objectives to be achieved through that evaluation (Hunger and Wheelen, 1997).

International Standard Organization (ISO) registration appeared to be the most significant determinant of corporate performance and in addition that ROA, EVA, ROS and Inventory are the most significant variables affecting ISO (Kamal Naser and Mohd Zulkifli Mokhtar 2004). (Weiner and Mahoney, 1981) indicated that numerous measures of corporate performance could be used as dependent variables. However, more important than a specific measure chosen is the use of multiple measures, because different criteria of performance are likely to be differentially affected by the various independent variables (Lieberson and O’Connor, 1972).

Different methods, however, have been employed in the literature to measure corporate performance (a summary of corporate performance model is offered in Diagram 1) Researchers in the U.S. focus on a balanced scorecard (Kaplan and Norton, 1992; Sim and Koh, 2001; Light, 1998) and return on assets (ROA). (Corbett et al., 2002) used ROA found that after ISO 9000 certification, companies tended to report abnormal improvements in ROA and more importantly, these improvements were found to be lasting. UK researchers adopted instruments such cash flow, working capital and added value (Kay and Davis, 1990; Burton, 1994; Pat, 1995).
(Bhimani, 1993) for instance investigated 21 companies to provide an overall picture of performance measurement in the UK manufacturing sector. Among the financial measures used were working capital, capital market, financial returns and lender security. In Europe, the focus was on return on assets, return on investment, economic value added and lender security (Heras et al., 2002; Haversjo, 2000; De With, 1996). Similarly, research in New Zealand focuses on cash flow and economic value added (Perkins and Van Zyl, 1994). As for Return on Sales (ROS), (Kay and Davis’s, 1990) study of the top European company performers, found that Glaxo generates the highest return, followed by RTZ, LVMH, BT, Guinness, Kymmene and Philip Morris. (Kearney, 2001) also used ROS as a performance measure to assess the best performing manufacturing companies globally. Three measures of profitability are used in this study: Return on Investment (ROI) and ROE and ROS. Return on Investment is the most commonly used measure of the profitability of corporate performance (Hunger and Wheelen, 1997; Douglas and Craig, 1983; Buzzell and Gale, 1987).

Besides profitability measures, performance measures were used in this study where, (Perkins and Van Zyl, 1994; Pat, 1995; and Stewart, 2002) adopts Economic Value Added (EVA) measurement, as one of the latest and most widely used measures, to assess the financial well being of businesses. Another additional performance measure, Tobin’s Q (TQ) is also being used by (Corbett et al., 2002). Tobin’s Q is the market value of a firm’s equity plus its debt, divided by the book value of its total assets. Marcus (1969) study on the profitability (ratio of net profits before tax plus interest payment to total assets) and size of firm, found that size of firm influences profitability in some, but not in all, manufacturing industries; Grinyer et. al (1980), used Size, ROI, growth in sales and technology as the measures of performance, among their findings are; size of company is positively correlated with degree of diversification and divisionalization of companies; ROI and growth are positively correlated with diversification and ROI and growth are greater for divisionally structured companies.

Lewis and Thomas (1990) studied on the linkage between strategic groups and performance in U.K. retail grocery industry used Size, Return on Sales (ROS), Return on Capital Employed (ROCE) and Price/Earnings Ratio(PER) as their performance variables.
Firm size is based on total assets, firm growth rate is based on annual average compounded growth rate in sales, concentration ratio and technology rates were used as causal factors were measured against financial variables which include return on net worth, fixed asset turnover, total debts/total assets, current ratio and total asset turnover. Gupta (1969). Among the findings were, activity ratios and leverage ratios decrease with an increase in the size of the firm, but they increase with the growth of the firm. Liquidity ratio rise with an increase in the size of the firm but they fall with the growth rates. The larger-sized firms tend to have higher profits margin on sales than the smaller-sized firms. Firm size as a performance measure is most often interpreted as a source of organizational costs (Shepherd, 1972), or X-inefficiencies (Liebenstein, 1976). From a strategy perspective, firm size also may be an indicator of diversification, which by and large has been found to affect performance negatively (Rumelt, 1982; Porter, 1987; Wernerfelt and Montgomery, 1988).

A. Prasetyantoko and Rachmadi Parmono (2008) firm size is positively related to firm profitability, but it is not related to market capitalization and ownership factor matters on firm performance by the evidence that firms with majority foreign ownership have much higher performance in both measurements namely return on asset (ROA) and market capitalization growth than domestically-owned firms. Ordinary Least Square (OLS) is employed for the estimation procedure. Inflation is negatively related to firm performance, whereas capital market development has different impact for profitability and market capitalization growth. Consistent with most theoretical prediction, inflation undermines firm performance and interest rate is positively related to firm performance. Capital market development decreases with firm profitability, but it increases with market capitalization growth.

Kakani and Kaul (2001) identified that firm size, marketing expenditure, and international exposure had a positive relation with its shareholder values. Meanwhile Wu (2006) determined that firm size affects on firm performance. Liu (2004) demonstrate the determinants of UK corporate failures by modeling the short-run and long-run behaviors of corporate failure rates in relation to macroeconomic phenomena and finds that failure rates are associated with interest rates, credit, profits, price, and corporate birth rates both in the short run and in the long run.

But there is no single factor is explaining firm success and failure. Many studies also show that higher debt ratio means higher risk to bankrupt and therefore debt should be
an important factor affecting firm value. This study is intended to know what factors determining corporate performance in Selected Central Public Sector Enterprises (CPSEs) in India.

A stepwise regression analysis has been used to estimate the coefficients and the direction of relationships between the dependent and the independent variables in this study and has been explained in the following section.

**VARIABLES**

1) 365 days average market capitalization
2) Profit After Tax (PAT)
3) Price/Earnings Ratio (PE ratio)
4) Return on Equity (ROE)
5) Return on Assets (ROA)
6) Return on Capital Employed (ROCE)
7) Return on Networth (RONW)

I) Capital Structure impact on Corporate Performance of selected overall CPEs

A) 365 days average market capitalization:

From the Table-7.1, the data makes it clear that the mean value of 365 days average market capitalization of overall sample firms was 20461 in the year 1990-1991 and it was 20425 in the year 1991-1992. It was constant and continued for entire study period. In the years 2007-2008, 2008-2009 and 2009-2010 it was 20587, 20588 and 20520 respectively.

The median value of 365 days average market capitalization of overall sample firms was 11309 in the year 1990-1991 and 11323 in the year 1991-1992. It was constant for the entire study period. It was 11550, 11563, and 11576 in the years 2007-2008, 2008-2009 and 2009-2010 respectively.

From the year 2001-2002 to the year 2006-2007 it was 1591. It was 1593 from the year 1993-1994 to 1997-1998; in the years 2007-2008 and 2008-2009 it was 1590 further, it was 1589 in the last year of the study period.

The Q3 value of 365 days average market capitalization of overall sample firms was 41605 and 46635 in the years 1990-1991 and 1991-92. It was evident that with slight increases it reached to 42020, 42044, 42063, 42077, and 42092 in the years 2005-2006, 2006-2007, 2008-2009, and 2009-2010 respectively. (Value in the table is Rs. in Cr.)

**B) Profit After Tax:**

The Table-7.2 revealed that the mean value of profit after tax of overall sample firms was 92.41 in year 1990-1991 and 125.1 in the year 1991-1992. It was gradually increased to 1721 in the year 2009-2010, except in there years 2001-2002 and 2008-2009 with 483.2 and 1441 respectively.

The median of profit after tax of overall sample firms was 52.7 in the year 1990-1991 and 67.9 in the year 1991-1992. It was increased to 107 in the year 1994-1995. It decreased to 53.6 in the year 1998-1999. And it reached to 109 in the year 2000-2001 and in year 2001-2002 it was 40.6. It was 172 during the year 2002-2003 and increased to 587 in the year 2006-2007. In the years 2008 - 2009 and 2009 - 2010 it was 269 and 377 respectively.

Q1 value of profit after tax of overall sample firms was 14.3 in the year 1990-1991 and 23.7 in the year 1991-1992. It gradually decreased to 0.71 during the year 1997-1998 and the years 1998-1999, 2000-2001 and 2001-2002 it was negative. It was 6.3 in the year 2003-2004 and increased to 54.3 in the year 2006-2007. In the years 2007-2008, 2008-2009, and 2009-2010 it was 45.6, 40.9 and 47.9 respectively.

Q3 value of profit after tax of overall sample firms was 67.57 in the 1990-1991 and 122.6 in the year 1991-1992. It was gradually increased to 2014 during the year 2009-2010, except in the years 1997-1998, 1998-1999 and 2008-09. It was declined to 212.4, 115 and 1272 respectively. (Value in the table is in Rs.)
C) Price/Earnings ratio:

The Table-7.3 revealed that the mean value of price/Earnings ratio of overall sample firms was 37.5 during the year 1990-1991 and it was 36.7 in the year 1991-1992 and with slight up and downs it was finally 37.2 during the year 2009-2010.

The median value of price/Earnings ratio of overall sample firms was 27.34 and 27.52 in the years and 1990-1991 and 1991-1992 respectively, with slight changes it was 26.48 and 26.91 in the years 2008-09 and 09-2010 respectively.

Q1 value of price/Earnings ratio of overall sample firms was 12.91, 13.02 and 12.77 in the years 1990-1991, 1991-1992 and 1992-1993 respectively. It was slight changes reached 12.75 and 12.83 in the years 2008-2009 and 2009-2010 respectively.

The Q3 value of price/Earnings ratio of overall sample firms was 32.07, 31.88 and 30.53 in the years 1990-1991, 1991-1992 and 1992-1993 respectively. With slight up and downs it was declined to 24.46 in the year 2008-2009 and finally it was reached to 28.01 in the year 2009-2010.

D) Return On Equity:

Table-7.4 the data revels that the mean value of return on equity of overall sample firms was 23.1, 30.2, 29 and 29.1 in the years 1990-1991, 1991-1992, 1992-1993, and 1993-1994 respectively. It was 19.3 in the year 1994-1995 and it was gradually increased to 80.9 in during the year 2008-09. Finally it was 78.3 in the year 2009-2010.

The median value of return on equity of overall sample firms was 9.08 in the year 1990-1991 and decreased to 5.4 in the year 1993-1994. Again it was increased to 11.07 in the year 1995-1996. In the years 1998-99 and 99-00 it was 7.89 and 8.34 respectively. In the year 2001-02 it was 12.37 and gradually increased to 24.64 in the year 2008-2009 and in the year 2009-2010 it was 22.95.


The Q3 value of return on equity of overall sample firms was 18.57 during the year 1990-1991 and it was 24.49, 27.53, 26.76 and 23.58 in the years 1991-1992, 1992-1993, 1993-1994 and 1994-1995 respectively. It was 20.57 in 1997-1998 and it was gradually increased to 90.07 during the year 2009-2010.

**E) Return On Assets:**

From the Table-7.5 it was evident that the mean value of return on assets of overall sample firms was 0.069 in the year 1990-1991 and from the year 1991-1992 to 1994-1995 it was negative. It was 1.016 in the year 1995-1996 and it gradually decreased to 0.04 and 0.038 in the years 2008-2009 and 2009-2010 respectively but except in the years 2002-2003 with 0.92 and 2007-2008 with 0.19.


Q1 value of return on assets of overall sample firms was 0.018 in the year 1990-1991 and it was 0.021 in the year 1991-1992 and 1992-1993. Gradually it was decreased to very low level 0.002 in the years 1997-1998 and 1998-1999. It was negative in the years 2000-2001, 2001-2002 and 2002-2003. It was 0.011 in the year 2003-2004. It was 0.032 in 2006-2007 and 0.025 in the year 2009-2010.

Q3 value of return on assets of overall sample firms was 0.064 in the year 1990-1991, gradually it was increased to 0.163 in the year 2002-2003 and again it was decreased to 0.12 0.163 and 0.12 in the year in 2002-2003 and 2007-2008. It was 0.101 and 0.099 in the year 2008-2009 and 2009-2010 respectively.
F) **Return On Capital Employed:**

The Table-7.6 shows that the mean value of return on assets of overall sample firms was 6.91 in the year 1990-1991 and 8.20 in the year 1991-1992. It was decreased to 2.63 in the year 1996-1997 and in the years 1997-1998, 1998-1999, and 1999-2000 it was negative. It was very high in the years 2000-2001 and 2004-2005 with 58.39 and 35.88. The median value was 7.06 in the year 1990-91 and 9.64 in the years 1991-92. Gradually it was decreased to 3.1 in the year 2001-2002 and again it increased to 16.59 in the year 2007-2008. It was 9.89 and 10.13 in the years 2008-2009 and 2009-2010 respectively.

Q1 value of return on assets of overall sample firms was 2.99 during the year 1990-1991 and 4.88 in the year 1991-1992. It was decreased to 0.94 during the year 1996-97 and from the year 1997 to the year 2002-03 it was negative. In the year 2003-2004 it was 0.59 and it was 7.2 in the year 2004-2005. In the year 2006-2007 it was 8.64, in the year 2008-2009 it was 0.32. It was 5.36 in the last year of study period.

Q3 value of return on assets of overall sample firms was 10.81 in the year 1990-1991 and it was 15.9 in the year 2000-2001. It was increased to 24.42 during the year 2004-2005 and in the year 2006-2007 it was 25.12. It was 24.24 in the year 2007-2008 and it was 20.5 and 19.14 in the years 2008-2009 and 2009-2010 respectively. (Value in the table is in Times)

G) **Return on Networth:**

From the Table-7.7 the data shows that the mean value of return on net worth of overall sample firms was 8.84 in the year 1990-1991, it was 3.06, 15.16, and 7.92 in the years 1991-1992, 1992-1993 and 1993-1994 respectively and it was negative from the year 1996-1997 to the year 2003-2004 expect in the year 1997-1998 and 2000-2001 with 12.16 and 9.80 respectively. It was 33.58 in the year 2004-05 and decreased to 3.38 in the year 2008-09. Further, it was 11.25 in the last year of the study period.
The median value return on net worth of overall sample firms was 4.54 in the year 1990-1991 and 13.18 in the year 1991-1992. It was decreased to 5.03 during the year 2001-2002, and it increased to 18.63 in the year 2006-2007. Finally it was 13.18 in the year 2009-2010.

Q1 value return on net worth of overall sample firms was 4.54 in the year 1990-1991 and 0.18 in the year 1991-1992. It was 6.42 in the year 1992-1993 and decreased to 1.37 in the year 1996-97. It was 3.9 in the year 1997-98 and from the year 1998-1999 to 2002-2003 it was negative, except in the year 1999-2000 with 0.14. Again it was increased to 9.55 during the year 2006-2007 and decreased to 0.31 during the year 2008-2009. Finally it was 5.37 in the year 2009-2010.

The Q3 value return on net worth of overall sample firms was 15.1 in the year 1990-1991 and it was 17.8 in the year 1991-1992. It was increased to 23.4 during the year 1997-1998, and it was 29.1 during the year 2004-2005. Further, slight up and downs finally it was 20.8 in the last year of the study period. (Value in the table is in Times)

II) Capital Structure impact on Corporate Performance of selected CPEs in Manufacturing Industry

A) 365 days average market capitalization:

From the Table-7.1 it was evident that the mean value of 365 days average market capitalization of selected firms in manufacturing industry was 20461 in the year 1990-1991 and it was gradually increased to 20590 in the last year 2009-2010 of the study.

The median value of 365 days average market capitalization of selected firms in manufacturing industry was 6801 during the year 1990-1991 and 6807 in the year 1991-1992. It was gradually increased to 7567 and 7581 during the years 2008-2009 and 2009-2010 respectively.

The Q1 value of 365 days average market capitalization of selected firms in manufacturing industry was 1223 in the year 1990-1991 and it gradually decreased to 1199 and 1196 in the years 2008-2009 and 2009-2010 respectively.
The Q3 value of 365 days average market capitalization of selected firms in manufacturing industry was 16681 and 16691 in the years 1990-1991 and it was 1991-1992 respectively gradually increased to 16766 in the years 2005-2006 and 2006-2007. But it was slight declined to 19764, 19761 and 19758 in the years 2007-2008, 2008-2009 and 2009-2010 respectively. (Value in the table is Rs. in Cr.)

B) Profit After Tax:

The Table-7.2 reveals that the mean value of Profit after tax of selected firms in manufacturing industry was 81 in the year 1990-1991 and it was increased to 269 in the 1997-1998. In the years 1998-1999 and 1999-2000 it was 194 and 182 respectively and in the year 2000-2001 and 2001-2002 years it was 258 and 216 respectively. In the year 2002-2003 it was 494 and gradually it was increased to 1311 in the year 2009-2010, expect in 2008-2009 with 769.

The median value of Profit after tax of selected firms in manufacturing industry was 32 in the year 1990-91and it was increased to 90.6 during the year 1997-1998. It was decreased to very low level 10.9 in the year 2002-2003 and in the 2003-204 it was 107. It gradually increased to 283 in the year 2009-2010, except in the year 2008-2009 with 769.


The Q3 value of Profit after tax of selected firms in manufacturing industry was 50.55 in the year 1990-1991 and it increased to 521.4 in the year 1997-1998 except in the year 1994-1995 with 198.4. It was 266.8 in mean 2001-2002 and it increased to 1630 in the year 2006-2007. In the years 2007-2008, 2008-2009 and 2009-2010 it was 1246,737.5 and 1360 respectively. (Value in the table is in Rs.)
C) **Price Earnings ratio:**

From the Table-7.3 it is clear that the mean value of Price Earnings Ratio of selected firms in manufacturing industry was 19.94 in the year 1990-1991. From the year 1991-1992 to the year 1997-1998 it was 19 to 20 except in the years 1994-1995 and 1995-1996 with 18.71 and 18.64 respectively. It was 19.6 from the year 1998-1999 to the year 2007-2008 and it was 17.69 and 17.99 in the years 2008-2009 and 2009-2010 respectively.

The median value Price Earnings Ratio of selected firms in manufacturing industry was 17.23 in the year 1990-1991 and 17.5 in the year 1991-1992. Further, with slight changes it was decreased to 14.37 and 14.74 in the years 2008-2009 and 2009-2010 respectively.

Q1 value Price Earnings Ratio of selected firms in manufacturing industry was 38.37 in the year 1990-1991 and slight up and down it was reached to 28.75 in the year 2008-2009 it was 29.6 in the year 2009-2010.

Q3 value Price Earnings Ratio of selected firms in manufacturing industry was 2.85 in the year 1990-1991 and it was gradually increased to 3.33 in the year 2008-2009 it was 3.16 in the year 2009-2010.

D) **Return On Equity:**

From the Table-7.4 it was evident that the mean value of return on equity of sample firms in manufacturing industry was 32.3 and it was 37.7 in the years 1990-1991 and 1991-1992. It was 40.5 in the year 1993-1994 and it was 21.3 in the year 1994-1995. It gradually increased to 75.3 in the year 2008-2009 and finally, it was 64.2 in the year 2009-2010.

From the table 7.4 the median value return on equity of sample firms in manufacturing industry was 9.08 in the year 1990-1991. In the year 1991-1992 it was 8.98 and increased to 17.4 in the year 1995-1996. Again it was decreased to 6.95 and 6.34 in the years 2000-2001 and 2001-2002 respectively. And it increased to 18.7 during the year 2008-2009. It was 18.5 during the last year of the study period.
Q1 value return on equity of sample firms in manufacturing industry was 1.9 in the year 1990-1991 and gradually it was increased to 8.5, 8.3, and 7.2 in the years 2007-2008, 2008-2009, and 2009-2010 respectively.

Q3 values return on equity of sample firms in manufacturing industry was also low in the year 1990-1991 it was 22.78, and it was 26.27 in the year 1991-1992. It was gradually increased to 72.63 in the year 2006-2007 and in the years 2007-2008, 2008-2009, and 2009-2010 it was 61.73, 67.97, and 69.7 respectively. (Value in the table is. in Times)

E) **Return On Assets:**

From the Table-7.5 the data revealed that the mean value of return on assets of sample firms in manufacturing industry was negative from the year 1990-1991 to 2001-2002 but except in the year 2002-2003. It and decreased to 0.016 in the year 2005-2006. It was 0.267 in the year 2007-2008. In the years 2008-2009 and 2009-2010 it was 0.012 and 0.018 respectively.

The median value of return on assets of sample firms in manufacturing industry was 0.031 in the year 1990-1991 and it was 0.047, 0.048, and 0.026 in the years 1991-1992, 1992-1993, and 1993-1994 respectively. It was 0.029 in the year 1995-1996 and 0.022 in the year 1996-1997. It was 0.107 in the year 1997-1998. It was 0.06 in the year 2004-2005 and increased to 0.058 in the year 2009-2010.

The Q1 value of return on assets of sample firms in manufacturing industry was 0.018 and 0.023 in the years 1990-1991 and 1992-1993 respectively. It was 0.01 and 0.011 in the years 1992-1993 and 1993-1994 respectively. From the year 1994-1995 to the year 2009-2010 it was negative except in the years 1995-1996, 1996-1997, 2004-2005, 2005-2006, and 2007-2008 with 4.04, 0.003, 0.011, 0.01 and 0.012 respectively.

The Q3 value of return on assets of sample firms in manufacturing industry was 0.069 in the year 1990-1991 and 0.059 in the year 1991-1992. Again it decreased to 0.044 with slight changes during the year 2001-2002. It decreased to 0.108 and 0.12 in the
In years 2006-2007 and 2007-2008 respectively. In the years 2008-2009 and 2009-2010 it was 0.076 and 0.097 respectively. (Value in the table is in Times)

**F) Return On Capital Employed:**

The Table-7.6 revealed that the mean value of return on capital employed of selected firms in manufacturing industry was 7.57 and 8.24 in the years 1990-1991 and 1992-1993. It was decreased to 1.36 in the year 1995-1996 and from 1996-1997 to 1999-2000 it was negative. In the years 2006-2007, 2008-2009, and 2009-2010 it was 44.26, 13.74, 1.61 and 12.98 respectively.

The median value of return on capital employed of selected firms in manufacturing industry 7.06 and 10.03 in the years 1990-1991 and 1991-1992 and it was decreased to 0.375 very low level in the year 2000-2001. Future, it was 1.41 in 2001-2002 and increased to 24.66 during the year 2007-2008. It was 9.65 and 18.01 in the years 2008-2009 and 2009-2010 respectively.

The Q1 value of return on capital employed of selected firms in manufacturing industry was 2.62, 4.11, and 0.71 in the years 1990-1991, 1991-1992 and 1992-1993 respectively, from the year 1993-1994 to 2003-2004 and 2008-2009 it was negative, except in the year 1995-1996 with 0.43. In the years 2004-2005, 2005-2006, 2006-2007, and 2007-2008 it was 8.32, 1.88, 8.06, and 4.92 respectively. Finally it was 6.78 in the year 2009-2010.

The Q3 value of return on capital employed of selected firms in manufacturing industry was 11.43 and 10.06 in the years 1990-1991 and 1991-1992 respectively. In the year 1999-2000 it was 11.09 and it was 14.25 in the year 2000-2001. It was increased to 26.04 during the year 2006-2007. In the years 2007-2008, 2008-2009 and 2009-2010, it was 24.008, 19.86 and 19.11 respectively. (Value in the table is in Times)

**G) Return On Networth:**

From Table-7.7 it was visible that the mean value of return on networth of selected firms in manufacturing industry was 8.3, 17.37, 5.90, and 0.94 in the years 1990-


The Q1 value of return on networth of selected firms in manufacturing industry was 4.25, 7.34, 5.22 and 4.67 in the years 1990-91, 91-92, 92-93 and 93-94 respectively. It was negative value from the year 1994-95 to 2009-10, except in the year 1997-1998, 2004-05, 2005-06 and 2007-08 with 0.95, with 9.3, 2.21 and 2.62 respectively.

The Q3 value of return on networth of selected firms in manufacturing industry was 15.77 19.82 and 15.58 in the years 1990-1991, 1991-1992 1992-1993 and 1994-1995. From the year 1994-1995 to the year 2001-2002 it was between 18 to 19 respectively. In the year 2002-2003 it was 26.3 and in the years 2003-2004 with 28.41. In the years 2004-2005, 2005-2006 it was 33.51 and 27.06 respectively and it was decreased to 21.31 during the year 2009-2010. (Value in the table is. in Times)

III) Capital Structure impact on Corporate Performance of selected CPEs in Service Industry

A) 365 days average market capitalization:

From the Table-7.1 it was evident that the mean value of 365 days average market capitalization of selected CPEs in service industry was 24852 and gradually it decreased to 24332 during the year 2008-2009, but in last year of the study period was 24415.
The median value of 365 days average market capitalization of selected CPEs in service industry was 41605 in the year 1990-1991, and it was gradually increased to 42092 during the year 2009-2010.

The Q1 value of 365 days average market capitalization of selected CPEs in service industry was 1822 in the years 1990-1991 and 1991-1992. From the years 2001-2002 to 2007-2008 the value was constant. From the 1998-1999 to the year 2000-2001 and in the year 1992-1993 the value was 1823. From the year 1993-1994 to 1997-1998 it was 1824. In the years 2008-2009 and 2009-2010 it was 1821 and 1820 respectively.

The Q3 value of 365 days average market capitalization of selected CPEs in service industry was 15467 in the year was 1990-1991 and it was gradually increased to 15600 during the year 2009-2010. (Value in the table is Rs. in Cr.)

**B) Profit After Tax:**

The Table-7.2 disclosed that the mean value of profit after tax of selected CPEs in service industry was 42.55 and 63.09 in the years 1990-1991 and 1991-1992 respectively gradually increased to 393.5 in the year 2004-2005, except in the years 2001-2002 and 2002-2003 with 232.5 and 189.6 respectively. Again it reached to 324.7 in the year 2008-2009, finally in the last year it was negative the study period.

The median value of profit after tax of selected CPEs in service industry was 52.68, 25.92, 29.35, and 48.58 in the year 1990-1991, 1991-1992, 1992-1993, and 1993-1994, respectively. It was increased to 294.84 during the year 2007-2008, except in 2001-2002 with 75.48. It was 246.08 and 215.07 in the years 2008-2009 and 2009-2010 respectively.

Q1 value of profit after tax of selected CPEs in service industry was 13.4 in the year 1990-1991 and 16.18 in the year 1991-1992. It was 14.76 in the year 1993-1994 and it was increased to 62.71 in the year 1997-1998. Again it reached to 16.96 in the year 2007-2008. It was 54.41 and 36.53 in the year 2008-2009 and 2009-2010 respectively.

Q3 value of profit after tax of selected CPEs in service industry was 66.6 in the year 1990-1991 and it was increased to 260 in the year 1999-2000. It was 341, 247,

C) **Price/Earnings ratio:**

The Table-7.3 make known that the mean value of price/earnings ratio of selected CPEs in service industry was 82.94 in the year 1990-1991 and 81.72 in the year 1991-1992. It was increased to 128.4 in the year 1998-99 and 127.7 in 1999-2000. Again it deceased to 73.74 and 93.56 in the years 2008-2009 and 2009-2010 respectively.

The median value of price/earnings ratio of selected CPEs in service industry was 29.94, 29.72, 29.04 and 20.14 in the years 1990-1991, 1991-1992, 1992-1993 and 1993-1994 respectively, with slight up and downs it was 27.6, 27.35, and 32.84, in the years 2007-2008, 2008-2009 and 2009-2010 respectively.

Q1 value of price/earnings ratio of selected CPEs in service industry was lies between 2 to 3 from the year 1990-1991 to 1995-1996; it was negative in the year 1996-1997. It was between 13-17 for remaining study period, but except in the years 2003-2004 and 2004-2005 with 9.08 and 9.42 respectively.

Q3 value of price/earnings ratio of selected CPEs in service industry was 29.35 in the year 1990-1991 and 29 in the year 1991-1992. It was 28.35 and 28.01 in the years 1992-1993 and 1993-1994 respectively. It was 27.41, 227.88, and 27.16 in the years 1994-1995, 1995-1996 and 1996-1997 respectively. It was very high in the year 1997-1998 with 279.7 and increased to 325.3 during the year 2000-2001. It was 27.32 in the year 2001-2002 gradually it decreased to 23.97 in the year 2008-2009. Finally it increased 136.3 in the year 2009-2010.

D) **Return On Equity:**

The Table-7.4 reveal that the mean value of return on equity of selected CPEs in service industry was 19.12 in the year 1990-1991 and it was 47.15 in the year 1991-1992. It decreased to 24.05 in the year 1999-2000. Again it was increased to 90.11 in

The median value of return on equity of selected CPEs in service industry was 2.61 in the year 1990-1991 and it was 6.17 in the year in the year 1991-1992. It was gradually increased for entire period and finally it reached to 42.31, and 39.6 in the years 2008-2009 and 2009-2010 respectively.

Q1 value of return on equity of selected CPEs in service industry was 2.17 and 2.53 in the years 2008-2009 and 2009-2010 respectively. It increased to 10.46 in the year 2003-2004, again it was decreased to 8.56, and 7.01 in the years 2008-2009 and 2009-2010 respectively.

The Q3 value of return on equity of selected CPEs in service industry was 44.38 in the year 1990-1991 and it was 8.72 in the year 1991-1992. It was 81.42, 64.84, 49.94, 43.94, 66.74, 71.57 and 57.66 in the years 1993-1994, 1994-1995, 1995-1996, 1996-1997, 1997-1998 and 1998-1999 respectively. It was increased to very high level it 361.52 in the year 2006-2007 and it was 211.5, 258.48, and 284.8 in the years 2007-2008, 2008-2009 and 2009-2010 respectively. (Value in the table is in Times)

E) **Return On Assets:**

The Table-7.5 shows the mean value of return on assets of selected CPEs in service industry was 0.3 in the year 1990-1991. It was laid between 0.04 to 0.09 for entire the study period, expect in the two years, 1995-1996 and 2002-2003 with values 1.52 and 1.56 respectively.

The median of return on assets of selected CPEs in service industry was 0.06 in the year 1990-1991 and it was lied between 0.03 to 0.09 for the entire study period expect in the year 1995-1996 and 1996-1997 with 0.1 and 1997-1998 and 1998-1999 with 0.12 and finally in the year 2006-2007 and 2007-2008 it was 0.11 and 0.12 respectively.
The Q1 value of return on assets of selected CPEs in service industry was 0.0101 to 0.0589 for the entire study period except negative in the years 2000-2001, 2001-2002 and 2002-2003.

The Q3 value of return on assets of selected CPEs in service industry was 0.47 to 0.175 for the entire study period, but in the first year of the study period it was 0.449 for study period. (Value in the table is in Times)

F) Return On Capital Employed:

The Table-7.6 the data revealed that the mean value of return on capital employed of selected CPEs in service industry was 6.43 in the year 1990-1991 and 9 in the year 1991-1992. It was increased to 14.11 during the year 1996-97 and decreased to 3.63 during the year 2001-2002. It was negative in the year 2002-2003 and In the year 2003-2004 it was 9.68. It was 16.3 and 12.78 in the years 2007-2008 and 2008-2009 respectively. For the final year it was 7.02.

The median value of return on capital employed of selected CPEs in service industry was 7.27 in the year 1991-1992 and it was 8.17 in the year 1991-1992. It was 4.62 and 5.79 in the years 1992-1993 and 1993-1994 respectively. In the years 2001-2002 and 2002-2003 the median value was 4.98 and 7.19. But finally it was 17.1 and 12.4 in the years 2008-2009 and 2009-2010 respectively.

Q1 value of return on capital employed of selected CPEs in service industry was 3.44 and 5.13 in the years 1990-1991 and 1991-1992 respectively, it was increased to 6.36 during the year 1994-1995 and it decreased to 3.26 during the year 1999-2000. From the year 2000-2001 to the year 2003-2004 it was negative. It was 3.04 in the year 2004-2005 and 10.61, 10.27, 462 and 2.98 in the years 2006-2007, 2007-2008, 2008-2009 and 2009-2010 respectively.

The Q3 value of return on capital employed of selected CPEs in service industry was 9 in the year 1990-1991 and it was 37.05 in the year 1996-1997, Further, it decreased to 11.33 in the year 2001-2002. It was reached to 29.04 in the year 2007-2008. In the years 2008-2009 and 2009-2010 it was 23.65 and 23.09 respectively. (Value in the table is in Times)
G) Return On Networth:

The Table-7.7 reveals that the mean value of return on networth of selected CPEs in service industry was 11.1 in the year 1990-1991 it was increased to 18.73 and 18.6 in the years 1995-1996 and 1996-1997. Again it was decreased to low level 1.49 during the year 2002-2003. It was 11.02 in the year 2003-2004 and it was increased to 16.59 during the year 2007-2008. It was 13.65 and 7.94 in the year 2008-2009 and 2009-2010 respectively.

The median value of return on networth of selected CPEs in service industry was 10.89, 25.79, 10.52, 8.71 and 28.45 in the years 1990-1991, 1991-1992, 1992-1993 and 1994-1995, respectively. It was 29.99 in the year 1995-1996 and decreased to 6.155 during the year 2001-2002, again it was increased to 25.61 during the year 2007-2008. In the years 2008-2009 and 2009-2010 it was 23.43 and 12.57 respectively.

The Q1 value of return on networth of selected CPEs in service industry was 9.19, 13.18 in the years 1990-1991 and 1991-1992 respectively. It was 3.12 and it decreased to 0.77 and 1.71 in the years 1997-1998, 1998-1999 respectively. It was negative value from 1999-2000 to 2005-2006 and in the years 2006-07, 2007-08 and 2009-2010 it was 0.83, 3.13 and 2.06 respectively.

The Q3 value of return on networth of selected CPEs in service industry was 13.12 and 20.36 in the years 1990-1991 and 1991-1992. It was increased to 28.34 in the year 1996-1997. Again it was decreased to 15.98 during the year 2001-2002. It increased to 24.38 during the year 2007-2008. And it was 21.41 and 18.88 in the years 2008-2009 and 2009-2010 respectively. (Value in the table is in Times)

IV) Capital Structure impact on Corporate Performance of selected CPEs in Mining Industry

A) 365 days average market capitalization:

From the Table-7.1 it was evident that the mean value of 365 days average market capitalization of selected firms in mining industry was 97302 in the year 1990-1991
and it gradually decreased for entire study period and finally it was 96789 in the last year of the study period.

The mean value of 365 days average market capitalization of selected firms in mining industry was 41605 in the year 1990-1991 but it was gradually increased for entire study period, in the last year of study period it was 42092.

The Q1 value of 365 days average market capitalization of selected firms in mining industry was also slowed increase trend but it was very nominal growth. It was the year 28701 in the 1990-1991 and gradually it increased for entire study period and during the year 2009-2010 it was 28804.

The Q3 value of 365 days average market capitalization of selected firms in mining industry was showing down trend for entire study period. It was 193751 in the year 1990-1991 and gradually decreased to 192123 during the year 2009-2010. (Value in the table is Rs. in Cr.)

**B) Profit After Tax:**

The Table-7.2 reveals that the mean value of profit after tax of selected firms in mining industry was 33.63 during the year 1990-1991. It was 144 in the year 1991-1992 and it increased for entire study period. Finally, it was reached 4784 and 4759 in the years 2008-2009 and 2009-2010 respectively.

The median value of profit after tax of selected firms in mining industry was negative in the year 1990-1991, it was 59.15 and 134.88 in the year 1991-1992 and 1992-1993 respectively. It increased 2381.4 in the year 2006-2007. It was 1631.5, 1272.3 and 814.22 in the year 2007-2008, 2008-09 and 2009-10 respectively.

The Q1 value of profit after tax of selected firms in mining industry was negative during the year 1990-1991 and it was 52.16, 50.67 and 48.56 in the years 1991-1992, 1992-1993 and 1993-1994 respectively. Suddenly it reached very low level at 1.31 in the year 1994-1995 and again it increased to 83.89 and 102.92 in the years 1995-1996 and 1996-1997 respectively. It was 19.27 in the year 2000-2001 and increased to 976.97 and 938.97 during the years 2006-2007 and 2007-2008. But it was 630.98 and 484.45 in the years 2008-09 and 2009-2010 respectively.
Q3 value of profit after tax of selected firms in mining industry was 71.94 during the year and continuously it was increased each year for entire study period and reached 10249 and 10107 in the year 2008-2009 and 2009-2010 respectively. (Value in the table is in Rs.)

C) **Price Earnings ratio:**
The Table-7.3 show that the mean value of P/E ratio of selected firms in mining industry was 52.4 during the year 1990-1991 and gradually it was decreased to 42.6 in the year 2000-2001. It increased to 46.4 in the year 2003-2004 and from the year 2004-2005 with 45.8 it decreased to 42.7 in the year 2008-2009. Finally it was 43.1 in the last year of study period.
The median value of P/E ratio of selected firms in mining industry was laid between 20.77 to 23.91 for entire study period with slight ups and downs.
Q1 value was laid between 15 and 16 for the entire study period with slight changes.
The Q3 value of P/E ratio of selected firms in mining industry was 103.4, during the year 1990-1991 and decreased to 87.63 in the year 1994-1995. In the year 1995-1996 it was 91.41 and but again it was decreased to 80.32 in the year 2008-2009. Further it was 81.38 in the last year.

D) **Return On Assets:**
The table-7.4 reveals shows that the mean value of return on equity of selected firms in mining industry was 0.63 in the year 1990-1991 and 0.71 in the year 1991-1992. In the year 1994-1995 it was 9.47, it was 4.02 in the year 1995-1996. It increased to 8.17 in the year 1999-2000. Further and it increased to 22.8 in the year 2007-2008. It was 21.4 and 18.6 in the years 2008-2009 and 2009-2010 respectively. The median value was 0.63 in the year 1990-1991, it gradually increased for entire study period and reached to 26.5 in the year 2007-2008 It was 21.3 and 17.8 in the year 2008-2009 and 2009-2010 respectively.
Q1 value of return on equity of selected firms in mining industry was 1.08 in the year 1994-1995 and gradually increased to12.9 in the year 2007-2008. In the years 2008-2009 and 2009-2010 it was 11.6 and 10.7 respectively.
Q3 value of return on equity of selected firms in mining industry was 25 in 1994-1995 and it was 6.3, 7.83 and 8.99 in the years 1995-1996, 1996-1997, and 1997-1998, respectively. It gradually increased to 42.8 in the years 2007-2008 and it was 41.8 and 34.6 in the years 2008-2009 and 2009-2010 respectively. (Value in the table is in Times)

E) **Return On Assets:**

The Table-7.5 revels that the mean value of return on assets of selected firms in mining industry was laid between 0.036 to 0.208 for entire study period, except in two years in 1995-1996 and 2002-2003 it was 5.67 and 4.11 respectively. The median value was lied between 0.04 and 0.19 for entire study period except very high in the year 1995-1996 at 0.26.

Q1 value of return on assets of selected firms’ in mining industry was negative in the year 1990-1991 and from the year 1997-1998 to the year 2002-2003 and in 1994-1995 it was negative. It was 0.0146 in the year 1991-1992 and it was 0.0598 in the year 1996-1997. It was 0.0177 in the year 2003-2004 and increased to 0.1368 in the year 2006-2007. It was 0.1331, 0.483 and 0.0772 in the years 2007-2008, 2008-2009 and 2009-2010 respectively.

Q3 value of return on assets of selected firms’ in mining industry was lied between 0.07 to 0.28 for the entire study period, but except in two years 1995-96 and 2002-03 with 14 and 10.3. (Value in the table is in Times)

F) **Return On Capital Employed:**

From the Table-7.6 it is evident that the mean value of return on capital employed of selected firms in mining industry was 7.77 in the year 1990-1991 and it was increased to 19.16 and 13.82 in the years 95-96 and 96-97 respectively. It was negative in the years 98-99, 99-00, 01-02, 03-04. In the years 2006-07, 2007-2008 and 2008-2009 it was 28.49 24.9 and 17.41 respectively.

The median value of return on capital employed of selected firms in mining industry was 7.77 in the year 1990-1991 and increased to 20.91 in the year 1995-1996. It was
27.09 in the year 2004-2005 and increased to 26.2 in the year 2006-07. Finally it was 20.5 and 20.08 in the year 2008-2009 and 2009-2010 respectively.

The Q1 value of return on capital employed of selected firms in mining industry was negative from the year 1997-98 to 2003-2004, it was 9.84 and 4.54 in the year 1991-1992 and 1992-1993 respectively to very high in the years 2004-05 and 2006-07 19.75 and 13.63. Finally it was 8.50 in the year 2009-10.

The Q3 value of return on capital employed of selected firms in mining industry was 13.38 in the year 1991-1992, gradually it increased to 43.45, 44.49, and 36.17 in the year 2005-2006, 2006-2007 and 2007-2008 respectively. Finally, it was 34.6 and 24.36 in the years 2008-09 and 2009-10 respectively. (Value in the table is in Times)

G) Return On Networth:

It was clear form Table-7.7 that the mean value of return on networth of selected firms in mining industry was 5.53 in the year 1990-1991, it was 12.47, 13.04, 10.02, 7.55 and 21.9 in the years 1991-1992, 1992-1993, 1993-1994, 1994-1995 and 1995-1996 respectively. It was negative from the year 1998-1999 to the year 2003-2004. It was 31.25 in the year 2004-2005 and increased to 38.35 during the period 2006-2007. It decreased to 19.77 and 18.18 during the years 2008-2009 and 2009-2010 respectively.


Q3 value of return on networth of selected firms in mining industry was 3.37 in the year 1991-1992 and it was 23.13 and 16.28 in the years 1992-1993 and 1993-1994 respectively.
respectively with ups and downs it was reached to 52.99 in the year 2006-2007 and it was 37.84, 34.64 and 24.38 in the years 2007-2008, 2008-2009 and 2009-2010 respectively. (Value in the table is in Times)

V) Capital Structure impact on Corporate Performance of selected CPEs in Power Industry

A) 365 days average market capitalization:

From the Table-7.1 it was evident that the mean value of 365 days average market capitalization of selected firms in power industry was 69837 in the year 1990-1991 and in 69245 in the year 2009-2010. It showed declined for the entire study period. The median value was evident that it was 61126 in the year 1990-1991 and it was gradually decreased for the entire study period and reached to 60725 during the year 2009-10. Q1 value of 365 days average market capitalization of selected firms in power industry was 29338 in the year 1990-91 and gradually decreased for the entire study period and it was 29100 in the year 2009-10. The Q3 value of 365 days average market capitalization of selected firms in power industry was 138417 during the year 1990-1991, and it was gradually decreased to 137113 in the year 2009-2010. It showed decline trend for entire study period. (Value in the table is Rs. in Cr.)

B) Profit After Tax:

From the Table-7.2 it was evident that the mean value of profit after tax of selected firms in power industry was 701 in the year 1990-1991 and it was 369, 316.3 and 355.3 in the years 1991-1992, 1992-1993, and 1993-1994 respectively. It was gradually increased to 3521 during the year 2009-2010 from 398.8 in the year 1994-1995. The median value was 700.96 in the year 1990-1991 and it was 101.66 in the year 1991-1992 gradually increased to 3061.3 in the year 2009-2010. It showed increasing trend for entire study period, except in few years.
Q1 value of profit after tax of selected firms in power industry was negative in the years 1990-90 and 1991-92 and it was 60.19 in the year 1992-1993 and 64.63 in the year 1993-1994. It gradually increased for entire study period and reached to 3061.3 during the year 2009-2010.

Q3 value of profit after tax of selected firms in power industry was 1007 in the year 1991-1992, it was 724.1 in the year 1992-1993 and gradually increased to 7070 during the year 2009-2010. It showed increasing trend for entire study period. (Value in the table is in Rs.)

C) Price/Earnings ratio:
Table -7.3 shows that the mean value of price/earnings ratio of selected firms in power industry was 19.8 in the years 1990-1991 and 1991-1992 and gradually it decreased to 17.8 during the year 2000-2001 It was 18.2 in the year 2009-2010. The median value of price/earnings ratio of selected firms in power industry was 28.1 and 28.5 in the years 1990-1991 and 1991-1992 respectively. With slight up and downs it was reached to 23.9 and 24.4 during the years 2008-2009 and 2009-2010.

The Q1 value of price/earnings ratio of selected firms in power industry was 17.43 and 17.36 in the years 1990-1991 and 1991-1992 and it was gradually decreased to 14.97 and 15.29 during the years 2008-2009 and 2009-2010.

The Q3 value of price/earnings ratio of selected firms in power industry was laid between 21.36 to 23.14 for the entire study period, except in the year 2002-2003 with 17.7.

D) Return On Equity:
The Table-7.4 clarified that the mean value of return on equity of selected firms in power industry was 0.4 and 0.47 in the years 1990-1991 and 1991-1992. It was very light in the year 3.35 in the year 1992-1993 and it was 0.58 in 1994-1995 respectively. It was gradually increased to 2.11, 2.36 and 2.71 in the years and 2007-2008, 2008-2009, and 2009-2010 respectively.
The median value of return on equity of selected firms in power industry was 0.4 and 0.45 in the year 1990-1991 and 1991-1992 respectively. It was gradually increased to 3.71 and 4.56 in the year 2008-2009 and 2009-2010 respectively.

Q1 value of return on equity of selected firms in power industry was 0.41, 0.47, 0.57, and 0.3 in the years 1990-1991, 1991-1992, 1992-1993 and 1993-1994, respectively with slight changes it increased to 0.64 and 0.7 in the years 2008-2009 and 2009-2010 respectively.

Q3 value of return on equity of selected firms in power industry was 0.56 in the year 1991-1992 and it was 8.99 and 2.26 in the year 1992-1993 and 1993-1994 respectively. It was 0.8 in the year 1994-1995 and it gradually increased to 4.59 and 5.15 in the years 2008-2009 and 2009-2010 respectively. (Value in the table is in Times)

E) Return On Assets:

From the Table-7.5 revels that the mean value of return on assets of selected firms in power industry was 0.2 in the year 1990-1991 of sample firms in power industry. The mean value was laid between 0.02 to 0.06 for entire study period except two years in 1995-1996, and 2002-2003 with 0.13 and 0.21 very high.

The median value of return on assets of selected firms in power industry was 0.198 in the year 1990-1991 and it was 0.024 and 0.057 in the years 1991-1992 and 1992-1993 respectively. It was very high in the year 2002-2003 with 0.258 and it was 0.11 in the years 2003-2004 and 2004-2005. It was 0.09, 0.07, 0.10, 0.07, and 0.11 in the years 2005-2006, 2006-2007, 2007-2008, 2008-2009 and 2009-2010 respectively.

Q1 value of return on assets of selected firms in power industry was negative in the year 1991-1992, and it was laid between 0.01 and 0.04 for the entire study period.

The Q3 value of return on assets of selected firms in power industry was between 0.04 to 0.11 for the entire study period but except in two years in 1995-1996 and 2002-2003 with 0.35 and 0.57 respectively. (Value in the table is in Times)
Return On Capital Employed:

The Table-7.6 shows that the mean value of return on capital employed of selected firms in power industry, was 4.26, 2.16, 6.95 and 3.94 in the years 1990-1991, 1991-1992, 1992-1993, 1993-1994 respectively. Further, from the year 1994-1995 to the year 2009-2010 it reached between 6 and 7.

The median value of return on capital employed of selected firms in power industry was 4.26 in the year 1990-1991 increased to 14.12 in the year 1998-1999. It was constant for remaining period till 2007-2008. Future, it was 7.95 and 12.7 in the year 2008-2009 and 2009-2010 respectively.


G) Return On Networth:

The Table-7.7 revels that the mean value of return on networth of selected firms in mining industry was 7.94 in the year 1990-1991 and it was 2.51 in the year 1991-1992 it was 11.05 in year 1992-1993. It was 11.63, 8.13 and 11.11 in the 2007-2008, 2008-2009 and 2009-2010 respectively.

The median value of return on networth of selected firms in mining industry was 7.94 in the years 1990-1991. It was 7.68 and 9.05 in the years 1993-1994 and 1994-1995 respectively, it was reached high value 17.13 in the year 2000-2001 and 18.08 in the
year 2007-2008. It was 11.14 and 19.63 in the years 2008-2009 and 2009-2010 respectively.

Q1 value of return on networth of selected firms in mining industry was negative in the year 1991-1992, it was 3.35, 3.25, 3.09 and 4.69 in the years 1992-1993, 1993-1994, 1994-1995 and 1995-1996 respectively. It was constant from the years 1996-1997 to 2007-2008, with slight changes. In year 2008-2009 it was 2.97 and in the year 2009-2010 it was 6.71.

Q3 value of return on networth of selected firms in mining industry was 10.64, 22.12, 8.29, 7.90 and 10.22 in the years 1991-1992, 1992-1993, 1993-1994, 1994-1995 and 1995-1996 respectively. It was increased to 17.5 during the year 2002-2003 and it was decreased to 12.93 and 13.5 during the years 2008-2009 and 2009-2010 respectively. (Value in the table is in Times)

Regression Analysis of Capital structure ratios impact on corporate performance of CPEs:

In this session stepwise regression analysis elaborate the impact of capital structure ratios on corporate performance. In the regression analysis capital structure ratios concerned as independent variables, i.e., debt/equity ratio, debt to total assets ratio and, networth to total assets ratio and to assess the corporate performance measure blow ratio have been selected as dependent variables for the study.

A) 365 days average market capitalization
B) Earnings per share
C) Profit after tax
D) Price/Earnings ratio
E) Return on equity
F) Return on assets
G) Return on capital employed
H) Return on networth
Regression analysis has been processed for each group wise. They are I) overall sample firms II) Manufacturing Industry III) Service Industry IV) Mining Industry V) Power Industry.

**Regression model and variables**

Since the sample contains data across firms in various industries, so the panel data method is employed. This thesis adopts a method with one-time access and multiple analysis. The model is as follow:

\[ Y = C + aX_1 + bX_2 + cX_3 \]

C is a constant, \( a, b, c \) are separately the coefficient of \( X_1, X_2 \) and \( X_3 \)

Y: corporate performance indicators (365 days average market capitalization, earnings per share, profit after tax, price/earnings ratio, return on equity, return on assets, return on capital employed and return on networth)

X1: Debt/ Equity ratio,

X2: Debt to total assets ratio

X3: Networth to total assets ratio

I) **Analysis of Capital structure ratios impact on corporate performance in Overall sample firms**

A) **365 days average market capitalization:** The Result of the regression analysis indicate that (see table 7.8) the capital structure ratios have impact on 365 days average market capitalization of overall sample CPEs. The R square is 0.640, which means 64 percent independent variables (capital structure ratios) are responsible to determine dependent variable (365 days average market capitalization).The ANOVA table shows that the P value corresponding to significance of regression is (0.001) less than 0.01 level of significance. So the Null hypothesis is rejected. Thus altogether the capital structure ratios are influencing the 365 days average market capitalization. The fallow regression formula give the dependent variable value from independent variables.
Overall 365 days average market capitalization = 20655.658 (constant) – 2.252 * overall debt/equity ratio – 3.572 * overall debt to total assets ratio + 0.501 * overall networth to total assets ratio.

Individually debt/equity ratio, debt to total assets ratio and networth to total assets ratio with t values 0.299, 1.892 and 0.564 respectively are not influencing the 365 days average market capitalization in overall CPE firms.

The p value of regression significance and R square value implying that the capital structure ratios having a significant impact on 365 day average market capitalization in overall sample CPE firms.

B) **Earnings per Share:** The Result of the regression analysis indicate that (see table 7.9) reveals that capital structure ratios impact on earnings per share. R square is 0.778, which means that the independent variables (capital structure ratios) 77.8 percent responsible to determine the dependent variable (EPS). The ANOVA table of revels the P value corresponding to significance of regression is (0.000) less than 0.01 level of significance. The null hypothesis is rejected, that means capital structure ratios are influencing the earnings per share in overall sample firms. The regression formula is:

\[
\text{Overall earnings per share} = -438.35 \text{ (constant)} - 5.796 \times \text{overall debt/equity ratio} + 15.449 \times \text{overall debt to total assets ratio} + 0.105 \times \text{overall networth to total assets ratio}.
\]

Individually debt/equity ratio and networth to total assets with t values 0.319 and 0.049 do not have significance impact on EPS. But debt to total assets ratio has significant impact on EPS with t value 3.395 in overall sample firms.

The p value of regression significance and R square implying that the capital structure ratios have a significant impact on Earnings per share in overall sample CPE firms.

C) **Profit after Tax:** The Result of the regression analysis indicate that (see table 7.10) revels that capital structure ratios impact on profit after tax. R square is 0.494, which means that the independent variables (capital structure ratios) 49.4
percent responsible to determine the dependent variable (PAT). The ANOVA table reveals the P value corresponding to significance of regression is (0.011) almost equal to 0.01 level of significance. The null hypothesis is rejected. Altogether capital structure ratios have impact on profit after tax. The regression formula show the impact is:

**Overall profit after tax = 3579.908 (constant) – 152.356 * overall debt/equity ratio - 72.491 * overall debt to total assets ratio - 9.074 * overall networth to total assets ratio**

Individually debt/equity ratio, debt to total assets and networth to total assets ratios do not have significant impact on profit after tax with t values -1.192, -2.266 and -0.602 correspondingly.

The p value of regression significance and R square implying that the capital structure ratios have significant impact on Earnings per share in overall sample CPE firms.

D) **Price/ Earnings per share:** The Result of the regression analysis indicate that (see table 7.11) reveals that capital structure ratios impact on price/Earnings ratio of overall CPEs’. R square is 0.314, which means that the independent variables (capital structure ratios) 31.4 percent responsible to determine the dependent variable (P/E ratio). The ANOVA table of revels the P value corresponding to significance of regression is (0.102) more than the (0.01) level of significance. The null hypothesis is accepted.

Individually debt/equity ratio, debt to total assets ratio and networth to total assets ratio do not have significant impact on price/Earnings ratio with t values .050, 2.143 and 2.657 correspondingly on P/E ratio in overall sample firms.

The p value of regression significance and R square implying that the capital structure ratios not have significant impact on Price/Earnings ratio in overall sample CPE firms.

E) **Return on Equity:** The Result of the regression analysis indicate that (see table 7.12) reveals that capital structure ratios influence on Return on Equity of overall
CPEs. R square is 0.331, which means that the independent variables (capital structure ratios) 33.1 percent responsible to determine the dependent variable (Return on Equity). The ANOVA table reveals the P value corresponding to significance of regression is (0.085) more than (0.01) significance. So the null hypothesis is accepted.

Individually debt/equity ratio, debt to total assets and networth to total assets ratios do not have significant impact on return on equity in overall CPEs with t values 1.843, 1.352 and 0.364 correspondingly.

The p value of regression significance and R square implying that the capital structure ratios not showing a significant impact on Return on Equity in overall sample CPE firms.

F) Return on Assets: The Result of the regression analysis indicate that (see table 7.13) shows the capital structure ratios influence on Return on Assets in overall sample CPEs. R square value is 0.279, which means that the independent variables (capital structure ratios) 27.9 percent responsible to determine the dependent variable (Return on Assets). The ANOVA table of reveals the P value corresponding to significance of regression is 0.145 more than 0.01 level of significance. So the null hypothesis is accepted.

Individually debt/equity ratio, debt to total assets and networth to total assets ratios do not have significant impact on return on assets in overall CPEs.

The p value of regression significance and R square implying that the capital structure ratios not showing a significant impact on Return on Assets in overall sample CPE firms.

G) Return on Capital Employed: The Result of the regression analysis indicate that (see table 7.14) reveals the capital structure ratios influence on Return on Capital Employed in overall sample CPEs. R square value is 0.124, which means that the independent variables (capital structure ratios) 12.4 percent responsible to determine the dependent variable (Return on Capital Employed). The ANOVA table of shows the P value corresponding to significance of regression (0.536) is more than (0.01) significance. So the null hypothesis is accepted.
Individually debt/equity ratio, debt to total assets and networth to total assets ratios do not have significant impact on return on capital employed in overall CPEs.

The p value of regression significance and R square implying that the capital structure ratios not showed significant impact on Return on Capital Employed in overall sample CPE firms.

**II) Return on Networth:** The Result of the regression analysis indicate that (see table 7.15) explains the capital structure ratios influence on Return on Networth in overall sample CPEs. R square value is 0.364, which means that the independent variables (capital structure ratios) 36.4 percent responsible to determine the dependent variable (Return on Networth). The ANOVA table shows the P value corresponding to significance of regression (0.059) is more than (0.01) significance. So the null hypothesis is accepted.

Individually debt/equity ratio with (t value -2.625) have significant impact on networth to total assets ratio and debt to total assets and networth to total assets ratios with t values -1.405 and -1.413 do not have significant impact on return on capital employed in overall CPEs.

The p value of regression significance and R square implying that the capital structure ratios do not have a significant impact on Return on Capital Employed in overall sample CPE firms.

**II) Analysis of Capital structure ratios impact on corporate performance in Manufacturing Industry**

A) 365 days Average Market Capitalization: The Result of the regression analysis indicate that (see table 7.16) presenting the capital structure ratios influence on 365 days average market capitalization in sample CPEs in Manufacturing Industry. R square value is 0.460, which means that the independent variables (capital structure ratios) 46.0 percent responsible to determine the dependent variable (365 days Average Market Capitalization). The ANOVA table shows the P value corresponding to significance of
regression (0.017) is higher than (0.01) significance level. So the null hypothesis is accepted.

Individually debt/equity ratio, debt to total assets and networth to total assets ratios do not have significant impact on 356 days average market capitalization with t values 0.540, -0.103 and -1.620 correspondingly.

The p value of regression significance and R square implying that the capital structure ratios do not have a significant impact on 365 days average market capitalization of sample CPE firms in Manufacturing Industry.

**B) Earnings per Share:** The Result of the regression analysis indicate that (see table 7.17) the capital structure ratios influence on Earnings per Share of sample CPEs in Manufacturing Industry. R square value is 0.237, which means that the independent variables (capital structure ratios) 23.7 percent responsible to determine the dependent variable (Earnings Per Share).The ANOVA table shows the P value corresponding to significance of regression (0.215) is higher than (0.01) significance level. So the null hypothesis is accepted.

Individually also debt/equity ratio, debt to total assets and networth to total assets ratios do not have significant impact on Earnings per Share with t values 0.540, -0.103 and -1.620 correspondingly.

The p value of regression significance and R square implying that the capital structure ratios do not having a significant impact on Earnings per Share of sample CPE firms in Manufacturing Industry.

**C) Profit after Tax:** The Result of the regression analysis indicate that (see table 7.18) reveals the capital structure ratios impact on Profit after Tax of sample CPEs in Manufacturing Industry. R square value is 0.265, which means that the independent variables (capital structure ratios) 26.5 percent responsible to determine the dependent variable (Profit After Tax).The ANOVA table shows the P value corresponding to significance of regression (0.167) is higher than (0.01) level of significance. So the null hypothesis is accepted.
Independently also debt/equity ratio, debt to total assets and networth to total assets ratios do not have significant impact on profit after tax with t values -1.041, -0.135 and 0.825 respectively.

The p value of regression significance and R square implying that the capital structure ratios do not have a significant impact on profit after tax of sample CPE firms in Manufacturing Industry.

**D) Price/Earnings Ratio:** The Result of the regression analysis indicate that (see table 7.19) presents the capital structure ratios impact on P/E ratio sample CPEs in Manufacturing Industry. R square value is 0.257, which means that the independent variables (capital structure ratios) 25.7 percent responsible to determine the dependent variable (Price/Earnings ratio).The ANOVA table shows the P value corresponding to significance of regression (0.179) is higher than (0.01) significance level. So the null hypothesis is accepted.

Independently the capital structure ratios also do not have significant impact on price/Earnings ratio corresponding to t values.

The p value of regression significance and R square implying that the capital structure ratios do not have significant impact on Price/Earnings ratio of sample CPE firms in Manufacturing Industry.

**E) Return on Equity:** The Result of the regression analysis indicate that (see table 7.20) presents the capital structure ratios impact on Return on Equity of sample CPEs in Manufacturing Industry. R square value is 0.338, which means that the independent variables (capital structure ratios) 33.8 percent responsible to determine the dependent variable (Return on Equity).The ANOVA table shows the P value corresponding to significance of regression (0.079) is higher than (0.01) level of significance. So the null hypothesis is accepted.

Individually also at 0.01 significance independently debt/equity ratio, debt to total assets and networth to total assets ratios do not have significant impact on Return on Equity corresponding to t values.
The p value of regression significance and R square implying that the capital structure ratios do not having a significant impact on Return on Equity of sample CPE firms in Manufacturing Industry.

F) **Return on Assets:** The Result of the regression analysis indicate that (see table 7.21) shows the capital structure ratios impact on Return on Assets of sample CPEs in Manufacturing Industry. R square value is 0.292, which means that the independent variables (capital structure ratios) 29.2 percent responsible to determine the dependent variable (Return on Assets). The ANOVA table shows the P value corresponding to significance of regression (0.128) is higher than (0.01) significance level. So the null hypothesis is accepted.

At 0.01 significance independently the debt/equity ratio, debt to total assets and networth to total assets ratios donot have significant impact on Return on Assets with t values 0.022, 0.884 and 1.789 respectively.

The p value of regression significance and R square implying that the capital structure ratios do not having a significant impact on Return on Assets of sample CPE firms in Manufacturing Industry.

G) **Return on Capital Employed:** The Result of the regression analysis indicate that (see table 7.22) shows the capital structure ratios impact on Return on Capital Employed of sample CPEs in Manufacturing Industry. R square value is 0.029, which means that the independent variables (capital structure ratios) 2.9 percent responsible to determine the dependent variable (Return on Capital Employed). The ANOVA table shows the P value corresponding to significance of regression (0.922) is very higher than (0.01) significance level. So the null hypothesis is accepted.

At 0.01 significance independently the debt/equity ratio, debt to total assets and networth to total assets ratios do not have significant impact on Return on Capital Employed with t values -0.645, -0.187 and -0.065 respectively which are less than (0.01) level of significance.
The p value of regression significance and R square implying that the capital structure ratios do not have a significant impact on Return on Capital Employed of sample CPE firms in Manufacturing Industry.

**H) Return on Networth:** The Result of the regression analysis indicate that (see table 7.23) shows the capital structure ratios impact on Return on Networth of sample CPEs in Manufacturing Industry. R square value is 0.175, which means that the independent variables (capital structure ratios) 17.5 percent responsible to determine the dependent variable (Return on Networth). The ANOVA table shows the P value corresponding to significance of regression (0.365) is very higher than (0.01) significance level. So the null hypothesis is accepted.

At 0.01 significance independently the debt/equity ratio, debt to total assets and networth to total assets ratios not having significant impact on Return on Networth with t values -1.656, -0.663 and -1.680 respectively which are less than significant level (0.01).

The p value of regression significance and R square implying that the capital structure ratios do not having a significant impact on Return on Capital Employed of sample CPE firms in Manufacturing Industry.

**III) Analysis of Capital structure ratios impact on corporate performance in Service Industry**

**A) 365 days Average Market Capitalization:** The Result of the regression analysis indicate that (see table 7.24) reveals the capital structure ratios impact on 365 days average market capitalization of sample CPEs in Service Industry. R square value is 0.896, which means that the independent variables (capital structure ratios) 89.6 percent responsible to determine the dependent variable (365 days Average Market Capitalization). The ANOVA table shows the P value corresponding to significance of regression (0.000) is lower than (0.01) significance level. So the null hypothesis is rejected. Thus the capital structure ratios have significant influence on the 365 days average market capitalization in service industry. The regression formula is:
Service 365 days average market capitalization = 24856.695 (constant) – 192.946 * service debt/equity ratio + 17.414 * service debt to total assets ratio – 9.831 * service networth to total assets ratio.

At 0.01 significance independently the debt/equity ratio, debt to total assets and networth to total assets ratios having significant impact on 365 days average market capitalization with t values -6.656, 7.93 and -3.610 respectively.

The p value of regression significance and R square implying that the capital structure ratios do have a significant impact on 365 days average market capitalization of sample CPE firms in Service Industry.

B) Earnings per Share: The Result of the regression analysis indicate that (see table 7.25) reveals the capital structure ratios impact on earnings per share of sample CPEs in Service Industry. R square value is 0.497, which means that the independent variables (capital structure ratios) 49.7 percent responsible to determine the dependent variable (Earnings Per Share). The ANOVA table shows the P value corresponding to significance of regression (0.010) is equal to (0.01) significance level. So the null hypothesis is rejected. That means capital structure ratio have impact on earnings per share in service industry. The regression formula is:

Service earnings per share = 536.896 (constant) – 29.231 * service debt/equity ratio + 2.953 * service debt to total assets ratio – 10.679 * service networth to total assets ratio.

At 0.01 significance independently the debt/equity ratio and debt to total assets ratios not having a significant impact on 365 days average market capitalization with t values -0.631, 0.873, but networth to total assets ratio with -2.54 t value have significant impact on dependent variable.

The p value of regression significance and R square implying that the capital structure ratios do have a significant impact on earnings per share of sample CPE firms in Service Industry.
C) Profit after Tax: The Result of the regression analysis indicate that (see table 7.26) reveals the capital structure ratios impact on profit after tax of sample CPEs in Service Industry. R square value is 0.566, which means that the independent variables (capital structure ratios) 56.6 percent responsible to determine the dependent variable (Profit After Tax). The ANOVA table shows the P value corresponding to significance of regression (0.003) is lower than (0.01) level of significance. So the null hypothesis is rejected. So the below formula show the capital structure ratio impact on profit after tax in service industry.

\[
\text{Service profit after tax} = 319.159 \text{ (constant)} - 20.313 \times \text{service debt/equity ratio} - 9.102 \times \text{service debt to total assets ratio} + 1.942 \times \text{service networth to total assets ratio}.
\]

At 0.01 significance independently the debt/equity ratio and networth to total assets ratios do not have a significant impact on profit after tax with t values -0.432 and 0.456 respectively, but debt to total assets ratio with -2.65 t value have significant impact on dependent variable.

The p value of regression significance and R square implying that the capital structure ratios having a significant impact on profit after tax of sample CPE firms in Service Industry.

D) Price / Earnings ratio: The Result of the regression analysis indicate that (see table 7.27) reveals the capital structure ratios impact on price/earnings ratio of sample CPEs in Service Industry. R square value is 0.626, which means that the independent variables (capital structure ratios) 62.6 percent responsible to determine the dependent variable (price/earnings ratio). The ANOVA table shows the P value corresponding to significance of regression (0.001) is lower than (0.01) level of significance. So the null hypothesis is rejected. The regression formula is:

\[
\text{Service price / Earnings ratio} = -66.724 \text{ (constant)} - 11.268 \times \text{service debt/equity ratio} + 2.181 \times \text{service debt to total assets ratio} + 2.631 \times \text{service networth to total assets ratio}.
\]
At 0.01 significance independently the debt/equity ratio is not having impact on P/E ratio with t value -1.621, debt to total assets ratio and networth to total assets ratios having a significant impact on price/Earnings ratio with t values 4.294 and 4.182 respectively.

The p value of regression significance and R square implying that the capital structure ratios have significant impact on price/earnings ratio of sample CPE firms in Service Industry.

**E) Return on Equity:** The Result of the regression analysis indicate that (see table 7.28) shows the capital structure ratios impact on Return on Equity of sample CPEs in Service Industry. R square value is 0.983, which means that the independent variables (capital structure ratios) 98.3 percent responsible to determine the dependent variable (return on equity). The ANOVA table shows the P value corresponding to significance of regression (0.000) is lower than (0.01) level of significance. So the null hypothesis is rejected. That means altogether capital structure ratios are influencing the return on equity, below regression formula show the influence:

\[
\text{Service return on equity} = 68.783 \text{ (constant)} + 87.283 \times \text{service debt/equity ratio} - 5.254 \times \text{service debt to total assets ratio} + 0.458 \times \text{service networth to total assets ratio}.
\]

At 0.01 significance independently the debt/equity ratio and debt to total assets ratio have significant impact on Return on Equity with t values 8.15 and 6.712 respectively but networth to total assets ratio do not having a significant impact on Return on Equity with t value 0.472.

The p value of regression significance and R square is implying that the capital structure ratios have significant impact on return on equity of sample CPE firms in Service Industry.

**F) Return on Assets:** The Result of the regression analysis indicate that (see table 7.29) shows the capital structure ratios impact on Return on Assets of sample CPEs in Service Industry. R square value is 0.028, which means that the independent variables (capital structure ratios) 2.8 percent responsible to
determine the dependent variable (return on assets). The ANOVA table shows the P value corresponding to significance of regression (0.924) is higher than (0.01) level of significance. So the null hypothesis is accepted.

At 0.01 significance independently the debt/equity ratio and debt to total assets ratio and networth to total assets ratios have significant impact on Return on Assets with t values -0.657, 0.1 and 0.36 respectively.

The p value of regression significance and R square implying that the capital structure ratios do not have significant impact on return on assets of sample CPE firms in Service Industry.

G) Return on Capital Employed: The Result of the regression analysis indicate that (see table 7.30) shows the capital structure ratios impact on Return on Capital Employed of sample CPEs in Service Industry. R square value is 0.048, which means that the independent variables (capital structure ratios) 4.8 percent responsible to determine the dependent variable (Return on Capital Employed). The ANOVA table shows the P value corresponding to significance of regression (0.848) is higher than (0.01) level of significance. So the null hypothesis is accepted.

At 0.01 significance independently the debt/equity ratio and debt to total assets ratio and networth to total assets ratios have significant impact on Return on Assets with t values 0.873, -0.425 and 0.275 respectively.

The p value of regression significance and R square implying that the capital structure ratios do not have significant impact on return on capital employed of sample CPE firms in Service Industry.

H) Return on Networth: The Result of the regression analysis indicate that (see table 7.31) shows the capital structure ratios impact on return on networth of sample CPEs in Service Industry. R square value is 0.115, which means that the independent variables (capital structure ratios) 11.5 percent responsible to determine the dependent variable (return on networth). The ANOVA table shows the P value corresponding to significance of regression (0.571) is higher than (0.01) significance level. So the null hypothesis is accepted.
At 0.01 significance independently the debt/equity ratio and debt to total assets ratio and networth to total assets ratios have significant impact on Return on Assets with t values -0.051, 0.696 and -0.458 respectively.

The p value of regression significance and R square implying that the capital structure ratios do not having a significant impact on return on networth of sample CPE firms in Service Industry.

IV) **Analysis of Capital structure ratios impact on corporate performance in Mining Industry**

A) **365 days Average Market Capitalization:** The Result of the regression analysis indicate that (see table 7.32) shows the capital structure ratios impact on 365 days average market capitalization of sample CPEs in Mining Industry.

R square value is 0.858, which means that the independent variables (capital structure ratios) 85.8 percent responsible to determine the dependent variable (365 days Average Market Capitalization). The ANOVA table shows the P value corresponding to significance of regression (0.000) is less than (0.02) level of significance. So the null hypothesis is rejected. The regression formula is:

\[
\text{Mining 365 days average market capitalization} = 96134.948 \text{ (constant)} - 20.934 \times \text{mining debt/equity ratio} + 17.439 \times \text{mining debt to total assets ratio} + 9.945 \times \text{mining networth to total assets ratio}.
\]

At 0.01 significance independently the debt/equity ratio and networth to total assets ratios do not have impact on 365 days Average Market Capitalization with t values -1.450 and 2.147 respectively debt to total assets ratio have significant impact on 365 days Average Market Capitalization with t values 6.526.

The p value of regression significance and R square implying that the capital structure ratios have significant impact on 365 days Average Market Capitalization of sample CPE firms in Mining Industry.
B) Earnings per Share: The Result of the regression analysis indicates that (see table 7.33) shows the capital structure ratios impact on Earnings per Share of sample CPEs in Mining Industry. R square value is 0.232, which means that the independent variables (capital structure ratios) 23.2 percent responsible to determine the dependent variable (Earnings Per Share). The ANOVA table shows the P value corresponding to significance of regression (0.252) is higher than (0.01) significance level. So the null hypothesis is accepted.

At 0.01 significance independently the debt/equity ratio and debt to total assets ratio and networth to total assets ratios do not have significant impact on Earnings per Share with t values -1.311, -0.154 and -1.180 respectively.

The p value of regression significance and R square implying that the capital structure ratios not have significant impact on Earnings per Share of sample CPE firms in Mining Industry.

C) Profit After Tax: The Result of the regression analysis indicate that (see table 7.34) shows the capital structure ratios impact on Profit after Tax of sample CPEs in Mining Industry. R square value is 0.913, which means that the independent variables (capital structure ratios) 91.3 percent responsible to determine the dependent variable (Profit after Tax). The ANOVA table shows the P value corresponding to significance of regression (0.000) is less than (0.01) level of significance. So the null hypothesis is rejected. Thus altogether capital structure ratios have impact on profit after tax in mining industry. The below regression formula show the impact

\[
\text{Mining profit after tax} = 18670.964 \text{ (constant)} - 159.289 \times \text{mining debt/equity ratio} - 226.595 \times \text{mining debt to total assets ratio} - 211.129 \times \text{mining networth to total assets ratio}.
\]

At 0.01 significance independently the debt/equity ratio with t value -1.363 do not have significant impact on dependent variable and debt to total assets ratio and networth to total assets ratios have significant impact on Profit after Tax with t values -10.476 and -5.630 respectively.
The p value of regression significance and R square implying that the capital structure ratios have significant impact on Profit After Tax of sample CPE firms in Mining Industry.

**D) Price/Earnings ratio:** The Result of the regression analysis indicate that (see table 7.35) shows the capital structure ratios impact on Price/Earnings ratio of sample CPEs in Mining Industry. R square value is 0.626, which means that the independent variables (capital structure ratios) 62.6 percent responsible to determine the dependent variable (Price/Earnings ratio). The ANOVA table shows the P value corresponding to significance of regression (0.001) is less than (0.02) significance level. So the null hypothesis is rejected. The regression formula shows the impact of independent variables on dependent variable.

\[
\text{Mining P/E ratio} = 57.516 \text{ (constant)} - 0.594 \times \text{mining debt/equity ratio} + 0.049 \times \text{mining debt to total assets ratio} - 0.215 \times \text{mining networth to total assets ratio}.
\]

At 0.01 significance independently the debt/equity ratio, debt to total assets ratio and networth to total assets ratios not having significant impact on Price/Earnings ratio with t values -1.656, 0.734 and -1.865 respectively.

The p value of regression significance and R square implying that the capital structure ratios do have a significant impact on Price/Earnings ratio of sample CPE firms in Mining Industry

**E) Return on Equity:** The Result of the regression analysis indicate that (see table 7.36) reveals the capital structure ratios impact on Return on Equity of sample CPEs in Mining Industry. R square is 0.866, which means that the independent variables (capital structure ratios) 86.6 percent responsible to determine the dependent variable (Return on Equity). The ANOVA table shows the P value corresponding to significance of regression (0.000) is higher than (0.01) level of significance. So the null hypothesis is accepted. The regression formula is:
Mining return on equity = 65.210 (constant) – 0.793 * mining debt/equity ratio - 0.849 * mining debt to total assets ratio - 0.661 * mining networth to total assets ratio.

At 0.01 significance independently the debt/equity ratio do not have significant impact on return on equity with t value -1.291 and debt to total assets ratio and networth to total assets ratios have significant impact on return on equity with t values -7.468 and -3.350 respectively.

The p value of regression significance and R square implying that the capital structure ratios do have a significant impact on Return on Equity of sample CPE firms in Mining Industry.

F) Return on Assets: The Result of the regression analysis indicate that (see table 7.37) hows the capital structure ratios impact on Return on Assets of sample CPEs in Mining Industry. R square value is 0.239, which means that the independent variables (capital structure ratios) 23.9 percent responsible to determine the dependent variable (Return on Assets).The ANOVA table shows the P value corresponding to significance of regression (0.237) is higher than (0.01) level of significance. So the null hypothesis is accepted.

At 0.01 significance level independently the debt/equity ratio, debt to total assets ratio and networth to total assets ratios do not have significant impact on return on assets with t values 2.118, 0.182 and 0.586 respectively.

The p value of regression significance and R square implying that the capital structure ratios do not have a significant impact on Return on Assets of sample CPE firms in Mining Industry.

G) Return on Capital Employed: The Result of the regression analysis indicate that (see table 7.38) shows the capital structure ratios impact on Return on Capital Employed of sample CPEs in Mining Industry. R square value is 0.380, which means that the independent variables (capital structure ratios) 38 percent responsible to determine the dependent variable (Return on Capital Employed).The ANOVA table shows the P value corresponding to
significance of regression (0.060) is higher than (0.01) significance level. So the null hypothesis is accepted.

At 0.01 significance independently the debt/equity ratio and networth to total assets ratios do not have significant impact on Return on Capital Employed with t values -2.186 and -1.897 respectively and debt to total assets ratio do have impact on return on capital employed with t value -2.368.

The p value of regression significance and R square value implying that the capital structure ratios not have significant impact on Return on Capital Employed of sample CPE firms in Mining Industry.

H) Return on Networth: The Result of the regression analysis indicate that (see table 7.39) reveals the capital structure ratios impact on Return on Networth of sample CPEs in Mining Industry. R square value is 0.313, which means that the independent variables (capital structure ratios) 31.3 percent responsible to determine the dependent variable (Return on Networth). The ANOVA table shows the P value corresponding to significance of regression (0.122) is higher than (0.01) significance level. So the null hypothesis is accepted.

At 0.01 significance independently the debt/equity ratio do not have significant impact on Return on Networth with t value -2.325, debt to total assets ratio and networth to total assets ratios not having significant impact on Return on Networth with t values -0.821, -0.654 respectively.

The p value of regression significance and R square is implying that the capital structure ratios do not have a significant impact on Return on Networth of sample CPE firms in Mining Industry.

V) Analysis of Capital structure ratios impact on corporate performance in Power Industry

A) 365 days Average Market Capitalization: The Result of the regression analysis indicate that (see table 7.40) shows the capital structure ratios impact
on 365 days average market capitalization of sample CPEs in Power Industry. 
R square value is 0.944, which means that the independent variables (capital 
structure ratios) 94.4 percent responsible to determine the dependent variable 
(365 days Average Market Capitalization). The ANOVA table shows the P 
value corresponding to significance of regression (0.000) is less than (0.01) 
level of significance. So the null hypothesis is rejected. The 365 day average 
market capitalization was significantly influenced by the capital structure 
ratios in power industry. The influence was revealed by the regression formula 
is:

\[
\text{Power 365 days average market capitalization} = 65616.394 \text{ (constant)} + 
119.652 \times \text{power debt/equity ratio} + 42.246 \times \text{power debt to total assets} 
\text{ratio} + 44.222 \times \text{power networth to total assets ratio}
\]

At 0.01 significance independently the debt/equity ratio and debt to total assets 
ratio and networth to total assets ratios have significant impact on 365 days 
Average Market Capitalization with t values 3.416, 12.758 and 15.063 
respectively.

The p value of regression significance and R square implying that the capital 
structure ratios have significant impact on 365 days Average Market 
Capitalization of sample CPE firms in Power Industry.

B) Earnings per Share: The Result of the regression analysis indicates that 
(see table 7.41) shows the capital structure ratios impact on Earnings per Share 
of sample CPEs in Power Industry. R square value is 0.543, which means that 
the independent variables (capital structure ratios) 54.3 percent responsible to 
determine the dependent variable (Earnings Per Share). The ANOVA table 
shows the P value corresponding to significance of regression (0.005) is less 
than (0.01) significance level. So the null hypothesis is rejected, thus capital 
structure ratio have significant impact on earnings per have in power industry. 
The regression formula is:
Power earnings per share = - 3177.589 (constant) - 346.317 * power debt/equity ratio + 56.459 * power debt to total assets ratio + 31.960 * power networth to total assets ratio

At 0.01 significance independently the debt/equity ratio and debt to total assets ratio and networth to total assets ratios have significant impact on Earnings Per Share with t values -2.490, 4.294 and 2.742 respectively.

The p value of regression significance and R square implying that the capital structure ratios have significant impact on Earnings per Share of sample CPE firms in Power Industry.

C) Profit After Tax: The Result of the regression analysis indicate that (see table 7.42) shows the capital structure ratios impact on Profit after Tax of sample CPEs in Power Industry. R square value is 0.887, which means that the independent variables (capital structure ratios) 88.7 percent responsible to determine the dependent variable (Profit after Tax). The ANOVA table shows the P value corresponding to significance of regression (0.000) is less than (0.01) level of significance. So the null hypothesis is rejected. Thus capital structure ratios are influencing the profit after tax in power industry. The regression formula is:

Power profit after tax = 21294.431 (constant) - 31.909 * power debt/equity ratio - 238.685 * power debt to total assets ratio - 217.224 * power networth to total assets ratio

At 0.01 significance independently the debt/equity ratio with t value -0.125 do not have significant impact on dependent variable and debt to total assets ratio and networth to total assets ratios have significant impact on Profit after Tax with t values -9.898 and -10.160 respectively.

The p value of regression significance and R square implying that the capital structure ratios have significant impact on Profit After Tax of sample CPE firms in Power Industry.
D) **Price/Earnings ratio:** The Result of the regression analysis indicate that (see table 7.43) shows the capital structure ratios impact on Price/Earnings ratio of sample CPEs in Power Industry. R square value is 0.686, which means that the independent variables (capital structure ratios) 68.6 percent responsible to determine the dependent variable (Price/Earnings ratio). The ANOVA table shows the P value corresponding to significance of regression (0.000) is less than (0.01) level of significance. So the null hypothesis is rejected. The regression formula give impact of capital structure ratio on price/earnings ratio in power industry.

\[
\text{Power price/earnings ratio} = 9.404 \text{ (constant)} + 0.731 \times \text{power debt/equity ratio} + 0.084 \times \text{power debt to total assets ratio} + 0.109 \times \text{power networth to total assets ratio}
\]

At 0.01 significance independently the debt/equity ratio, debt to total assets ratio and networth to total assets ratios have significant impact on Price/Earnings ratio with t values 2.800, 3.420 and 4.963 respectively.

The p value of regression significance and R square implying that the capital structure ratios have significant impact on Price/Earnings ratio of sample CPE firms in Power Industry.

E) **Return on Equity:** The Result of the regression analysis indicate that (see table 7.44) shows the capital structure ratios impact on Return on Equity of sample CPEs in Power Industry. R square value is 0.416, which means that the independent variables (capital structure ratios) 41.6 percent responsible to determine the dependent variable (Return on Equity). The ANOVA table shows the P value corresponding to significance of regression (0.031) is higher than (0.01) significance level. So the null hypothesis is accepted.

At 0.01 significance independently the debt/equity ratio and debt to total assets ratio do not have significant impact on return on equity with t value -1.698 and -1.210 respectively and networth to total assets ratio have significant impact on return on equity with t values -3.023.
The p value of regression significance and R square implying that the capital structure ratios do not have a significant impact on Return on Equity of sample CPE firms in Power Industry.

**F) Return on Assets:** The Result of the regression analysis indicate that (see table 7.45) shows the capital structure ratios impact on Return on Assets of sample CPEs in Power Industry. R square value is 0.350, which means that the independent variables (capital structure ratios) 35 percent responsible to determine the dependent variable (Return on Assets). The ANOVA table shows the P value corresponding to significance of regression (0.069) is higher than (0.01) significance level. So the null hypothesis is accepted.

At 0.01 significance independently the debt/equity ratio, debt to total assets ratio and networth to total assets ratios do not have significant impact on return on assets with t values 0.873, -0.846 and 1.290 respectively.

The p value of regression significance and R square is implying that the capital structure ratios do not have a significant impact on Return on Assets of sample CPE firms in Power Industry.

**G) Return on Capital Employed:** The Result of the regression analysis indicate that (see table 7.46) shows the capital structure ratios impact on Return on Capital Employed of sample CPEs in Power Industry. R square value is 0.613, which means that the independent variables (capital structure ratios) 61.3 percent responsible to determine the dependent variable (Return on Capital Employed). The ANOVA table shows the P value corresponding to significance of regression (0.001) is less than (0.01) level of significance. So the null hypothesis is rejected. The below regression table make clear about the dependent variable value.

\[
\text{Power return on capital employed} = 26.751 \text{ (constant)} - 2.797 \times \text{power debt/equity ratio} - 0.151 \times \text{power debt to total assets ratio} - 0.255 \times \text{power networth to total assets ratio}
\]

At 0.01 significance independently the debt/equity ratio and networth to total assets ratios having significant impact on Return on Capital Employed with t
values -3.354,-3.646 respectively and debt to total assets ratio do not have impact on return on capital employed.

The p value of regression significance and R square is implying that the capital structure ratios having a significant impact on Return on Capital Employed of sample CPE firms in Power Industry.

**H) Return on Networth:** The Result of the regression analysis indicate that (see table 7.47) reveals the capital structure ratios impact on Return on Networth of sample CPEs in Power Industry. R square value is 0.722, which means that the independent variables (capital structure ratios) 72.2 percent responsible to determine the dependent variable (Return on Networth). The ANOVA table shows the P value corresponding to significance of regression (0.000) is lower than (0.01) level of significance. So the null hypothesis is rejected. Thus altogether the capital structure ratios influencing the return on networth in power industry, the regression formula is:

\[
\text{Power return on networth} = 45.031 \text{ (constant)} - 4.452 \times \text{power debt/equity ratio} - 0.278 \times \text{power debt to total assets ratio} - 0.431 \times \text{power networth to total assets ratio}
\]

At 0.01 significance independently the debt/equity ratio, debt to total assets ratio and networth to total assets ratios having significant impact on Return on Networth with t values -4.102,-2.706 and -4.744 respectively.

The p value of regression significance and R square are implying that the capital structure ratios have significant impact on Return on Networth of sample CPE firms in Power Industry.

**Correlation analysis of corporate performance measure factors**

**Correlation Qualitative Assessment values**

Zero or Null – no correlation

0.1 to 0.3 Weak correlation

0.3 to 0.6 Regular correlation
0.6 to 0.8 Strong correlation

0.8 to 0.9 Very strong correlation

1 perfect correlation

- 0.1 to - 0.3 Negative weak

- 0.3 to - 0.6 Negative regular

- 0.6 to - 0.8 Negative strong

- 0.8 to 0.9 Negative very strong

-1 perfect negative

Overall sample CPEs:

**365 days average market capitalization:** 365 days average market capitalization at 0.01 significance level has significant very strong correlation with profit after tax and has strong correlation with return on equity and networth to total assets ratio and negative strong correlation with debt to total assets ratio and EPS in overall sample firms.

**Earnings Per Share:** EPS has strong correlation with networth to total assets ratio and negative strong correlation with debt to total assets ratio at 0.01 significance in overall sample firms.

**Profit After Tax:** PAT has very strong correlation with return on equity and negative strong correlation with debt to total assets ratio at 0.01 significance level in overall sample firms.

**Price/Earnings ratio:** P/E ratio did not have correlation with any other factors in overall sample firms.

**Return on Capital Employed:** Return on Capital Employed has regular correlation with return on networth at 0.05 significance level in overall sample firms.
Manufacturing Industry:-

365 days average market capitalization: - At 0.01 significance level 365 days average market capitalization has very strong correlation with PE ratio. 365 days average market capitalization has very strong negative correlation with PAT and regular correlation debt to total assets ratio and EPS and negative regular correlation with networth to total assets ratio and return on equity in manufacturing industry.

Earnings per Share: - EPS in manufacturing industry has strong correlation with P/E ratio at 0.01 significance level.

Profit After Tax: - Profit after Tax has very strong negative correlation with PE ratio and strong correlation with return on equity at 0.01 significance level in manufacturing industry.

Price/Earnings ratio: - The PE ratio has strong negative correlation with return on equity at 0.01 significance and negative regular correlation with networth to total assets ratio at 0.05 significance level in manufacturing industry.

Return on Assets: - Return on assets has regular correlation with networth to total assets ratio at 0.05 significance.

Return on capital employed: - Return on capital employed has significant regular correlation with return on networth at 0.05 significance in manufacturing industry.

Service Industry:-

365 days average market capitalization: - at 0.01 significance 365 days average market capitalization has strong correlation with EPS and debt to total assets ratio and strong negative correlation with Pat and return on equity and networth to total assets ratio in service industry.
**Earnings per Share:** - EPS has regular correlation with debt to total assets ratio and negative strong correlation with networth to total assets ratio and negative regular correlation with PAT at 0.01 significance in service industry.

**Profit after Tax:** - Profit after Tax has regular correlation with networth to total assets ratio and negative regular correlation with debt/equity ratio at 0.05 significance, it has strong negative correlation with debt to total assets ratio in service industry at 0.01 significance.

**Return on equity:** - Return on equity has regular correlation with debt/equity ratio at 0.05 significance in service industry.

**Return on capital employed:** - It has very strong correlation with return on capital employed at 0.01 significance in service.

**Mining Industry:**

**365 days average market capitalization:** - 365 days average market capitalization in mining industry has very strong negative correlation debt to total assets ratio and strong correlation with PE ratio; it has negative strong correlation with profit after tax and return on equity and at 0.01 significance in mining industry. At 0.05 significance it has regular correlation with EPS in mining industry.

**Profit After Tax:** - Profit after tax at 0.01 significance has very strong correlation with return on equity in mining industry and very strong negative correlation with debt to total assets ratio and it has regular correlation with networth to total assets ratio and negative regular correlation with PE ratio in mining industry at 0.05 significance.

**Price/Earnings Ratio:** - PE ratio has negative regular correlation with return on equity and strong negative correlation with networth to total assets ratio and strong correlation with debt to total assets ratio at 0.01 significance in mining industry.

**Return on equity:** - Return on equity at 0.05 significance level has regular correlation with return on capital employed in mining industry and it has
strong correlation with networth to total assets ratio and very strong negative correlation with debt to total assets ratio at 0.01 significance in service industry.

**Return on Capital Employed:** - Return on capital employed at 0.01 significance has strong correlation with return on networth in mining industry.

**Power Industry:**

**365 days average market capitalization:** - In power industry 365 days average market capitalization has strong correlation with PE ratio and strong negative correlation with return on capital employed and return on networth. It has very strong negative correlation with PAT at 0.01 level of significance. At 0.05 significance level it has regular correlation with EPS and regular negative correlation with return on equity in power industry.

**Earnings per Share:** - EPS has negative regular correlation with PAT at 0.01 level of significance in power industry.

**Profit After Tax:** - At 0.01 significance Profit After Tax has strong negative correlation with PE ratio and regular correlation with return on networth in power industry. At 0.05 level of significance it has regular correlation with return on equity and return on capital employed in power industry.

**Price/Earnings ratio:** - PE ratio in power industry has strong negative correlation with return on capital employed and return on networth at 0.01 significance level. And it has regular correlation with debt/equity ratio at 0.05 significance level in power industry.

**Return on Equity:** - Return on equity has strong correlation with return on networth at 0.01 level of significance and at 0.05 significance it has regular correlation with return on capital employed in power industry.

**Return on Assets:** - Return on assets has regular correlation with networth to total assets ratio and negative regular correlation with debt to total assets ratio at 0.05 significance in power industry.
**Return on Capital Employed**: - Return on capital employed level has very strong correlation with return on networth at 0.01 significance and negative regular correlation with debt/equity ratio in power industry.

**Return on Networth**: - Return on Networth has negative regular correlation with debt/equity ratio at 0.01 significance in power industry.