Capital Structure Decision during Firm’s Life Cycle: with Reference of Top Companies Listed in Bse 500 Operating in India in Terms of the Market Capitalization

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Abstract: Researchers have always made laudable contribution in examining the factors that influence an individuals and business firms to adopt and maintain the capital structure decision during a firm’s life cycle. The research methodology is carried out to examine the financing choices of top 100 firms in terms of the market capitalization through a close outlook with the business life cycle. The determinant of capital structure decision is based on profitability, liquidity, nature of industry, timing and timing of issue. Debt is taken as a fundamental source in an early stage where as in maturity stage, firm re-balance their capital structure gradually substituting debt for internal capital. This study aims to generate an idea of a dynamic evolution of the firm across the different stages, investment/disinvestment needs, profitability, cash flow generation and risk changes. Moreover, the study is carried out with a comprehensive analysis of the firm’s capital structure and the main elements in the classical theories, i.e. Trade off Theory and Pecking Order Theory.

Keywords: Capital Structure, Financial Growth Cycle, Financing Decision, Small And Medium-Sized Firms, Sources of Finance.

I. INTRODUCTION

Capital Structure is an arrangement and procurement of the capital from different means to finance overall operations and growth of an organization as the term “structure” implies arrangement of the various sections. Thus, capital structure refers to the proportions or combinations of share capital either in the form of equity or preference, long term debts and retained earnings whereas financial structure consists of short-term debt, long term debt and shareholder’s fund i.e. entire left-hand side of the company’s balance sheet. According to I.M. Pandey “Capital structure refers to the mix of long-term sources of funds, such as, debentures, long-term debts, preference share capital and equity share capital including reserves and surplus.”

The capital structure decision is a significant financial decision as it affects the shareholders return and risk and consequently market value of shares. The combination of both debt and equity is crucial for an organization as it leads to maximize the wealth of owners and value of firm along with minimizes the company overall cost of capital.

Research Methodology

Sampling Design and Technique: Sample selection consists of top 100 manufacturing companies listed in BSE 500 operating in India in terms of the market capitalization for the year 2018/19. We exclude those firms that have missing values in either dependent variable or independent variables throughout the period of the study. Apart from the missing dependent and independent values in the variables we have excluded all the banking, financial, insurances and investment companies. To analyze data, SPSS statistical software has been used for applying the required statistical analysis technique.

Sample size: A period of five years from 2013/14 to 2017/18 has been considered. The use of the large sample size is to ensure the reliability and to reduce the measurement error. The Study has been based on the secondary data only. The annual financial standalone data of sample companies have been taken from the BSE website, capital line, and from the money control for the empirical evaluation. After applying the filters and excluding the Banking & Financial Institutions, Insurance Companies and Investment Companies, with information availability constraint, a sample size of remaining 52 listed Indian manufacturing companies on BSE has been taken to apply the panel regression model for the data analysis and interpretation.

Proposed model: Firm value = β0+ β1(Share Performance)+ β2 (Profitability ) + β3 (growth opportunities) + β4 (asset utilization ratio ) + β5 (liquidity ) + β6 (dividend payout ratio ) + β7 (age) + β8 (inflation) + β9 (GDP) + β10 (earning volatility) + β11 (debt service capacity) + β12 (equity) + β13 (Debt) + β14 (cash balance) + β15 (interest coverage ratio) + β16 (operating income) + β17 (net income) + β18 (Cash flow from operating activities) + β19 (business risk) + β20 (cash flow coverage ratio) + β21 (ownership).

Where, β0 = Intercept, β1= coefficient for share performance, β2= coefficient of profitability, β3=coefficient of growth opportunities, β4=coefficient of asset utilization ratio, β5=coefficient of liquidity, β6=coefficient of dividend payout ratio, β7=coefficient of age, β8=coefficient of inflation, β9=coefficient of GDP, β10=coefficient of earning volatility, β11=coefficient of debt service capacity, β12=coefficient of equity, β13=coefficient of debt, β14=coefficient of cash balance, β15=coefficient of interest coverage ratio, β16=coefficient of operating income, β17=coefficient of net income, β18=coefficient of cash flow from operating activities, β19= coefficient of business risk, β20= coefficient of cash flow coverage ratio, β21=coefficient of ownership.

Measure: The paper evaluates empirically the Capital
Structure Decision During a Firm’s Life Cycle.” of the Indian Business which are listed in the Bombay Stock Exchange (BSE) on the basis of top Market Capitalization.

Firm’s value or Enterprise value has been used as a proxy for financial leverage with share price performance, profitability (net profit margin), growth opportunities (ROE), asset utilization ratio, liquidity, dividend payout ratio, age, inflation, GDP, earning volatility, debt service capacity, equity, debt, cash balance, interest coverage ratio, operating income, net income, cash flow from operating activities, business risk, cash flow coverage ratio and ownership as independent variables. The Firm’s value is calculated on the basis of the market capitalization.

Growth Opportunities is calculated on the basis of the Return on Equity (ROE). The formulae for ROE= Profit after Tax (PAT)/ Equity share holder fund. D/C is a measure of firm’s financial leverage and financial strength and tells whether a firm is more inclined toward debt or equity financing. D/A is a measure of firm’s financial leverage and financial risk and indicate the percentage of assets that are financed by debt. Dividend Payout Ratio is calculated as dividend divided by the net income. Profitability is calculated on the basis of Net Profit after Tax.

Size is calculated as the natural logarithm of total assets. It implies large firms with lower asset volatility and better performance.

Age is calculated as the number of years when the company was listed in the BSE. It implies better credibility and reputation in the market.

Tangibility is calculated as the ratio of net fixed assets divided by Total assets. It shows fixed asset investment and long-term resources held by the firm. Dividend Payout Ratio (DPO) is the ratio of dividend to profit after tax. Business risk (Risk) is measured by operating leverage which is the ratio of the percentage change in EBIT to percentage change in net sales. It shows the extent a firm has utilized its fixed operating cost for running its operations. It is calculated on the basis of financial leverage i.e. Operating Income divided by Net Income. Liquidity is calculated as the ratio of current assets to current liabilities. Higher ratio indicates more availability of funds to meet short-term obligations.

Interest coverage ratio (ICR) is calculated as the ratio of EBIT to Interest expense. Higher the ratio, higher will be the interest expense coverage and low financial risk. CFCR is calculated as the ratio of net operating cash flow to Total debt. Higher the ratio, higher will be the debt absorption capacity and low financial risk. Ownership structure is represented as the percentage of shareholding held by the promoters of the firm. It is based on agency cost theory and reflects the expectations of the promoters. It is categorized in terms of family held firm, foreign companies, widely and Government owned companies.

Earning Volatility is calculated on the difference of closing price and opening price divided by the opening price. Inflation is reflected as a percentage change in wholesale price index (WPI) in India. Gross domestic product growth rate (GDP) is calculated as the percentage change in GDP on a year to year basis in India. It is a measure of a country’s economic development.

To determine which theory’s implications are more validating in the Indian Business Organization, i.e. trade-off vs pecking order theory, following are the hypothesis provided by the above theories for some variables. As per trade-off theory, there is a positive relationship between profitability and financial leverage as the future cost of financial distress is low for profitable firms and tax shield is more valuable for these firms. On the contrary, pecking order suggest a negative relationship between profitability and financial leverage as profitable firms use more retained earnings to finance their current as well as future projects.

**Objectives of Study**
1. To examine the differences among the company groups for determinants of capital structure.

**Hypothesis of Study:**
H0a: There is no significant influence of capital structure determinants and the firm value.

**Data Analysis and Interpretation**

**Descriptive statistics:** It summarizes a given data set, which shows a representation of the entire or a sample of a population. Descriptive statistics are broken down into measures of central tendency and measures of variation (spread). Measures of central tendency include the mean, median, and mode, while measures of variation include the standard deviation, variance, the minimum and maximum variables, and the kurtosis and skewness.

The mean is a type of average. We have calculated the descriptive statistics of all the variable i.e. dependent and independent variable. The mean of these variables are calculated by finding the sum of the ratings and then dividing by the number of rating responses.

The standard deviation is used to develop a statistical measure of the mean variance. A quantitative expressing by how much the members of a group differs from the mean value for the group. The first step in finding the standard deviation is finding the difference between the mean and the rating for each rating.

**Table: 01 Descriptive Statistics**

|                          | N | Minimum | Maximum  | Mean   | Std. Deviation |
|--------------------------|---|---------|----------|--------|----------------|
| share price performance  | 252 | -134.62 | 311.08   | 40.063 | 51.082         |
| profitability (net profit margin) | 252 | -34.92  | 10024.16 | 106.852| 766.996        |
### Descriptive Statistics

| Variable Description                        | Minimum | Maximum | Mean | Standard Deviation |
|---------------------------------------------|---------|---------|------|--------------------|
| Growth Opportunities (ROE)                  | -100.74 | 312.73  | 22.211 | 28.303             |
| Asset Utilization Ratio (ROA=NI/TA)         | -21.69  | 77.61   | 12.287 | 11.543             |
| Liquidity (Current Ratio)                   | 0.26    | 12.01   | 1.8792 | 1.537              |
| Dividend Payout Ratio                       | -1053.76| 1261.74 | 30.549 | 109.141            |
| Firm Size (Enterprise value) (Cr.)          | 0.00    | 653357.8| 102385.3425 | 109149.484 |
| Age                                         | 0.0     | 210.0   | 25.202 | 17.878             |
| Inflation                                   | 2.2     | 9.1     | 5.478  | 2.3161             |
| GDP [US$ Billion]                           | 1856.7  | 2597.5  | 2177.035 | 250.5792          |
| Opening Price (OP)                          | 17.4    | 25488.0 | 1418.569 | 2499.359         |
| Closing Price (CP)                          | 48.8    | 29793.0 | 1570.865 | 3150.838         |
| Earnings Volatility=(CP-OP)/OP              | -8339   | 1.951   | 0.90   | 0.382              |
| Debt Service Capacity=NI/Debt              | -1.322  | 16029   | 416.191 | 2116.370         |
| Total Equity                                | 4.83    | 9478.69 | 1053.855 | 1930.937        |
| Debt                                        | 1.00    | 239843.0| 20664.670 | 39962.401       |
| Cash Balance                                | 3.46    | 52589.53| 4408.285 | 7895.825        |
| Interest Coverage Ratio                     | -134.75 | 90089.72| 725.3316 | 6007.3468       |
| Operating Income (OI)                       | -14189.00| 243226.66 | 19394.1677 | 34003.9537     |
| Net Income (NI)                             | -17862.00| 36080.00 | 4588.4341 | 6807.8838       |
| Cash Flow from Operating Activities (CFOA)  | -10031.02| 71459.00 | 7257.515 | 11424.205       |
| Business Risk (Financial leverage ratio=OI/NI)| -121.075| 352.382 | 9.299   | 30.939            |
| Cash Flow Coverage Ratio=CFOA/Debt          | -3.964  | 366.620 | 11.787 | 34.957            |
| Ownership                                   | 1.0     | 4.0     | 2.357  | 1.125              |
| Valid N (listwise)                          | 252     |         |       |                   |

The above table shows the descriptive statistics of all the variables which are taken into consideration for the research work. The frequency distribution is stated by the N which is 252 in each and every variable. It refers to that there were not any missing values in the frequency distribution in any of the variable. We have taken firm size i.e. Enterprise Value as a dependent variable where-as other variables are taken as an independent variable. The minimum value of the Enterprise value is 0 where-as the maximum value is 653,357.8.

Moreover, mean current ratio is 1.879 with the minimum and maximum current ratio of 0.26 and 12.01 respectively. If we look after the mean value of the current ratio then the value 1.879 can be consider as an ideal current ratio which means that the firm is able to pay its current obligation from the current assets.

The share price performance is taken on the basis of the current market value. The minimum and maximum share price performance of the sample data is -134.62 and 311.08 respectively with the mean value of 40.063 and standard deviation 51.082.

The Net profit Margin is calculated on the basis of net profit divided by sales. The minimum and maximum net profit margin of the company is -34.92 and 10024.16 respectively. If we look after the average value of the net profit margin of the sample then it is 106.852. Even though the companies are considered as top 100 companies then minimum net profit value of the company is still in negative. The deviation of the values from the mean value is exceeding the average value which is represented by the standard deviation.
India is taken as an emerging market which shows the average growth potentiality in terms of Return on Equity is 22.211. With minimum and maximum value of -100.74 and 312.73 respectively.

The asset utilization ratio was having the average ratio of 12.258 with minimum and maximum ratio of -21.69 and 77.61 respectively. It shows the ability to generate the net income from the total assets.

The dividend pay-out ratio having minimum and maximum value of -1053.76 and 1261.74 respectively with the average pay-out ratio of 30.549. The inflation and GDP of India is taken into consideration for our survey. The minimum and maximum GDP during the time period of 5 year was 1856.7 and 2597.5 respectively where-as the mean value of GDP for the time period of 5 year was 2177.035. Similarly, the minimum and maximum inflation rate for the 5-year time period was 2.2 and 9.1 respectively with the average rate of 5.478. The standard deviation of the GDP and inflation were 250.597 and 2.31 respectively.

Earning volatility is calculated with the difference of closing price and opening price divided by the opening price. The minimum and maximum value of earning volatility was 0.9 and standard deviation was 0.8339 and 1.951 respectively. The mean value of earning volatility was 0.9 and standard deviation of 0.382. The figure states that in between the span of 5-year time period there was not much more drastic change in the market as the minimum and maximum value both are approach to be near.

Maximum total debt service capacity in the research sample is 16029 where-as the minimum value is -1.322 with the mean value of 416.191 along with the standard deviation of 2116.370. It may be due to the fact that accessing long-term debt sources like loans and bonds is not possible for firms or they may rarely use long-term sources in their financing decisions due to the risks associated with them.

The cash flow from operating activities having minimum and maximum value of -10031.02 and 71459 respectively with the mean value of 7257.515. The negative cash flow represents the cash outflow where-as the positive cash flow represents the cash inflow. The ownership data is string in nature so we have converted the string data into the numeric form labelling from 1 to 4. 1 is represented by the family held, 2 is represented by the widely held, 3 is represented by foreign held, 4 is represented by the Govt. held and 5 is represented by the mix family owned companies.

**Objective -1:** To examine the differences among the company groups for determinants of capital structure.

To achieve this objective, the descriptive statistics is used and to find the differences among the age groups, one way ANOVA is used.

### Table 2: FIRM CATEGORIZATION (OLD AGE, MIDDLE AGE AND YOUNG AGE FIRM)

| Share price performance | N | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean |
|-------------------------|---|------|----------------|------------|---------------------------------|
|                         |   |      |                |            | Lower Bound | Upper Bound                  |
| share price             | 1 | 100  | 39.6732        | 51.1472    | 5.11472      | 29.5245 | 49.8219 |
| performance             | 2 | 115  | 42.8965        | 55.12995   | 5.14089      | 32.7124 | 53.0806 |
|                         | 3 | 30   | 36.3617        | 37.09484   | 6.77256      | 22.5102 | 50.2131 |
| Total                   |   | 245  | 40.7807        | 51.47805   | 3.28881      | 34.3026 | 47.2588 |
| profitability (net profit margin) | | | | | | |
|                         | 1 | 100  | 251.4791       | 1206.76544 | 120.67654    | 12.0307 | 490.9275 |
|                         | 2 | 115  | 13.0736        | 12.28486   | 1.14557      | 10.8042 | 15.3429 |
|                         | 3 | 30   | 8.1963         | 3.92075    | .71583       | 6.7323  | 9.6604  |
| Total                   |   | 245  | 109.7847       | 777.71889  | 49.68664     | 11.9153 | 207.6542 |
| growth opportunities (ROE) | | | | | | |
|                         | 1 | 100  | 25.6467        | 24.55750   | 2.45575      | 20.7740 | 30.5194 |
|                         | 2 | 115  | 16.7964        | 19.45671   | 1.81435      | 13.2022 | 20.3906 |
|                         | 3 | 30   | 24.1880        | 13.98888   | 2.55401      | 18.9645 | 29.4115 |
| Total                   |   | 245  | 21.3139        | 21.52079   | 1.37491      | 18.6057 | 24.0221 |
| asset utilization ratio (ROA=NI/TA) | | | | | | |
|                         | 1 | 100  | 15.1566        | 14.29638   | 1.42964      | 12.3199 | 17.9933 |
|                         | 2 | 115  | 10.3217        | 9.37237    | .87398       | 8.5903  | 12.0530 |
|                         | 3 | 30   | 11.3067        | 5.71669    | 1.04372      | 9.1720  | 13.4413 |
| Total                   |   | 245  | 12.4157        | 11.53902   | .73720       | 10.9636 | 13.8678 |
| liquidity (Current ratio) | | | | | | |
|                         | 1 | 100  | 2.0591         | 1.78012    | .17801       | 1.7059  | 2.4123  |
|                         | 2 | 115  | 1.8631         | 1.49432    | .13935       | 1.5871  | 2.1392  |
|                         | 3 | 30   | 1.5930         | .56392     | .10296      | 1.3824  | 1.8036  |
|                | Total        | 1         | 2         | 3         | 245        | 1.9100   | 1.54573  | .09875   | 1.7155   | 2.1046   |
|----------------|--------------|-----------|-----------|-----------|------------|----------|----------|----------|----------|----------|
| dividend payout ratio | 1            | 100       | 36.1206   | 35.2548   | .352543    | 29.1254  | .09875   | 1.7155   | 2.1046   | 43.1158  |
|                | 2            | 115       | 24.4123   | 157.91310 | 14.72547   | -.7587   | .09875   | 1.7155   | 2.1046   | 53.5834  |
|                | 3            | 30        | 37.1760   | 17.12504  | 3.12659    | 30.7814  | .09875   | 1.7155   | 2.1046   | 43.5706  |
| Total          | 245          | 30.7541   | 110.5963  | 7.06403   | 16.8399    | .09875   | 1.7155   | 2.1046   | 44.6684  |
| firm size (Enterprise value) (Cr.) | 1            | 100       | 135347.1266 | 139574.5501 | 107652.5078 | 163041.7454 |
|                | 2            | 115       | 88387.8340 | 79485.97793 | 73704.5098 | 103071.1582  |
|                | 3            | 30        | 56966.6820 | 65436.96699 | 32532.1170  | 81401.2470  |
| Total          | 245          | 103707.4042 | 110247.3751 | 7043.4463  | 89833.6883  | 117581.1201 |
| Earning volatility= (CP-OP)/OP | 1            | 100       | .0770     | .36089    | .03609     | .0054    | .1486    | .684456  |
|                | 2            | 115       | .0907     | .40963    | .03820     | .0150    | .1664    | .7205    |
|                | 3            | 30        | .1270     | .38433    | .07017     | -.0165   | .0270    | .1381    |
| Total          | 245          | .0896     | .38605    | .02466    | .0410      | .1381    |          |
| debt service   | 1            | 100       | 367.7235  | 1565.96820 | 57.0014    | 678.4456  |
| capacity= NI/Debt | 2            | 115       | 589.5410  | 2765.09967 | 78.7483    | 1100.3336 |
|                | 3            | 30        | 10.2140   | 14.85723  | 2.71255    | 15.7618  |
| Total          | 245          | 428.0652  | 2145.3322 | 137.06031  | 158.0929   | 698.0376  |
| total equity   | 1            | 100       | 1261.9509 | 1883.47500 | 88.34750   | 1635.6732 |
|                | 2            | 115       | 842.2707  | 1929.80431 | 485.7809   | 1198.7605 |
|                | 3            | 30        | 799.7537  | 1956.78371 | 69.0786    | 1530.4287 |
| Total          | 245          | 1008.3626 | 1918.1003 | 122.54294  | 766.9856   | 1249.7396 |
| Debt           | 1            | 100       | 23449.1712| 47196.14471| 4719.61447 | 10484.3422| 32813.9102 |
|                | 2            | 115       | 19885.1052| 36652.24542| 3417.83951 | 13114.3915| 26655.8190 |
|                | 3            | 30        | 12399.9537| 26585.14399| 4853.76102 | 2472.8978 | 22327.0096 |
| Total          | 245          | 20423.2769| 40338.86734| 2577.15570| 15346.9657| 25499.5880 |
| cash balance   | 1            | 100       | 6475.9106 | 10256.21129| 1025.62113 | 4440.8558| 8510.9654 |
|                | 2            | 115       | 3670.5883 | 6119.74394 | 570.66907  | 2540.0973 | 4801.0794 |
|                | 3            | 30        | 1218.8287 | 1525.80121 | 278.57191  | 649.0851 | 1788.5722 |
| Total          | 245          | 4515.4042 | 7981.3431 | 509.90873  | 3511.0178  | 5519.7869 |
| interest coverage ratio | 1            | 100       | 1170.8591 | 9050.87942 | 905.08794  | -625.0317 | 2966.4799 |
|                | 2            | 115       | 562.1017  | 2820.93633 | 263.05367  | 40.9944 | 1083.2090 |
|                | 3            | 30        | 34.1440   | 47.75417   | 2.75675    | 15.5762  |
| Total          | 245          | 745.9262  | 6091.6501 | 389.18125  | -20.6573   | 1512.5098 |
| operating Income (OI) | 1            | 100       | 31082.1961| 50536.53034 | 5053.65303 | 21054.6521 | 41109.7401 |
|                | 2            | 115       | 11106.8973| 8989.75877 | 838.29933  | 9446.2328 | 12767.5618 |
|                | 3            | 30        | 10871.0367| 10882.90429| 1986.93739 | 6807.2934 | 14934.7799 |
| Total          | 245          | 19231.1996| 34428.57367| 2199.56089| 14898.6497 | 23563.7494 |
| Net Income (NI) | 1            | 100       | 7090.2500 | 8535.40870 | 853.54087  | 5396.6397 | 8783.8603 |
|                | 2            | 115       | 3104.3686 | 4560.32653 | 425.25264  | 2261.9464 | 3946.7908 |
|                | 3            | 30        | 2882.7313 | 5653.24773 | 1032.13710 | 771.7739 | 4993.6887 |
| Total          | 245          | 4704.1197 | 6857.23497 | 438.09267 | 3841.1937 | 5567.0457 |
We are conducting the research of total 51 companies in terms of market capitalization from top 100 companies which are listed in BSE. As per our analysis we found that 21 companies are old aged companies which have 100 years of firm –year observations. Similarly, 23 companies are of middle-aged companies which are of 115 firm -year observation where-as 7 companies are of young age which are of 30-firm -year observation.

On the basis of share price performance, the mean value of middle-aged companies is higher in comparison to the mean values of the old age and young aged companies. The least mean value is of young aged companies which is 36.36. In terms of profitability the maximum and minimum mean value is of old age and young age i.e. 251.47 and 8.19 respectively. When we look after the mean value on the basis of growth opportunities then the old age posses the higher mean i.e. 25.6 where as middle age possess the least mean i.e. 16.7. The maximum mean value having the variables on the basis of (asset utilization ratio, liquidity ratio, firm size) in respect to the old aged firm where as the minimum mean value having the variables on the basis of (asset utilization ratio, dividend payout ratio, firm size and debt service capacity) in respect to the middle-aged firm. Similarly, the Middle-aged firm have the maximum mean value and old aged firm have the minimum mean value on the basis of equity, debt balance, interest coverage ratio, operating income, net income, and cash flow from operating activities, business risk and cash flow coverage ratio.

**Hypothesis Testing**

Hypothesis: There is no significant difference among the companies of different age groups and the capital structure determinants and firm value.

To test the hypothesis, one –way ANOVA is used to compare the groups.

**Table 3: ANOVA**

|                          | Sum of Squares | df | Mean Square | F     |
|--------------------------|----------------|----|-------------|-------|
| Share price performance  | Between Groups | 1223.312 | 2 | 611.656 | .229 |
|                         | Within Groups  | 645374.257 | 242 | 2666.836 |
|                         | Total          | 646597.569 | 244 |       |
| Profitability (net profit margin) | Between Groups | 3392936.199 | 2 | 1696468.100 | 2.847 |
|                         | Within Groups  | 144189650.204 | 242 | 595825.001 |
|                         | Total          | 147582586.403 | 244 |       |
| Growth opportunities (ROE) | Between Groups | 4471.991 | 2 | 2235.995 | 4.986 |
|                         | Within Groups  | 108535.231 | 242 | 448.493 |
|                         | Total          | 113007.221 | 244 |       |
| Measure                          | Between Groups                                | Within Groups     | Total       | Between Groups                                | Within Groups     | Total       |
|---------------------------------|-----------------------------------------------|-------------------|-------------|-----------------------------------------------|-------------------|-------------|
| Asset utilization ratio (ROA=NI/TA) | 1292.431                                      | 2                 | 646.216     | 5.013                                         |                   |             |
|                                 | Within Groups                                 | 31195.905         | 242         | 128.909                                       |                   |             |
|                                 | Total                                         | 32488.336         | 244         |                                               |                   |             |
| Liquidity (Current ratio)       | 5.490                                         | 2                 | 2.745       | 1.150                                         |                   |             |
|                                 | Within Groups                                 | 577.496           | 242         | 2.386                                         |                   |             |
|                                 | Total                                         | 582.986           | 244         |                                               |                   |             |
| Dividend payout ratio           | 8742.206                                      | 2                 | 4371.103    | .356                                         |                   |             |
|                                 | Within Groups                                 | 2974314.552       | 242         | 12290.556                                     |                   |             |
|                                 | Total                                         | 2983056.757       | 244         |                                               |                   |             |
| Firm size (Enterprise value) (Cr.) | 192637318286.197                              | 2                 | 96318659143.09 | 8.406                        |                   |             |
|                                 | Within Groups                                 | 2773056710167.016 | 242         | 11458912025.48       |                   |             |
|                                 | Total                                         | 2965694028453.213 | 244         |                                               |                   |             |
| Earnings volatility=(CP-OP)/OP   | .058                                          | 2                 | .029        | .193                                         |                   |             |
|                                 | Within Groups                                 | 36.306            | 242         | .150                                         |                   |             |
|                                 | Total                                         | 36.364            | 244         |                                               |                   |             |
| Debt service capacity= NI/Debt  | 8600659.130                                   | 2                 | 4300329.565 | .934                                         |                   |             |
|                                 | Within Groups                                 | 1114398271.665    | 242         | 4604951.536                                   |                   |             |
|                                 | Total                                         | 1122998930.795    | 244         |                                               |                   |             |
| Total equity                    | 10908683.081                                  | 2                 | 5454341.541 | 1.488                                         |                   |             |
|                                 | Within Groups                                 | 886793895.599     | 242         | 3664437.585                                   |                   |             |
|                                 | Total                                         | 897702578.680     | 244         |                                               |                   |             |
| Debt                            | 2880122410.069                                | 2                 | 1440061205.035 | .884                        |                   |             |
|                                 | Within Groups                                 | 394162586777.032 | 242         | 1628771019.740         |                   |             |
|                                 | Total                                         | 397042709187.101 | 244         |                                               |                   |             |
| Cash balance                    | 792457931.622                                 | 2                 | 396228965.811 | 6.501                        |                   |             |
|                                 | Within Groups                                 | 14750755447.623  | 242         | 60953534.908                                   |                   |             |
|                                 | Total                                         | 15543213379.245   | 244         |                                               |                   |             |
| Interest coverage ratio         | 37141828.685                                  | 2                 | 18570914.342 | .498                                         |                   |             |
|                                 | Within Groups                                 | 9017259466.187    | 242         | 37261402.753                                   |                   |             |
|                                 | Total                                         | 9054401294.872    | 244         |                                               |                   |             |
From the table, there exist significant differences among the companies of different groups such as young, middle aged and old age with respect to the determinants of capital structure. This means the null hypothesis is rejected except for the explanatory variables such as net income, operating income, cash balance, enterprise value, asset utilization ratio, growth opportunities at p<0.05 and net profit margins (at p<0.10).

II. CONCLUSION

The research is carried out to identify the factors affecting the capital structure decision during the firm’s life cycle. The pecking theory states an inverse relation of leverage with profitability, during growth and maturity and positive relation with growth opportunities during introduction, shake-out and decline. The start-up firm commonly rely on the debt capital if the firm is unable to finance from the family and friend capital. The determinant of capital structure decision is based on profitability, liquidity, nature of industry, timing and timing of issue. In contrary to conventional wisdom, debt is fundamental to the business firms in the early stage and firm rebalance their capital structure by substituting internal capital with debt.

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