



An Empirical Study To Determine The Capital Structure Determinants In Selected Indian Companies

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Abstract:

This study examines the determinants influencing capital structure decisions across major Indian manufacturing industries. Using panel data from 100 companies across 10 industries over the period 2010–2020, the research applies a static panel regression approach to analyze the relationship between leverage and firm-specific as well as macroeconomic variables. The findings reveal that determinants of capital structure vary significantly across industries, indicating that no universal financing pattern exists. The study contributes to existing literature by emphasizing industry-specific financial behavior in emerging markets like India.

Keyword: Capital Structure Determinants, Indian manufacturing industries, financial behavior leverage, macroeconomic variables

1. INTRODUCTION

In the current era of fierce corporate competition, a business concerns financial performance is indisputably vital to the long-term survival and steady expansion of an economic unit. The rationale behind this is because the entity's growth and goodwill are significantly impacted by its financial performance. The two solid foundations that managers must focus on in order to get the optimum outcome are efficiency and equity. In the current market-driven state of business affairs, companies have to face both domestic and global challenges in the production and profit domains if they hope to flourish and grow. Improved financial performance can satisfy all the stakeholders including employees, customers, investors, creditors, debtors, management, and others who play a crucial role as coalition partners in a company's progress. It can also boost the confidence of shareholders seeking higher dividends and share prices. Conversely, poor performance will have an impact on employment, the environment, and equity for all those involved as well as the broader community.

The finance literature identifies three critical decision-making domains that finance managers should address that are financing, investment, and dividend decisions. One of the three main decision-making domains, capital structure decisions, is associated with a firm's or company's finance decisions. The definition of "capital" according to the dictionary is the total amount of money or money's worth that can

be invested to launch or expand a firm. Conversely, "structure" refers to the way something is put together or how something is arranged in an orderly fashion. It speaks about "the organization of something" or "the composition of parts". However, in the context of finance, capital structure describes the split between equity (capital) and debt (fixed-interest securities) that have been utilized to fund a company. The amount of debt and equity that can be used to finance an investment plan depends on the financing decision made by the company. The asset mix of a firm is one of the most crucial things to consider when making an investment. The choice of finance consists of two parts. First, the theory of capital structure discusses the theoretical connection between the usage of debt and the return to shareholders. When debt is used, a higher return to the shareholders through leverage usually means a larger financial risk. A well-balanced debt-to-equity ratio is crucial for achieving a trade-off between risk and return to shareholders. This is commonly referred to as an ideal capital structure in finance literature. As the ideal capital structure is difficult to define, the objective capital structure is really thought to be one that has a reasonable balance between debt and equity capital. However, achieving the desired capital structure is quite challenging. Therefore, one aspect of the financing decision-making process involves determining whether an ideal capital structure exists. If so, it can be challenging to identify the ideal capital structure; therefore, in theory, the target capital structure is one that has a respectable ratio of debt to equity capital.

2.Literature Review

Popli and Jaiswal (2012) through the paper “**Determinants of Corporate Capital Structure of Indian Industries**” investigated the variables influencing the choices made about "capital structure" in a few Indian industries. The primary goal was to determine to what extent the major capital structure theories can describe the capital structure choice of the Indian industries. The capital structure decisions made by two hundred thirty-two (232) Indian manufacturing companies under twelve(12) industries can be explained by theories. They applied multiple regression models and the duration of the study was from 2005 to 2011. The main determinants of an industry's capital structure are its size, asset structures, agency expenses, and non-departmental tax shield. At one or five percent, the coefficients of these variables are significant. At the one percent or five percent level, the coefficients of these factors were significant.

Malinić et.al (2013) in the paper titled “**The Determinants of Capital Structure in Emerging Capital Markets: Evidence from Serbia**” studied to look into the factors that affected Serbian companies' "capital structure" between 2008 and 2011, focusing on the country's 108 large and medium-sized non-financial enterprises. The study utilized book value, which is the total book value of all short-term and liabilities commitments, as an independent variable and "ROE" to measure the factors affecting the leverage structure. The current ratio and asset tangibility were the study's dependent variables. The results showed that, similar to other nations, a firm's capital structure is influenced by its unique drivers. The firm's capital structure was extremely rigid due to an underdeveloped capital market and a lack of diverse financial resources. Serbia's business chooses short-term capital with higher shareholders and lower responsibility than both developed and emerging nations. Conversely, in the event of a financial crisis, corporations with distinct borrowing sources and no major concerns might restructure their financial obligations.

Handoo and Sharma (2014) conducted a study among eight hundred and seventy (870) listed Indian companies of both government and private enterprises through the paper “**A study in determinants of Capital Structure in India**” in search of most significant factors that determined "capital structure" between 2001 and 2010. Profitability, assets tangibility, growth, size, cost of debt, liquidity, financial distress, tax rate, debt serving capacity, and age were used as independent variables in this study, while the dependent variables included –total debt ratio (TDR), –long-term debt ratio (LTD), and –short-term debt ratio (STD). The multiple regression approach, the multicollinearity test, and the Durbin-Watson statistic test were used to

examine the goals. It was discovered that the following variables had a substantial impact on the financial structure of the selected Indian firms: "profitability," "growth," "asset tangibility," "size," "cost of debt," "tax rate," and "debt serving capacity."

Song (2005) through the paper **–Capital Structure Determinants: An Empirical Study of Swedish Companies**” examined the variables that affected the capital structure of six thousand Swedish companies from 1992 to 2000. The terms "tangibility," "non-debt tax shield," "profitability size," "expected growth," "uniqueness," and "income variability" were used by the researchers in this study. "Time dummies" are the independent variables, while leverage is the dependent variable. In this study, descriptive statistics and a panel regression model were used to evaluate the data. A fixed effects model was utilized. The study's findings demonstrated that long-term and short-term debts differ significantly from one another, and the majority of the elements align with theories related to capital structure.

Ahmadimousabad et.al (2013) through the paper **“Capital Structure Decisions and Determinants: An Empirical Study in Iran”** carried out a study involving one hundred and thirty-three enterprises to examine the variables influencing the financial structure of an Iranian company from 2001 to 2010. Data was obtained from the annual reports available on the website of the relevant company. To determine the outcome, the dependent and independent variables were analyzed using multiple regression analysis. The study's result was that capital structure was positively connected with "size" and "risk," but it was adversely correlated with "profitability," "tangibility," and "growth." According to this analysis, the most crucial components for a firm's capital structure are its financial aspects.

Ghazouani (2013) through the paper **“The Capital Structure through the Trade- Off Theory: Evidence from Tunisian Firm”** conducted a study among twenty (20) Tunisian Firms which were belong to industrial, commercial and service sector to look into capital structure behaviour between 2004 and 2010 within the framework of trade-off theory. Data came from the BVMT. The models that were used were a dynamic panel data model and a static panel data regression model. The first model's result was that the key informative factors of the degree of capital structure of Tunisian enterprises are their profitability and asset structure. The most important finding using dynamic model, however, was that the adjustment costs are rather high and increase slowly as one approaches the ideal ratio.

Modugu and Eragbhe (2015) in their paper **–Determinants of Capital Structure Decision: A Research Synthesis** stated that choosing a capital structure presents many difficulties for businesses. One of the most crucial choices that public interest companies must make is figuring out the right debt to equity ratio. An unwise financial decision can cause any business's fortunes to stagnate. Therefore, in order to maximize wealth, managers must take intentional steps in the right direction at the right moment to identify the factors that must be taken into account when selecting the appropriate finance mix. The premise behind this conceptual work is that senior business executives ought to consult it as a guide when deciding on capital structures. The research looks at a lot of literature to find key elements to consider when selecting a capital structure.

Vukasin Kuc et.al (2020) examined the key determinants of capital structure through their research paper namely **–Determinants of the Capital Structure of Large Companies: Evidence from Serbia**” among one hundred forty one (141) largest non-financial firms between 2009 and 2017. Panel data fixed effect model was inculcated in this investigation. The study employed the following independent and dependent variables: profitability, size, tangibility, growth, volatility, liquidity, cash gap, tax-shield, GDP growth, inflation, and banking sector development. The dependent variables included total leverage, short-term leverage, and long-term leverage. According to the study's findings, businesses are mostly financed by short-term loans, which is consistent with

the pecking order idea. The findings indicate that while long-term debt is fully consistent with the trade-off theory, behavior is in line with the packing order hypothesis.

3. RESEARCH GAPS

It is clear from a study of the literature on capital structure choices that many studies have sought empirical evidence for various capital structure theories in a variety of settings. Analyzing the factors affecting the company's leverage or capital structure, or capital structure determinants, is the first step, but

- i. Numerous studies have taken into account firm-specific characteristics in addition to capital structure drivers. The body of research on how national characteristics affect capital structure in India is extremely thin.
- ii. Another gap, that all the determinants are not influenced in same way for all the industry. Sometimes it gave positive influence some gave negative.

Numerous studies discussing the factors influencing the capital structure were discovered after a thorough review of the literature by a number of scholars and researchers. However, the findings are inconsistent across the entire trial. A small attempt has been made to close this gap and increase our understanding of how leverage affects business value through this inquiry.

4. OBJECTIVE OF THE STUDY

The primary objective of the study is to identify how much capital structure is depends on their determinants and is the dependability of determinants varies on industry to industry or not.

5. HYPOTHESIS OF THE STUDY

H₀ - There is no significant difference among the various industries with respect to the relationship between Leverage and determinants of capital structure.

H₁ - There is a significant difference among the various industries with respect to the relationship between Leverage and determinants of capital structure.

6. DATABASE AND METHODOLOGY OF THE STUDY

This study purely based on secondary database. All the quantitative figures were composed from "CAPITALINE 2000" software and different companies financial statement. This article based on top hundred (100) companies under ten (10) reputed manufacturing industries which are listed in National Stock exchange (NSE) and all the data were collected on the basis of annual turnover. Industries which were used in this case like cement industry, automobile industry, pharmaceutical industry, fertilizer and chemical industry, construction industry, oil and gas industry, power industry, iron and steel industry, metal Industry and FMCG. The duration of the current study was from 1st april 2010 to 31st march 2020. The convenient sampling procedure was used for carrying out the study.

This study based on Static Panel Regression model. Here Leverage (LEV) was used as dependent variable and size(SZ), Tangibility(TAN), Liquidity(LIQ), Uniqueness (UNI), Return on Invested Capital(ROIC), Firm quality(FIRMQ), Income variation(INCV), Non-Debt Tax Shields(NDTS), growth(GR), Inflation(INF), GDP Growth(GDPG) as independent variables for analysing the objectives.

A graphical representation of variables was shown below

Variables	Formula
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Dependent	
Leverage(LEV)	Long-Term Debt/Total Assets
Independent	
Size(SZ)	Log of Total Assets
Tangibility(TAN)	Total Fixed Assets/Total Assets
Liquidity(LIQ)	Current Assets/ Current Liabilities
Uniqueness (UNI)	Selling Expenses/Sales
Return on Invested Capital(ROIC)	ROIC=[(PAT+Interest)/ Capital Employed]*100
Firm Quality(FIRMQ)	Altman Z –Score
Income Variation(INCV)	Log of Standard Deviation of Earnings before Interest and Taxes
Non-Debt Tax Shields(NDTS)	Depreciation / total assets
Growth(GR)	Year after Year Change to Total Average Assets
Inflation(INF)	Annual inflation rate of wholesale price index
GDP Growth(GDPG)	Year on year change in GDP at current Price

To solve the objective of the study there is a static panel regression model which is as follows-

$$LEV_{it} = \alpha_0 + \beta_1 ROIC_{it} + \beta_2 SZ_{it} + \beta_3 GR_{it} + \beta_4 LIQ_{it} + \beta_5 TAN_{it} + \beta_6 FQ_{it} + \beta_7 NDT_{it} + \beta_8 UNI_{it} + \beta_9 INCVAR_{it} + \beta_{10} GDPG_{it} + \beta_{11} INF_{it} + e_{it}$$

Where α_0 is the intercept term, e_{it} is the residual term, $i = 1, 2, 3, \dots, 100$ number of companies and $t = 1, 2, 3, \dots, 10$ years. $\beta_1, \beta_2, \dots, \beta_{11}$ are coefficient of independent variables.

In this research panel data was used as the dataset consists of cross-sectional data and time series data which enable us the heterogeneity of factors used in this research, makes more effective and give more degree of freedom and reduce collinearity among variable. This study is actually based on static panel model regression which consists of random effect, fixed effect and pooled OLS. So, for selection of the model under static panel regression this study goes for Hausman Specification Test and if the above mentioned test do not give the significant statistics value i.e ($p > 0.05$) then the study go for Breusch and Pagan LM test

7. MAJOR FINDINGS OF THE STUDY

7.1 MULTICOLLINEARITY TEST

Measure	LE V	SZ	TA N	LI Q	UN I	FIRM Q	INC V	NDT S	G R	IN F	GDP G	ROI C	Mea n VIF
Tolerance value	0.894	0.216	0.730	0.883	0.961	0.966	0.238	0.979	0.974	0.916	0.961	0.996	
VIF	1.12	4.63	1.37	1.13	1.04	1.06	4.19	1.02	1.03	1.09	1.04	1.00	1.72

According to the Gujarati(2003), if the value of VIF is more than 10 then their must be multicollinearity problem as VIF(Variance Inflation Factor) is the measurement tool for multicollinearity problem.

The above table showed whether the multicollinearity problem is in the data set or not. After testing the dataset it was clear that there was no multicollinearity problem as VIF of the different variables are below 5.

7.2 STATIONARITY TEST

VARIABLE	T-STATISTICS	P VALUE
Leverage (LEV)	-56.7895	0.0000
Size (SI)	-5.8083	0.0000
Tangibility (TAN)	-12.4250	0.0000
Liquidity (LIQ)	-11.1953	0.0000
Uniqueness (UNQ)	-62.7269	0.0000
Growth (GR)	-20.4074	0.0000
Firm Quality (FIRMQ)	-20.7848	0.0000
Return on Invested Capital (ROIC)	-49.7655	0.0000
Inflation	-9.5435	0.0000
NDTS	-11.6867	0.0000
GDP Growth	-12.9215	0.0000
Icmvar	-41.0874	0.0000

All of the variables which were taken into consideration in the study for testing Stationarity, using the Levin, Lin, and Chu (LLC) Test for Unit Root Testing (2002). The test results clearly demonstrated that the null hypothesis of a panel unit root in the series level was rejected (p -value < 0.05) at different lag lengths, showing that the series is stationary and lacks a unit root. Time-series characteristics transferred via the panel data are consistent throughout time since all variables are stationary at a constant level according to the LLC test.

7.3 SELECTION OF MODEL

Industry	Observation	Hausman Specification test	Bruesch-Pagan LM test	Appropriate Model
Pharmaceutical	100	52.08* (0.0000)	0.00 (1.000)	Fixed-effect Model
Automobile	100	22.21* (0.0228)	0.00 (1.000)	Fixed-effect Model
Cement	100	197.26* (0.0000)	0.00 (1.000)	Fixed-effect Model
Construction	100	56.73* (0.0000)	0.00 (1.000)	Fixed-effect Model
Fertilizer	100	41.12* (0.0000)	0.00 (1.000)	Fixed-effect Model
FMCG	100	45.06* (0.0000)	0.00 (1.000)	Fixed-effect Model
Iron and Steel	100	74.42* (0.0000)	0.00 (1.000)	Fixed-effect Model
Oil and Gas	100	149.63* (0.0000)	0.00 (1.000)	Fixed-effect Model

Power Generation and Distribution	100	100.47* (0.0000)	0.00 (1.000)	Fixed-effect Model
Metal	100	261.15* (0.0000)	0.00 (1.000)	Fixed-effect Model

Pharmaceutical industry consists of ten(10) pharmaceutical company and to continue the study we go for model selection process under static panel regression model. So First we go for Hausman Specification test and their statistics value showed 52.08 with its p value of 0.000 which indicated that it is positively significant in 1% level and by the rules we choose Fixed Effect Model. In case of automobile industry after processing the Hausman specification test statistics value showed 22.21 with p value of 0.0228 which is also positively significant. So again we go for Fixed effect model. From the above table rest of the industry like cement, construction, Fertilizer, FMCG, Iron and steel, Oil and Gas, Power Generation and Distribution and metal industry also showed the positive significant value as the p value of 0.000. So we go for Fixed Effect Model for analysig the data.

7.4 ANALYSIS OF VARIOUS INDUSTRIES

7.4.1 PHARMACEUTICAL INDUSTRY

For analysing the determinants of capital structure which are varies industry to industry or not, we have already done some statistical test. In case of pharmaceutical industry after Hausman Specification test we choose fixed effect model and we formulate the regression

$$LEV_{it} = - 0.2147 + 0.0021 ROIC_{it} + 0.0000194SZ_{it} + 0.000096 GR_{it} + 0.0132 LIQ_{it} + 0.2508TAN_{it} - 0.0255FQ_{it} + 1.2375NDTS_{it} - 0.0484UN_{it} + 0.0168INCVAR_{it} + 0.0059GDPG_{it} + 0.0112INF_{it}$$

$$R^2 = 0.2570$$

After the regression was finished, it was discovered that the chosen pharmaceutical company's leverage was positively significantly correlated with inflation, tangibility, and liquidity at the 1% level and with ROIC at the 5% significant level. However, the chosen company's leverage had a negative correlation with GDP growth and business quality, whereas the other factors had little bearing. 0.2570 is the R² value.

7.4.2 AUTOMOBILE INDUSTRY

We have also conducted statistical tests to examine the degree to which leverage depends on other independent variables in the automotive industry. Therefore, we must select the Fixed Effect Model and create the regression after passing the Hausman Specification test.

$$LEV_{it} = 1.6443 - 0.0002 ROIC_{it} - 0.0546 SZ_{it} - 0.0003 GR_{it} - 0.0810 LIQ_{it} - 1.1717 TAN_{it} - 0.0071 FQ_{it} + 0.3772NDTS_{it} - 0.2451UN_{it} - 0.0355 INCVAR_{it} - 0.0095 GDPG_{it} - 0.0018 INF_{it}$$

$$R^2 = 0.3513$$

From the above analysis leverage was positively significant with NDTS at 1% level and negatively significant with tangibility at 1% level. The rest of the variables are insignificant. Here dependent variable was 35.13% dependent on the independent variable.

7.4.3 CEMENT INDUSTRY

In the case of the cement industry as well, we first perform certain statistical tests. For model selection, we perform the Hausman Specification test and select the Fixed Effect model for data analysis because the results of the aforementioned test were significant. We then create the regression.

$$\text{LEV}_{it} = 0.4511 + 0.0009 \text{ROIC}_{it} + 0.0120 \text{SZ}_{it} + 0.0006 \text{GR}_{it} + 0.1084 \text{LIQ}_{it} + 0.1848 \text{TAN}_{it} - 0.0709 \text{FQ}_{it} + 0.8787 \text{NDTS}_{it} - 0.0213 \text{UN}_{it} - 0.0459 \text{INCVAR}_{it} - 0.0005 \text{GDPG}_{it} - 0.0073 \text{INF}_{it}$$

$$R^2 = 0.2659$$

Leverage is positively correlated with tangibility, growth, and inflation at the 1% level, according to the aforementioned investigation. However, at the 1% level, leverage has a negative correlation with both firm quality and income variation. In this case, the dependent variable was highly reliant on the independent factors, as indicated by the R-square of 0.2659.

7.4.4 CONSTRUCTION INDUSTRY

The fourth industry was the construction sector, which likewise underwent a Hausman specification test and produced a significant result. We then selected a fixed effect model to analyze the regression that was developed.

$$\text{LEV}_{it} = 0.4407 - 0.00004 \text{ROIC}_{it} - 0.0360 \text{SZ}_{it} + 0.00067 \text{GR}_{it} + 0.0186 \text{LIQ}_{it} + 0.1463 \text{TAN}_{it} - 0.0179 \text{FQ}_{it} + 0.1127 \text{NDTS}_{it} - 1.2514 \text{UN}_{it} + 0.0038 \text{INCVAR}_{it} + 0.0029 \text{GDPG}_{it} - 0.0050 \text{INF}_{it}$$

$$R^2 = 0.0898$$

From the above regression analysis it was showed that leverage was associated negatively significant with ROIC and Uniqueness. On the other hand it was positively associated with growth and tangibility as their p value was less than 0.05 and rest of the explanatory variables are insignificant. This analysis showed R square value was 0.0898 which is significant in 1% level as its p value was 0.0000.

7.4.5 FERTILIZER INDUSTRY

In the fertilizer industry, we use statistical testing to choose a model in order to analyze the elements that have the greatest impact on leverage. We selected the fixed effect model after running the Hausman Specification test because the test produced a significant result. The regression that we have developed

$$\text{LEV}_{it} = -0.8159 - 0.00067 \text{ROIC}_{it} + 0.0866 \text{SZ}_{it} - 0.0020 \text{GR}_{it} - 0.0190 \text{LIQ}_{it} - 0.1627 \text{TAN}_{it} + 0.0691 \text{FQ}_{it} + 5.3036 \text{NDTS}_{it} - 1.9704 \text{UN}_{it} + 0.0423 \text{INCVAR}_{it} + 0.0152 \text{GDPG}_{it} + 0.0221 \text{INF}_{it}$$

$$R^2 = 0.4586$$

The aforementioned analysis led to the conclusion that there was a negative correlation with ROIC, uniqueness, growth, liquidity, and tangibility and a positive substantial influence on GDPG and inflation. However, the remaining variables have a negligible impact on the dependent variable. The fixed effect model was shown to be suitable for these industries, and the R square value was 0.4586, which is satisfactory.

7.4.6 FMCG (First Moving Consumer Goods)

Another one selected industry was FMCG which was also under research that capital structure was dependent to other selected explanatory variables or not or if dependent then how much. So for that we go for Hausman specification test and it gave a significant result and we for fixed effect model. For analysis we construct a regression-

$$\text{LEV}_{it} = -0.4622 - 0.00000938 \text{ROIC}_{it} + 0.0931 \text{SZ}_{it} - 0.0006 \text{GR}_{it} - 0.0003 \text{LIQ}_{it} + 0.0838 \text{TAN}_{it} - 0.0086 \text{FQ}_{it} + 0.0108 \text{NDTS}_{it} + 0.2819 \text{UN}_{it} - 0.0574 \text{INCVAR}_{it} + 0.0039 \text{GDPG}_{it} + 0.0181 \text{INF}_{it}$$

$$R^2 = 0.1481$$

From the above regression analysis it was found that leverage was dependent positively significantly associated with inflation and size . On the other hand GDPG negatively significantly associated with leverage. The value of R^2 is significant i.e 0.1481 with p value 0.0000. So in this case also fixed effect model was appropriate.

7.4.7 IRON AND STEEL

In case of Iron and steel industry again to verify the factors which are effective on capital structure we go for Hausmen specification test and selected fixed effect model. The regression we formulate such like

$$LEV_{it} = 0.00092 + 0.0047 ROIC_{it} + 0.0891 SZ_{it} + 0.0001 GR_{it} + 0.0153 LIQ_{it} - 0.6998 TAN_{it} - 0.1876 FQ_{it} + 2.8764 NDT_{it} - 1.1003 UN_{it} + 0.0119 INCVAR_{it} + 0.0046 GDPG_{it} + 0.0017 INF_{it}$$

$$R^2 = 0.1753$$

Leverage was found to be positively and strongly correlated with ROIC, Size, Growth, Liquidity, NDTs, income variation, GDPG, and Inflation based on the regression mentioned above. However, it had a negative correlation with two factors: firm quality and tangibility. The R square value for this industry was 0.1753, which is significant at the 1% level.

7.4.8 METAL INDUSTRY

Certain elements are also significantly associated with leverage, both positively and negatively, in the metal business. We used the Hausman Specification Test once more to confirm that relevance, and the results were noteworthy. For the analysis of the metal industry dataset, we therefore choose the fixed effect model. The regression formula that we create

$$LEV_{it} = 5.5814 + 0.0000122 ROIC_{it} + 0.0660 SZ_{it} + 0.00012 GR_{it} + 0.0011 LIQ_{it} + 0.0446 TAN_{it} - 0.0054 FQ_{it} + 2.1830 NDT_{it} + 0.0257 UN_{it} - 0.0043 INCVAR_{it} + 0.0033 GDPG_{it} + 0.0372 INF_{it}$$

$$R^2 = 0.1909$$

It is evident from the regression above that leverage has a positive and significant relationship with size, growth, and NDTs. However, it had a negatively significant correlation with company quality, while other factors had a negligible correlation with capital structure. The p value was 0.0000 and the R^2 value was 0.1909, both of which are significant.

7.4.9 OIL AND GAS INDUSTRY

In order to examine the connection between capital structure and its determinants, we also use the oil and gas sector. Therefore, we first use the Hausman specification test for model selection in order to analyze the dependence of leverage on the other variable. Once more, this test produced significant results, so we choose a fixed effect model. The developed equation

$$LEV_{it} = -1.1489 + 0.0010 ROIC_{it} + 0.1247 SZ_{it} + 0.0002 GR_{it} - 0.0108 LIQ_{it} + 0.0325 TAN_{it} - 0.0186 FQ_{it} - 0.1808 NDT_{it} + 0.0604 UN_{it} + 0.0320 INCVAR_{it} + 0.0037 GDPG_{it} + 0.0145 INF_{it}$$

$$R^2 = 0.1234$$

The aforementioned equation indicates that leverage is inversely correlated with company quality and favourably correlated with ROIC, size, and inflation. Other factors have negligible relationships with leverage. With a significant p value of 0.0000, the R^2 value was 0.1234.

7.4.10 POWER GENERATION AND DISTRIBUTION

Power generation and distribution was another business chosen for this investigation. to determine whether the chosen explanatory variables affect leverage. We therefore repeat the Hausman Specification

Test and select the fixed effect model after the results show a significant outcome. To assess the goal, we create a regression equation.

$$LEV_{it} = -1.1797 + 0.0004 ROIC_{it} + 0.1653 SZ_{it} - 0.0002 GR_{it} - 0.0013 LIQ_{it} - 0.0434 TAN_{it} - 0.0881 FQ_{it} + 1.3104 NDT_{sit} + 0.0009 UN_{it} - 0.0252 INCVAR_{it} + 0.0023 GDPG_{it} + 0.0076 INF_{it}.$$

R² = 0.3194

Size, inflation, and GDP growth are all positively significant at the 1% and 10% significance levels, according to the regression equation above. Conversely, at the 1% and 5% significance levels, company quality and income variation are adversely significant. The p value is 0.0000 and the R-square value is 0.3194. Thus, it is important.

8. CONCLUSION

The goal of this study was to determine whether capital structure determinants differ between industries using a static panel regression model. The aforementioned discussion provides empirical evidence that not all capital structure-related variables have the same level of significance for every industry. Certain factors may be inconsequential or adversely significant in one industry but positively significant in another, and vice versa. Therefore, we may conclude that different industries have different capital structure drivers, and the finance manager needs to exercise extreme caution while defining the company's capital structure.

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