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A Study to Empirically Quantify the Impact and Interlink the Concepts of Capital Structure and Corporate Strategy

Krishna Kumar S[1] and Ajay Venkataraman[2]

Abstract

Capital Structure refers to the specific combination of debt-equity an enterprise employs to make up its finances. Corporate Strategy on the other hand is the overall strategy of a firm that enables it to add additional value to itself over and above what it creates. Researchers in the past have concluded these concepts to oppose one another. However, there exists a need to interlink these concepts. This study mainly seeks to bridge a gap between the two while quantifying the effect of Capital Structure on Corporate Strategy. It has also been proven that financial decisions have strategic relevance as well as affect corporate governance. The individual determinants of both concepts have been considered to quantify the impact, i.e. Debt-Equity and Debt-Cap for Capital Structure and Stability, Growth and Retrenchment for Corporate Strategy. Structural Equation Modelling (SEM) in Smart PLS has been adopted due to its ability to test liner models with a theoretical base. The calculations have been graphically represented in the form of a model, indicating path dependencies. By attempting to empirically test and prove that such a relation exists our study provides several implications for the industry and organizations alike who strive to devise a capital optimum strategy.

Keywords: Capital Structure, Corporate Strategy, Debt-Equity, Debt-Cap, Growth, Retrenchment, Stability

1. Introduction

In today's globalized world a firm operates in an evolving environment which predominantly fosters competition. Such a scenario requires the company to not only to adapt financially but also revise and revamp its strategy. Therefore, we have arrived at a juncture wherein the fields of finance and management are inter-reliant. This study focuses on Capital Structure (finance) and Corporate Strategy (management) in specific.

Capital Structure and Corporate Strategy have been concepts studied for decades. However, in retrospect there has been no requirement to interlink both these studies. The financial spectrum today is more volatile than ever before. The ability to ascertain an optimum capital structure complimented with a comprehensive strategy in the need of the hour for any firm. Upon scrutinizing the vast literature available and the functioning of large scale business enterprises, the unexplored space between these two concepts became progressively more evident. Hence, this study seeks to establish a relation between the concepts of Capital Structure and Corporate Strategy with the help of their respective determinants.

1. Assistant Professor, Faculty of Management Studies, PES University, Bangalore, India
2. Student, Bachelor of Business Administration, PES University, Bangalore, India

The paper hereon is divided into sections, namely the review of literature which will elucidate the basis of our research proposition, the hypothesis and our model. The proposition is then further tested empirically using the structural equation modelling method and finally the discussion encompassing the arguments supporting the model and the implications for the corporate world.

2. Review of Literature

Only a handful of researches have either suggested or proven a bond among the fields of corporate finance and strategic management (Ward and Grundy, 1996). In sync with the views on the existing literature available Bettis (1983), deciphers that the conflicting viewpoints concerning strategic management and theories of finance are the cause of an antagonistic relation between the two concepts. More often than not, past researches have proven that in a scenario of perfect market, a company's strategy may not be solely based on financial decisions (Modigliani and Miller, 1958). On the contrary, practically these decisions influence the value of a firm explicitly due to many inconsistencies (Myers and Majluf, 1984). Jensen (1986) clearly states the priority that financial decisions amass in terms of strategic relevance. This can further be seconded by the studies carried out by Barton and Gordon (1987). Also, Kochhar (1996) has implicated its importance especially in affecting corporate governance. Moreover, a firm's value could be influenced by the financial decisions wherein the imbalance between the stakeholders and the company is considered or due to agency irregularities clouding the very same decisions. Tax reasons can also be termed as one of these determinants. This signifies the need to further probe and prove the quantitative relation that exists among Capital Structure and Corporate Strategy.

The combination of Equity and debt in the form of capital structure can have an effect on the determinants of corporate strategy – Stability, Growth and Retrenchment. This can further elucidate the impact and how exactly these two concepts of capital structure and corporate strategy are actually linked.

2.1. Determinants of Corporate Strategy

Stability

Measuring financial stability is far more complex and tedious in comparison to price stability, since it is difficult to measure the interdependencies of the various elements pertaining to the financial system and at large the real economy. Moreover, cross-border dimensions and time complicate this task further. However, during the late 1990s, researchers from across the globe have attempted to capture conditions of financial stability through various indicators of financial system vulnerabilities. Financial stability complex to define and even more tedious to measure. In simple words, a financial framework can be described as stable in the absence of volatility, stress or financial emergencies. This restricted definition is moderately easy to hypothesize, however neglects to capture the positive commitment of a well-working financial framework to the whole economic performance. Policymakers and scholastic specialists have concentrated on a few quantitative measures to survey financial stability. The set of Indicators developed by the IMF are similar to the variables used to observe market pressures and external vulnerabilities in (Gray *et al.*, 2007). Therefore, we have considered Sustainable Growth Rate (SGR) as a measure of financial stability.

Growth

The net result of the combination of a firm's capabilities, performance and its resources is growth (Nelson and Winter, 1982). The prospects of a company's growth rely substantially on its production procedures. Therefore, path-dependencies become an undisputed factor of growth.

Also, it has been proven numerous times in the past that a firm's growth is not certain, due to external influences such as market dynamics and competition. As mentioned in the 'Evolution Theory' researcher Coad (2007) theorizes, a correspondence between a firm's financial performance and its growth in line with the principle of 'growth of the fitter'. According to this theory only the large scale financial performers can prosper, however, empirical evidence in this matter is uncertain and vague. A few studies like Bottazzi and Secchi (2005) show a positive relation between the concepts of financial performance and growth, however many others such as (Hardwick and Adams, 2002) only find a moderate relation of the same. Concepts relating to equity have often been hailed as good indicators of growth. There are two major ways of measuring growth, i.e. relative and absolute. Since, relative growth is used mostly in studying company specific growth in terms of percentage (Delmar *et al*., 2003), we have employed the same. Considering the literature base provided we have considered return on Equity (ROE) in order to determine growth.

Retrenchment

Retrenchment strategies are often used to sizeably reduce the operating cost of an enterprise. Some of the strategies adopted include; sale of non-core assets, disinvestments, reducing number of employees, cuts in budgets pertaining to research and development, training and marketing. A comprehensive study by Geroski and Gregg (1994) which surveyed about 600 manufacturing firms during the recession of the 1990s, conclude that most of the companies adapted to the crisis and refocused their businesses by reducing workforce and closing unprofitable concerns. However, the reduction or increase in product lines was seldom seen. Although retrenchment effects a company's expenditure, its effect on innovation is subject to the firm's stage in the business cycle (Geroski and Walters, 1995). Lastly, mergers and acquisitions are another notable form of strategy that firms employ while mitigating crisis. In this paper however, retrenchment has been considered a theoretical concept.

2.2. Determinants of Capital Structure

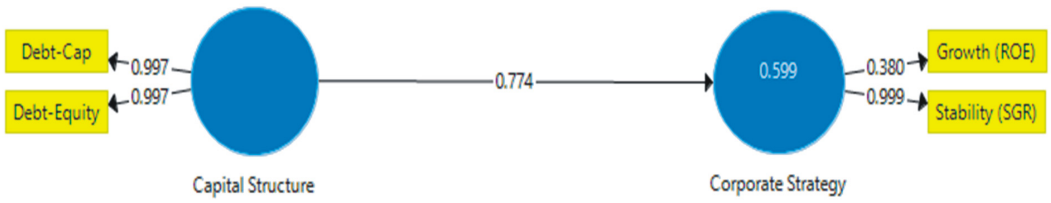
While looking to invest in an enterprise, debt is probably considered the most important element in the capital structure. A significant note here would be, not just debt, but the firm's ability to carry the debt must be considered. This is vital to any investment decision. The relation shared by debt and equity is undoubtedly the best means of comprehending the carrying capacity of debt i.e. the financial health of the firm. Optimum capital structure is the need of every enterprise and defining it is a tedious task. For this very reason, a large number of theories pertaining to capital structure exist. Many of these theories have evolved and some proven irrelevant. All this since most of these propositions have constraints that are either geographic or time pertinent or both. Also, they face a threat of being interpreted subjectively. In line with this only a certain few standard theories have been critically acclaimed and accepted. Concepts to be noted at this juncture include shareholder value and long term debt. The latter is an acclaimed concept with a one-dimension definition, therefore we would examine the former i.e. shareholder value and its counterpart degree of control.

Leverage is always in sync with the industry i.e. firms always prefer to ensure that their capital structures eventually lead up to the averages in the industry (Hovakimian *et al*., 2001). Firms that are large however, rely more so on debt since their sizable organization is collateral enough to both service debt and offer payment in the case of liquidation or any similar event (Rajan and Zingales, 1995). The profit of the company is inversely proportional to the debt it is required to undertake (Kayhan and Titman, 2007). This can be seconded by Futema *et al*. (2009) who carried out a study on the public companies of Brazil. Firms which earn a lot of profit can always turn to their retained earnings at the time of need to finance existing as well as new

investments. Hence, using debt only if they fall short of internal funds. In the view of Shyam-Sunder and Myers (1999), the cost of debt must lead to a situation where in the firms cannot continuously increase their borrowings. Moreover, by Pecking order, if the cost of debt is not controlled it may even override the cost of funds such as equity. Hence, by increasing the cost of debt firms would see a saturation point as far as leverage is concerned. This proves the importance of leverage and in turn the importance of Debt-Cap and Debt-Equity in our study.

3. Research Proposition and Empirical Findings

To better understand the proposed relation between Capital Structure and Corporate Strategy, Structural Equation Modelling (SEM) using SmartPLS has been adopted. Smart PLS has been used since it has the ability to test linear models with a theoretical base (Haenlein and Kaplan, 2004) (Electronic, 2016).



(**Source:** Model framed by researchers)

3.1. Explanation of Target Endogenous Variable Variance

The coefficient of determination, *R2*, is 0.599 for the CORPORATE STRATEGY endogenous latent variable. This means that CAPITAL STRUCTURE moderately explains 59.9% of the variance in CORPORATE STRATEGY.

3.2 Inner Model Path Coefficient Sizes and Significance

- The inner model suggests that CAPITAL STRUCTURE has a strong effect on CORPORATE STRATEGY (0.774)
- The hypothesized path relationship between CAPITAL STRUCTURE and CORPORATE STRATEGY is statistically significant, since it is it >0.1
- Therefore, the conclusion that CAPITAL STRUCTURE is a moderately strong predictor of CORPORATE STRATEGY

3.3 Outer Model Loadings

The estimation was stopped after the 'stop criterion' of the algorithm was reached. Moreover, the convergence took place after only 5 iterations out of 300, hence our estimation is good.

	Debt-Cap	Debt-Equity	Growth (ROE)	Stability (SGR)
Iteration 0	0.50132	0.50132	0.60872	0.60872
Iteration 1	0.49747	0.50516	0.03569	0.98697
Iteration 2	0.50402	0.49861	0.03579	0.98693
Iteration 3	0.50402	0.49861	0.03561	0.98700
Iteration 4	0.50403	0.49861	0.03561	0.98700
Iteration 5	0.50403	0.49861	0.03561	0.98700

3.4 Indicator Reliability

The Indicator reliability of individual variables are larger than the preferred level of 0.7 except for growth (0.1444).

Latent Variable	Indicators	Loadings	Indicator Reliability (i.e., loadings2)	Composite Reliability	AVE
CAPITAL STRUCTURE	Debt-Cap	0.997	0.994009	0.997370956	0.994755699
	Debt-Equity	0.997	0.994009		
CORPORATE STRATEGY	Growth	0.38	0.1444	0.689765637	0.571807933
	Stability	0.999	0.998001		

3.5 Internal Consistency Reliability

Although Cronbach's Alpha was generally used as the determinant of Internal Consistency Reliability, the paper by (Bagozzi and Yi, 1988) has suggested the use of composite reliability. Both CAPITAL STRUCTURE (0.997370956) and CORPORATE STRATEGY (0.689765637) have values larger than 0.6 thus, showing high levels of internal consistency reliability.

	Cronbach's Alpha
Capital Structure	0.99473
Corporate Strategy	0.51782

Latent Variable	AVE
CAPITAL STRUCTURE	0.9947557
CORPORATE STRATEGY	0.57180793

3.6 Convergent Validity

The convergent validity is determined by the Average Variance Extracted (AVE), moreover the values of CAPITAL STRUCTURE (0.9947557) and CORPORATE STRATEGY (0.57180793) exceed the acceptable threshold of 0.5, hence the convergence validity is confirmed.

3.7 Discriminant Validity

The determinant of discriminant validity is considered as 'Fornell-Larcker Criterion Analysis for Checking Discriminant Validity', to ascertain if this value is larger than other correlation values among the latent variables.

Fornell-Larcker Criterion

	Capital Structure	Corporate Strategy
Capital Structure	0.99737	
Corporate Strategy	0.77378	0.75618

3.8 Checking Structural Path Significance in Bootstrapping

Inner Loadings

	T Statistics (|O/STDEV|)
Capital Structure -> Corporate Strategy	4.39223

We can infer from the data that the path coefficient is significant. This is because our value of 4.39223 is greater than the required threshold of 1.96.

Outer Loadings

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
Debt-Cap <- Capital Structure	0.99740	0.99806	0.00083	1,201.95374	0.00000
Debt-Equity <- Capital Structure	0.99735	0.99799	0.00085	1,169.57582	0.00000
Growth (ROE) <- Corporate Strategy	0.38043	0.23266	0.54975	0.69201	0.48901
Stability (SGR) <- Corporate Strategy	0.99944	0.91613	0.15616	6.39993	0.00000

As presented in the table, all of the *T*-Statistics are larger than 1.96 except for Growth on CORPORATE STRATEGY, therefore we can say that the outer model loadings are highly significant.

4. Discussion

As stated previously during this empirical study, there exists a fundamental need to interlink the concepts of finance and business strategy, specifically Capital Structure and Corporate Strategy. The combinations of debt-equity influence managerial decisions. This was proved by C. Myers, in his landmark study in 1977 which dwelt on the concept that a firms' value was based on the assets in place and their growth opportunities. This proves that high debt relationships could prompt managers to reject net positive value projects, that which leads to the overall decrease in the firms' value. Hence, the scenarios of over and underinvestment are critical in a projects outcome and the company's strategy in place.

But, to understand the relation between Capital Structure and a firms' strategy we must dwell upon the latter's determinants, namely, growth, stability and retrenchment. By considering Return on Equity as a measure of growth, we have been able to prove that progressive growth requires the assent of both internal stakeholders (Equity) as well as external stakeholders (Debt). Only a firm capable of reassuring both these elements of efficiently utilizing their monetary investments can sustain an increasing growth rate. Stability on the other hand has been measured using the

concept of Sustainable Growth Rate (SGR). SGR determines the maximum rate at which a firm can grow without looking for external sources of finance. Return on Equity and Retained Earnings are considered here. In simple words, it measures how fast a firm can grow in the absence of leverage. In this case, we can safely say that although a firm can expand using its own resources, a large-scale expansion would always require debt for the sake of leverage. Moreover, equity is proven as a go to cost of finance in terms of economic fallouts. Retrenchment was considered a theoretical concept in this study as there was no sign of liquidation or disinvestment strategies by the firm. The primary reason could be the presence of a large asset base and a consistent demand for the product. However, by scrutinizing the financials, during economic slowdowns, the company has looked inward for answers. Focusing on their existing demand for production and reassuring their stakeholders, they could pass out of the phase without taking any drastic measures.

It is important to note that Stability, Growth and Retrenchment effect corporate Strategy in varied levels of significance. Stability has the greatest effect followed by Growth and finally Retrenchment. By this we can infer that a company's process of value creation is greatly impacted by its Capital Structure. Therefore, a capital optimum strategy is the need of the hour as far as today's globalized markets are concerned.

5. Limitations

Even though we have been able to significantly prove and substantiate that a relation exists between Capital Structure and Corporate Strategy, it is not without limitations. Firstly, this paper considers a few determinants of its main variables, hence, there could be other determinants effecting this study in different ways. Secondly, retrenchment has been considered a theoretical concept which could not be quantified. Lastly, the model is tested ceteris paribus.

6. Conclusion

In the course of this paper, we have highlighted the need to understand the relation between the concepts of Capital Structure and Corporate Strategy. Through our research proposition, we have attempted to probe this relation empirically. The study is relatively new to the fields of finance and management. We have been able to assess and interpret the relations among Capital Structure and Corporate Strategy by focusing on their individual determinants. By this understanding of the relation between finance and corporate strategy, firms must seek to utilize optimum levels of equity and leverage to gain maximum competitive advantage by applying the same in their strategies.

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