Influence of Capital Structure on Corporate Performance of Listed Firm in PSX: Role of External Factors

Abdul Hameed, Ilma University, Karachi, Pakistan
*Farheen Zahra Hussain, Department of Commerce, Bahauddin Zakariya University, Multan, Pakistan
Khawar Naheed, Department of Commerce, BZU, Multan, Pakistan
Muhammad Sadiq Shahid, Bahauddin Zakariya University, Multan, Pakistan

*Corresponding author’s email: farheenzh@gmail.com

ARTICLE DETAILS

ABSTRACT

Purpose: A company’s capital structure is a blend of its equity and debt financing and is considered a significant factor in the valuation of any firm. The decisions related to capital structure formation play an integral role for the firms, therefore; this research tends to explore the factors of capital structure and their impact on firm performance. For this purpose, financial data for different listed companies in PSX has been gathered, and dividends and taxes are used as firm external factors.

Design/Methodology/Approach: To examine the impact, the panel data has been used for the period 2016-2020 and panel least square has been applied.

Findings: The findings suggest that among the variable’s current ratio, dividends, taxation, total debt to total equity ratio, and the firm size are statistically significant to profitability. The study also concludes that dividends and tax have a greater impact on capital structure and firm performance.

Implications/Originality/Value: Managers and owners of the firms must make sure that their profits are used for future investments rather than payment of debts to avoid bankruptcy.

© 2021, The authors, under a Creative Commons Attribution-NonCommercial 4.0


Introduction

A company’s improvement and advancement need a specific degree of financing. There are two sorts of sources for funds provisioning, debt and equity. If a firm gets funds through debt financing,
it must have to pay interest, lease, or coupon payment at first. While on the other hand firms can get funds through investment by issuing shares, in that case, the firm has to make further two decisions. These decisions are either to pay dividends or retain the profit for future investment and are known as decisions of capital structure (Damodaran, 2001). Responsibility source is considered to be a great and heavy obligation on the firm which an affiliation must pay attention to, in the near future. The responsibility support has a value that is intriguing and worth is given by business visionaries. The individuals who buy shares are called shareholders and they are proprietors of the affiliation; regard money, in addition, a dedication on affiliation in any case and not fixed like responsibility which must be paid in future. Monetary experts need a return on their theory and are seen as an advantage and the other return that they can have is the capital extension. The choice of capital has a vital impact on an organization's worth. It has been the sketchiest subject. According to Modigliani & Miller (1958), it relied upon assumptions and without charges, out of a strong financial stock market, the estimation of the organization is relatively unaffected by how that certain firm is being financed. Rajan & Zingales (1995) study communicate that the affiliation debt ratio unveils to us the comprehension among the obligation favored position and obligation cost. Various other research has done that debt cash reduces the firm's worth. Progressive system's theory (Myers & Majluf, 1984) suggested that perfect funds structure is up till now an unresolved issue. This research revolves around how a firm value is affected by the capital structure that the organization applies - To find the impact of capital structure on firm value, what will be the effect on profitability, growth and return on both assets and equity? Which way of financing is better for a firm, either equity financing or debt financing?

The way firms are operating, and their relative capital structure has been generally a long way from being clearly obvious subject. To find which funds source of financing is better for advancement and accomplishment of a firm and moreover in what situation which source of financing is better. The study of Modigliani & Miller (1963) further analyzed and disseminated the results on capital structure, which made the reason of thinking on capital structure. Further study by Emini et al. (2012) concluded that capital structure has been a policy challenge due to money related issues for firms. Modigliani & Miller (1958) study is based on assumptions such as given frictionless markets, standardized way of information for all investor available; capital structure decision of the firm is irrelevant. By releasing up the doubts and separating their management, theories hope to describe whether an ideal capital structure exists or not and if it exists, by then what may be its determinants (Patrick et al. 2013). The existence of irrelevant hypotheses (Kraus & Litzenberger, 1973) and numerous different research about capital structure has done more on this topic to pay more attention than how to meet the fund's requirement of the firm. The main objective is finding the relative effect of a capital structure on the organization's various variables such as equity, profit, etc., the impact of capital structure on those dependent variables such as growth and earnings per share. There are many financial factors that can affect the return a shareholder can receive on their stock, but this is yet constant with many other variables but in this research, the focus will be on capital structure and its incorporating ratios of a company.

**Hypotheses of Model EPS and Growth**

H1: Current Ratio has a significant effect on the EPS of Pakistani companies.

H2: Dividend has a significant effect on the EPS of Pakistani companies.

H3: There is a significant impact of total debt to equity ratio on the EPS of listed firms.

H4: Tax has a significant impact on the EPS of Pakistani companies.

H5: The size of the firm has a significant effect on the EPS of Pakistani companies.

H6: Current Ratio has a significant effect on the growth of Pakistani companies.
H7: Dividend has a significant effect on the growth of Pakistani companies.
H8: There is a significant impact of the total debt to equity ratio on the growth of firms.
H9: Tax has a significant effect on the growth of Pakistani companies.
H10: Size of the firm has a significant effect on the growth of Pakistani companies.

This study explores the above hypothesis based on the research framework and review of previous literature. The study also used the data to explore the relationship between the profitability of the firm and the mixture of capital structure. The outline of the study utilized the following sections. After the introduction of the topic, the study explores literature review in section 2, while in section 3 study gives detail of the research method. The section 4 presents findings and summarize the data results and section 5 concludes the study.

**Literature Review**

When capital structuring is discussed, there have been many researchers who have provided different comparisons and views on the cost pertaining to the capital structure and associations with firm. Many studies focus on that topic because it impacts on firms growth, utilization of funds and responsibility of payment to investors of the additional income. Jensen and Michael (1986) study showed that capital structure decision depends on the difficulties associated with money and interest of managers. Budget experts prefer to spend money considering the way the CEO is inclined. Companies must make plans if a company does not pay the necessary fees on time, this will cause confusion and may affect the image of the company, because an experienced accounting manager will consider putting pressure on owners, and the corporate manager does not have to close the reduction of cash-related geniuses if they invested in more funds than promised, but at the same time, certain costs with reduced fees would not adversely affect the promised funds budget accuracy, debt costs, liquidity, improvement, the basic quality of resources and short execution (Sharma & Handoo, 2014). He further commented on how a stable salary has an undesirable significant impact on the promised funding. If you firmly use this experience for support, it will only bring negative reviews, this is not the same as salary. Established relationships have a stronger significant impact on compulsory financing (Ju, Nengjiu et al. 2005). They expect that a solid amount of leverage will be the basis of the exchange hypothesis (Shibru & Mekonnen, 2015). As per Shibru & Mekonnen (2015) factors affecting currency choices are advantages, liquidity, basic quality, but development and danger will not be affected. The capital structure affects the performance of the firms due to a higher debt-to-equity ratio (Baker & Wurgler, 2002). This is the basis for the stock price as it is more important than the indicated price after taking financing decisions. Reporting time is considered crucial for companies to provide their shares value. Khravish et al. (2010) showed us that the degree of debt positively depends on the size of the company and organization, regardless of whether there is a negative correlation between relations and roundness. In Jordan, various branches continue the experience of using a selection of core motivations. The exchange of assumptions in this theoretical way, company requires dedication (Kraus & Litzenberger, 1973). Their findings conclude that as long-term debt higher than firm may face increases bankruptcy but lower liquidation costs. This is another bankruptcy agency, and lenders trust these organizations more. This is another bankruptcy agency, and lenders trust these organizations more. Studies have shown that pecking is important for various assumptions. In a study, Odit & Gobardhun, (2011) stated that it is necessary to understand the importance of consistency of the theory of monetary structure for average relationships in overhauls. Due to the explanation of the high resource structure and the size of the company, they made enough debts to extend the term, but because of the size and resource limitations of SMEs, they do not have too many obligations to the basic package. SMEs rely more on domestic financing. This helps Pecking
order's hypothesis (Glen and Singh, 2004) to get some information about the report that owners have fewer obligations than industrialized countries due to misrepresentation. Khan (2012) studies on the sample of listed Pakistani firms also considered capital structure influence on firms’ performance and their lowering value of share obligations. Studies have shown that companies pay a significant price for inefficient markets and short-term obligations, pecking theory. With this opportunity, the company’s first step is to improve and focus on its internal sources, not external ones. Nirajini (2013) shows that this is achieved by considering the relationship between the structures of the capital using data of the Sri Lankan listed firms. He found a close relationship between the process of capital action and corporate execution. Akintoye (2009) in his assessment found that the choice of listed firms either debt or equity financing was based on compromised assumptions. The signal hypothesis (Spence, 1973) proposed that firm performance not confirmed, obtaining the funds due to ambiguous situation of the firm as an imperfect control on market. The signaling hypothesis shows a negative association between performance and capital structure. Since the agent is currently an experienced business opportunity, it is more harmful than a company that cannot significantly use the promised funds. The theoretical possibility of making a profit is a chance for a company to use the allocated funds. Huang & Song (2006) rely on dependencies to see the relationships between the fluctuating performance of companies and pay before collusion and costs. If an enterprise has a lower level of debts and increases the level of liquidity resources, it can cope with these liquidity resources and additional monetary significantly weakens. Vaidean & Laura (2013) found that factors in the structure of capital are not just a reduction in the firm performance. Jensen and Meckling (1986) also explain that a capital structure problem can be explained if the owner is offered a share to the investor or an increasing debt financing. The pecking requirement is important for cash negotiations, which affects the capital structure (Majluf, 1984). If a company makes an offer, it uses the value of the assets. Money trumps for the company are not enough. To avoid this problem and reduce the cost of citation, the company uses the allocated funding (Titman & Wessels, 1988). Debit accounts are reasonable for the use of capital, such as company size, fixed resources, opportunities for improvement, and an extended valuation area. Companies must understand the variables to which they must obey. Majluf (1984) required that the theoretical costs of liquidation and data conflicts could increase the value of the company because this pooling requires an understanding of internal assets, i.e., internal additional costs are not as good as simplifying external sources structure of the account to fulfill obligations, and in the end, the company can give a share. The assessment found a connection between liquidity and capital structure (Lipson & Mortal, 2009). These high liquidity relationships do not affect the review report, and banks must maintain a relationship. Liquidity reduces the risk of currency experts for their efforts. With less danger than cost, costs will decrease. Instead of using redundant work responsibilities, the company retained a new theoretical structure inside the store and after a while made an offer (Majluf, 1984). He fights using a mixture of duty and value. Maintenance costs will not be less than expected revenues. If a company uses more prominent obligations, it becomes risky, and the value of the obligations increases in the same way (Berger and Patti, 2006). There is a dynamic link between voluntary support and improved membership. If you firmly use this experience for support, it will only bring negative reviews. Solid use of more important debts will add value even further. (Antoniou, 2008). Campello (2007) found a negative correlation between credit cash and acquaintances. If companies expand the scope of job finance, good jobs will decrease. His assessment showed that if the company used a more visible explanation of responsibility, its slowness would develop, and its personal image would decrease. Margaritis & Psillaki (2007) obtained some evidence of Sri Lanka's ownership and found that there was an imperative link between capital structure and conspiracy considerations. Pandey (2009) during his audit found that these companies do not procedurally violate the structure of their capital and that these connections cause game behavior in their capital structure, which is an achievement that enterprises need to draw up a game plan for the capital structure. Lemmon, (2008) tested with
different affiliations and work. Studies show that every company and industry have a clear capital structure. Graham and J.R. (1996) & Mackie-Mason (1990) showed using Pakistani listed data that companies with high unrelated costs use more renowned managers with higher tenure employees to reduce costs in various companies, are usually responsible for complying with and accepting temporary responsibilities to long time managers. Short-term responsibilities usually have an insignificant association with performance. They usually used those managers who achieved well during their tenure and most decisions made by these managers brought good results. Significant on how the company is represented and moreover these short-term reputations are combined through a clear understanding that affects the growth of the company. Usually, banks are a huge source of financing, and they have a more understanding of the asymmetry of information, unconventional payment and inefficient regulatory structures other than financing (Kausar, 2014). The leaders of each alliance must build a relationship, and for this, they may think that they need a guarantee from external sources. In any case, the authorities hope that relying on progress will lead to an increase in costs with a slight assessment. The alliance will be equipped with a liability shield, and interest will influence the ratings of companies so that the budgetary impact will be disastrously determined in the financial statements of the company, either a company with high efficiency or a company with low efficiency. Higher influence on any company leads to better execution. This privileged position is explained by the cost reduction estimate approved. On the one hand, for any relationship, the impact is obviously valuable. The value of a business is dependent on the firm performance and the firm need for funds for the future. Speculatively, it may be the whole funds that one needs to pay to buy/expect authority over a business operation. For any company, this can have a negative and significant, since an influential company can exclude the opening of a company with great influence, which can lead to insufficient investments and can reduce the company's market valuations, if necessary; therefore, relative influence is an extremely important relationship between performances. Higher relative impacts accumulate lower impacts, for example, increasing impacts improve better and decreasing relative significant increase financial as a result, firms with less influence have better performance (Sitana, 2014). Research studies have shown that there are two hypotheses signaling and pecking order theory but different studies use a different level of tests for research which made a different assessment of results (Brîndușa, 2012).

The above literature shows a different level of factors and theories with little association of firm capital structure. No study has focused on combining the firm's term factors and short-term business operation needs. These factors have more influence on capital structures and firm future performance. This study used dividend payment and tax as an additional factor because firm management plans require their fund's needs after payment of tax and dividend from profit. As most of studies showed that investors invest their funds in companies that have higher growth in profit and payment of dividends rather than that pay higher interest on their obligations. Firms require funds during their initial periods due to lower funds and lower profits.

**Research Method**

The research has used secondary data and performed Panel regression using fixed or random models based on the Hausman test results. The data for this study is collected from the listed firms in the PSX-100 index during 2016-2020. This research incorporates a sample size of 357 firms listed in the PSX 100 Index, belonging to various different sectors. All the financial statements are accessed using company official websites, while only listed firms are selected for the research using purposive sampling. In this research model, the dependent variable is profitability (EPS). While the capital structure is measured through different variables that are: total debt to total equity ratio, current ratio, firm size, tax and dividends.

Following models were adopted to examine the impact of capital structure on firm’s profitability.
EPS = C (1) + C(2)*SIZ + C(3)*DIV + C(4)*TAX + C(5)*CR + C(6)*TDTE …………. (1)

GROWTH = C (1) + C(2)*SIZ + C(3)*DIV + C(4)*TAX + C(5)*CR + C(6)*TDTE…… (2)

Where; C(i), (i=1…n) shows the unknown intercept for every entity (n entity – specific intercepts); SIZ = Size of the Firm; DIV = Dividends; TAX = Taxes; CR = Current Ratio; TDTE = Total Debt to Total Equity; EPS = Earnings per Share

Results and Discussion

The results section attempts to test the proposed model using statistical test. This research uses panel regression method to examine the model. Data for 357 companies was evaluated for the period of 5 years (2016-2020). The nature of the gathered data is panel cross-sectional data. Studies identified that, panel data is tested using the panel least square, fixed and random effect models. Most of the econometric equation shown fixed or random effect model is appropriate for this study using Chow test, LM test and Hausman test. Considering this, researcher applied Hausman test in order to examine whether to focus the panel, random or fixed effect results. The Hausman test favors random effect model which shows that chi square statistics value 3.22 with df. 5 and sig value 0.6648 ≥ 0.05 so random effect model results are selected for analysis.

Table 1: Random Effect Model (EPS).

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>T-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>-44.71491</td>
<td>13.00964</td>
<td>-3.437059</td>
<td>0.0006</td>
</tr>
<tr>
<td>Current_Ratio</td>
<td>0.034806</td>
<td>0.093851</td>
<td>0.370867</td>
<td>0.7108</td>
</tr>
<tr>
<td>Dividend</td>
<td>6.751107</td>
<td>8.19E-07</td>
<td>0.824514</td>
<td>0.4098</td>
</tr>
<tr>
<td>Size</td>
<td>3.577075</td>
<td>0.862946</td>
<td>4.145187</td>
<td>0.0000</td>
</tr>
<tr>
<td>Tax</td>
<td>1.72E-06</td>
<td>9.23E-07</td>
<td>1.866844</td>
<td>0.0621</td>
</tr>
<tr>
<td>TDTTE</td>
<td>0.009492</td>
<td>0.031808</td>
<td>0.298402</td>
<td>0.7654</td>
</tr>
</tbody>
</table>

The above results suggest that the size of the firm has a significant impact on profitability while other variables like, current ratio, dividends, taxation, and TDTTE have a positive but non-significant relationship with profitability. Previous studies have also provided significant evidence to suggest that, firm size has a significant impact on profitability. This may be concluded that the bigger size of the firm implies them to attract capital on a cheaper basis which reduces cost and increases profitability. Another school of thought suggests that bigger size firms can achieve economies of scale by taking orders which again aid in reducing cost and significant asset utilization, which helps in increasing profitability. Similarly, the current ratio shows insignificant relationship with profitability. The current ratio has a positive (insignificant) relationship with profitability, this suggests that it has no influence.

The dividends have a positive but insignificant relationship with profitability this suggests that it has no influence. Some previous studies have identified that dividends effect profitability but in the longer run, as it is a strategic decision (Huang & Song, 2006). Taxation has a positive but insignificant relationship with profitability which suggests that it has no influence. TDTTE insignificant relationship with profitability. The TDTTE ratio has a positive but insignificant relationship with profitability which suggests that it has no influence on profitability.

Table 2: Random Effect Model (Growth)Authors’ compilation.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>3.855570</td>
<td>11.33347</td>
<td>0.340193</td>
<td>0.7338</td>
</tr>
<tr>
<td>Current_Ratio</td>
<td>-0.167770</td>
<td>0.031294</td>
<td>-5.361046</td>
<td>0.0000</td>
</tr>
<tr>
<td>Dividend</td>
<td>4.69E-09</td>
<td>2.87E-07</td>
<td>0.016356</td>
<td>0.9870</td>
</tr>
<tr>
<td>Size</td>
<td>-0.147266</td>
<td>0.754895</td>
<td>-0.195082</td>
<td>0.8454</td>
</tr>
<tr>
<td>Tax</td>
<td>2.48E-08</td>
<td>3.45E-07</td>
<td>0.071857</td>
<td>0.9427</td>
</tr>
<tr>
<td>TDTTE</td>
<td>0.000483</td>
<td>0.010215</td>
<td>0.047263</td>
<td>0.9623</td>
</tr>
</tbody>
</table>
Results about the growth suggest that size of the firm has no significant impact on profitability while other variables also have non-significant relationship with growth. The current ratio showed insignificant relationship with growth, which suggests that it has no influence. The dividends have shown insignificant relationship with growth, this suggests that it also has no influence. Similarly, Taxation and TDTTE showed insignificant relationship with growth suggested that these variables have no influence on profitability.

The main aim of conducting this research is to examine the impact of capital structure on a firm’s profitability especially dividend and tax. The research questions for this study are whether the capital structure determinants have a significant impact on the firm’s profitability of the listed companies in PSX 100? Moreover, the research objective of this study is to examine what determinants of capital structure impact profitability, and also try to check whether its management will help firms in influencing their profits. Initially panel least square regression is used, however, considering the research data is panel, random and fixed effect of regression is used. The Hausman tests were applied in order to decide whether to select the results of random and fixed effects. The Hausman test p-value is greater than 0.05 which is why the random effect models’ results are presented for this study. Results from the test provide significant evidence to suggest that firm size has a significant impact on profitability in the case of EPS. On the other hand, the current ratio, dividends, firm size, taxation, total debt to total equity ratio are insignificant to EPS and Growth.

**Conclusion**

In conclusion, the research examines the impact of capital structure on profitability. Results from the random effect showed that among the variables current ratio, dividends, taxation, total debt to total equity ratio, the firm size is statistically significant to profitability. Since firms like automobile, cement, sugar is regarded as capital intensive industries in which elements like working capital are higher, firm size matters a lot. The larger firm size has many advantages like attracting more capital, attracting capital on less interest rate, financing can be attained on longer time period; the cost would be lower since, production is on economic scale thus, enhancing profitability. This study results suggest our academician, researchers and corporate managers must focus on above mentioned variables during their future planning, they must focus more on short-term financing to overcome the current operations related to working capital management, they should also focus on dividends and taxes as well.

More research variables whose impact can be witnessed in firms’ capital structure decisions like shareholding pattern, cash conversion and cash flow management need to be included and explored in reference to reach the optimum capital structure. Further, future research can include more companies and more data from other sectors like automobile, manufacturing, etc. For managers, it is recommended that an optimum capital structure should be devised considering the financing situation. The targeted capital structure should be flexible. Managers also need to make their decisions according to the changes in the capital structure as a firm should possess earning power to generate revenues to meet its cost of capital and finance its future growth.

**References**


