1.8. THE IMPACT OF CAPITAL STRUCTURE AND BOARD OF DIRECTORS CHARACTERISTICS ON INVESTMENT DECISIONS AND PERFORMANCE OF NORDIC FIRMS

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Abstract

The phenomenon of firm financing and the board of directors' characteristics are two important determinants of investment and performance of firms, ceteris-paribus. The financing of a firm underpins the financial resources of a firm that can be utilized to acquire assets, which are necessary to run it. Similarly, corporate boards of directors provide leadership and guidance to the firms and at the same time participate in the monitoring and control activities. The quality of corporate boards of directors depends on several characteristics including human capital, relational capital, and board diversity, among others. The current study examines whether firm-level capital structure impacts firm-investments and performance. The results show that the financing of firms affects the investments and performance of firms. Similarly, the busyness of directors and board size affect intangible investments negatively, whereas the education of directors affects the same positively. A major theoretical contribution of the current study is that the capital structure has been taken as an explanatory as well as an intermediate variable to examine its effect on firm investments, and performance.

1. INTRODUCTION

The capital structure of firms and the board of directors are important determinants of investment and performance of firms. However, these firm-level relationships are extremely complex for the several reasons: firstly, the board of directors can directly impact the capital structure of the firm, and subsequently, the changes in the capital structure of the firm can further affect its investments and performance; secondly, the board of directors of the firm can directly impact investment decisions and performance of firms by bypassing the capital structure of the firm; and thirdly, the abovementioned relationships can also be inclusive of mutual causation of a firm's investment and its performance. Henceforth, one can argue that the set of relationships between the board of directors, capital structure, investments, and firm-financing is anything but simpler.

In the finance literature, the concept of optimum capital structure has been discussed extensively; however, it is noticeable that the notion of firm-level optimum capital structure is a mirage. Academic researchers and corporate managers have been seeking endlessly to formulate the optimal capital structure; however, there is no universal and across the board understanding of this concept. Many scholars suggest that rather than endeavoring to achieve the specific point of optimality of capital structure, firms should aim to achieve the range of capital structure.

The total capital requirements underpin the financial resources of a firm, and these resources can be utilized to acquire assets, which are necessary to run firms. The capital structure generally indicates the relative share of debt and equity in the total capital of a firm. To find the right financing path a firm needs to balance the advantages of debt, for example, because debt is a cheaper way of financing, and the risks associated with debt, for example, the financial distress costs associated with the debt can have substantial unfavorable effects on the firm. The choice of the capital structure depends on many factors such as the size of the company, industry, profitability and corporate tax level, the tangibility of assets, and growth opportunities. Corporate boards of directors provide leadership and guidance to the firms and at the same time participate in the monitoring and control activities. There are several determinants of the quality of corporate boards of directors and to name a few are- independence of boards, human capital (e.g., education, experience, expertise) of directors, relational capital (e.g., multiple directorships) of directors, board diversity (e.g., gender, nationality, ethnicity). Investments, including tangible, intangible and financial assets, are the reflection of firms' future and these are undertaken to enhance the firm-value by generating more cash flow. The capital structure and board of directors' characteristics play an important role in influencing firm investments. The concept of firm

performance has been extensively researched in finance discipline and assumes a great deal of significance in the field of corporate governance. Since the concept of capital structure, the board of directors' characteristics, investments and firm-performance are intertwined, therefore, the current study endeavors to solve this puzzle by exploring the following research questions:

1. Does the firm-level capital structure impact investments and firm-performance?
2. Do board of directors' characteristics impacts the investments and firm-performance so that the firm-level capital structure acts as the intermediate variable?
3. Does the firm-level capital structure, as an intermediate or predictor variable, impacts the firm-performance through investments or directly?
4. Does firm-level investing affect firm-performance?

The secondary data has been for the period 2003-2018. The data sources have been firms' official annual reports, corporate governance reports, financial statements, and the Nasdaq OMX database. The key capital structure variable is the debt-to-equity ratio, which includes various categories of debt that are the book, and market value of debt as well as the current, and non-current debt.

The empirical findings show that the financing of firms affects investments and performance of firms, in general. The firm leverage ratios affect non-current investments negatively, however, the same ratios affect investments in intangible assets positively. Similarly, leverage has a negative effect on the operating profit ratio and some other performance measures. Nonetheless, the above results become more significant when firm-level capital structure acts as the intermediate variable and the predictor variables are corporate governance characteristics of firms. The busyness of directors and board size affect intangible investments negatively, whereas the education of directors affects intangible investments positively. The busyness of directors affects non-financial firm performance positively. Similarly, the busyness of directors and board size affect accounting-based performance negatively. Education of directors, age and gender affect accounting-based performance positively. The busyness of directors and the education of directors affect market-based performance positively, whereas, age affects market-based performance negatively.

2. THEORETICAL LITERATURE REVIEW

Economic and business situations play an important role to influence the corporate capital structure. The financing underpins the capital structure, which is an important strategic decision of corporates, and it affects various aspects of firms including their operations, investments, performance, survival, growth, and solvency. The most common sources

of firm-financing are equity and debt. Firms having access to an abundance of capital at the minimum cost of capital experience more opportunities to grow, expand and acquire larger market share. Nonetheless, it is worth noticing that the discussion is not merely confined to ascertaining low-cost finance in adequate quantity on favorable terms, but it goes beyond and includes more vital issues such as determining the optimum capital structure (Berk & DeMarzo, 2016). Firms endeavor to achieve financial stability, achieve the liquidity, and solvency benchmarks and generate a higher return on capital on a sustainable basis, and these objectives can be achieved when firms attempt to obtain the optimal capital structure (Graham & Leary, 2011). The determining of an optimal capital structure is not an exogenous phenomenon as several macro-economic determinants, firm-management features, institutional settings, industry/sector characteristics, and regulatory requirements, other things being equal (Salim & Yadav, 2012). Business and economic factors highlight the macro-economic scenario, which is uncertain and influenced by globalization among other factors, and resultantly the needs and requirements of firm-level financing also change. Similarly, the firm management features including functioning, leadership, monitoring, control, and decision-making also influence optimal capital structure. Firm financing can play an important role to enhance the profitability of firms. The right amount, composition of financing and cost of capital can play an important role in maximizing return on capital for a given level of financial risk. The firm-specific risks, also known as unique risk, micro risk, unsystematic risk, can be influenced by the risk appetite of firm managers, among other factors (Kang, Wang, & Xiao, 2018). The nature and composition of capital structure can be influenced by corporate governance dynamics (Aguilera & Crespi-Cladera, 2016; Basu & Sen, 2015). Similarly, institutional characteristics of firms influence the capital structure of firms. For example, the influence of founder members, also known as promoters, represents an institutional characteristic of firms, also affects the choice of firm-financing (Hundal, 2016, 2017).

The current study explores the following hypotheses:

H1: Firm-level capital structure influences investments.

H2: Firm-level capital structure influences firm-performance.

H3: Board of directors' characteristics impact capital structure.

H4: Board of directors' characteristics impact investments.

H5: Board of directors' characteristics impact firm-performance.

H6: Firm-level investing affects firm-performance.

3. DATA AND METHODOLOGY

A sample of as many as 73 non-financial publicly traded firms listed on the Nasdaq OMX Nordic Stock Exchange has been selected to test the hypotheses. Twenty-three firms have been chosen from Finland and Sweden each, whereas fifteen and twelve firms represent Denmark and Norway, respectively. The unbalanced pooled data covers a period of sixteen years (2003 to 2018). Due to the unavailability of data a final sample of 983 firm-years and the country-wise classification is 313 firm-years (Finland), 322 firm-years (Sweden), 201 firm-years (Denmark) and 147 firm-years (Norway). The market data have been obtained from the Nasdaq OMX Nordic Stock Exchange and respective central banks, whereas, those of the accounting and corporate governance variables have been extracted from the annual reports (especially financial statements and corporate governance reports) of the sample firms. Several econometric techniques including multivariate ordinary least square method and factor analysis have applied to analyze the data.

4. KEY FINDINGS

The empirical findings show that the financing of firms affects investments and performance of firms, in general. Leverage ratios, measured by total debt to equity ratio and long-term debt to equity ratio, negatively affect non-current investments, however, the same variables affect investments in intangible assets positively. Similarly, the debt-to-equity ratio has a negative effect on the operating profit ratio and some other performance measures. Nonetheless, the above results become more significant when firm-level capital structure acts as the intermediate variable and the predictor variables are corporate governance characteristics of firms. For example, the share ownership of the boards of directors and the education level of directors influence the debt-to-equity ratio positively. Similarly, the board size and independence of the boards affect the debt-to-equity ratio negatively. Furthermore, incentive-based pay to the CEO affects most of the firm-level performance measures positively.

The busyness of directors and board size affect intangible investments negatively, whereas the education of directors affects intangible investments positively. The busyness of directors affects non-financial firm performance positively. Similarly, the busyness of directors and board size affect accounting-based performance negatively. Education of directors, age and gender affect accounting-based performance positively. The busyness of directors and the education of directors affect market-based performance positively, whereas, age affects market-based performance negatively. Board size and age affect systematic risk negatively. Education, gender, and busyness affect systematic risk positively.

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CONFERENCE FORUM DISCUSSION

Alex Kostyuk: Hi Shab, and welcome to our conference forum. Corporate governance in Nordic countries is a very contributive topic. I saw that your statement in the presentation that "the busyness of directors and board size affect intangible investments negatively". What do you mean by "the busyness of directors"? Do you mean the number of directorships taken by one director at the same time elsewhere?

Do not you think that the director's gender issue could influence debt-to-equity ratio, especially taking into account the Scandinavian specifics? You concluded that "gender affects accounting-based performance". Does it mean that this is a positive effect (the more females the more positive effect)?

Shab Hundal: Hello Alex, I appreciate your query. When the directors of firms also take multiple directorships in other firms on top of the firm they are affiliated to then, on the one hand, it brings "virtues" to the firm they represent in the form of relational capital which can be justified by the resource dependence theory, for example, however, when these directors become overbusy so much so that their "busyness" deter them to perform their core responsibilities, then this phenomenon becomes a component of the agency costs that can be inflicted upon the

firm. Hence, you got it correct. Firms having busy directors invest lesser in the intangible assets, arguable because busy directors do not have time and patience to understand the role and relevance of R&D and other innovation activities as they can be engaged in maximizing their 'personal' utility function. In a similar vein, larger boards may find it difficult to make decisions with respect to intangible investments due to infighting, lack of common understanding (poor consensus), power blocs, and other delays. The gender variable (proportion of women on board) affects the accounting performance positively. There is no sufficient evidence that gender variable (proportion of women on board) could influence firm financing (e.g., debt-to-equity ratio). Interestingly, Scandinavian society gives unparalleled status to women in society, however, the same is not "so true" in corporate settings.

Dilvin Taskin: I think the reason that we do not find a direct relationship between financing and gender maybe due to the fact that in many countries the percentage of women on the boards is still very low.

Maria Guedes: Agree, there is no really balanced board, or at least a critical mass that can tell us a good story from there.

Shab Hundal: Thanks, Dilvin and Maria, for your feedback. Maybe corporate culture is not always in sync with the national culture...

Maria Guedes: Something to think about: does culture really matter? Everywhere there are boards that perform badly, and the reasons behind the bad performance are similar....so what does culture mean here?? Nothing really...

Dilvin Taskin: I think culture can be considered as a factor. Of course, there are many other relevant factors for failure, but in some cultures, nepotism plays a big role in the failure of businesses.

Maria Guedes: Nepotism causes to appoint the wrong persons for the boards, for example.

Shab Hundal: Maria, I think culture matters...culture does reflect on the mindset of corporate directors which further reflects on their decision making, etc.

Shab Hundal: Dilvin, it is so true...I have done quite a bit of research in the field of multiple directorships (busyness) and I found that invariable nepotism, inter-locking of directors, quest to extend control for a given proportion of ownerships, consumption effect and entrenchment effect are the key factors.

Alex Kostyuk: Shab, it is very much promising statement by you "Interestingly, Scandinavian society gives unparalleled status to women in society, however, the same is not "so true" in corporate settings". This means that there are two different standards of female role. The first is in our ordinary world. The second – corporate world. Even in countries, where ordinary world standards are very favorable for women. So, the role of "the right soil" is not enough to grow "a seed"? Probably, it should be slightly pushed by the regulation?

Shab Hundal: Exactly, Alex, Finland is a very SME driven economy and the participation of women on board of SMEs is even thinner.

Alex Kostyuk: I see, Shab. In this case, there are ways out. The first is regulation. The second – stakeholder activism.

Shab Hundal: You are right, Alex, that regulations and stakeholder activism can do a word of good. Nonetheless, the participation of women at the executive positions is at a very impressive scale.

Alex Kostyuk: I would say, an extremely impressive scale, at least for certain countries. I think that a cultural stereotype is still a key issue here, Shab.

Shab Hundal: Alex, my last comment was in the Finnish context.

Mireille Chidiac El Hajj: Hello Shab. The presentation is very interesting. And Professor Kostyuk had made his point when he asked about gender diversity. His argument is very important. One more element can be added though: it is about the difference between the executive and non-executive members of the board of directors. It can be added as a characteristic that can influence the firm's performance and its investments.

Shab Hundal: Mireille, thanks for your inputs. Executive and non-executive distinction can unfold important findings.