HOW MARKET VALUES ARE AFFECTED BY BOARD STRUCTURE, BOARD SIZE AND ESG CONTROVERSIES SCORES?

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Abstract - Board size and Board structure is determined by various factors but their effect on firm values is dubious. This paper aims to provide evidence for this effect so that firms give upmost importance to these details. Similarly, 20 top ESG companies are analyzed to put forth the relation between ESG controversies score and corporate social responsibility strategies score and firm values as well. Theories and literature regarding with these issues are addressed briefly.

Keywords - ESG, Board Size, Board Structure

I. INTRODUCTION

There are numerous factors that may affect firm values. This paper aims to contribute to the literature by analyzing the relationship between firm values and some non-financial factors. Corporate social responsibility investments of companies have gained attraction but the return on these investments are dubious and of interest for various researchers throughout the world.

Board size may have an impact on the speed of decisions in a firm as well as the accuracy of those decisions. How large should a board be, has been widely discussed in earlier studies. Our objective is to address to the pros and cons of this debate in detail as well as its relationship with market values of firms.

Board structure is the second aspect that this study sheds light. The structure may also play a role in the changes of the market values of firms. Gender issues regarding with board structure are beyond the scope of this paper.

ESG scores are of interest for numerous academicians throughout the world. However, firms that put an emphasis on environmental, social and governance factors may not reap profits if any. Other objective of this study is to assess the relation with ESG scores and market values of firms. Authors elected to use ESG controversies score as ESG scores are studied more in the literature.

II. LITERATURE REVIEW AND THEORETICAL BASE

Theoretical limitations exist due to misspecified models usage by researches that analyze the relationship with social responsibility and profitability. Some factors that may have a significant effect on profitability or market size are mostly ignored or neglected; A neutral effect has been detected after controlling for neglected variables like R&D [12]. However, there are studies that provide evidence for positive relationship between ESG scores and market values of firms as well [10].

Total ESG Scores are found to have positive impact on stock prices in Korean market; book value per share, earnings per share and size are found to have a significant effect on firm's value[15].

2.1. Why Board Structure is important?

Boards can be composed of managing professionals and independent members. Independent board members have superior monitoring ability as they need to preserve their reputation [8]. Board Structure may be thought to play an important role in firm values but some evidences are shown against this belief for English firms [7]. Board independence, board meetings and gender diversity have a positive effect on firm values for Egypt and USA[14].

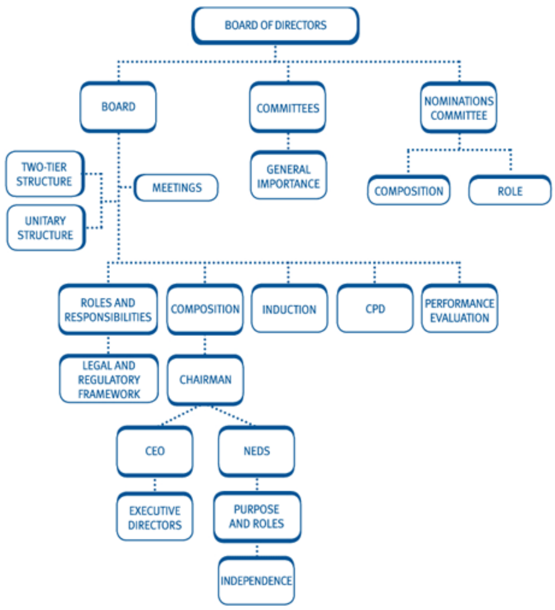

Figure 1: Board Structure
Source: Kaplan Financial

Figure 1 depicts composition of a possible boardof directors. A firm may elect to work with a simpler version to make faster decisions or agility. Another firm may favor more crowded one to pursue accuracy. Their choice of structure may affect valuations of firms due to missed opportunities because of bureaucracy or unfiltered fatal decisions.

2.2Board Size

Larger boards are better for monitoring management. Resource Dependence Theory assumes larger boards are more efficient than smaller ones; Conversely, smaller boards are more agile[3]. Board effectiveness in terms of busy-ness of corporate directors is found to have a significant impact on market values however, board size is found to have an insignificant effect for İtalian non-financial firms of 77 [6]. Board size is found to have a positive effect of firm's profitability in terms of ROA in Indian market[13]. From the banking perspective, larger boards tend to add value to a bank as there are subsidiaries to monitor closely[1].

Average board size across Europe*

	Board size		Board size		Board size
Belgium	10.4	Italy	11.6	Spain	10.8
Denmark	10	Netherlands	9.2	Sweden	9.9
Finland	8.2	Norway	8.5	Switzerland	10.5
France	13.9	Russia	10.1	UK	10.2
Germany	14.1				

* Data appearing in charts throughout this publication are taken from country-specific 2016 editions of the *Spencer Stuart Board Index*. A list of these can be found in Appendix A. Each *Board Index* is available on the Spencer Stuart website.

Figure 2: European Average Board Size
Source: Spencer Stuart Board Index

Figure 2 shows that Germany has the highest average of 14.1 board size and one can infer that they focus on accuracy. Whereas, Scandinavian countries seem to have 8-9 members in their boards. Other than lower costs, less number of board members to convince may help Scandinavians to move faster.

2.3 Corporate Social Responsibility (CSR) Strategy Score

Managers may elect to pursue CSR strategies on and off but this may not increase the firm values. However, when they are persistent with CSR strategies they tend to increase firm values [11]. Stakeholders Theory advocates for an increase in firm values due to increased CSR strategies but some scholars argue that there is no clear relationship [9].

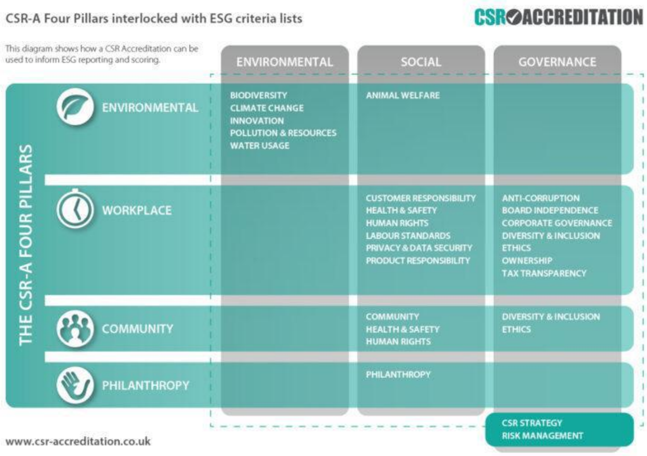

Figure 3: CSR Score
Source CSR Accreditation

Figure 3 depicts the four pillars of corporate social responsibility which are namely, environmental, workplace, community and philanthropy against ESG factors. Our paper locates where workplace and governance intersects.

2.4 ESG ControversiesScore

Stakeholder and legitimacy theories may associate controversies score with lower firm values. When firms announce adverse ESG related news, stock returns diminish [2]. When such news is released, based on Salience Theory, investors may reason that negative news will follow in the future and they oversell the stocks associated with negative ESG related issues [5]. Moreover, 119 French companies are analyzed and a significant negative relationship has been found between ESG controversies and firm values [4].There is conflictbetween ESG controversiesandinvestorexpectationsandcreatesambi quity on market values.

Figure 4: ESG Scores
Source: The Motley Fool

As shown in Figure 4, companies struggle to keep their ESG scores high.MSCI ESG score provides a rating system for firms but costs to get an AAA rating shall be lower than gains achieved by this rating. Keen Managers may play the system to get average ratings without investing too much time and effort but do they reap the profits from these ratings remains a mystery.

III. DATA AND METHODOLOGY

Our Sample period is from the second quarter of 2008 till the last quarter of 2020. 51 quarterly data of 20 ESG companies are analyzed with STATA software program. Dependent variables are Market Value and Total Assets. Whereas, independent variables are ESG Controversies score, ESG Score, CSR strategy score, Value board structure/board diversity, Board size, and Value-board structure/specific skills are independent variables in our panel data analysis.

$MV_{i,t}= \alpha + \beta_1 ESG_{i,t} + \beta_2 BS_{i,t} + \beta_3 BD_{i,t} + \beta_4 SS_{i,t} + \varepsilon_{i,t}$(1)

$TA_{i,t}= \alpha + \beta_1 ESG_{i,t} + \beta_2 BS_{i,t} + \beta_3 BD_{i,t} + \beta_4 SS_{i,t} + \varepsilon_{i,t}$(2)

IV. DISCUSSION

Market values are of interest for many parties including investors, regulators, tax authorities and stakeholders of firms. There are numerous financial factors that have an impact on firm values but non-financial factors do also play a role. Board structure and board size may increase stock prices but time and efforts are put to increase CSR strategy score or ESG score of firms. The benefits from increased scores shall exceed the costs of obtaining them.

Firms should not neglect their non-financial factors as they play a significant role in the demand for shares of firms in the post-modern world of today. They also affect the valuation of firms as well.

Gender issues may be incorporated into the models to improve r-squares for further studies. Artificial intelligence may reduce board size and board structure in the near future and that may be an interesting topic to cover as well. Artificial intelligence may also calculate the net gains from getting a ESG score and consequently that may help board members to see the probable return and thus, lead them to allocate their time and efforts to pursue such goals.

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