Corporate Governance and the Financial Leverage: Evidence from Jordan.

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Abstract

Does corporate governance play a role in determining the capital structure of the firms? this study has been examined the relationship between corporate governance and the use of debt financing. The study shown that funds and institutional holdings has a negative and significant impact on leverage, suggesting that financial leverage degree decreased with the increased monitoring power of funds and institutional stockholdings. On the other hand, the holdings of large owners have a positive and significant relationship with leverage. In this study we present a number of explanations by viewing that entrenched managers may obtain a better access to debt market and then they can finance with extra debt this possibly is consider as an outcome of conservative investments policy they used. Our findings could be a helpful and practical for not only investors and financial managers, it could be useful also for financial consultants.

Keywords: Corporate governance; financial leverage; funds holdings, capital structure.

1. Introduction

Corporate governance one of the main issues have been raised recently in the corporate world. The corporate governance is a structure which monitors and controls the behavior of corporate executives in different areas such as financial one which can be applied by the board of directors (large owners), and institutional investors. Corporate governance issue can have an effect on the various aspects of firm's management including the performance management, earnings management and capital structure. The management of capital structure, which reflects the financial leverage of companies and the way by which the capital of company is applied by the managers, is one of the important issues, since the inclusion of debt in the capital structure may affect the performance and the market value of the firm.

Optimal capital structure and sound corporate governance and an optimal are very important for each firm to improve the firm's market value. In literature, corporate governance is defined as the system by which businesses firms are directed and controlled, Kajola (2008). While Gill, Biger and Mathur, (2011), defined that the optimal capital structure includes debt, but the firm not financed 100% of debt. The ideal debt to equity ratio for the firm is when its minimize the costs of financing and reduce the likelihood of insolvency. Berle & Means (1932) were considered the first researchers that have discussed the theory of corporate governance. Modigliani and Miller (1958) also pioneered the theory capital structure. It was alleged that the obtained understandings in the valuation of firms depending on the technique of funding depending on the accepting the structure of capital and the firm's assets.

Since that, many researchers had tried to pursue their paths to build up innovative theories. For example, Jensen and Meckling (1976) defined agency relationships (i.e., a contract between agent and principal to perform services on behalf of the principal). Studies have defined the financial leverage as the amount of debt which is obtained for needed financing in order to acquire the necessary property (Hampton, p. 2001). According to the mentioned definition, the companies can be defined based on the financing as companies with high and low
degree of financial leverage. In general, the leverage ratios indicate the amount of debts in the capital structure of company funding.

According to the information asymmetry theory, the managers have more information than the investors about the prospect of company and this fact is called asymmetric information. For that reason, because the managers have more information about the future of company, they do not engage others in the future profit of company; hence, they offer the financial needs of company throughout using debt; but if they do not, they will meet the financial needs of company through the share distribution.

Another key point, that self-governing managers and institutional shareholders generally encouraged directors to enlarge shareholder's yields throughout larger risk-taking. Shareholders may find it may most favorable to boost risks as they do not internalize the social cost of failures. In addition, since of the firms-specific human capital and private benefit of control, directors tend to seek out a lesser level of risks than shareholders (Laeven and Levine, 2009).

This paper examines the effects of variables in the corporate governance on leverage level for a sample of Jordanian companies, proxy variables were selected from earlier observed works. The variables include: the ownership of insiders, financial institutions (funds), corporate stockholders and foreign stockholders. The study may provide policy makers in Jordan with more insight to the style of governance which may ensures an optimal capital structure; therefore investors and shareholders will make a further consideration about the capital market and investment decisions.

The rest of this study is structured as follows: section 2: present literature reviews. Section 3: the hypotheses and its discussion. Section 4: The methodology and data and section 5 present the results and findings. And finally concludes.

2. Literature Reviews

A study by abdoli, Lashkary and dehghani(2012) examined the effect of corporate governance on financial leverage by using a sample of 77 Iranian companies. They concluded that the board independence and the presence of internal auditor have a significant relationship with the ratio of debt (financial leverage).

Sabour, Al-Farouq and Karim (2009) evaluated the effect and relationship between the structure of ownership and board structure, and financial performance of companies in Botswana Stock Exchange. They found that there was a difference between the corporate governance systems among the companies due to the difference in the measured performance. Diversification in capital market with different combinations is one of the reasons which they cited in their paper.

Gruszczynski, Marek (2006) examined the relationship between levels of corporate governance and the financial performance for companies listed in Poland. The results have shown that the level of corporate governance in firms of Poland are related to their capability to duplicate through financial closure based on what is illustrated by its liquidities’ degree and its profitability in addition to the financial leverage variables.

Cuong and Canh (2012), in their study had used a set of data for companies listed on Vietnam stock exchange markets. They found that the optimal debt ratio, of less than 59.27% raise the value of the firms.

Ron Jana (2010) evaluated the relationship between some of the boards characteristics, and the structure of corporate capital in Nepal. The results shown that: the corporate governance leads to lower financial leverage and disputes in the agencies. Experimental results of relationship are only significant statistically about the
combination of board and conservative tenure, but it is not significant about the size and skill of board. On the other hand, the results show a positive correlation between the number of executive leaders in the board and the level of debt. Finally, the findings show that the management of building companies uses the higher debt level as a mean of expropriation for a few shareholders, not as a punitive and disciplinary mean.

Cheng and Tzeng (2011) in their paper of 645 firms had listed in the Taiwan Securities Exchange (TSE) (2000-2009), they found a significant and positive relationship between the value of the firm and its leverage. Adeyemii & Oboh (2011) used a data of 90 companies from Nigeria and found that the firm's market value is influenced positively by its alternatives of capital structure which means the level of leverage. In summary, all studies had shown that both financial leverage and corporate governance are correlated and as a result affecting the firms values.

3. Hypotheses Development

Research Hypotheses:

H0: There is no significant relationship between corporate governance and the degree of leverage

4. Methodology

4.1. The data

We used a sample of annual observations for publicly owned companies that have selected from pool of firms listed in Amman Stock Exchange (ASE), that fulfilled each of the following criterias: First: Financial sector companies have expelled from our sample due to the high leverage degree, also its performance measurements cannot be significantly compared to other companies in the other industries. Second: the firms’ common stocks must list with no disruption on the ASE between 2005 and 2011. Finally, almost most data and ownerships associated to financial information are completely obtainable. In this paper we used data and financial information were collected from firms are listed in, in addition Institutional ownerships information are gathered from the Jordanian security Depository Center.

4.2. Variables and Model

4.2.1 Variables

This paper has examined the components of corporate governance and analyzed the relationships between this attribute and the financial leverage degree.

Dependent Variable: The degree of financial leverage (LEV_{i,t}): which is measured as the ratio of total liabilities to total assets for company (i) at year (t).

Independent Variables: Corporate Governance.

To examine the governance we used the following factors; the ownership of insiders, financial institution (funds), corporate stockholders and foreign stockholders. The Insiders ownership (INS) component has calculated by the ratio of insider’s stockholding (insiders whom hold 5% or above of total outstanding common stocks. The financial institutions ownerships (FIS) have been measured by the ratio of financial institutions (Fund) stockholding. In the same way the ownerships of corporate were considered by the ratio of corporate stockholdings (CS), and foreign ownerships (FORS) is calculated by foreign stockholding’s ratio.

The control variables

We control for the following firm characteristics:
• SIZE: firm’s size which is used as a proxy for the capacity to enter the capital market.
  
  \[ \text{SIZE}_{i,t} = \ln(\text{Total assets}) \]

• Dividends payments (DIVY) the dividend yields of firm \( i \) in time \( t \), which is equal payments paid divided by the value of the stock.

• Growth (Investment) opportunities Tobin’s \( Q_{i,t} \), measured as market value of asset-to-book value of asset ratio for firm \( i \) in time \( t \), and equals (Book value of debt + Market value of equity) / Book value of assets.

• CASH \( i,t \), Corporate Cash Holding for company \( i \) in time \( t \), and it is cash equivalents divided by net Assets. Where: Net Assets= Total Assets – cash and cash equivalent (Opler et al. 1999).

• Return on Equity (ROE) the measure of firm's performances and calculates as \( \text{ROE} = \frac{\text{Net Profit after Tax}}{\text{Total Common Equity}} \).

4.2.2 The Model

In this paper we examined the financial leverage degree of firms that influenced by the factors of corporate governance, and we consider some firm's characteristics. On the other hand, it is not easy to interpret the results since there a problem of endogeneity has appeared. Financial leverage degree may reduce the agency costs result from the shareholder-manager conflict by imposing more monitoring on managers decision concerning borrowing but corporate governance authority may also support firm borrowing and increase the degree of financial leverage. First to report for endogeneity between corporate governance and financial leverage we regress the contemporary corporate governance measurements on the values of financial leverage degree one period lag degree, and additional explanatory variables. The lags allow for the consequence of the changes in sample firms’ financial leverage degree to show up in prospect of corporate governance.

The methodology is exclusively planned to organize three econometrics issues: a. the existence of unobserved firm's explicit effect, that is reduced by considering the 1st difference of the variables, b. the autoregressive behaviour of financial leverage, c. possible endogeneity of the explanatory variables. In particular, we investigate the following model:

\[
\text{Leverage}_{i,t} = \alpha + \text{Corporate Governance}_{i,t-1} + \text{Leverage}_{i,t-1} + \text{C}_{i,t-1} + \epsilon_t
\]

Eq (1)

Where \( \alpha \) represent regression coefficient and \( \epsilon \) is an error term; and \( \text{C}_{i,t-1} \) contains control variables (Size,cash,tobins’Q,ROE,DIVY).

5. Empirical Results

Table (1) shows for corporate governance proxies used in this study (corporate stockholdings, funds, foreign and insider stockholdings). The statistics shown that about 40% of the capitals come from firm's investors, seven percent come from funds and financial institutional investors, nineteen percent from overseas investors, while the large holders grasp on 53 percent of the capital of ASE firms. The financial performance for the selected firms was excellent; as the average Tobins’ Q ratios were 1.6 which is greater than 1 and that means the firm's
market value is greater than the company's assets. 27% of the ROE observations were negative with median of 3%. The selected firms were highly depending on debt and about 31.4% of its financing comes from other sources of funds. In addition, the statistics confirm that the means of dividends yields were 2.3 percent, with a maximum value of 3.2%. On average the companies hold 5.4% of net assets as cash. In this paper, factors of governance were tested include the firm's ownership capital structure, they were related to each other as presented in table (2), to deal with this dilemma, we examined the effect of ownership variable on financial leverage independently.

According to the random effects regression outcomes revealed in table (3), funds and institutional holdings show a negatively significant effect on leverage, suggesting that financial leverage degree decreased with the increased monitoring power of funds and institutional stockholdings. While the holdings of large owners whom hold more than 5 percent has a positively significant relationship with leverage, which can be explained using the arguments of the widely accepted pecking order hypothesis (POH)(Myers & Majluf, 1984) which consider the function of information asymmetry in influencing firm’s financing policy. It argues that in the face of information asymmetry, corporations will have a preference debt more than equity, and since investors will significantly discount the value of equity taking into account agency cost and create an equity offering unpleasant for the firms. The other two proxies for corporate governance (corporate and foreign holdings) have no effect on the degree of financial leverage. Cash flow shows a negatively significant relationship with degree of financial leverage, results are consistent with the theory of free cash flow which suggests that low leverage companies are a lesser amount of subject to monitoring, allowing for superior managerial discretions.

6. Concludes

The rationale of this paper is to find whether there is a relationship between corporate governance and financial leverage on Jordanian firms. Similar to literatures the paper has an important limitation which includes developing good proxies for effective governance. The investigations have shown that the relationship between the corporate governance and the degree of leverage is more complicated than anticipated. Overall the findings confirm that institutional investors have a negative impact on the financial leverage, while Insiders and huge owners have a positive effect on the capital structure decisions and depending on debt. Foreign investors have no effect on the degree of leverage.

The probability to have a relationship between the risk of bankruptcy and corporate governance can be an interesting subject for conducting new and future studies. Also, valuating the relationships between the probability of corporate bankruptcy and the financial leverage is a good topic for future research.

We recommended that the managers consider the issues related to the independence board and the presence of internal auditor more than before. In addition, shareholders increase the number of non-responsible members of board in order to shrink the conflicts between their interests and the members of board's interests.

References

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Table (1): Descriptive Statistics.

<table>
<thead>
<tr>
<th>A: ownership structure</th>
<th>Mean</th>
<th>Median</th>
<th>Max.</th>
<th>Min.</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corporate holdings</td>
<td>0.402232</td>
<td>0.410951</td>
<td>0.991761</td>
<td>0.002621</td>
<td>0.241585</td>
</tr>
<tr>
<td>Funds holdings</td>
<td>0.073238</td>
<td>0.036093</td>
<td>0.423242</td>
<td>0.000000</td>
<td>0.092516</td>
</tr>
<tr>
<td>Foreign holdings</td>
<td>0.193682</td>
<td>0.087520</td>
<td>0.986546</td>
<td>0.000000</td>
<td>0.235579</td>
</tr>
<tr>
<td>Large owners holdings</td>
<td>0.527404</td>
<td>0.572000</td>
<td>0.972400</td>
<td>0.000000</td>
<td>0.230792</td>
</tr>
</tbody>
</table>
### B: Corporate performance Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>0.306989</th>
<th>0.281009</th>
<th>0.837363</th>
<th>0.002049</th>
<th>0.182906</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leverage</td>
<td>0.023232</td>
<td>0.000000</td>
<td>0.322581</td>
<td>0.000000</td>
<td>0.037886</td>
</tr>
<tr>
<td>Div.Yld</td>
<td>-0.349503</td>
<td>3.06500</td>
<td>57.2100</td>
<td>-111.1170</td>
<td>20.77695</td>
</tr>
<tr>
<td>ROE</td>
<td>1.578192</td>
<td>1.254152</td>
<td>8.070894</td>
<td>0.222515</td>
<td>1.109893</td>
</tr>
<tr>
<td>Tobins'Q</td>
<td>1.578192</td>
<td>1.254152</td>
<td>8.070894</td>
<td>0.222515</td>
<td>1.109893</td>
</tr>
<tr>
<td>Cash</td>
<td>0.053918</td>
<td>0.021558</td>
<td>0.663525</td>
<td>-0.647301</td>
<td>0.111132</td>
</tr>
</tbody>
</table>

Table (2): Pearson correlation coefficient between governance factors presented by ownership structure of firms.

<table>
<thead>
<tr>
<th>Corporate holdings</th>
<th>Funds holdings</th>
<th>Foreign holdings</th>
<th>Large owners holdings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corporate holdings</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Funds holdings</td>
<td>-0.140826</td>
<td>1.0000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(-2.556432)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.0110</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreign holdings</td>
<td>0.373924</td>
<td>-0.027044</td>
<td>1.0000</td>
</tr>
<tr>
<td></td>
<td>7.245867</td>
<td>-0.486213</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.0000</td>
<td>0.0340</td>
<td></td>
</tr>
<tr>
<td>Large owners holdings</td>
<td>0.408066</td>
<td>-0.117643</td>
<td>0.442325</td>
</tr>
<tr>
<td></td>
<td>8.033109</td>
<td>-2.129081</td>
<td>8.863811</td>
</tr>
<tr>
<td></td>
<td>0.0000</td>
<td>0.0340</td>
<td>0.0000</td>
</tr>
</tbody>
</table>


Table (3): Panel Data Regression (Random effect): Leverage and corporate Governance.

\[ \text{Leverage}_{i,t} = \alpha + \text{Corporate Governance} \cdot \text{Leverage}_{i,t-1} + \epsilon_{i,t} \]

<table>
<thead>
<tr>
<th>Corporate Governance Proxies</th>
<th>Corporate Holdings</th>
<th>Funds &amp; Institutions Holdings</th>
<th>Large Owners Holdings</th>
<th>Foreign Holdings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coefficient for Corporate Governance Proxies.</td>
<td>0.020791</td>
<td>-0.058092***</td>
<td>0.044285**</td>
<td>0.016009</td>
</tr>
<tr>
<td>Cash</td>
<td>-0.138564*</td>
<td>-0.131549*</td>
<td>-0.142184*</td>
<td>-0.130990*</td>
</tr>
<tr>
<td>DivYld</td>
<td>0.157482</td>
<td>0.154740</td>
<td>0.205541</td>
<td>0.185062</td>
</tr>
<tr>
<td>Tobins'Q</td>
<td>0.000970</td>
<td>0.000760</td>
<td>-0.002266</td>
<td>0.000445</td>
</tr>
<tr>
<td>Size</td>
<td>0.011983*</td>
<td>0.014229*</td>
<td>-0.012550*</td>
<td>0.011519**</td>
</tr>
<tr>
<td>ROE</td>
<td>-0.001918*</td>
<td>-0.001961*</td>
<td>-0.001934*</td>
<td>-0.001902*</td>
</tr>
<tr>
<td>Leverage (-1)</td>
<td>0.787062*</td>
<td>0.774056*</td>
<td>0.785384*</td>
<td>0.88377*</td>
</tr>
<tr>
<td>Constant C</td>
<td>-0.128500</td>
<td>-0.150416**</td>
<td>-0.148306**</td>
<td>-0.116117</td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>0.757959</td>
<td>0.757355</td>
<td>0.759981</td>
<td>0.757583</td>
</tr>
<tr>
<td>F-Statistic</td>
<td>124.9189</td>
<td>123.1748</td>
<td>126.2965</td>
<td>124.6655</td>
</tr>
<tr>
<td>Prob. (F-Statistic)</td>
<td>0.0000</td>
<td>0.0000</td>
<td>0.0000</td>
<td>0.0000</td>
</tr>
<tr>
<td>D.W</td>
<td>2.009996</td>
<td>1.999843</td>
<td>2.001375</td>
<td>2.000389</td>
</tr>
</tbody>
</table>

* Value is significant at 1%.  ** Value is significant at 5%.  *** Value is significant at 10%.
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