IMPACT OF MANAGERIAL OWNERSHIP ON CAPITAL STRUCTURE: A SURVEY OF TURKISH FIRMS

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Abstract

This paper investigates the relationship between insider ownership and capital structure decisions made by managers for an emerging market. Therefore, we survey managers of 103 firms listed in the Istanbul Stock Exchange (ISE). Our findings lend considerable support to our expectation that leverage, debt maturity and dividend issues reduce ability of managers to divert resources from value maximisation. However the same monitoring and disciplining tax is not observed for stock issues. Also, our findings document that managers of firms listed in the ISE do not opt to dividend smoothing policy. Finally, the results are in line with our expectation that, the more willing are the managers to reduce asymmetric information between them and shareholders, the higher their ownership level in firms.

Keywords: Insider ownership, agency costs, capital structure

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Introduction

Modigliani and Miller (1958) show that capital structure decisions have no impact on firm value. Since their seminal work researchers have been finding evidence for the role of capital structure choices in increasing firm value, in the light of capital market imperfections. Being one of the main fruits of capital market imperfections, agency conflicts exist between firm managers and owners because of the separation of ownership from control in firms. Consequently, managers pursue capital structure choices that enhance their interests rather than that of shareholders. In accord with this, there is an extensive empirical and theoretical research on how corporate ownership structure influences capital structure choices.

Renneboog (2000) states that capital structure decisions can be considered as a monitoring device as it triggers corporate control actions. Therefore the aim of this paper is to investigate relationship between managerial ownership levels in a firm and the decisions of managers made for capital structure. In this sense, a comprehensive survey of managers of firms listed on the Istanbul Stock Exchange (ISE) is conducted for our analysis. Then, we combine their managerial views on capital structure with their stock ownership levels in firms. Consequently we aim to understand if differences in the ownership level creates differences in the choices as well.

We contribute new evidence to corporate governance by focusing on Turkish case. First of all, Love (2003) and Khurana, Martin and Pereira (in press) show that capital market imperfections are more severe for emerging markets. Being an emerging market, Turkey provides a good field to study conflicts of interests between managers and shareholders in severely imperfect capital market conditions. Furthermore, Turkey is a civil law country and according to La Porta et al. (1998) protection of Turkish investors is weaker than that of their US and UK counterparts. Consequently, there is likely to be a superior opportunistic behavior on the part of entrenched managers in Turkey. Finally our study on the relationship between insider ownership and capital structure is particularly important for firms because a good corporate governance is associated with a lower cost of capital as shown by Claessens (2006).

Our findings show that the role of both leverage and debt maturity in reducing agency costs due to conflicts of interests between managers and shareholders intensifies monotonically with decreasing levels of insider ownership. Furthermore, while our analysis provides no evidence on corporate governance role of stock issues, dividends are found to discipline managerial activities. Finally, aligning to our expectations, managers become less willing to
reduce information asymmetry between them and shareholders as their insider ownership level reduces.

Our paper is organised as follows. The next section reviews previous studies and introduces the structure of our survey. This is followed by the methodology section. We report our empirical findings before presenting a summary and conclusion.

**Previous Studies**

Jensen and Meckling (1976) argue that introduction of managerial share ownership may align the interests of managers and shareholders and hence reduce the agency problems. Therefore we aim to see if insider ownership, as an agency cost mechanism, influences capital structure choices. Moreover, Schleifer and Vishny (1997) show that complementary intervention of both internal and external control mechanisms in Anglo-American countries maintain managerial performance. However disciplinary function of the takeover market in Turkey is very weak. Similarly, lack of efficient monitoring by financial institutions lead managers in Turkey to be more likely to be entrenched. For this reason, we focus on the capital structure decisions as a substituting performance maintaining tool for managers in differing managerial equity ownership intervals.

Leverage is a very important item in capital structure decisions. Grossman and Hart (1982) show that managers commit themselves to work hard by issuing debt. In the event of default, creditors have the legal standing to both review managerial decision and to have management replaced through the courts, whereas shareholders do not have this power. Similarly, Jensen and Meckling (1976) and Jensen (1986) theorize that debt causes the decisions that managers make to be more aligned with the interests of shareholders in the sense that debt reduces free cash and hence less resources are left for entrenched managers to waste on unprofitable activities. In this sense, Denis and Sarin (1999) and Holderness, Kroszner and Sheehan (1999) find evidence of a negative effect of leverage on the firm’s level of insider ownership. Moreover, maturity structure of corporate debt is also shown to be a factor in mitigating conflicts of interests between managers and shareholders because short term debt has superior ability to overrule management compared to long term debt (See, Datta, Iskandar-Datta and Raman, 2005 and Arslan and Karan, 2006 for Turkish firms). Consequently our first questions to managers are about their decisions related to their leverage and corporate debt maturity structure.

Our survey also includes questions about decisions on dividends. Rozef (1982) and Easterbrook (1984) argue that high dividend pay out firms incur capital monitoring, thereby managerial discretion over resources decreases. Besides, Pindado and De la Torre (2006) consider dividend as a way of encouraging managers for the possession of higher stakes in the firm because received dividends are tax deductible. Therefore we investigate the relationship between insider ownership level and dividend choices. However, dividend decisions should be approached with a caution because management is generally reluctant to reduce dividends unless a reduction is unavoidable (Michaely, Thaler and Womack, 1995.) This situation is the outcome of the fact that dividend cuts or omissions are associated with unusually poor stock price due to adverse interpretation from stock market (Healy and Palepu, 1988).

We also consider disciplining role of the market for the stakes. Renneboog (2000) states that a market for share stakes might play a monitoring role on management. In this sense, we reason that stock issues is another tool to force managers to act in accord with the benefits of shareholders. Therefore the views of managers in different ownership intervals on issuing stock reflect their perception on the monitoring and disciplining role of stock market.

We report the views of managers belonging to different ownership intervals because Stulz (1988) formalize that there is a concave relationship between firm valuation and increase in managerial ownership. First of all, increased managerial ownership is expected to result in improved firm performance since managers are less likely to divert resources away from value maximisation. However, at a certain level of managerial ownership management becomes entrenched because outside shareholders find it difficult to monitor the actions of managers then. Consequently benefit of consumption of perquisites for managers may outweigh the loss they suffer from a reduced value of firm. Therefore, we consider this likely non-monotonic relationship between managerial ownership and alignment of shareholder and managerial interests by reporting the survey results in four distinct insider ownership levels.

Agency conflicts are mainly generated by asymmetric information between owners and controllers of firms. Thus, we also incorporate extra information about the views of managers on the tools reducing the asymmetric information between them and shareholders such as ways to enhance transparency through timely and accurately informing shareholders. This way, we aim to clarify the discrepancies between the different insider ownership levels for efforts to mitigate conflicts of interests in firms.

**Methodology**

Our sample consists of a total of 103 firms listed on the ISE. In 2005 the total number of firms listed on the ISE is 292. After excluding the financial firms 4

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4 For evidences see, Morck, Shleifer and Vishny 1988; McConnell and Servaes, 1990 and Ozkan and Ozkan, 2004 for UK firms.
from the sample the total number of firms we have sent the surveys to managers, namely, chief financial officers (CFO) or chief executive officers (CEO) is 245. We have e-mailed, mailed and faxed the survey between March 2005 and July 2005. Owing to the shortness of our survey containing not in excess of 20 questions, our response rate is 42 percent which is much higher than those of other similar studies conducted through surveys. Furthermore, managerial stock ownership levels are obtained from the yearbook of ISE companies, which is a country-specific source and published by the Department of Documentation of ISE at the end of each year. It provides data on the first level of shareholding for all publicly traded companies in Turkey, and lists names of owners, numbers of declared shares and percentage of ownership.

[Insert Table 1 About Here]

Table 1 shows the allocation of the survey respondents to one of the ten broad economic groups. According to the table our sample is not concentrated on particular sectors and leading ones are food and textile industries, comprising 18.45 percent and 16.50 percent of the sample respectively. These industries are followed by chemical, trade-services, electronics industries, metal industries and their rankings in the sample are 12.62 percent, 10.68 percent 8.74 percent and 7.77 percent respectively. The least number of replies that take place in our study belong to the transport, building and paper industries with participating only 7, 6 and 5 firms respectively.

[Insert Figure 1 About Here]

We divide the managerial ownership levels into four groups and Figure 1 portrays these managerial ownership intervals which we base our analysis on. The vertical axis of the figure represents the percentage of the whole sample and the horizontal axis demonstrates the managerial ownership intervals. Managers having the ownership level less than 5 percent in firms form only 19 percent of the sample. Moreover, the percentage of managerial ownership level that falls to the percentage between 5 and 10 in the whole sample is 17. This highest ranking insider ownership interval is the one between 10 and 20 percent and it comprises 34 percent of the sample. It is followed by the managerial ownership level exceeding 20 percent and it covers the 30 percent of the sample. The results confirm the finding in Yurtoglu (2000) that ownership structure of Turkish firms are characterised as having high level of insider ownership. Hence, the ownership structure of Turkish firms are highly concentrated and differs from those of Anglo-Saxon counterparts which are characterised by dispersed ownership levels. Accordingly, our results also differ from those obtained for the executive stock ownership levels by Bancel and Mittoo (2004) for European countries. Their findings show that the majority of insider ownership level is below 5 percent and the number of firms that falls to this interval exceeds 85 percent of the sample. Sum of the ownership levels taking place in the other three intervals, namely between 5 and 10 percent, between 10 and 20 percent and those exceeding 20 percent comprise less than 5 percent of the sample.

**Empirical Findings**

Panel A in Table 2 presents responses to the questions in the survey regarding leverage and debt maturity decisions. These questions highlight the role of leverage and debt maturity in mitigating conflicts of interests between managers and shareholders in firms. The results show that as the managerial ownership level decreases the belief that an appropriate amount of debt ensures that upper management works hard and efficiently, increases monotonically. Since the lower levels of insider ownership encourages managerial entrenchment the disciplining role of debt is more pronounced for the managers falling to the lower intervals of managerial ownership. Furthermore, our results do not document a considerable difference in responses given to the question if debt gives investors a better impression of firm's prospects. Nevertheless, we found a slim evidence that the importance of this issue for the managers that hold less than 5 percent of equity in firms is more pronounced than that of those whose ownership levels are between 5%-10%. Our results do not provide statistical significant differences among the responses given to the statement that having a close relationship with a bank encourages usage of debt. However, this issue is fairly important for our sample firms. In accord with our motive the importance level of responses given to the question “Short term debt ensures that returns from new projects can be captured by shareholders.” decreases monotonically as the insider ownership level increases. This result is in line with our expectations that the role of short term debt in reducing agency conflicts between managers an shareholders is more essential for the lower level of insider ownership which encourages managerial entrenchment. On average, the managers of our sample firms find it important to maintain a target debt to equity ratio. However, the responses to these questions do not exhibit a monotonic and significant difference between the ownership intervals, whereas sample firms on average find it important to maintain the target ratios. Finally, the most definitive role of debt in agency costs is captured from the last question which asks if debt gives investors a better impression of a firm's prospects.
activities having unbeneficial outcomes for firms in expense of shareholders, borrowing opportunities decrease monotonically as the insider ownership level decreases. Consequently, managers with lower ownership levels in firms feel less able to borrow in the event of conflict of interest between them and shareholders. To sum, our findings confirm that the role of both leverage and debt maturity in mitigating conflicts of interests in firm due to separation of ownership and control, is enhancing monotonically with decreasing levels of insider ownership.

[Insert Table 2, Panel A About Here]

Panel B in Table 2 exhibits responses to the questions in the survey on dividend and stock issues. The first two statements of this panel is related to the choices of managers on issuing stocks. We find that managers in the each interval are consistently not in the opinion that stock issues give a better impression of their firms’ prospects than using debt, since the responses on average are close to the “not important” option. Moreover, our results show that on average managers do not resort to issuing stocks to dilute the holdings of certain shareholders. Besides, there is neither statistically significant differences nor monotonic among the insider ownership levels for responses given to both of the questions on stock issues.

The rest of the questions in Panel B aims to reveal the differences among managers, falling to four distinct ownership intervals, in their choices for dividend issues. First of all, judging into the responses given to the question 3 in the panel, we find a strong evidence that the importance of dividend in ensuring that upper management works hard and efficiently grows uniformly and significantly as the insider ownership level decreases. This finding is in accord with the literature that an appropriate amount of dividend reduces managerial entrenchment through disciplining managers. Furthermore, on average managers in the each ownership intervals find it important that dividend level should be adjusted in accord with the earnings, nonetheless there is no significant difference between the intervals for the responses. Consequently, we find that managers of firms listed in the ISE do not opt to dividend smoothing policy in order to avoid adverse reaction from the stock market in case of dividend omissions or reductions.

[Insert Table 2, Panel B About Here]

The objective of questions presenting in Panel B in Table 2 is to understand the differences among managers in their efforts to reduce the degree of asymmetric information between them and shareholders. Information asymmetry feeds the managerial entrenchment which emanates from the seperation of ownership and control in firms. However increasing the transparency in firms, reduces the value decreasing activities and decisions of managers through enhancing the timely and accurate transfer of internal information to shareholders. Generally our results show that the intention of managers to maintain the asymmetric information increases as the insider ownership level falls. These results are inline with our findings for leverage, debt maturity and dividend issues presented in the previous panels in the Table 2. First of all, as the insider ownership level falls monotonically, firms find it less important to announce their targets frequently concerning capital structure to the shareholders. Furthermore, the identical monotonically decreasing and highly significant pattern is also observed for the responses given to the statement that firms should timely disclose major managerial outcomes and decisions to the shareholders. Finally, our last aim is to reveal how important it is to announce financial reports quarterly instead of biamnually or once at the end of fiscal year. The firms in our sample on average are not in the opinion that quarter announcements are important for their firms. Nevertheless, its importance for managers increases monotonically with the rise in insider ownership as expected. Obviously, managers with lower ownership levels try to sustain their entrenchment ability through not increasing transparency within their firms.

[Insert Table 2, Panel C About Here]

**Summary and Conclusion**

In this paper we examine how managerial ownership level affects capital structure decisions. Capital structure decisions such a leverage, debt maturity, stocks and dividends help to align interests of managers and shareholders. Following the literature on the corporate governance role of capital structure decisions, our questions are developed accordingly and we conduct our survey to managers of firms listed in the ISE. Responses to the survey are divided into the four managerial ownership level in order to find out if managerial entrenchment motive is a monotonic process. Our survey is conducted on 103 firms in the year 2005. Having a 42 percent response rate to the survey, our analyses encompasses relatively higher number of firms from the chosen sample of firms than the similar studies.

Our study sheds more light on the capital structure decisions of managers given that the analyses are conducted in an emerging market, in which capital market imperfections are stated to be more severe than developed markets. Moreover legal protection of investors are weaker in Turkey and this results in the enhanced role of capital structure choices to reduce managerial discretion over resources.

The results obtained through responses to the survey confirm that leverage and debt maturity reduces managerial discretion over resources. On the contrary the same disciplining and monitoring role is
not obtained for the stock issues. Moreover, dividends are also found to limit managers to divert resources away from value maximisation. Additionally we found that managers of our sample do not opt to dividend smoothing policy by rather resorting to adjusting dividend payments in accord with the earnings. Besides, we investigated opinion of managers to increase transparency of their decisions and activities. The results are in line with our expectations and show that the more willing are managers to reduce asymmetric information between them and shareholders, the higher ownership level they have in firms. Finally, due to monotonic improvement of corporate governance roles of capital structure choices along with the fall in insider ownership, our results do not support the concavity of the relationship between managerial entrenchment and insider ownership.

The evidence documented in this paper is based on the analysis of firms in a single emerging market country. More investigation is needed to explore the relationship between insider ownership level and managerial decisions of capital structure in emerging markets. This is an area for future research since such an analysis would further allow us to investigate the effect of country-specific characteristics, such as macro-economic, legislative and institutional system, on these issues.

References


### Appendices

#### Table 1. Allocation of companies to one of ten broad economic groups

<table>
<thead>
<tr>
<th>Sub-Sector</th>
<th>Number of Companies</th>
<th>% Companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy</td>
<td>8</td>
<td>7.77</td>
</tr>
<tr>
<td>Transport Industry</td>
<td>7</td>
<td>6.80</td>
</tr>
<tr>
<td>Textile Industry</td>
<td>17</td>
<td>16.50</td>
</tr>
<tr>
<td>Building</td>
<td>6</td>
<td>5.83</td>
</tr>
<tr>
<td>Trade-Services</td>
<td>11</td>
<td>10.68</td>
</tr>
<tr>
<td>Food-Industry</td>
<td>19</td>
<td>18.45</td>
</tr>
<tr>
<td>Metal Industry</td>
<td>8</td>
<td>7.77</td>
</tr>
<tr>
<td>Chemical Industry</td>
<td>13</td>
<td>12.62</td>
</tr>
<tr>
<td>Paper Industry</td>
<td>5</td>
<td>4.85</td>
</tr>
<tr>
<td>Electronics</td>
<td>9</td>
<td>8.74</td>
</tr>
</tbody>
</table>

#### Table 2. Survey Responses

Respondents are asked to rate the following questions on a scale of 0 (not important) to 4 (very important). Mean represents the mean value of scales obtained from the entire sample. ***,**, denotes a significant difference at the 1%, 5% and 10% level, respectively.

<table>
<thead>
<tr>
<th>Panel A: Responses on Leverage and Debt Maturity</th>
<th>Managerial Ownership Intervals</th>
<th>Means</th>
<th>P-values for Univariate T-test for Difference in Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>Man power Ownership Intervals</td>
<td>&lt;5%</td>
<td>5%-10%</td>
<td>10%-20%</td>
</tr>
<tr>
<td>1) An appropriate amount of debt ensures that upper management works hard and efficiently</td>
<td>2.67</td>
<td>3.4</td>
<td>2.97</td>
</tr>
<tr>
<td>2) Using debt gives investors a better impression of our firm’s prospects</td>
<td>1.62</td>
<td>2.0</td>
<td>1.69</td>
</tr>
<tr>
<td>3) We use debt because of our close relationship with a bank</td>
<td>2.75</td>
<td>2.8</td>
<td>2.71</td>
</tr>
<tr>
<td>4) Short term debt ensures that returns from new projects can be captured by shareholders</td>
<td>1.98</td>
<td>2.9</td>
<td>3.25</td>
</tr>
<tr>
<td>5) One of our main goal is to maintain a target debt-to-equity ratio</td>
<td>3.03</td>
<td>3.0</td>
<td>2.85</td>
</tr>
<tr>
<td>6) It becomes harder for a firm to borrow when it acts against the interest of its shareholders</td>
<td>2.7</td>
<td>1.64</td>
<td>2.72</td>
</tr>
</tbody>
</table>
### Panel B: Responses on Dividend and Stock Issues

| Managerial Ownership Intervals |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mean | <5% | 5%–10% | 10%–20% | >20% | <5%<5% | 5%–10% | 10%–20% | >20% | <5%<5% | 5%–10% | 10%–20% | >20% |
| 1) Issuing stock gives a better impression of our firm’s prospects than using debt | 0.84 | 0.7 | 1.34 | 0.59 | 0.66 | 0.27 | 0.91 | 0.89 | 0.23 | 0.39 | 0.82 |
| 2) We issue stocks to dilute the holdings of certain shareholders | 0.90 | 0.1 | 0 | 0.84 | 0.75 | 0.87 | 0.53 | 0.36 | 0.43 | 0.85 | 0.92 | 0.70 |
| 3) An appropriate amount of dividend ensures that upper management works hard and efficiently | 1.75 | 2.6 | 4 | 1.89 | 1.48 | 0.99 | 0.021* | 0.059* | 0.001* | 0.014* | 0.044** |
| 4) Dividend level should be adjusted in accord with earnings | 3.35 | 3.5 | 6 | 3.24 | 3.42 | 3.19 | 0.57 | 0.89 | 0.49 | 0.69 | 0.83 | 0.86 |

### Panel C: Responses on Transparency

| Managerial Ownership Intervals |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mean | <5% | 5%–10% | 10%–20% | >20% | <5%<5% | 5%–10% | 10%–20% | >20% | <5%<5% | 5%–10% | 10%–20% | >20% |
| 1) Firms should frequently announce their targets concerning capital structure to shareholders | 2.86 | 2.30 | 2.94 | 3.02 | 3.16 | 0.027** | 0.021** | 0.018** | 0.95 | 0.89 | 0.94 |
| 2) Firms should timely disclose major managerial outcomes and decisions to shareholders | 3.10 | 2.67 | 3.10 | 3.21 | 3.42 | 0.048** | 0.008*** | 0.003*** | 0.89 | 0.52 | 0.75 |
| 3) Firms should quarterly announce their financial reports | 1.54 | 1.03 | 1.19 | 1.71 | 2.24 | 0.76 | 0.044** | 0.005*** | 0.32 | 0.09* | 0.26 |