

Ownership Concentration, Cash Holding and Firm Value

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Abstract

The purpose of the study is to explore the relationship between ownership concentration and firm value in the Tehran Stock Exchange (TSE). The previous research indicates that ownership structure as an external corporate governance mechanism can influence firm value. In this study, the effect of the type of ownership on company assessment is examined along with level of cash holding. It is expected that firm value will increase as management ownership increases by reducing cash holdings. We also predict firm value is lower in companies with high cash holding and having ownership concentration. In the study, using financial statement information of companies listed on the TSE from 2004 to 2013, the relationship of this subject is addressed. The results of regression analysis in support of the hypothesis indicate firm value declines as ownership concentration increases when company's cash holding mounts. On the whole, the results of the study shows that level of cash holdings which goes hand in hand with level of ownership concentration can reduce firm value.

Keywords: Ownership concentration, cash holding, firm value, corporate governance.

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Introduction

In this study, proceeding with the theoretical literature, we examine the effect of ownership concentration and cash holding on firm value. There is some evidence that external organizational investors are the biggest and easiest forms of organizational resource loss due to acquisition of excess cash on the part of other companies and major internal organizational investments (Titman et al, 2004). With the development of joint stock companies, many investors have emerged, who were not influential in the management of economic units. This led ownership to be detached from company management, which caused new problems. Among these problems are conflict of interest between ownership and management, which led agency theory to come up. With the establishment of agency relationship, each party is in pursuit of maximizing his personal interest. Since managers' utility function is not the same as owners', there is an interest conflict between them (Jensen, 1986).

In this regard, the study of corporate governance is in conjunction with mechanisms that lead incentive issues to plunge due to the detachment of management from commercial enterprises' financing. Indeed, corporate governance can be incorporated into control mechanisms designed for effectively implementing company's operation on behalf of its stakeholders. In market-based economy, regulatory mechanisms are necessary for separation of ownership and control. According to studies, quality of corporate governance structure would reduce opportunistic management behavior and increase investors' benefits (Lee et al, 2007). In general, empirical research demonstrates a direct relationship between governance mechanisms and reliance on financial reporting (Niu, 2006; Pergola et al, 2006; Carcello et al, 2009). Structure of ownership can have a huge impact on corporate governance, supervision of boards of directors, and eventually on firm value. Ownership concentration may increase oversight and eliminate hitchhiker problem, causing positive changes in the company. The major shareholders and owners, the administrator may control the rights to use personal interests, leading to exploitation of other shareholders (see also Ebrahimi Kordlor and Erabi, 2011).

Among other factors that help managers to move on their personal interest is free cash flow in a company. If companies have a great opportunity to grow, it may be possible for them to use cash flow optimally and achieve good profitability; it seems very likely that the cash is invested in specific projects with negative current value which reduces firm value as company's expenditures go up (Khademi et al, 2014). In this paper, the role of major and inside ownership as an external mechanism for corporate governance as well as level of cash holding in firm value are empirically studied by controlling main factors such as size and owner leverage; it is also attempted to explore their reciprocal effect on firm value among companies listed on the Tehran Stock Exchange.

The remainder of this paper is divided into four sections. In the first part, the discussion is focused on the research literature and hypotheses development. In the next section, the research methodology is presented. Then, the descriptive statistics and research results are presented, and the paper ends with conclusions and recommendations.



Literature and hypothesis development

There is broaden literature in ownership concentration. Ownership concentration may increase oversight and eliminate hitchhiker problem, causing positive changes in the company. The major shareholders and owners, the administrator may control the rights to use personal interests, leading to exploitation of other shareholders (see also Ebrahimi Kordlor and Erabi, 2011). The possibility of non-specific effects on various aspects of corporate ownership concentration causing offered various theories in relation to its behavior major shareholders and authors in their studies sometimes have reached contradictory conclusions.

In this regard, Aksia (2006) demonstrated that the odds of financial restatement occurance increases when company has a dispersed ownership. Likewise, the results of Peng (2007) showed that decentralized ownership has less efficiency in monitoring managers. Most blockholders' motivation for monitoring management's actions will potentially decrease earnings management by restricting managers' leeway in financial reporting and increase quality of financial reporting; it is called a developing view (Zhong et al, 2007).

On the other hand, several researches indicate that there is a positive association between management ownership (management entrenchment) and external shareholders losses. As the management ownership increases the loss of external shareholders will increase as well (Pergola et al., 2009). The large shareholders entrenchment is the same as that of managers. Since they have much control over corporate decisions, they can derive more benefit at the expense of small shareholders' loss. It is because owners with the right to control are less subject to regulations and supervision of stock market. The shareholders have control over the procurement process of financial statements, attempting to conceal the real economic status of company by means of manipulation (Zhong et al, 2007). In this regard, evidence shows that firms with high ownership concentration have less earnings information content and more earnings management (Zhong et al, 2007). Thus, when most of company's share is left in the hands of few investors, the probability that financial statements are manipulated because of satisfying their needs and expectations increases, so it can be expected that firm value is influenced in these companies.

Garcie and Sanchez (2011), in a study conducted in Spain, found that it is just ownership concentration that exerts a positive and significant effect on Q Tobin's calculated by firms as a benchmark for measuring firm value. The results of Matnor and Sulong (2010), working on 403 active firms listed on the Bursa Malaysia, indicated that there is a positive and significant relationship between institutional ownership and firm value. In a study into the effect of institutional ownership and firm value in Taiwan, Li (2010) sought to find an optimal threshold of institutional ownership percentage. His study was conducted on 221 Taiwanese firms during 1997-2006. Utilizing the simple pattern Q Tobin's to determine firm value, he could reach 81.2 threshold. That is, if institutional ownership is lower than it, there will be no association between institutional ownership and Q Tobin's; otherwise, firm value will increase by 1.25 percent as institutional ownership increases by one percent. He believes that the increase in firm value comes from an increase in institutional shareholders' control over company.



Cash is viewed as a vital resource in every economic unit. The balance between available cash flow and cash needs is one of the important factors in a healthy economic and commercial units and persistence of their activities. Cash flows play a pivotal role in many financial decisions, pattern of securities valuation, assessment methods of capital projects, etc. (Qorbani and Adili, 2012). Usually a significant portion of company's assets is held in cash or marketable securities; the ratio often varies from 8 to 22 percent (Rahimian et al, 2013). An incentive to maintain cash is justifiable within the framework of exchange and agency theories. In this regard, exchange theory has the most empirical evidence. Firms with high cash holdings often come under pressure from institutional investors to return capital to shareholders, because accumulation of cash may encourage managers to perform activities destroying value. Managers may also use up the cash for their personal gain (Jensen, 1986).

In this regard, Martinez et al (2008) examined the effect of cash holding on firm value. Their results which included 472 industrial firms listed on the US Stock Exchange during 2001-2007 indicated that there is an optimal cash level which contains 14% of the sum of all assets and deviation from the optimum cash level reduce firm value.

Hyung (2011) states that shareholders' problems with monitoring managers' opportunistic actions will potentially allow managers to use up cash provided inside company for their private gain and fail to utilize them to maximize firm value. In the paper revolving around agency costs of free cash flow and conditional conservatism, he asserts that agency costs incurred by companies as a result of excess cash on companies' needs and most companies that have to pay agency costs as a result of cash flow incur losses rather than yield any profit. As for companies with less agency costs, the reverse is true.

Kurdestani and Rudneshin (2006) examined the extent to which cash and accruals of accounting profits are related to company's market value. The result indicated that the cash components of profit are more capable of explaining market valuation compared to profit accruals, and have more profitability. Fakhari and Taghavi (2009) examined the effect of financial reporting in the form of quality of accruals on level of cash holding. Their findings demonstrated that quality of financial reporting is negatively and significantly associated with cash and cash trades. The results also indicated that growth variables, cash flow and liquid assets have a positive effect on cash holding, as size and debt maturity are negatively related to cash holding.

In their study, Guney et al (2003) investigated cash holding behavior in Japan, France, Germany, and the UK over the period 1983-2000, indicating that a country's legal structure and ownership structure play a significant role in determining cash holdings of firms. They found that shareholder protection is associated with lower cash holdings and ownership concentration exerts a negative impact on cash levels. Schwetzler and Reimund (2003) studied determining factors in cash holding of German firms. They studied the effects of excess cash on performance as well as the direct effects of corporate valuation with respect to cash holding, revealing that excess cash deviate management from commercial unit's operating improvement, which is in line with inoperable investment hypothesis based on agency. According to above arguments, theories and



results, we can offer the following hypotheses about the effect of ownership concentration and cash holding on firm value:

H1: There is a negative relationship between ownership concentration and firm value.

H1: There is a negative relationship between inside ownership and firm value.

H1: There is a negative relationship between cash holding and firm value.

H1: Firm value is low for firms with high ownership concentration and cash holding.

Methodology

Research model

We use below regression for examine relationship between ownership concentration, cash holding and firm value:

$$MV_t = \beta_0 + \beta_1 Block_t + \beta_2 Inowner_{t-1} + \beta_3 Cash_t + \beta_4 Block*Cash_t + \beta_5 Size_t + \beta_6 Liq_t + \beta_7 Lev_{t-1} + \beta_k Years + \beta_i Industries + \epsilon$$
.

3.2. Research variables

Firm value (MV): it is the dependent variable of the research which equals the natural logarithm of firm's market value (number of shares owned by shareholders is multiplied by market value per firm's share).

Ownership concentration (**Block**): it is introduced in the research model as a research variable in order to examine the first hypothesis, which equals the percentage of blockholder's ownership (shareholders with more than 5 percent ownership of firm share). Moreover, in this study, the ownership percentage of inside shareholders (**Inowner**) is used to examine the second hypothesis of the research, which shows the ratio of firm's board member ownership.

Cash holding (**Cash**): it represents a natural logarithm of the ratio of cash to company's total assets, which is derived from firm's balance sheet. Similarly, the concurrent effect of ownership concentration and cash holding (**Block*Cash**) on firm value is examined using 4β coefficient in the study.

According to previous research, in addition to the study variables, other variables that can affect firm value have been used as control variables. The first variable is firm size (Size) which equals the natural logarithm of corporate sale. The financial leverage (Lev) is measured as a research control variable—the ratio of debt to total assets. Liquidity ratio variable (Liq) is equal to the sum of current assets to firm's current liabilities. At last, the control variable of years includes a set of dummy variables that are considered to control the effects of each year and the control variable of Industries includes a set of dummy variables that are considered to control the effects of each industry.



This is a retrospective descriptive study that uses logistic regression analysis to test the research hypothesis. In this study, to collect scientific sources and research literature use library methods. Research data has been collected from the Rahavad Novin database and the financial statements from Management and Research Libraries Tehran Stock Exchange website. To calculate the variables and test research hypotheses use Excel and SPSS18 software.

Study sample

Statistical population of the study consists of all the listed companies in Tehran Stock Exchange during the period 2005 to 2014 (period of 10 years). In this study to choice the sampling method in accordance with most accounting study uses convenient purposeful sampling. In convenient purposeful sampling, elected members of the statistical population which that the researcher intends to comply with criteria or certain criteria. In this study, the statistical sample beginning with the whole statistical population and selected after considering the following criteria:

- 1. Companies that are listed before 2005,
- 2. During research have not changed their fiscal year,
- 3. Does not including financial and holding companies,
- 4. Required research information to be available.

After implementing the aforementioned to determine intervention criteria, it's collected 682 firm-year observation between the years 2005 to 2014. Eventually, to eliminate the deviation caused by specified values, to deleting observations with more than 3 standard deviations from the mean for all variables. Thus, the final sample for this study was observed after the removal of outliers in 638 year- company observation dropped that these observations is basis of analysis of research hypotheses.

Results

Descriptive statistics

Table 1 represents the descriptive statistics of the research variables. According to the table, the mean of major ownership and inside ownership is 72 and 63 percent, respectively, which reveals that the ownership structure of Iran's capital market is concentrated and looks more like an inside ownership. Moreover, it can be seen that the mean of leverage in Iran is 67 percent, which indicates its high application in companies listed on TSE. Other information relating to the descriptive statistics of the variables can be seen in the table. In what follows, the results of the research hypotheses tests are addressed.



Table 1: Descriptive statistics for research variables

Variable	min	max	Mean	median	Std dev.
Block	0	99	72.75	74	20.48
Inowner	0	97	63.16	67.47	23.79
Cash	-8.68	-1.04	-3.60	-3.5	1.20
Size	9.41	16.82	12.72	12.60	1.25
Liq	0.20	3.38	1.20	1.14	0.46
Lev	0.18	1.66	0.68	0.67	0.22

Research findings

Table 2 provides the results of the research hypotheses for 638 year-firm observations. According to the first hypothesis, it was predicted that there is a negative and significant relationship between ownership concentration (using major ownership criterion) and firm value. The evidence provided in the following table indicates a positive but insignificant relationship (p-value=0.231). Thus, it can be said that there is no significant relationship between major ownership level and firm value. In the additional test, the ownership level of the largest shareholder was used instead of major ownership, the coefficient of which was positive (the related table is not provided). The findings indicate that firm value increases as does ownership concentration, which is in line with the evidence of research such as Li (2010) and Garci and Sanchez (2011).

Table 2: Research results

Variable	β	STD error	Wald	p-value				
α	-0.837	1.144	0.535	0.232				
Block	0.162	0.219	0.544	0.231				
Inowner	0.187	0.199	0.882	0.174				
Cash	0.427	0.183	5.435	0.010				
Block*Cash	-0.186	0.834	-2.035	0.034				
Size	0.297	0.201	2.187	0.069				
Liq	0.097	0.066	2.144	0.071				
Lev	0.092	0.150	0.381	0.271				

Another evidence in the table suggests that inside ownership has no significant effect on firm value (p-value=0.174); meanwhile, the coefficient of the variable is also positive. Thus, the second hypothesis is not confirmed. On the other hand, several researches indicate that there is a positive association between management ownership (management entrenchment) and external shareholders losses. As the management ownership increases the loss of external shareholders will increase as well (Pergola et al., 2009). The large shareholders entrenchment is the same as that of managers. Since they have much control over corporate decisions, they can derive more benefit at the expense of small shareholders' loss. It is because owners with the right to control are less subject to regulations and supervision of stock market. The shareholders have control over the procurement process of financial statements, attempting to conceal the real economic status of company by means of manipulation (Zhong et al, 2007).



Cash holding is the subject of the third research hypothesis in which a negative relationship to firm value was expected. The result proved otherwise; according to them, corporate cash holding bears a positive and significant relation to firm value (p-value=0.010). In other words, as corporate cash increases, so does firm value. This evidence is opposite of Martinez et al (2008)'s results that examined the effect of cash holding on firm value. Their results which included 472 industrial firms listed on the US Stock Exchange during 2001-2007 indicated that there is an optimal cash level which contains 14% of the sum of all assets and deviation from the optimum cash level reduce firm value. Also Guney et al (2003) investigated cash holding behavior in Japan, France, Germany, and the UK over the period 1983-2000, indicating that a country's legal structure and ownership structure play a significant role in determining cash holdings of firms. They found that shareholder protection is associated with lower cash holdings and ownership concentration exerts a negative impact on cash levels.

In the end, we address the results of the fourth hypothesis. According to the hypothesis, firm value is reduced in firms with high ownership concentration and high cash level. The result supports the hypothesis (p-value=0.034). In fact, companies with greater ownership concentration and cash holding at the same time have less value. Evidence is similar to Hyung (2011) states that shareholders' problems with monitoring managers' opportunistic actions will potentially allow managers to use up cash provided inside company for their private gain and fail to utilize them to maximize firm value. In the paper revolving around agency costs of free cash flow and conditional conservatism, he asserts that agency costs incurred by companies as a result of excess cash on companies' needs and most companies that have to pay agency costs as a result of cash flow incur losses rather than yield any profit. As for companies with less agency costs, the reverse is true.

Among the variables relating to corporate characteristics, firm size variable is associated with firm value. The results show that the variable bears a positive and significant relation (P-value=0.069) to firm value. In other words, larger companies have greater valuation. As for other control variables, current ratio is significant, as financial leverage variable is insignificant. According to the research evidence, as corporate cash level increases, so does firm value (P-value=0.071).

Conclusion

The purpose of the study is to explore the relationship between ownership concentration and firm value in the Tehran Stock Exchange (TSE). The previous research indicates that ownership structure as an external corporate governance mechanism can influence firm value. In this study, the effect of the type of ownership on company assessment is examined along with level of cash holding.

Given overinvestment, Jensen (1986) states that firms with less growth opportunities and debts have some advantages, including managers' activities that can be disciplined, because the motivations of coalition of manager shareholder will decline in making investment in opportunities with net current value, because advantages of such investment accrue to creditors rather than shareholder; likewise, it reduces free cash turnover costs;



as a result, it leads to a positive relationship between liabilities and growth opportunity in companies with low growth opportunity.

Another agency problem which arises from agency theory is overinvestment which is made from a conflict between managers and shareholders; managers tend to expand firm size, though they are required to embrace poor projects and reduce shareholders' wealth. If excess cash flows are not available, managers' ability to achieve the goal become restricted, but the restriction can be removed through financing via debts. As a result, managers is required to pay the real amount and interest of the debt in cash which was supposed to be spent in poor projects. Hence leverage is a mechanism for surpassing overinvestment problem and justifies the negative relationship between liability and growth opportunity in companies with less growth opportunities. Simply put, theories of optimum capital structure based on agency costs state that the opposite effect of leverage on growth sometimes reduces firm value by preventing manager from accepting poor projects.

In the study, using financial statement information of companies listed on the TSE from 2004 to 2013, the relationship of this subject is addressed. The results of regression analysis in support of the hypothesis indicate firm value declines as ownership concentration increases when company's cash holding mounts. On the whole, the results of the study shows that level of cash holdings which goes hand in hand with level of ownership concentration can reduce firm value.

The results of the research can be important from two aspects; from the practical aspect, it can help policy makers as well as capital market investors set standards protecting shareholders' rights; from the theoretical aspect, the research can contribute to the literature of ownership concentration and firm value research, as well as study into the role of cash holding in this regard. Moreover, it can move researchers to study corporate cash holding in Iran's capital market further; for example, we can refer to the competitiveness of product market with respect to the effect of corporate cash holdings on firm value. Investigations into other determining factors in firm value can be added to the agenda for future research with emphasis on factors relating to liquidity management in different economic and industry conditions, and using other methods of analyses.

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