Cash Holdings, Firm Value and Corporate Governance

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Abstract: The present study mainly aims to assess the relationship between cash holdings, firm value and corporate governance on Tehran stock exchange. It is intended to discover whether there is a significant relationship between cash holdings, firm value and corporate governance or not. To achieve this goal, the effects of the following factors on cash holdings were examined: financial leverage, firm size, the percentage of non-executive directors, the percentage of institutional investors, firm value, earnings before interest and taxes (EBIT), financial expenses, cash flows and opportunity cost of capital. Multiple regression model, based on panel data analysis, was applied to assess the aforementioned relationship and their significance was determined by F and T statistics. The model's coefficient of correlation was appraised by F-Limer and Hausman tests. Target population of the research contained 99 listed companies on Tehran stock exchange over a 6-year-period from 2006 to 2011. The achieved findings indicated that there is no significant relationship between cash holdings, firm value and corporate governance; there is a significant positive relationship between cash holdings and corporate governance; there is no significant relationship between cash holdings and firm value.

Key words: Cash holdings · Firm value · Corporate governance

INTRODUCTION

Nowadays, reaching a decision about cash reserves is of great importance in all factories. The biggest advantage of cash holdings in an inefficient market is the improvement of firms' capabilities to take the opportunity to invest at an appropriate time or refrain from external financing [1]. During the past 30 years, conflicts of interests in many corporation and their confrontation strategies caused the economists to ponder over this issue. Determining how to spend a company's internal funds is essential in resolving the conflicts between investors and managers. During the period of firm's economic growth, its funds increase and the manager should decide whether these funds are going to be distributed among the investors or not; whether they are going to be used utilized in external financing or not; or whether they should be held [2].

The corporations determine their optimal cash level by making a balance between the benefits and costs of cash holding. As a matter of fact, they determine the optimal cash level by specifying the importance of final costs and interests resulting from cash reserves.

Mentioned must be made that there is an optimal cash level for all corporations which can be recognized by managers through the application of active strategies and on the basis of cost-profit analyses in proportion to cash holdings [3].

Keynes' Liquidity preference theory is one of the most famous theories of cash holding that explains why people hold their money. According to Keynes' theory, demand for liquidity is determined by three accompanying motives: 1) The transactions motive: people prefer to have liquidity to assure basic transactions, for their income is not constantly available. 2) The precautionary motive: people prefer to have liquidity in the case of social unexpected problems that need unusual costs. 3) Speculative motive: people retain liquidity to speculate that bond prices will fall.

Theoretical Background: Based on the second standard of cash, cash refers to funds, checking deposits in banks or financial institutions, Rial or foreign currency deposits, short-term investments without receipt deducting the overdrafts which are studied with no notification.

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In accordance with the second standard of cash equivalents, cash refers to short-term investments which can be rapidly changed into the funds and its risks are not much, so it can easily and without any notification changed into the funds and the due date will be at most three months deducting the instalments and liabilities to the banks or other people which can be payable by three months.

Theories associated with cash holdings

There are many theories associated with cash holdings based on which some factors affect the level of company's cash holdings.

Information Asymmetry: In economics, information asymmetry deals with the study of decisions in transactions where one party has more or better information than the other. Information asymmetry has an effective role in providing external financing [2]. So, the quality of accounting information may reduce the negative effects of information asymmetries and adverse selection costs, allowing firms to reduce the level of corporate cash holdings. Cash holdings decrease when firms increase their use of bank debt and in the presence of cash substitutes. In Contrast, firms with higher cash flow hold higher levels of cash [4].

Agency Theory: Agency problems are an important determinant of corporate cash holdings. Agency costs can affect managerial behaviours. In terms of the size, larger corporations are assumed to hold more cash, since their managers have more authority and liberty. Corporations with small amount of debt are also expected to hold more cash, since they are not observed by capital market, consequently manager has more freedom. The corporations which take the valuable opportunities of investment or high levels of external financing hold more cash, since they need it at the time of investing [5].

Balance Theory: According to balance theory, corporations can determine their optimal cash levels by keeping a balance between profits and costs of cash holdings [2]. It worth mentioning in this theory that there is an optimal cash level for all corporations which can be recognized by managers through the application of active strategies and on the basis of cost-profit analyses in proportion to cash holdings.

Pecking Order Theory: Pecking order theory postulates that companies prioritize their sources of financing, first preferring internal financing and then external ones [6]. In fact, when investor protection is low, managers will have an incentive to accumulate cash to gain discretionary power over the firm's investment decisions and not to refer to the outside investors [7]. According to pecking order theory, insiders of the company are more aware of shareholders and decreasing asymmetric information can improve the level of share distribution without losing any market values [8].

Free Cash Flow Theory: Free cash flow theory of Jensen (1986) suggests that mangers have an incentive to build up cash to increase the amount of assets under their control and to gain discretionary power over the firm investment decision. Cash reduces the pressure to perform well and allows managers to invest in projects that best suit their own interests, but may not be in the shareholders best interest [7].

Theoretical Motives of Cash Holdings: Five motives have been established within the literature related to cash holdings: transactions motive, precautionary motive, speculative motive, agency motive and taxation motive.

Transactions motive is costlier than others and utilizes more assets (except cash) in commercial transactions; therefore, it is assumed that the corporations which face higher transactions costs hold more cash. According to Keynes, precautionary motive refers to the fact that people prefer to have liquidity in the case of social unexpected problems that need unusual costs. The amount of money held for this purpose increases as income increases. Based on Keynes' theory, speculative motive is the weakest motive of cash holdings. people retain liquidity to speculate that bond prices will fall. When the interest rate decreases people demand more money to hold until the interest rate increases, which would drive down the price of an existing bond to keep its yield in line with the interest rate. Thus, the lower the interest rate, the more money demanded (and vice versa). Agency motive stands for the fact that firm values will be higher when firms with entrenched managers pay dividends and external shareholder protection is poor. Only when external shareholder protection is strong do we find that cash held by controlling managers is unrelated to firm value. Taxation motive: Foley *et al*. (2007), examining U.S.

corporations that hold large amounts of cash, found that the corporations which have to pay more taxes need more cash holdings.

Firm Value: Recently, firm values are receiving increased attention and being assessed under various subtitles such as the exclusive rights of shareholders, beneficiaries, customers, or business ethics, corporate social responsibilities, environmental stability or citizenship. However some of these values are to a certain extent unreal and sketchy. The current study examines the fundamental values which can make differences or change decision-makings in a corporation. These values can help corporations to select an appropriate method among existing tools and objectives, or in other words, these values stand for the aims decision-makers refer to when choosing their policy [9].

Corporate Governance: Shareholder-manager conflicts were the most controversial issues of corporate governance by 1980. The Enron and WorldCom scandals (2002) made researchers conduct a lot in the field of corporate governance. They found that appropriate corporate governance policies positively affect firm performance and market value (Gompers & Metrick, 2003; Brown, 2006). Corporate governance contains the relations between shareholders, managers, auditors and other beneficiaries which control shareholders' equity, execute verified laws and avoid probable misuses (Khodadadi & Taker, 2012). In fact, the ultimate goal of organizing corporate governance strategies is providing owners with controlling systematic mechanisms to be able to observe firm's activities and managers and assure them of management responsiveness and beneficiaries' profits [10].

There are three significant theories which describe corporate governance. They defined corporate governance differently, due to their specific scientific background. They can be explained in the following manner.

Agency Theory: According to this theory, the separation of management and ownership causes agency problems, since managers are considered as agents and shareholders as staffs. Therefore, some conflicts of interests can be seen between them. One of the basic financial theories of corporations is shareholders' equity increase, although such a goal is mostly unachieved [11].

Transactions Cost Theory: This theory has used interdisciplinary concepts of economics, law and institution. It was first introduced by Cyert and March (1963) under the title of behavioural theory of the firm which was considered as a basis for industrial economics and financial theories. Transactions cost theory is constructed on the fact that the corporations are so big that can substitute for the market. Some transactions are omitted inside the corporations and managers conduct the production [11].

Beneficiaries Theory: This theory has been paid more attention since 1970. Friman (1984) first proposed this concept in the field of management. He suggested the general theories of firms and their responsiveness to many beneficiaries. This theory is mostly a widespread research tradition which combines the fields of philosophy, ethics, politics, economics, law and social and organizational sciences. Beneficiaries theory is based on this fact that corporations are so big and effective that should response and pay more attention to various communities in the society, not just shareholders [11].

Review of Literature: [12] studied the relationship between the governance mechanisms and the market valuation of publicly listed firms in China. According to their research, the corporate governance index was found to have significant negative effect on market valuation.

[13] used a four-year and 160-company panel data and found that an increase in the proportion of outside directors affects company value. He also found that companies that present more exacerbated agency conflicts tend to incorporate professional directors to the boards in order to improve corporate governance and ameliorate the agency problems.

[14] used managerial control rights data for over 5000 firms to examine the net costs and benefits of cash holdings. They found that when external country-level shareholder protection is weak, firm values are lower when controlling managers hold more cash. Moreover, when external shareholder protection is weak, firm values are higher when controlling managers pay dividends. And only when external shareholder protection is strong, cash held by controlling managers is unrelated to firm value.

[15] contrasted the effect of cash holding on firm value for a sample of 472 US industrial firms during 2001-2007. Their study verified the existence of an optimal cash level which forms 14% of whole assets and concluded that deviations from this optimal level reduce firm value.

[16] examined the relationship between cash holdings and firm governance structure using a sample of 11,645 firm-year observations for 1872 firms. They found that firms with higher insider ownership have higher cash holdings, while firms with weaker shareholder rights (higher ownership concentration, executive compensation, board composition and subset of shareholder rights, or higher GIndex) have lower cash holdings. By and large, firms with weaker shareholder rights and low insider ownership have lower cash reserves than those with stronger shareholder rights (low GIndex) and high insider ownership. Stronger shareholder rights reduce firm values, especially when the government do not support investors [5] Pinquitz *et al*., 2006, [14].

[17] assessed the relationships between firm-level corporate governance mechanisms and cash holdings and their effects on firm value for a sample of firms listed in Singapore and Malaysia. They concluded that firms characterized with poor governance attributes such as CEO-chair duality or agency policies and also pyramid firms have the tendency to hold larger cash reserves than firms with more effective governance.

[18] appraised the relationship between firm value and institutional ownership over a period of 1997-2004 using a sample of 61 listed companies on Tehran stock exchange. They employed multiple linear regression models. Although they found a positive association between firm value and institutional ownership which is an indication of effective monitoring, interest-convergence theory was not confirmed in this study and the relationship was not found significant.

[3] studied the effects elements in cash holdings in listed companies on Tehran stock exchange. They applied a sample of 283 companies from 2000 to 2005. The findings of their research prioritized negative elements in cash holdings as follows: account receivable, net working capital, inventories and short-term liabilities. Furthermore, they prioritized positive elements in the following manner: opportunities for firm growth, dividend interest, cash flow volatility and net profit volatility. But the variables of long-term liabilities and firm size were not found significantly effective in cash holdings.

[19] examined the relationship between some of the corporate governance mechanisms such as the percentages of non-executive directors of the board and institutional investors as independent variables and cash holdings as the dependent variable on Tehran stock exchange. Their findings demonstrated that there is a significant negative relationship between the percentage of nonexecutive directors of the board and cash holdings

on Tehran stock exchange and there is not significant association between the percentage of institutional investors and cash holdings.

[19] assessed the relationship between some of the corporate governance mechanisms such as the percentages of non-executive directors of the board, institutional investors and as independent variables and Tubin's q, criteria of firm value, as the dependent variable on Tehran stock exchange. The achieved findings of their research showed that there was a significant positive relationship between the percentage of institutional investors and value of listed firms on Tehran stock exchange. No significant relationship was observed between the variables of non-executive directors of the board and value of listed firms on Tehran stock exchange. But cash holdings and firm value were positively and significantly related in listed companies on Tehran stock exchange.

[20] investigated the relationship between cash holdings and firm value in a state of information asymmetry. Their chosen target population was consisting of 105 listed companies on Tehran stock exchange from 2003 to 2008. Panel data analysis and combined least square regression models deployed in order to test research hypotheses and estimate their efficiencies. Their obtained findings indicated that there is a reverse relationship between cash holdings and firm value in a state of information asymmetry.

Research Hypotheses: Considering theoretical background and literature related to the present study, the following hypotheses have been designed:

- There is a significant relationship between cash holdings, corporate governance and firm value.
- There is a significant relationship between cash holdings and firm value.
- There is a significant relationship between cash holdings and corporate governance.

Research Methodology: The current study is an applied descriptive survey whose findings can be employed in other studies and areas.

Data Collection and Sampling: Target population of the research was consisting of 99 listed companies on Tehran stock exchange which were chosen based on systematic elimination sampling. The companies which are in concordance with the following issues were regarded as target population: 1) The company's financial year should

Table 1: The Kolmogorov-Smirnov test for determining normal distribution of residuals

	Regression model
Z statistic of the Kolmogorov-Smirnov test	0.775
P-value (significance level)	0.585

finish at the end of March each year. 2) All needed information during the period of investigation (2006-2011) should be available. 3) The company should be listed on Tehran stock exchange in 2003. 4) It should not leave the stock by 2011. 5) All listed companies except leasing or financial mediators.

Needed data were collected through audited financial statements and explanatory notes of listed companies on Tehran stock exchange, databases, Rahavard Novin software and official websites such as http://www.rdis.ir and http://www.codal.ir.

Research Models: Multiple regression models were utilized in order to assess the research model. F-Limer test was applied to choose between combined or fixed regression models and Hausman test was used to choose between fixed effects and random effects models. Having tested the models, it became clear that fixed and random effects models do not outrank combined data model; therefore, combined data model was selected. Research hypotheses were tested through the application of the results of econometric and multiple regression models. Fisher (F) statistic was applied to determine the whole regression model's significance. Student's t-test was also used to assess the significance of independent variables' efficiencies at the levels of 90%, 95% or 99% (Gajrati, 2004).

The normality of the distributions was examined by the Kolmogorov–Smirnov test. Considering the fact that the obtained result of this test in the last model was 1.093 and its p-value was 0.187 which is more than 0.05, this conclusion can be drawn that residuals were normally distributed with a confidence level of 95%. Normality of residuals can be also noticed in the histogram.

Research Model: Research model is an analytic model which is based on Decho and Dicho's model and is written as follows:

$$CASH_{i,t-1} = \beta_0 + \beta_1 CASH_{i,t} + \beta_2 Cflow_{i,t} + \beta_4 SIZE_{i,t} + \beta_5 RSPREAD_{i,t} + \beta_6 LEV_{i,t} + \beta_7 F_{i,t} + \beta_8 VALUEi_{i,t} + \beta_9 E_{i,t} + \beta_{10} BUS - GROUP_{i,t} + \beta_{11} INSTOWN_{i,t} + \beta_{12} OUTD_{i,t} + \nu_{i,t}$$

where,

CASH	=	Is calculated applying balance sheets
INSTOWN	:	The percentage of institutional ownership
OUTD	:	The proportion of non-executive directors to the whole directors of the board
SIZE	:	Firm size (Sales logarithm is used to calculate firm size)
RSPREAD	:	Opportunity cost of capital in cash, which is calculated by deducting return on assets (gross operating income to total assets) from risk-free interest rate (short-term government bonds).
LEV	:	Firm leverage, calculated as the proportion of total liabilities to total assets
VALUE	:	Firm value, calculated through the application of Tubin's q, the proportion of firm' market value to book value of assets
E	:	Earnings before interests and taxes
F	:	Financial expenses
CFLOW	:	Operating cash flows
BUS-GROUP	:	Dummy variable, if the corporation is a member of commercial groups, it equals one, otherwise it equals zero

Data Analysis: This study aims to assess the relationship between the dependent variable of cash holdings and independent variables of firm value and corporate governance. So, regression models and Pearson correlation coefficient were utilized to test research hypotheses.

First Hypothesis Testing: First hypothesis: There is a significant relationship between cash holdings, corporate governance and firm value.

Regression model of Decho and Dicho was used to test the first hypothesis. In this section, regression model includes just two variables of corporate governance and firm value. Decho and Dicho's model (2000) will be discussed in next section.

Findings of the above table indicate that calculated correlation between firm's cash and independent variables equals 0.115. Coefficient of determination shows that 1.3% of cash changes (as the dependent variable) are rooted in the changes of independent variables of firm value and corporate governance. Owing to the fact that significance level of F statistic is more than 0.05, the aforementioned model is not significant.

Table 2: Correlation and regression analysis

Regression panel, the results of goodness of fit for the variables of CASH, INSTOWN and VALUE			
Correlation coefficient	0.115	F statistic (p-value)	2.605 (0.075)
Coefficient of determination	0.013	Durbin-Watson statistic	1.963
T statistic (p-value)	-0.174 (0.862)	Coefficient of regression line (value) Standardized coefficient 0.068	
			-0.009
T statistic (p-value)	2.277 (0.023)	Coefficient of regression line (governance)	230.012
		Standardized coefficient	0.114

Final regression model:

(Firms' cash) = 6349.068 + 230.012 (percentage of institutional ownership) - 0.068 (firm value)

Table 3: Correlation test between cash holdings and firm value

		Firm value
Cash holdings	Pearson correlation coefficient	0.008
	Significance level	0.870
	T-statistic	0.158
	Total	395

[14] used managerial control rights data to examine the net costs and benefits of cash holdings. They found that when external country-level shareholder protection is weak, firm values are lower when controlling managers hold more cash and there is a negative relationship between them.

The current study mainly intends to find the relationship between cash holdings and corporate governance strategies such as the percentage of non-executive directors of the board, the percentage of institutional investors and firm value in listed companies on Tehran stock exchange, considering other effective variables in firm value which are not consistent with this study. The achieved findings of the research conducted by [3] prioritized negative elements in cash holdings as follows: account receivable, net working capital, inventories and short-term liabilities. Furthermore, they prioritized positive elements in the following manner: opportunities for firm growth, dividend interest, cash flow volatility and net profit volatility. The findings of the research done by Aghaei *et al*. are not consistent with this study's findings either. [12] concluded that the corporate governance index was found to have significant negative effect on market valuation which does not agree with the findings of this study and [17] which assessed the relationships between firm-level corporate governance mechanisms and cash holdings and their effects on firm value for a sample of firms listed in Singapore and Malaysia.

Second Hypothesis Testing: Second hypothesis: There is a significant relationship between cash holdings and firm value.

Pearson correlation coefficient test was applied to test the relationship between cash holdings and firm value. The obtained results can be seen in the accompanying table.

The above table indicates that calculated correlation between cash holdings and firm value equals 0.008 and in other words, these variables are weakly related to each other. Increasing firm value will enhance the amounts of cash holdings. Due to the fact that absolute value of T statistic is 0.158 (less than standard t which is 1.97), its degree of freedom is 393, it can be concluded with the confident level of 95% that there is no significant relationship between cash holdings and firm value. So, the second hypothesis is rejected.

[19] found a significant relationship between cash holdings and firm value. Furthermore, the findings of this study are not consistent with the findings of the research conducted by Micklson and Parch (2003) who stated that cash holdings and firm value are positively related to each other. But they are consistent with the findings of [16, 5]and Li (2009) who found that there is a negative relationship between cash holdings and firm performance; and Shane Sheferd (2007) who proved that cash holdings damages the value of big corporations; and Martinez *et al*. (2008) who found that cash holdings and firm value are reversely related to each other. The research accomplished by [20] showed a significant negative relationship cash holdings and firm value in a state of information asymmetry and their findings are not consistent with this study's. The current study's findings were in agreement with the researches conducted by [8], Fakhari and Taghavi (2009) and [3].

Third Hypothesis Testing: Third hypothesis: There is a significant relationship between cash holdings and corporate governance.

Pearson correlation coefficient test was applied to test the relationship between cash holdings and corporate governance. The obtained results can be seen in the accompanying table.

Table 4: Correlation test between cash holdings and corporate governance

		Corporate governance
Cash holdings	Pearson correlation coefficient	0.114
	Significance level	0.023
	T-statistic	2.27
	Total	395

The achieved findings of Table 4.13 indicate that calculated correlation between cash holdings and corporate governance equals 0.114 and in other words, these variables are weakly related to each other. Increasing corporate governance will enhance the amounts of cash holdings. Due to the fact that absolute value of T statistic is 2.27 (more than standard t which is 1.97), its degree of freedom is 393, it can be concluded with the confident level of 95% that there is a significant relationship between cash holdings and corporate governance. So, the third hypothesis is confirmed.

These findings are consistent with the findings of [16] who believed that there is a significant positive relationship between institutional ownership and cash holdings. Furthermore, the findings of this study prove that there is a significant negative relationship between cash holdings and the percentage of non-executive directors of the board. This finding is in agreement with the finding of Li's study (2009), but in disagreement with the researches conducted by [16] who found a negative relationship between cash holdings and corporate governance; and consistent with the findings of [4] who regarded a significant negative relationship between the percentage of non-executive directors of the board and cash holdings in listed companies on Tehran stock exchange and stated that there is no significant relationship between the percentage of institutional investors and cash holdings, which opposes this study's findings.[8] and Gruninger (2007) found a significant reverse relationship between tangible assets, firm size and cash and a non-linear relationship leverage and cash flow.

The accompanying table contains regression coefficients, standard deviation of t-statistic and significance level of regression coefficient. If each coefficient's significance level is less than 0.05, the hypothesis and significant relationship between the variables are accepted. The amounts of regression coefficient of the model for last year cash, operating cash flows, firm size, opportunity cost of capital in cash, firm's leverage, financial expenses, firm value, earnings before interests and taxes, dummy variable of commercial group, percentage of institutional ownership and percentage of non-executive directors of the board are respectively 0.431, 0.0016, 8274.71, -35988.69, -186.52, 0.078, 0.053, 0.0549, 901.35, -46.29 and -425.071

Dependent Variable: CASH?
Method: Pooled Least Squares
Sample: 1 5
Included observations: 5
Cross-sections included: 78
Total pool (unbalanced) observations: 383
Cross sections without valid observations dropped

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-95990.56	18709.57	-5.130560	0.0000
CASHT_1?	0.431858	0.051147	8.443513	0.0000
CFLOW?	0.001649	0.007282	0.226507	0.8209
SIZE?	8274.717	1578.088	5.243509	0.0000
RSPREAD?	-35988.69	10696.18	-3.364630	0.0008
LEV?	-186.5281	5297.119	-0.035213	0.9719
F?	0.078827	0.036614	2.152899	0.0320
VALUE?	0.053971	0.286551	0.188349	0.8507
E?	0.054981	0.008434	6.518751	0.0000
BUS_GROUP?	901.3564	2946.913	0.305865	0.7599
INSTOWN?	-46.29237	79.18342	-0.584622	0.5592
OUTD?	-425.0712	305.9361	-1.389412	0.1655

R-squared	0.507203	Mean dependent var	23998.97
Adjusted R-squared	0.492592	S.D. dependent var	38439.34
S.E. of regression	27381.34	Akaike info criterion	23.30394
Sum squared resid	2.78E+11	Schwarz criterion	23.42764
Log likelihood	-4450.705	F-statistic	34.71324
Durbin-Watson stat	1.842281	Prob(F-statistic)	0.000000

The calculated coefficients of the first column demonstrate that the variables of opportunity cost of capital in cash, percentage of institutional ownership and percentage of non-executive directors of the board have negative effects. In other words, decreasing these variables can increase the amounts of cash holdings. In contrast, other variables have positive effects. It should be noticed that the evaluation criteria of independent variables are not equal, so their comparison cannot be correct without considering the significance level. Significance levels of the variables of last year cash, firm size, opportunity cost of capital in cash, financial expenses and earnings before interests and taxes are less than 0.05; therefore, these variables can significantly affect cash holdings. Coefficient of determination is 0.507 which shows that 50.7% of dependent variable's changes (cash holdings' changes) are the result of other variables' changes. Regarding the obtained regression coefficients, the following model can be designed:

$$CASH = -95990.56 + 0.431 * CASH_{i,t-1} + 0.00164 * Cflow_{i,t} + 8274.17 * SIZE_{i,t} - 35998.69 * PSPREAD_{i,t} - 186.52 * LEV_{i,t} + 0.078 * F_{i,t} + 0.053 * VALUE_{i,t} + 0.054 * E_{i,t} + 901.35 * BUS - GROUP_{i,t} - 42.29INSTOWN_{i,t} - 425.071OUTD_{i,t} + v_{i,t}$$

CONCLUSION

The relationships between the variables of cash holdings, corporate governance and firm value were assessed in this study. It was found that the variables of corporate governance and cash holdings are significantly related if only one variable is evaluated, otherwise no significant relationship is seen. Considering the achieved results, the variable of cash holdings does not affect firm value and corporate governance. Having dividend corporate governance into two classifications of the percentage of institutional shareholders and the percentage of non-executive directors, this conclusion can be drawn that cash holdings affect corporate governance, so cash holdings do not directly influence firm value and there is no significant relationship between them. But it does not mean that the variable of cash holdings is not worth examining. High or low levels of cash holdings can to a certain extent affect firm value. Previously conducted researches proved the significant relationship between cash holdings and corporate governance and so does the present study in the second hypothesis. So, high or low levels of cash holdings can be indications of weak or strong corporate governance. It can be concluded that cash holdings should remain a high priority. Considering other findings, it can be stated that cash holdings and firm value are not significantly related to each other.

Suggestions for future studies
It is suggested to

- Assess cash holdings in various industries and reasons of their probable differences.
- Investigate the effects of firm value on corporate governance on Tehran stock exchange.
- Study other effective elements of corporate governance in cash holdings.
- Examine the relationship between cash holdings, firm value and corporate governance in family firms.

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