

The Relationship between Cash Holdings and the Quality of Internal Control over Financial Reporting of Listed Companies in Tehran Stock Exchange

Sareh Bazrafkan, Hamid Ravanpak Noodezh*

Department of Management, Qeshm Branch, Islamic Azad University, Qeshm, Iran

**Corresponding Author Email: Hamid.ravanpakwin7@gmail.com*

Abstract: The aim of this study was to investigate the relationship between cash holdings and the quality of internal control over financial reporting of listed companies in Tehran Stock Exchange. In order to achieve the objectives of this study, three hypotheses have been developed. In order to test this hypothesis, a sample of 55 listed companies in the Tehran Stock Exchange during the years 2009 to 2013 were selected using the playoff systematic sampling. The improved cash flow was the independent variable and the dependent variable was defined as the quality of financial reporting. In addition to optimized cash flow, representing the variable costs as a moderating variable and the company's size and financial leverage were considered as the control variable. For hypothesis testing, multivariate regression analysis was used to panel data and data was analyzed using software Meanwhile EvIEWS7. The results of data analysis and hypothesis testing indicated that there was a significant relationship between cash holdings and the quality of internal control over financial reporting. Financial reporting had significant relationship with quality of internal control of the cost. And there was a relationship between the cash holdings and the quality of internal control over financial reporting.

Key words: Quality of Internal Control over Financial Reporting, Cash Flow, Representing Costs.

Introduction

From the view of profit-driven director, whether to spend or save the income cash flow is today's question in relation to more interest expenses or more flexibility in the future. While, the quality of the investment is often delayed after an event is detected and large cash reserves can be an important criterion for shareholders judgment. Money supply allocated a significant percentage of its assets. Typically, managers are seeking a level of cash holdings due to the advantages and disadvantages of cash holdings which are optimal. Companies are looking for the optimum level of liquidity due to a lack of liquidity, major losses to the company does not enter, on the other hand, the additional cash holdings, and this case does not miss opportunities, the level of liquidity in the corporate target, but according to details of the various companies and different time periods are different. Internal controls are established from the environmental control, accounting and control procedures and policies to create a reasonable assurance of achieving the goals of the company in the future.

Agency relationships and the costs associated with them have been widely studied in the literature of the financial companies. Agency relationships are contractual between two or more persons representing the owner, the person appointed as a representative of the authority delegated to him to decide. As a result, shareholders must incur expenses in order to align the interests of executives with them. Since, such costs arise due to the formation of the

agency relationship; it is called agency costs (Jensen and Mac Ling, 1976). Cash flows play a central role in making financial decisions. Also, historical information related to cash flow can help to control the accuracy of past evaluations and the relationship between business activities and future show receipts and payments. Companies retain a certain percentage of their assets in cash. In addition, many companies have increased their level of cash assets (Tavakolnia and Tirgari, 2014). Two governing theories are based on the maintenance of cash, trade theory and the theory of the hierarchy. According to the TOT, the optimal levels of cash holdings are set based on companies to balance the benefits and costs of holding cash (Ferreira and Vilela, 2004).

Theoretical Foundations

Internal control: including the control of environment, accounting and control procedures and policies to create a reasonable assurance of achieving the goals of the company in the future. These objectives include: 1) protection of resources against waste, fraud and efficiency 2) to improve the accuracy and reliability of accounting information and operating 3) encouraging employees to observe the policy 4) judging the performance of the operations in all parts of the company (Ghorbani, 2011). Internal control follows four objectives that one of them is the reliability of financial reporting; these controls are designed to achieve the internal controls over financial reporting.

The definition which was provided by the SEC of internal controls over financial reporting is as follows: It is a process which is led by the managing director / Chief Operative, Chief Financial Officer or people with similar tasks planned by the board of directors, so that management and other personnel to provide reasonable assurance regarding the reliability of financial reporting and statements external financial reporting in accordance with general accepted accounting principles, and include policies and procedures that are?

1. Documents related to the maintenance of records that shows reasonable, accurate and fair trading and the assets of the company.
2. Reasonable assurance that the transactions, in a way are appropriate to prepare the financial statements in accordance with generally accepted accounting principles need to be registered and all receipts and payments the company made only on the basis of management authority and the board of directors.
3. Reasonable assurance regarding prevention or timely detection of education and the establishment of unauthorized use of company assets, a material effect on the financial statements is that it provides.

Background of the research

Result of Lin et al (2011) examined the role of internal audit in exposing the weaknesses of their cases. On the impact of employees on internal controls showed honest and competent personnel in the exercise of strong controls over financial reporting to help manage and reduce problems in the internal controls within the organization. Moradi et al (2014) tried to identify risk factors affecting the likelihood of fraud in financial reporting from the perspective of auditors and examine their impact on the company's financial performance. The purpose of this research was to identify factors that affect the likelihood of fraud in reporting of financial statements from the perspective of auditors and managers. Findings suggested that the there was a significant relationship among the occurrence of fraud characteristics of the management, compliance management, internal controls and standards in force, risk factors were associated with market conditions and industry characteristics, operational, liquidity and financial stability and the possibility of fraud. The results showed a significant relationship between firm performance (the rate of return on assets, operating cash flow, return on equity and returns) and the risk of fraud. Nurafkan (2012) examined the relationship between information asymmetry and cash holdings in the listed companies in Tehran Stock Exchange. The results show that companies with higher information asymmetry hold more cash and asymmetry than companies that has a lower information asymmetry, and also, the companies surveyed in the Tehran Stock Exchange had no difference before the announcement of the profit.

Materials and Methods

This study sought to examine the relationship between optimal cash flow and the company's stock price, it can be stated that this study was an applied research using post-planned event and the independent variables cannot be manipulated, it was casual and correlation in method. The study population was included listed companies in Tehran Stock Exchange, in the period of 2009 to 2013. Samples were chosen using removal of systematic sampling.

- The end of its fiscal year was ending in March.
- Participating in the course of the financial year has not changed.
- The credit quality of corporate disclosure and financial information was available.
- Shares were studied during the study period.

According to the criteria, 55 companies were selected.

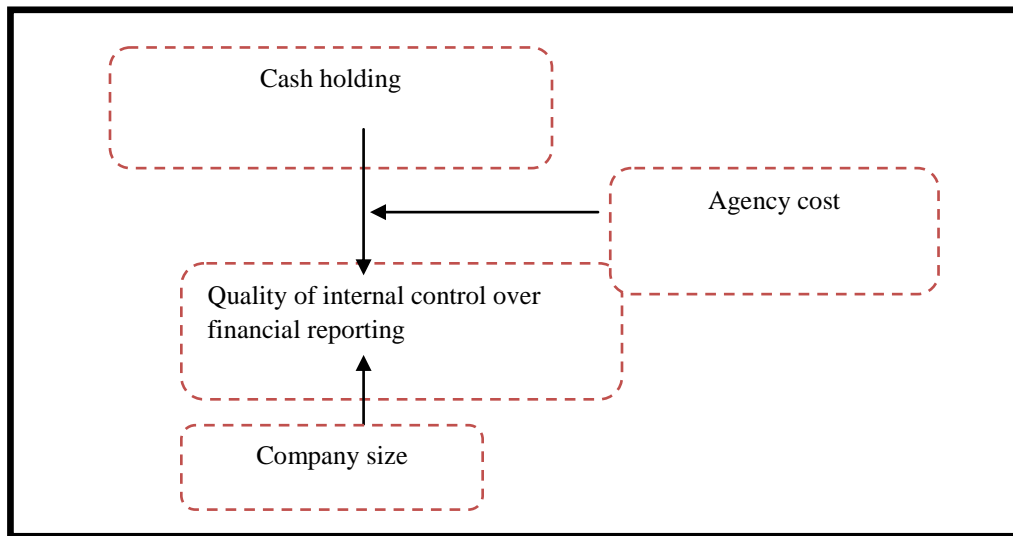


Figure 1. Conceptual models and variables.

In this study, the following models were used to test and to measure the hypotheses, the following model was used:

$$ICFR_{it} = \beta_0 + \beta_1 OC_{it} + \beta_2 SIZE_{it} + \beta_3 LEV_{it} + \varepsilon_{it}$$

$$ICFR_{it} = \beta_0 + \beta_1 AC_{it} + \beta_2 SIZE_{it} + \beta_3 LEV_{it} + \varepsilon_{it}$$

$$ICFR_{it} = \beta_0 + \beta_1 OC_{it} + \beta_2 AC + \beta_3 OC * AC + \beta_4 SIZE_{it} + \beta_5 LEV_{it} + \varepsilon_{it}$$

Results

Table 1. Estimated regression results

Model	$ICFR_{it} = \beta_0 + \beta_1 OC_{it} + \beta_2 SIZE_{it} + \beta_3 LEV_{it} + \varepsilon_{it}$		
Variables	Coefficients	Statistic t	Significant level
Constant coefficients	2616.256	9.864	0.000
Cash flow	-20.027	-4.718	0.000
Company size	-83396	-9.176	0.000
Financial leverage	12805.73	0.253	0.800
F statistic		15.543	
The possibility of statistic F		00.0	
Durbin-Watson statistic		2.087	
The coefficient of determination		0.503	
Adjusted coefficient		0.451	

According to the results, F-test for the first hypothesis can be seen in the table, the level was equal to zero and less than the significance level of α , therefore, null hypothesis was rejected, F-test at 95 percent also was rejected.

Therefore, the model was significant and there was a linear relationship between the dependent and independent variables. The coefficient of determination was equal to 0.503, which means that independent variables on the dependent variable explained 50% of changes. The value of the coefficient of determination represented the explanatory power of the model in the dependent variable which was explained by the independent variable. The next important issue was the component of material error in the independent model. Durbin-Watson statistic was used to examine the case because the amount was between 1.5 and 2.5, so, it can be concluded that no error components in the model was significantly correlated with both behavioral and independent variables. The Durbin-Watson statistics was equal to 2.07 and was located at an acceptable level (between 1.5 and 2.5). According to the results presented in Table, 1 as maintained variable of cash rate was negative (-20.027) and considering the significance level of t (0.0) as a result of the significant cash holding and the quality of internal control, there was a significant inverse relationship among them and the financial reporting and thus confirm the first hypothesis is the significant level of 95% means that the quality of internal control, financial reporting of cash flow.

The second hypothesis test

Quality of internal control over financial reporting had a significant relationship with the agency's cost. For the second hypothesis, we have the following model

$$ICFR_{it} = \beta_0 + \beta_1 AC_{it} + \beta_2 SIZE_{it} + \beta_3 LEV_{it} + \varepsilon_{it}$$

Table 2. Estimated regression results.

Model	$ICFR_{it} = \beta_0 + \beta_1 AC_{it} + \beta_2 SIZE_{it} + \beta_3 LEV_{it} + \varepsilon_{it}$		
Variables	Coefficients	Statistic t	Significant level
Constant coefficients	2834.109	9.155	0.000
Agency costs	-28861.331	-7.439	0.000
Company size	-78748	-8.099	0.000
Financial leverage	13996	0.277	0.781
size of the company		15.688	
Financial leverage		0.00	
F statistic		15.668	
The possibility of statistic F		00.0	
Durbin-Watson statistic		2.012	
The coefficient of determination		0.404	
Adjusted coefficient		0.353	

According to the results, F-test for the second hypothesis can be seen in the table, the level was equal to zero and less than the significance level of α , therefore, null hypothesis was rejected, F-test at 95 percent also rejected. Therefore, the model was significant and there was a linear relationship between the dependent and independent variables significant and there is a linear relationship between the independent and dependent variables. The coefficient of determination was equal to 0.404, which means that independent variables on the dependent variable explained 40% of changes.. The value of the coefficient of determination represents the explanatory power of the model in the dependent variable explained by the independent variable. The next important issue was component of material error in the independent model. Durbin-Watson statistic was used to examine the case because the amount was between 1.5 and 2.5, hence, it can be concluded that there was no error components in the model which was

significantly correlated with both behavioral and independent of each other. The Durbin-Watson statistic was equal to 2.01 and at an acceptable level (between 1.5 and 2.5). According to the results presented in Table 2 variable of agency cost factor was negative (-28861.331) and according to the level of test t (0.0) was significance, so, the result between cost and quality of internal control over financial reporting was significant and had inverse relationship with them. Therefore, the second hypothesis was confirmed at a significance level of 95% means that there was a significant relationship between the quality of internal control and financial reporting costs.

The third hypothesis testing

The agency's cost was effective on the maintenance of internal control over financial reporting quality. For the third hypothesis, we will study the following models:

$$1) \quad ICFR_{it} = \beta_0 + \beta_1 OC_{it} + \beta_2 AC + \beta_3 OC * AC + \beta_4 SIZE_{it} + \beta_5 LEV_{it} + \varepsilon_{it}$$

Table 3. Estimated regression results

$ICFR_{it} = \beta_0 + \beta_1 OC_{it} + \beta_2 AC + \beta_3 OC * AC + \beta_4 SIZE_{it} + \beta_5 LEV_{it} + \varepsilon_{it}$			
Model			
Variables	Coefficients	Statistic t	Significant level
Constant coefficients	15842.45	8.885	0.000
Cash flow	-19.035	-3.537	0.000
Agency costs	-26489	-4.373	0.000
Multiplying cash of agencies costs	-54147.35	-5.167	0.000
Company size	-77892	-7.734	0.000
Financial leverage	12632	0.249	0.803
F statistic		15.054	
The possibility of statistic F		00.0	
Durbin-Watson statistic		1.985	
The coefficient of determination		0.705	
Adjusted coefficient		0.651	

According to the results, F-test for the third hypothesis can be seen in the table, the level was equal to zero and less than the significance level of α , therefore, null hypothesis was rejected, F-test at 95 percent also rejected. Therefore, the model was significant and there was a linear relationship between the dependent and independent variables significant and there is a linear relationship between the independent and dependent variables. The coefficient of determination was equal to 0.705, which means that independent variables on the dependent variable explained 70% of changes. The value of the coefficient of determination represents the explanatory power of the model in the dependent variable explained by the independent variable. The next important issue was component of material error in the independent model. Durbin-Watson statistic was used to examine the case because the amount was between 1.5 and 2.5, hence, it can be concluded that there was no error components in the model which was significantly correlated with both behavioral and independent of each other. The Durbin-Watson statistic was equal

to 1.98 and at an acceptable level (between 1.5 and 2.5). According to the results presented in Table 2 variable of agency cost factor was negative (-54147.35) and according to the level of test t (0.0) was significance, so, the result between cost and quality of internal control over financial reporting was significant and had inverse relationship with them. Therefore, the third hypothesis was confirmed at a significance level of 95% means that there was a significant relationship between the agency's cost and the relationship between the quality of internal control and financial reporting costs.

Conclusion

Recommendations based on the results of the hypotheses

1. It is recommended to users of the financial statements in making economic decisions, optimize cash flow consider the positive factors affecting the quality of internal control over financial reporting.

2. Cash costs represented the relationship between efficiency and quality of internal control over financial reporting which was effective due to the investors' attention to the costs of representation in the capital market of Iran whereas the results of studies in foreign countries showed that agency costs, has attracted the attention of investors.

3. It is recommended that the necessary measures to describe the agency costs of economic decisions and to inform investors that it's various functions should be considered.

4. Companies' managers are recommended to move the famous train of cash flow (liquidity) for many years to emphasize the importance of internal control over financial reporting quality. In case of negligence in this case, the degradation of internal control over financial reporting resulting in reputation and value in the market due to their neglect, undermined and the performance will not be necessary.

Conflict of interest

The authors declare no conflict of interest

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