



The Relationship between Social Responsibility Disclosure and Cash Holdings

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Abstract

The present study investigates the relationship between social responsibility and cash holdings. The sample contains 770 firm years listed on the Tehran Stock Exchange from 2011 to 2017. The software used for statistical analysis is Stata 12, and the hypotheses were tested according to the multivariable linear regression test. The results suggest a negative and significant relationship between social responsibility and cash holdings. Furthermore, the results indicate that corporate governance negatively affects cash holdings. In addition, the results show the relationship between unsystematic risk and cash holdings is positive.

Keywords: Social Responsibility, Cash Holdings, Unsystematic Risk, Governance Score.

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1. Introduction

Corporate social responsibility is related to the relationship between companies and society. More specifically, this concept is concerned with the impact of firm operations on people and society. Some critics believe that the concept of social responsibility allowed the executives to establish social obligations, optionally. Some others point to the financial scandals of major companies like Enron and WorldCom and declare that despite the corporate responsibility movement's development, such scandals show that firms and managers think about their own benefits.

In fact, the world today considers the firms holistically, that is, a theoretical basis for novel approaches toward stakeholder theory-oriented firms. This theory states that companies become excessively large and contribute significantly to society so that more sections should be taken into account and shareholders. Corporate social responsibility clearly deals with a special set of business methods and strategies related to social issues. Still, according to many opinion leaders, the subject, far beyond what we think, is related to a philosophy or a set of values that form the basis of these methods. Investors ask for an amount of return on assets, which is equal to the related risk. Given the proposed explanations, the cash held is of great importance for firms. Now provided that these firms have regulated their social accountabilities, they could influence the cash holdings. Thus, the present study aims to evaluate the relationship between stock companies' social responsibility, cash holdings, unsystematic risk, and corporate governance.

2. Literature Review and Hypotheses Development

Although the determining factors of liquid assets are discussed extensively in the literature, the relationship between corporate social responsibility (CSR) and liquid assets is not established so far. Some scholars argued that social responsibility might be considered a method. Business units collect the social (ethic) capital during the time (Godfrey, 2005; Aoki, 2007; Russo and Perini, 2010; Antoni and Sacconi, 2011). This is actually the case because by performing corporate social responsibility activities, the business firm could establish sound credit relationships between investors (nationally and internationally) and customers, staff, and suppliers and provide a robust social image among associations and law-makers.

H₁: There is a relationship between high social responsibility and cash holdings

Holding a considerable amount of cash in a firm could lead to management inefficiency due to easy access of controllers to these cash resources. More specifically, having access to the surplus cash of firm activities could escalate the risk of misusing this amount by controlling investors, who greatly influence firms' decisions (Boubaker et al., 2013). Due to agency problems, managers may not use firms' cash resources to increase their shareholders' value. Corporate governance mechanisms are currently one of the main factors for improving companies' resource management and economic efficiency, including a series of relations between firm management, the board of directors, shareholders, and other beneficiaries. Corporate governance mechanisms provide a regulatory structure for firm objectives and help the firm achieve its goals and monitor the performance.

Besides providing the necessary management motive, this system paves the way for effective monitoring to apply the resources more effectively. Therefore, cash holdings could cause a conflict of interest between managers and owners. Effective corporate

governance contributes significantly to the decline of the risk of inappropriate use of liquid assets and the decrease of the agency costs of cash holdings. Boubaker et al. (2013) analyzed the board's impact, including duality, independence, tenure, CEO influence, and board size on the cash holdings. Their obtained results indicate that the board characteristics have a direct impact on cash holdings. Harford et al. (2008) evaluated the relationship between cash holdings and corporate governance structure. They found that companies with more internal ownership and institutional ownership percentage hold more cash. In contrast, companies with higher quality and larger corporate governance, and more independent boards hold less cash. Moreover, Gord et al. (2014) showed a negative and significant relationship between institutional ownership, reliance on debt, and board independence, and the level of cash holdings. Moreover, according to the findings, there is no significant relationship between ownership concentration, CEO tenure, CEO duality, and cash holdings level.

H₂: There is a relationship between powerful corporate governance and cash holdings

Investors' willingness to invest in business firms with social responsibility and customer loyalty to these firms could alleviate the unsystematic risk. Investors who are willing to invest in business firms with social responsibility do not consider such a process as investment assets but classify such investments as consumable assets because they benefit from the deposits, not the incurred payments (Fama and French, 2007). Such an investment behavior creates a kind of inelasticity in the demand curve of firms' share with social responsibility. For example, investors may buy these kinds of stocks not only for their modified performance return through unsystematic risk or economic infrastructures but for their social responsibility performance. Similarly, more customer loyalty to business firms with social responsibility means that such firms have more stable demand (namely, lower price sensitivity). Their profit performance is less sensitive than economic changes. Therefore, since firms with more unsystematic risks are more inclined toward more cash holding (Cheung, 2016), Luo and Batachariya (2009) argue that the social responsibility of a firm could reduce the specific risk in that business firms with a higher level of social capital are expected to be more capable in absorbing fluctuation (internally and externally). In particular, a sound relation among investors would lead to supply and demand consolidation during the critical periods, the increase of flexibility against fluctuations, and partnership in the increase of sustainable growth for business firms.

There is a positive relationship between unsystematic risk and cash holdings of business firms because the precautionary action for cash holdings surges when the risk of business firms' cash flows increases (Bates et al., 2009). Gao and Grinstein (2014) discovered that managers hold cash for precautionary purposes (with preventive aim). In addition, Mikkelson and Partch (2003) concluded that regular holding of considerable cash could result in poor performance, which is indicative of the conflict of interest between managers and shareholders. They declared that investors should be concerned about the managers not to draw from the internal cash reservoirs, and companies with copious amounts of cash holdings could audit other companies and reduce their values with higher probability.

H₃: There is a relationship between unsystematic risk and cash holdings

However, corporate governance may have a negative relationship with social responsibility. The agency theory indicates that since managers are willing to create

cash (Jensen, 1986) and participate in liquid assets activities to pursue their resources (Surroca Kavteripo, 2008; Jiraporn and Chintrakam, 2013; Fabrizi et al. 2014), the activities of social responsibility and liquid assets have a positive correlation. However, initial studies on this topic show that agency costs are not directly observable. The moderating role of corporate governance, which could debilitate the management strength or other types of agency costs, is taken for granted.

Recent studies generally confirm corporate governance's role and document that corporate governance has a negative relationship with liquid assets because they decrease agency problems related to liquid assets (Dittmar et al., 2007; Yun, 2009). In case the manager is willing to hold free cash flows and pursue social responsibility activities, we expect the level of liquid assets and range of partnership in social responsibility activities to be less for business firms with appropriate corporate governance. Accordingly, robust corporate governance could lead to a high (low) social responsibility. Secondly, Beltratti (2005) stated a positive relationship between social responsibility and corporate governance because they have a complementary role in forming the objectives and ongoing business firms' limitations. Thirdly, managers of firms with strong corporate governance may benefit from the investors' relations as an effective strategy, which shows that powerful corporate governance has a relationship with high social responsibility (Cespa, and Cestone and Soro Kavteripo, 2007; Fabrizi et al., 2014).

H₄: Powerful corporate governance contributes to the relationship between high social responsibility and cash holdings

Investors' willingness to invest in business firms with social responsibility (CRS) and customers' loyalty to business firms with CRS could lessen the unsystematic risk. Investors who are willing to invest in business firms with social responsibility do not consider such a process as an investment asset but classify such investments as consumable assets because they benefit from the deposits, not the incurred payments (Fama and French, 2007).

There are two competing approaches to the relationship between unsystematic risk and liquid assets. The first one is that lower unsystematic risk could decrease the liquid assets in that it reduces the required motive for transacting the cash held (Palazzo, 2012; Acharya et al., 2013). Palazzo (2012) showed that firms with low correlation and fluctuations, when they need external financial supply, are less likely to experience the shortage of cash flows, so it is expected that they have fewer immunization needs and hold less cash. In sum, firms with CRS are inclined to lower the unsystematic risk, which reduces their needs for cash holdings. The second approach is that a lower unsystematic risk may lead to higher liquid asset levels due to refinancing risk. Harford et al. (2014) argue that firms with shorter due date structures are more likely to face refinancing risk. In order to lower the risk, they are willing to increase their liquid assets. In other words, liquid assets are of great importance in reducing the risk of refinancing firms with short-time debts.

H₅: Unsystematic risk contributes to the relationship between high social responsibility and cash holdings

3. Research Methodology

The statistical population comprises all listed companies on the Tehran Stock Exchange from 2011 to 2017, and the companies with the following qualifications are selected as the sample of the study:

1. Data of companies should be available during the course of study. 2. Companies should not be affiliated with insurance companies and financial intermediaries. 3. To increase the comparability, their financial yearend should be on March 20th. 4. Companies should not change their fiscal year during the course of study. Given the imposed limitations, a total of 110 companies was selected as the sample of the study.

3.1. Research models

Consistent with the five hypotheses in this paper, the following five models are used to test hypotheses:

$$Cash = \beta_0 + \beta_1 csr + \beta_2 mtb + \beta_3 size + \beta_4 lev + \mathcal{E}_{it}$$

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$$Cash = \beta_0 + \beta_1 csr + \beta_2 mtb + \beta_3 size + \beta_4 lev + \mathcal{E}_{it}$$

$$Cash = \beta_0 + \beta_1 cg + \beta_2 csr + \beta_2 csr * cg + \beta_3 mtb + \beta_4 size + \beta_5 lev + \mathcal{E}_{it}$$

$$Cash = \beta_0 + \beta_1 idio + \beta_2 csr + \beta_2 csr * idio + \beta_3 mtb + \beta_4 size + \beta_5 lev + \mathcal{E}_{it}$$

Where β_0 is the intercept, *cash* is cash holdings of the company *i* in the year *t*, *csr* it is the high social responsibility of firm during the year, *Lev* is the financial leverage *i* in the year *t*, *size* it is the firm size of firm *i* in the year *t*, *mtb* it is the growth opportunity for the company *i* in the year *t*, *cg* it is powerful corporate governance *i* in the year *t*, *idio* it is an unsystematic risk *i* in the year *t*.

3.2. The operational definition of the research variables and their measurement process

3.2.1. Dependent variable: cash holdings is the dependent variable, which is achieved by dividing the cash into total assets.

3.2.2. Independent variables

Unsystematic risk: is achieved through the error sentence of the Fama and French model. Fama and French proposed the three-agent model of β , size, and book value to market value ratio, given their findings in 1992 using the CAMP model and the previous studies. They designed a multivariable regression for evaluating the effective factors on portfolio return (Fama and French, 1993). Using the CAMP model. Fama and French proposed the following formula:

$$R_i - R_f = a_i + b_1(R_m - R_f) + b_2(SMB) + b_3(HML)$$

$R_i - R_f$ is the company's additional return to no-risk return; this additional return is related to three agents of spending market risk, size factor, and value.

Table 1. Measuring the corporate governance score

Agent		Operational definition
Board effectiveness	BOARD	Less proportion of unbounded members to total members from the calculated amount for all companies of a year takes the value of 0; otherwise, it is 1.
		Not separating the role of CEO from the board of directors takes the value of 0; otherwise, it is 1.
		Change of CEO during the last two years takes 0; otherwise, it is 1.
Governance structure	GOV	Not changing the signing partners of audit reports within the last two years takes 0; otherwise, it is 1.
		Lack of internal audit department takes the value of 0; otherwise, it is 1.
		If audit firms perform the audit, it is 0, and if an audit organization performs it, it would be 1.
Ownership effects	OW	Freer float stock of a firm than the mean of total free float stock takes the value of 0; otherwise, it is 1.
		If the institutional shareholders possess more than 5% of a firm's regular stocks, it takes the value of 0; otherwise, it is 1.
Transparency	DIS	More proportion of interaction with sales affiliated individuals from the total mean of companies takes 0; otherwise, it is 1.
		The presence of net tax annual adjustments takes the value of 0; otherwise, it is 1.
		The presence of unacceptable statements takes the value of 0; otherwise, it is 1.
		Lack of a website takes the value of 0; otherwise, it is 1.

3.2.3. Corporate governance score

For calculating each firm's corporate governance score, the first total corporate governance score of all firms, the total mean score is calculated. If the corporate governance scores of the company *i* in the year *t* is more than the total mean score, it takes 1; otherwise, it would be 0. To measure the corporate governance score of companies under study, we first define 12 components (with the same coefficient) based on 4 indexes (with the same coefficient) for the corporate governance, then defined each component, assign the 0 and 1 value to each company under study. These components are selected by concluding the conducted studies on this subject.

3.2.4. Social responsibility reporting (CSR):

According to Mishra et al. (2011), the following model, which is objective and slightly popular, is used to measure corporate social responsibility:

$$CSR-s = CSR-COM-S + CSR-EMP-S + CSR-ENV-S + CSR-PRO-S$$

CSR-S is the social responsibility score. In this paper, four criteria of partnership disclosure score, staff relation disclosure score, environmental disclosure score, and product feature disclosure score were used to calculate the social responsibility score.

CSR-COM-S is a social partnership disclosure score calculated from the difference between strong points and weak points. The partnership disclosure score for stock companies, given the study of Mishra et al. (2011), who declared that companies that pay no tax or the liquidation of the company have a negative effect on the economic status of the society, is considered as a weak point and charity and innovative actions are the positive points. Hence, the social partnership score is calculated by subtracting the strong points from the weak points.

$$CSR-COM-S = \Sigma Strengths - \Sigma Concerns$$

Similarly, we can calculate the scores of other aspects of social responsibility, like:

CSR-EMP-S: staff relation disclosure score.

The staff relation score is calculated by subtracting the strong points from the weak points as follows: staff relation score for stock companies given the study of Mishra et al. (2011) who declared that sanitary and security weaknesses, downsizing of the

workforce, and incurring no payment and benefits and weakness in retirement benefits are the weak points and sharing cash benefit, retirement benefits, cash (granting loans, etc.) and non-cash grants, accepting the suggestions of staffs, regulating work environment health, regulating safety points, promoting welfare affairs in the workshop (well-equipped dormitory, transport), welfare actions (recreational settings), training staffs and rewarding to increase the production are the strong points. Hence, the staff relation score is calculated by subtracting these strong points from the said weak points.

CSR-ENV-S: environmental disclosure score.

The environmental disclosure score is calculated by subtracting the strong points from the weak points as follows: the environmental disclosure score for stock companies given the study of Mishra et al. (2011) who declared companies that have hazardous waste and also fined for weak management about waste materials and air pollution as well as for the use of chemicals for reducing the Ozone layer is the weak points and clean energy (use of fuel with less pollution), controlling the air pollution and reducing the greenhouse gas, gaining reward or Green commitment certificate, development of green space in the workplace, principled disposal of waste (waste management), the optimization of energy consumption, fostering the environmental and manufacturing culture per the environment are the strong points. Hence, the environmental disclosure score is calculated by subtracting these strong points from the weak points.

CSR-PRO-S: product feature disclosure score, which is calculated via the above-said model.

The product feature disclosure score is calculated by subtracting the strong points from the weak points as follows: the product feature disclosure score for stock companies given the study of Mishra et al. (2011) declared that companies that are fined for product safety and negative advertisements and also for the complaint of customer due to dissatisfaction of product quality are weak points and in case the company has high quality and safe products, conduct research and development processes, and carry advertisement and marketing and have after-sale services are strong points. Hence, the environmental disclosure score is calculated by subtracting the strong points from the weak points.

3.2.5. Moderator variables:

In this paper, corporate governance score and unsystematic risk are two moderator variables.

3.2.6. Control variables:

Firm size: the natural logarithm of the book value of total assets is used to measure the firm size.

Financial leverage: total debt to total assets ratio is used to measure the financial leverage.

Growth opportunity: market value of equity to book value of equity ratio is used as an agent for firm growth.

4. Hypotheses Testing

Descriptive statistics of the study: descriptive methods aim to describe the data using the tables and descriptive statistics tools, including central and dispersion indexes, to clarify the subject of study. The following table contains the descriptive statistics of all applied variables of the study. The number of reliable observations for each variable is 7 years. The desired data for 110 listed companies in the Tehran Stock Exchange were prepared. In the first section, the most important central and dispersion indexes were proposed. The standard deviation was used among the central indexes, mean \bar{x} , and dispersion indexes. In addition, a minimum and maximum were introduced for each

variable. Mean is the main central index used, the value of which is exactly at the equilibrium point or the center of gravity, and finally, the standard deviation is the major parameter of dispersion, which is achieved from the square root of the variance. These indexes are proposed in Table 2, and the values of this table are calculated via Stata, Excel version 12.

Table 2. Descriptive statistics

Variable	Symbol	Minimum	Maximum	Mean	Standard deviation
Cash holdings	<i>Cash</i>	0.06	0.219	0.091	0.1
Unsystematic risk	<i>idio</i>	0.014	0.58	0.13	0.24
Systematic risk	<i>beta</i>	0.08	0.69	0.211	0.252
Social responsibility	<i>csr</i>	0	1	0.319	0.156
Corporate governance score	<i>cg</i>	0	1	0.240	0.413
Firm size	<i>size</i>	-0.19	0.89	0.21	0.24
Financial leverage	<i>Lev</i>	0.26	0.87	0.51	0.31
Growth opportunity	<i>mtb</i>	0.89	6.54	2.36	0.47

4.1. Testing the first hypothesis

The results of Table 3 indicate that the model is optimum for hypothesis testing. The f statistic (52.33) and the significance level (0.0000) document the model is significant. The results of the Wooldridge Test indicate that there is no autocorrelation among disturbance sentences. The adjusted coefficient of determination is 0.35. High social responsibility is considered the independent variable, cash holdings as the dependent variable, firm size, growth opportunity, and financial leverage are the study's control variables. The variable of high social responsibility, given its level of significance (0.0000) in Table 3, has a negative and inverse relationship with cash holdings. There is a negative and significant relationship between the control variables of firm size, growth opportunity, and financial leverage, and cash holdings. Since there is a relationship between high social responsibility and cash holdings, the first hypothesis is accepted.

Table 3. Testing the first hypothesis

Variable	Symbol	Coefficient	T statistic	P-value
Social responsibility	<i>csr</i>	-0.15	-4.63	0.000
Growth opportunity	<i>mtb</i>	0.08	-2.25	0.034
Firm size	<i>size</i>	-0.03	-4.05	0.000
Financial leverage	<i>lev</i>	-0.41	-3.22	0.000
Intercept		0.22	1.04	0.251
R ²		0.36	F statistic	52.33
Durbin-Watson		2.143		
adjusted R ²		0.35	Level of significance	0.000

Resource: research findings

4.2. Testing the second hypothesis

The results of Table 4 indicate that the model is optimum for hypothesis testing. The f statistic (69.12) and the significance level (0.0000) document the model is significant. The results of the Wooldridge Test indicate that there is no autocorrelation among disturbance sentences. The adjusted coefficient of determination is 0.34. Powerful corporate governance is considered the independent variable, cash holdings as the dependent variable, firm size, growth opportunity, and financial leverage are the study's control variables. The variable of powerful corporate governance, given its level of significance (0.0000) in Table 4, has a negative and inverse relationship with cash holdings. There is a negative and significant relationship between the control variables of firm size, growth opportunity, and financial leverage, and cash holdings. Since there is a relationship between powerful corporate governance and cash holdings, the second hypothesis is accepted.

Table 4. Testing the second hypothesis

Variable	Symbol	Coefficient	T statistic	P-value
Powerful corporate governance	<i>cg</i>	-0.103	-4.02	0.000
Growth opportunity	<i>mtb</i>	0.35	7.52	0.000
Firm size	<i>size</i>	-0.28	-3.96	0.000
Financial leverage	<i>lev</i>	-0.063	-2.41	0.026
Intercept		0.231	1.52	0.087
R ²		0.35	F statistic	69.12
Durbin-Watson		2.23		
adjusted R ²		.034	Level of significance	0.000

4.3. Testing the third hypothesis

The results of Table 5 indicate that the model is optimum for hypothesis testing. The f statistic (55.74) and the significance level (0.0000) document the model is significant. The results of the Wooldridge Test indicate that there is no autocorrelation among disturbance sentences. The adjusted coefficient of determination is 0.31. Unsystematic risk is considered the independent variable, cash holdings as the dependent variable, firm size, growth opportunity, and financial leverage are the study's control variables. The variable of powerful corporate governance, given its level of significance (0.031) in table 5, has a positive and direct relationship with cash holdings. There is a significant relationship between the control variables of firm size, growth opportunity, and financial leverage, and cash holdings. Since there is a relationship between unsystematic risk and cash holdings, the third hypothesis is accepted.

Table 5. Testing the third hypothesis

Variable	Symbol	Coefficient	T statistic	P-value
Unsystematic risk	<i>idio</i>	0.04	2.37	0.031
Growth opportunity	<i>mtb</i>	0.42	4.55	0.000
Firm size	<i>size</i>	-0.37	-2.52	0.000
Financial leverage	<i>lev</i>	-0.078	-1.77	0.035
Intercept		0.145	1.13	0.064
R ²		0.33	F statistic	55.74
Durbin-Watson		2.18		
adjusted R ²		0.31	Level of significance	0.000

4.4. Testing the fourth hypothesis

The results of Table 6 indicate that the model is optimum for hypothesis testing. The f statistic (67.52) and the significance level (0.0000) document the model is significant. The results of the Wooldridge Test indicate that there is no autocorrelation among disturbance sentences. The adjusted coefficient of determination is 0.34. High social responsibility is considered the independent variable, cash holdings as the dependent variable, powerful corporate governance as the moderator variable, firm size, growth opportunity, and financial leverage are the study's control variables. The variable high social responsibility in powerful corporate governance, given its level of significance (0.000) in table 6, has a negative and inverse relationship with cash holdings. There is a significant relationship between the control variables of firm size, growth opportunity, and financial leverage, and cash holdings. Since powerful corporate governance contributes to the relationship between high social responsibility and cash holdings, the fourth hypothesis is accepted.

Table 6. Testing the fourth hypothesis

Variable	Symbol	Coefficient	T statistic	P-value
Social responsibility	<i>csr</i>	-0.19	-3.55	0.000
Powerful corporate governance	<i>cg</i>	-0.178	-4.46	0.000
Powerful corporate governance* social responsibility	<i>Csr* cg</i>	-0.25	-3.24	0.000
Growth opportunity	<i>mtb</i>	0.32	4.17	0.000
Firm size	<i>size</i>	-0.67	-2.12	0.000
Financial leverage	<i>lev</i>	-0.047	-1.45	0.027
Intercept		0.185	1.48	0.09
R ²		0.36	F statistic	67.52
Durbin-Watson		2.14		
adjusted R ²		0.34	Level of significance	0.000

4.5. Testing the fifth hypothesis

The results of Table 7 indicate that the model is optimum for hypothesis testing. The f statistic (55.45) and the significance level (0.0000) document the model is significant. The results of the Wooldridge Test indicate that there is no autocorrelation among disturbance sentences. The adjusted coefficient of determination is 0.30. High social responsibility is considered the independent variable, cash holdings as the dependent variable, unsystematic risk as to the moderator variable, firm size, growth opportunity, and financial leverage are the study's control variables. The variable high social responsibility, given its significance level (0.000) in table 7, has a negative and inverse relationship with cash holdings. High social responsibility in unsystematic risk, given its level of significance (0.041) in Table 7, has a positive and direct relationship with cash holdings. There is a significant relationship between the control variables of firm size, growth opportunity, and financial leverage, and cash holdings. Since the unsystematic risk contributes to the relationship between high social responsibility and cash holdings, the fifth hypothesis is accepted.

Table 7. Testing the fifth hypothesis

Variable	Symbol	Coefficient	T statistic	P-value
Social responsibility	<i>csr</i>	-0.24	-4.17	0.000
Unsystematic risk	<i>idio</i>	0.07	2.65	0.024
Powerful corporate governance* social responsibility	<i>Csr* idio</i>	0.09	1.14	0.041
Growth opportunity	<i>mtb</i>	0.38	3.15	0.000
Firm size	<i>size</i>	-0.49	-2.38	0.000
Financial leverage	<i>lev</i>	-0.087	-2.35	0.041
Intercept		0.195	2.22	0.062
R ²		0.31	F statistic	55.45
Durbin-Watson		2.41		
adjusted R ²		0.30	Level of significance	0.000

5. Conclusion

The results showed that firms with higher social responsibility and higher environmental performance are less willing to hold cash. This shows that by doing activities related to social responsibility, firms would establish and maintain harmonious relationships among investors, in the form of credit among investors and customers, trust among staff and suppliers, and the growth of social responsibility among associations law-makers. According to Chiang (2015), companies with high social responsibility are more willing to hold less cash, which is in line with this hypothesis.

As for the significant relationship between powerful corporate governance and cash

holdings, we mean the more the power of corporate governance in stock companies, the less is the amount of cash holdings. However, in some studies, like Jensen (1986), corporate governance may negatively affect cash holdings. Recent studies indicated that corporate governance has a negative relationship with cash holdings because in the agency theory, to decrease the agency problems related to cash holdings, less cash is maintained to prevent the misuse or earnings management of managers (Dittmar et al., 2007; Yun, 2009; Chen et al., 2012). Suppose the manager is willing to hold free cash flows. In that case, it is expected that the level of cash and the range of partnership in social responsibility activities be less in firms with an appropriate level of corporate governance. As for the significant relationship between unsystematic risk and cash holdings, namely, the higher the unsystematic risk in stock companies, the higher is the cash holdings. Unsystematic risk has a positive relationship with the cash of business firms. This is due to the precautionary action for holding liquid assets when a firm's risk increases (Bates et al., 2009). According to Chiang, firms with unsystematic risk have fewer cash holdings, which is in line with this hypothesis.

As for the impact of powerful corporate governance on the relationship between high social responsibility and cash holdings, we mean the higher the social responsibility of stock companies, the less is the cash holdings. Since powerful corporate governance takes the moderating role in high social responsibility, it has a more negative impact on cash holdings, so powerful corporate governance has a negative effect on the relationship between high social responsibility and cash holdings and makes this relationship more negative. Furthermore, we could say that social responsibility has a positive relationship with corporate governance due to the following reasons. First, we could mention the framework used extensively (environmentally, socially, and corporate governance), comprises the corporate governance as one of the structural components, and the international association of investors uses it to evaluate a firm's investments with social responsibility. Hence, powerful (weak) corporate governance would lead to high (low) social responsibility. Second, according to Beltovati (2005), a firm's social responsibility and corporate governance have a positive relationship because they complement each other in forming the objectives and limitations of business firms. Third, firm managers with powerful corporate governance may establish a relationship with investors as an effective strategy, which shows that powerful corporate governance is related to high social responsibility (Cespa and Cestone; Soro Kavteripo, 2007; Fabrizi et al., 2014). Thus, in stock companies with powerful corporate governance and high social responsibility, cash holdings are low, and powerful corporate governance contributes to the relationship between high social responsibility and cash holdings, which is in line with this hypothesis. As for the impact of unsystematic risk on the relationship between high social responsibility and cash holdings, we mean the more the social responsibility of stock companies, the less is the cash holdings. Since the unsystematic risk takes a moderating role in high social responsibility, it positively affects cash holdings, so the unsystematic risk positively impacts the relationship between high social responsibility and cash holding and makes the relationship more positive.

According to Fama and French (2007), we could conclude that investors' willingness to invest in firms with higher social responsibility is more and the loyalty of customers to firms with higher social responsibility and their willingness for investment could reduce the unsystematic risk. Investors interested in firm investment with social responsibility do not consider such that as capital assets but classify them as consumable assets because they benefit from the maintenance of such assets. Such an investment behavior creates a kind of inelasticity in the demand curve of firms' shares

with social responsibility. Moreover, the lower unsystematic risk could reduce the cash holdings because it decreases the cash held transaction motive (Acharya et al., 2013). Palazzo (2012) indicated that firms with lower correlation and fluctuations, when requiring external financial supply, are less likely to experience a cash-flow shortage, so it is expected that they have fewer immunization demands and hold less cash. According to Acharya et al. (2013), the unsystematic risk could affect cash selection and bank loans. Since banks cannot secure the cash for all business firms every time, business firms with lower unsystematic risk can grant credit, so we could conclude that the cash holdings are lower in companies with higher unsystematic risk. Therefore, companies with higher social responsibility and higher environmental performance are more interested in lower systematic risk and more cash holdings. Since in stock companies, the systematic risk is lower, it may lead to the growth of cash holdings due to the risk of financial supply.

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