



The Impact of Corporate Governance on Cash Management Efficiency in the Industry of Machinery and Equipment

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Abstract

"The corporate governance system" is a response to the problem of agency which is caused by the "separation of control from ownership". After representing agency theory, agency relations were widely affect the variety of topics in financial literature and gradually, especially with the emergence of financial scandals and bankruptcies of companies and financial corruption that occurred in the late twentieth century, corporate governance system Discussion has also attracted more attention.

In this study, the effects of corporate governance on the efficiency of cash management is evaluated in machinery and equipment industry. The sample consisted of 15 companies listed on the Tehran Stock Exchange in machinery and equipment industry in 1385- 1393, which were selected through screening. Hypothesis test was conducted through multiple regression and Generalized Least Squares (GLS) method. The results of this study in machinery and equipment industry indicate a significant positive correlation between corporate governance and management components performance of the cash conversion cycle.

Keywords: corporate governance, management of agency problem, the cash conversion cycle.

Introduction

The corporate governance is a set of rules and procedures governing the relations of managers, shareholders and company auditors who support shareholders by applying a monitoring system. Given that today's organizations emphasize to reduce conflicts of interest between shareholders and management to separate ownership from management, therefore by increase in the number of shareholders, especially shareholders, conflicts of interest between shareholders and



managers, and between shareholders will be increased. in the way that it will make some problems on the supervision and control over the management performance.

Literature review

Corporate Governance was introduced at the start of the twenty-first century, as one of the most important issues in business (Aghaie and et al, 1388). The available literature shows that there is no unit definition of corporate governance, and there are a lot of significant differences in it. It is even hard to gain an integrated definition in America or England. There are a lot of definition of corporate governance.

There are Limited views in one hand and the extensive perspectives in the other hand. In the limited perspective, corporate governance is limited to the relationship between company and shareholders. This is an old model that can be expressed in the form of agency theory. On the other hand, corporate governance can be considered as a network of relations not only between companies and their owners (shareholders), but also between company and a large number of stakeholders, including employees, customers, dealers, bondholders and so on. Such a view can be seen in the context of stakeholder's theory (Hasas Yekaneh, 1385).

The term corporate governance, literally means structuring and corporate control (Siladi, 2006). Definitions related to corporate governance, mainly represents the interests and attitudes of those who their intellectual value has corporate governance perspective. Solomon (2007) considers corporate governance as a set of processes, rules, policies and laws that effects leadership, management and control of the company.

Corporate governance is also defined as the use of Power companies process and how to control it or deal with corporate issues (Hughes, 2007).

Corporate governance meets the issues such as who (natural or legal), has what duties as a corporate beneficiary. Its evolution in recent years showed that its management-oriented events are becoming ever more rapid to beneficiary-oriented approach.

Agency theory

Moving from individual ownership to collective ownership, led to the creation of new issues in the management of financial resources. So that Berle, A. and Means, G, 1932, call it as a problem of agency, Jensen, M. C & Meckling, 1976, on analyzing agency theory has stated that manager of a company are considered as brokers and shareholders are considered as employers. In other words, everyday decision is assigned to managers who are shareholders' brokers. The problem that arises here is that brokers do not necessarily decide in favor of employers. One of the



hypotheses of agency theory is that brokers and employers have a conflict of interest. But apparently assuming that the Company's primary goal is to increase shareholder wealth, is in contradiction. Because the resultant of forces resulting from the activities of brokers and employers may not ultimately lead to an increase in shareholder wealth. for example, a manager who consider his/her reward as Increasing corporate profits and not an increase in the efficiency of the resources that have been laid out to him, how can give up his/her personal interests against the company public interest. Here the necessity to use more outside manager that their interest does not depend on the performance of the executive staff under their management is shown.

In other words, agency theory is based on the relationship between employer and broker. According to Jensen, M. C & Meckling 1976, this relationship is a kind of contract between the broker and the employer that may have to provide certain services. It is perfectly normal in human society, for example, in a legal claim we hire a lawyer to defend our interests and this means that such task is not something new.

Of course, that may create a conflict of interest in this regard. And this can be caused by events in the organization that is not compatible with the interests of the parties. Finance literature suggests that in most theories, the employer is shareholder and agents are managers and board members. Traditionally, agency theory discusses about the conflict of interest between shareholders and managers. And this occurs when the goals of managers are not in line with the company goals.

Liquidity management:

"Liquidity management", is an important criterion in determining the "working capital policies" and expresses the company's ability to generate cash needed. Current and immediate ratios and liquidity ratios are traditional and useful liquidity indicators; But they are insufficient and are only based on balance sheet figures and cannot provide good and accurate detail and information about their working capital management efficiency. Mathematical equations used to calculate these indices are cash and operating assets. But considering operating assets such as receivable accounts and cash and cash equivalents, Inventories is irrational in term of basic principles of Liquidity management. Given the limitations of traditional liquidity ratios, continued liquidity scale is used for working capital management. continuous liquidity Scale refers to incoming and outgoing cash flows generated in company which is caused by acquisition of raw materials, production, sales, payment and demands collection processes. As the continuous liquidity Scale is a function of the cash conversion cycle, it is more accurate to use the cash conversion cycle instead of traditional ratios, to assess the effectiveness of working capital management (Kieschnick, R.L., et al., 2008).



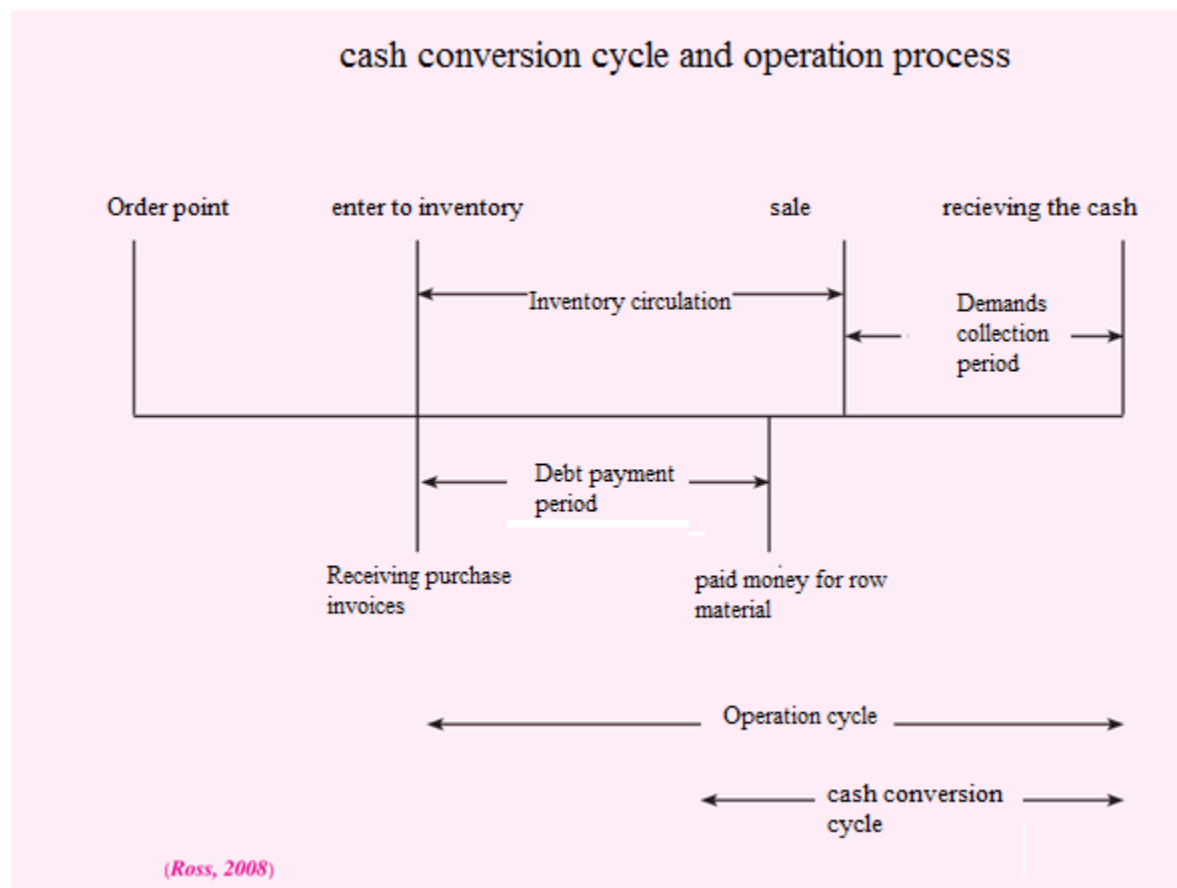
The cash conversion cycle:

In fact, liquidity management reflects the asset management and short-term debt and plays a vital role in the success of the enterprise management. If the company fails to properly manage its liquidity, current assets of company may not be able to meet the company's current debts. Therefore, company will have to find external sources to pay its short-term debt. Jose (1996), about the importance of "cash management" believes that "companies which have a long bright history about their balance sheets, if they do not have good liquidity management, they will not be able to pay their debts". Appropriate method for assessing the Company's liquidity is, "the cash conversion cycle" which is the period between payment for the purchasing inventory or raw materials to collect demands arising from the sale of goods to customers. Cash conversion cycle is a Dynamic scale for "working Liquidity management" which simultaneously creates a time-based scale using the balance sheet figures and benefits and disbenefits (Padachi, 2006).

Although the cash conversion cycle analysis can be useful alone, industry indicators are also very important in order to assess the performance of this cycle and to forecast opportunities to improve this cycle. Since the duration of this cycle is different for different industries, so comparing companies that operate in an industry is correct.

Financial science books mention the cash conversion cycle as a criterion for the concept of "the efficiency of working capital management" (Merton, 1974).

Ross (2008) has shown the cash conversion cycle and company operation processing cycle in Chart 1. Finance and Accounting are to provide appropriate solutions for the control of brokers by employers.



Shouzi et al 1394 in their paper concluded that Hypothesis of relationship between members outside the board of directors and institutional investors, was approved by the company's performance. Also, there was no significant relationship between the dual role of CEO and corporate performance. Thus, according to the results of this study, special attention to corporate governance mechanisms to improve the company's performance is emphasized. Mousavi et al in his research called corporate governance and Revised financial statements in 1394 expressed that there is only a significant positive relationship between audit quality in revised financial statements at 95 percent confidence.

Vaez et al 1393 in his study investigating the relationship between concentration of ownership and board structure with working capital performance, concluded that the level of ownership concentration has significant negative relationship with inventory conversion period and the cash conversion cycle.



Christopher S. Armstrong et al 2015 in an article titled corporate governance, incentives and tax avoidance concluded that there is no relationship between different mechanisms of corporate governance and tax avoidance. Ashok, Kumar Panigrahi 2013 in his research entitled the cash conversion cycle and profitability of the Company (the case study of cement manufacturing companies in India) showed that the selected companies have lower average to return on assets and return on equity with the cash conversion cycle. Monab et al 2012 in a study entitled optimal relationship of cash conversion cycle performance optimal management with size and profitability of the company's concluded that there is a negative relationship between efficiency of the cash cycle and size and profitability of the company.

Population and statistical sample

Population of this study consisted of all firms listed in the Tehran Stock Exchange, the machinery and equipment group. In order to do this research, a sample was selected by the systematic elimination method, from the companies of the population who have the following conditions:

1. During the years 1385 to 1393, have not change in activities and financial year.
2. Since beginning of 1385 are listed on the stock exchange.
3. To be a part of investment companies, leasing, insurance, bank and multidisciplinary.
4. Their financial period ends in esfand in each year.

Methodology

The present study is an applied research in term of goal. Applied research is research in which researchers try to find the applications of a study in real world outside the theoretical environment based on a scientifically proven theory. This study was a descriptive correlational research and its methodology is an ex post facto. In this study, researchers sought to examine a correlational relationship between the the research variables and then accordingly evaluate the relationship between variables and their intensity.

Correlation studies merely evaluate the variables in the cases in which they effect on certain phenomenon. The goal of correlation studies is to establish a relationship, or lack of it and using these relations in anticipation of the future. To estimate the research data from the combined data model (Panel) GLS was used.

Hypothesis and regression model

Hypothesis



there is a significant positive relationship between the components of good corporate governance and performance of the cash conversion cycle management.

The following regression model was used to test hypothesis:

$$CCC = \alpha + \beta_1 TN + \beta_2 BS + \beta_3 IND + \beta_4 QROW + \beta_5 FS + \beta_6 FB + \varepsilon_t$$

Table 1 the introduction of the research variables

Type of variable	Acronyms	Variable	calculation
Dependent	CCC	Cash conversion cycle	(the period of collection of demands + inventory turnover period) - deposit creditors period
Independent	TN	CEO tenure duration	The number of years of service as Director
Independent	IND	Ratio of non-bound members	Ratio of outside members of the board to all board members
Control	QROW	Sales growth	(Sales in current year- sold in last year) / sales of last year
Control	FS	size of the company	average assets Log
Control	FB	company's performance	Net profit after tax / sales

there is a significant positive relationship between the components of corporate governance and performance of cash conversion cycle management.

Table 2 Hypothesis test

CCC dependent variable				
$CCC = C(1) + C(2)*TN + C(3)*BS + C(4)*IND + C(5)*GROW + C(6)*FS + C(7)*FB + [CX=F]$				
result	Significant	T statistic	Variable	variable



	level		coefficient	
insignificant	۰.۰۰۹۵	-۲.۶۹۹۵۰۵	-۲۰.۶۷.۷۷۴	C
significant	۰.۰۰۰۰	۸.۰۳۷۹۷۲	۱۳.۶.۵۵۹	TN
significant	۰.۰۳۸۰	۱.۵۰۸۰۱۰	۱۶.۰۴۳۶۷	BS
significant	۰.۰۰۸۶	۲.۷۳۹۶۷۱	۴۸.۴۳۲۱۷	IND
insignificant	۰.۰۴۸۲	-۲.۰۲۵۸۵۰	-۱۸.۵۶۸۴۶	GROW
significant	۰.۰۰۳۷	۳.۰۵۰۶۳۱	۱۹۲.۸۹۸۷	FS
insignificant	۰.۹۷۵۱	-۰.۰۳۱۳۶۳	-۳.۸۱۶۳۹۷	FB
Durbin-Watson statistic: 1.966447		The determination coefficient: 0.816861		
White Test : 0.1160		Adjusted coefficient: 0.757061		
The significant level of statistic F: 0.000000		Statistic F: 13.65979		
F Limer test: 0.0000		Hausman test: 0.0086		

Prob table shows the validity of the model is significant in zero level.

The Durbin-Watson statistic is 1.96, which indicates absence of correlation.

Coefficients and t-statistics obtained for the variable of number of years of service as CEO is 13.60 and 8.037 Which shows there is a positive meaningful relationship at significant level of zero between the number of years of service as CEO in connection with the cash conversion cycle management efficiency. The coefficient obtained t statistics for the number of board members in relation to performance management of cash conversion cycle is respectively, 16.04 and 1.508. which shows there is a significant positive relationship at a significance level of 0.0380 between number of board members and management efficiency of the cash conversion cycle. The coefficient and t statistics obtained for outside members of in the board proportion in relation with management efficiency with respect to performance of the cash conversion cycle is respectively, 48.43 and 2.73. Which shows a positive relationship at significance level of 0.0086 between proportion of outside members in the board and management efficiency of the cash conversion cycle. Also coefficient and t statistics obtained for sales growth in relation to



efficiency of management of cash conversion cycle is respectively 2.02- 18.56, Which indicates there is no significant relationship between cash conversion cycle and company sales growth at significance level of 0.048. The coefficient and t statistics obtained for the size of the company in relation to efficiency of management of the cash conversion cycle is respectively, 192.89 and 3.050 Which shows there is a positive relationship at significance level of 0.0037 between firm size and management efficiency of the cash conversion cycle. The coefficient and t statistics obtained for the company's performance in relation to the cash conversion cycle management efficiency is respectively, 3.81- and 0.031-, which shows there is no relationship between company performance and management efficiency of the cash conversion. determination Coefficients obtained as 75 percent shows the validity of the regression model. F Limer test which indicates the type of data layout, at a significance level of zero represents an appropriate data layout for Panel. Obtained White test is 0.1160 which indicates existence of homogeneity of variances. Hausman test conducted with Prob is equal to 0.0086 which shows the of absence of random variables impact on the model, so our hypothesis is confirmed.

Conclusion and recommendations

after conducting the steps of a scientific research, if the research is obtained from a systematic process, the researcher can express ideas and recommendation for further researches. In machinery and equipment industry we were witness for hypothesis confirmation that suggests that improving the quality of corporate governance components have a positive impact on the cash conversion cycle management efficiency. According to the hypothesis confirmation, it seems that component of corporate governance generally has a positive effect on the efficiency of liquidity in machinery and equipment industry of Tehran Stock Exchange. Therefore, it is suggested that the investors must consider the relationship between the corporate governance components and the management efficiency of cash as a criterion for having better return and investment which is caused by high performance of company.

From the result of this research we can recommend to suppliers and creditors to use the evaluations of corporate governance structure to maintain and increase their interest to benefit the demand collection.

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