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The Impact of Corporate Governance on The Efficiency of Managing Working Capital: The Manufacturing Sector in Jordan

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ABSTRACT

The main objective of this research is to investigate the effect of corporate governance on working capital proficiency. A sample of 49 manufacturing organizations listed in ASE during the period of 2005-2016 is used. This research uses panel analysis (fixed and random effect techniques) in order to empirically investigate the impact of corporate governance in managing working capital efficiently. The model includes two variables of corporate governance; CEO tenure duration and board size and controlled the model by including the size of the firms, growth and the performance of company. The results suggest that the more experience the CEO has and the smaller the board size is, the better governance manufacturing companies in Jordan would be in managing their working capital efficiently. In addition, large, high growth companies efficiently manage their working capital in a better way. Lastly, high profitably manufacturing companies in Jordan tend to ignore managing their working capital efficiently.

Keywords: Working capital; governance; efficiency; Amman Stock Exchange; manufacturing firms.

INTRODUCTION

The management of working capital is substantial to the firm. Efficient management of working capital leads to minimizing working capital requirement, hence an increase in the company's cash flow and maximizing shareholders' return on investment. While weak management of working capital might have a negative impact on cash management, receivables, payables, and shareholders' return on investment. Working capital is formed from receivables, inventory, payables, and the use of cash for daily transactions. Highlighted in this study, the management of working capital is reflected by the management of current assets and current liabilities.

Cash is the most sensitive account of all components that can be affected by the inefficiency of managing working capital (Isshaq et al, 2009). Cash holding are ready-to-use funds for investment in physical assets and for distribution to shareholders. Companies tend to hold cash for precautionary, speculative, and transactional purposes. Precautionary purposes represent holding cash for safety reasons against foreseen fluctuations. Speculative purposes represent holding cash for bargain purchases, while transaction purposes represent holding cash for daily operations (Besley & Brigham, 2005; Gill & Shah, 2001).

Though it is important for companies to maintain a certain level of cash; excessive cash holding is not necessarily beneficial to the company, on the contrary it reflects inefficiency in managing working capital. Trade-off theory discusses that companies should determine an ideal level of cash by measuring the marginal costs and marginal benefits of holding cash, and according to this theory, it is important to maintain a certain level of liquidity for smoother transactions. While the main cost would is opportunity cost of investment in other assets (Afza & Adnan, 2007).

The purpose of the present study is to highlight the

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impact of corporate governance on working capital by studying the effect of corporate governance components such as CEO tenure duration and board size and controlling for additional factors such as size of the firm, growth and performance of the firm.

2. Literature Review

From all the components of working capital, cash is the component with the highest liquidity that reflects the firm's ability to pay its bills. While holding cash is crucial, inactive cash does not benefit the organization. Many firm characteristics affect cash; such as cash flow, net working capital, leverage, profitability, and capital expenditure. The effect may vary between developed and emerging economies (Gill & Shah, 2008).

The cash level organizations must hold is a classic conflict in finance, holding cash avoids the underpricing of the firm's stocks and indicates the optimal timing to invest. On the other hand, excessive cash holding is not always beneficial to the firm. This is where comes the important role of corporate governance to determine the optimal cash holding policies (Cossin & Hricko, 2004).

Michalski (2008) argued that any growth in the size of production requires growth in the levels of cash, inventories, and accounts receivable. Excessive building of net working capital will eventually be hurtful to the company in the case of paying penalty due to the delay in paying accounts payable, also it will not be in favor of the shareholders' wealth.

The role of corporate governance is crucial to set the net working capital management structure. CEO duplicity and the board size determine the optimal level of net working capital held in the firm. Furthermore, the board size has a major impact on the organizational performance and value. Studies done by Yermack (1996) proved the inverse relationship between board size and performance, as well as it is ignorable influence on the organizational expansion opportunities, resulting to more favorable financial ratios and a better CEO performance.

Another study was done by Lipton & Lorsch (1992) on a large sample of 2746 organizations in the UK that confirmed the strong inverse relationship between board size and profitability. Large boards eventually led to weak communication and poor decision making within the organization. Meanwhile, a sample of 103 firms drawn from emerging countries like South Africa, Ghana, Nigeria, and Kenya explained the enhanced organizational value as a result of large boards, large audit committees and the frequency of their meetings. As well as the influence country and sector characteristics have on corporate governance and policies (Kyereboah-Coleman, 2007).

The competition of survival between organizations is inevitable, which assures the efficient delivery of products and services to customers at the lowest prices while covering the costs. The residual claim features show a significant relation in measuring the survival of the organization in certain activities, which reflects the efficiency of operations and models controlling agency conflicts (Fama & Jensen, 1983).

The agency conflict plays an important role in corporate cash holdings, a sample was taken from firms in countries where shareholders' rights are not shielded revealed that those countries hold double as much cash as firms with high shareholders protection, in such countries perfect market theory and determinants of the need of cash holdings do not apply. We conclude that investors with weak shareholders shield cannot make managers immoderate cash balance (Dittmar et al, 2003).

A sample was drawn from the Swiss market of non-financial firms cash holdings in the time period (1995 - 2004) revealed that the median of Swiss firms is approximately double as the median of firms in the US and UK. The results illustrate that the assets tangibility and organization capacity have an inverse relationship with cash holdings, and a broke-off relationship between leverage ratio and liquidity holdings. Dividend payment and operating cash flow are firmly related to cash reserves. The study also revealed that there is no convincing relationship between growth opportunities and cash holdings, a dynamic panel shows that the Swiss firms accommodate their liquidity holdings only to decelerate ambition cash ratio, there is a nonlinear relationship between managerial ownership and cash holdings referring to corporate structure, a random relationship noted between managerial and cash holdings, otherwise an encounter effect related to rising risk aversion (Drobetz & Gruninger, 2006).

Saddour (2006) studied the factors of cash holdings in French organizations within the period of (1998-2002). Employing trade-off theory and the pecking order theory, we illustrate that French firms rise their cash level when their operations are speculative and their cash flow are high, and declining it when they are highly leveraged. Growth organizations keep greater cash balances than mature organizations. As well as having an inverse association between cash and the pursuing features: size, level of liquid assets and short term debt. To sum up; firms value as tested by Tobins Q rises with its cash balance, this positive relationship is more efficient for growth companies than for mature companies.

Kuan et el. (2011) tested the relationship between corporate governance and cash holding policies in family-owned organizations to find the effect of corporate governance separate from all other factors is different between family-managed and non-family-managed organizations. As well as the disconnection of seat control rights, cash flow rights and position duplicity majorly influence the cash policy within the organization.

Lau & Block (2012) investigated the existence of family-management effect on cash holding in the organization, and concluded that the family-run organizations have higher agency costs of cash holdings than founder firms, and cash held by founder firms have a stronger positive impact on the firm value. They concluded that family-run organizations are subject to adverse selection and moral hazard due to predilection.

Gill & Mathur (2011) drew a sample of 166 service organizations from the Canadian market to investigate the factors affecting financial leverage; they later highlighted the positive effect of sales expansion on liquidity. While another study was done by Valipour et al. (2012) on 83 Iranian organizations found an inverse association between sales growth and cash conversion cycle.

3. Methodology:

This paper managed to collect the data for 49 manufacturing companies listed on ASE for 11 years (2005-2015). The data were found in multiple sources such as the annual reports and the Amman Stock Exchange (ASE) website and the research assistants have managed to contact every single firm in order to collect the variables needed and any missing information. The following subsections will discuss the different variables and its impact on the efficiency of managing working capital management. Then at the end of every variable the suggested hypothesis will be stated.

3.1 Dependent Variable: cash conversion cycle (CCC)

Many researchers discussed the importance of working capital and recently the essential role of corporate governance impact on efficiently managing liquidity. Managing working capital is essential and affects the survival of any firm's management. Jose (1996) concluded that poor management of working capital leads to search of external finance sources in order to pay short term liabilities and service their loans. Many studies used the cash conversion cycle (CCC) as a proxy for working capital management such as Zadeh (2016) and Ashok and Panigrahi (2013). Cash conversion cycle can be defined as the time needed to sell inventory and collect receivables from customers while paying payables to suppliers (Padachi, 2006).

3.2 Independent Variables

3.2.1. CEO tenure duration

Different empirical papers agreed that the experience of CEO's and their service as directors affect the policies applied in the organization which affects directly the performance of company and its profitability. In other words, the more experience the CEO the better their vision about the market conditions and the better their decisions in daily operations which affects the policies agreed on the receivables and payables of the company (Haniffa & Hudaib, 2006). Therefore, *we expect positive impact between the CEO tenure duration and the efficiency of working capital management.*

3.2.2 Board size

The literature provided mixed empirical results on the relationship between the board size and the efficiency of working capital. For example Jensen (1993) stated that the smaller the board size the better simply this would help in monitoring the decisions and the performance of managers and this affect the policies applied positively. In other words, small boards' monitor the daily decisions taken by managers and this helps in reducing risk by increasing liquidity. On the contrary, Abor and Nicholars (2007) and Ujunwa (2012) argued that large boards is more effective than smaller ones because usually more experience and diversity of backgrounds can be found among directors and this in turn helps in dominating the CEO powerfully. Thus, this paper *expects that there is an impact between board size and managing working capital efficiently.*

3.2.3 Size of the firm

Padachi et.al. (2006) argued that the investment decision for every firm is done through investing in fixed assets. Thus, small firms own lower fixed assets compared to larger ones and this turn makes them rely more heavily on current assets and try to maintain better management to their working capital. In addition, Rehman and Nasr (2007) confirmed the negative relation between size and managing working capital efficiently since large firms usually have easy access to the market and can raise their leverage easily but small firms cannot cover any cash deficit by debt, therefore, they need to maintain good management to their working capital. The proxy used for size is the natural logarithm of total assets. So, this study *expects negative relation between size and managing working capital management efficiently.*

3.2.4 Firm's growth

The empirical investigation of Bates et.al. (2009) argued that low growth companies tend to increase cash and have better liquidity and this needs the financial policies of the firms to be flexible and this confirms the pecking order theory suggestion where low growth firms usually face low profitability and this in turn lower the internal funds and increase the possibility to look for external financial sources. Consequently, low growth firms overinvest in inventory and do not collect efficiently their receivables and this reflects the few investment opportunities faced by such firms. In such cases the threat of takeover increases. Jensen (1986) discussed that because of the high threat faced by low growth companies; they try to keep cash and increase liquidity in order to face the takeover challenge. The proxy used for firms growth is sales growth ((Current year sales – last year sales)/sales of last year). Hence, this paper *expects negative relationship between firms' growth and the efficiency of managing working capital.*

3.2.5 Firm's performance

The proxy used for the performance of firms is return on assets (ROA) (Ghosh & Maji, 2004). According to Nazir and Afza (2008) highly profitable companies ignore managing their working capital efficiently simply because they have enough cash that can be used in different investment activities and this increases the company's performance. In addition, highly profitable firms face low risk in their daily operations and this in turn helps mangers to deal with their working capital efficiently. Therefore, *this paper expects that the company's performance affect managing working capital efficiently*.

Based on the above discussion this paper estimate the following model using the fixed and random effect techniques, then, Hausman test is applied in order to specify the best model:

$$CCC_{i,t} = \alpha_0 + \alpha_1 CEOTN_{i,t} + \alpha_2 Bsize_{i,t} + \alpha_3 Ln(TA)_{i,t} + \alpha_4 \Delta Sales_{i,t} + \alpha_5 ROA_{i,t} + \varepsilon_i$$

Where: CCC is cash conversion cycle; CEOTN is CEO tenure duration; Bsize is Board size; Ln(TA) is the natural logarithm of total assets and a proxy used for the size of the company; ΔSales is the change of sales and is the proxy for Growth ROA is the performance of company.

4. Results

The descriptive statistics of the different variables of this study are shown in Table 1 and the results of the fixed effect mode are shown in Table 2 respectively.

Table 1: Descriptive Statistics

	Minimum	Maximum	Mean	St.Dev.
CEO Tenure duration	2	20	8.654	3.594
Board Size	5	15	8	0.957
Size	6.194	12.297	9.164	1.067
Growth	-0.256	0.561	0.105	0.138
Performance	-0.759	0.538	0.01	0.205

It is worth mentioning that Table 1 shows that the most deviated variable is the CEO tenure duration with a standard deviation of 3.594 and this means that some manufacturing companies in Jordan encompasses highly qualified experienced CEO's but other firms do not care that much about the experience and the number of executive years of experience. In addition, we can notice that the size of the manufacturing companies widely differs in Jordan and this suggest that some companies invested large fixed assets in the manufacturing sector but others decided to be conservative in investing in the manufacturing sector and this may be due to the risk related factors during the years of the financial crisis.

Table 2: The panel data analysis findings of Fixed Effect Results

Constant	1.453 *
CEO Tenure Duration	0.079***
Board Size	-0.234**
Size	0.530*
Growth	0.038***
Performance	-0.135**
Adjusted R^2	0.485
Hausman	13.54***
F statistic	184.65 ***

Note: *, **, *** show the statistical significance levels at 0.10, 0.05 and 0.01 respectively

Based on the above fixed effect model results table, the mode investigated the impact of two corporate governance measures (CEO tenure duration and Board size), the size of the firm, growth and the performance of the company on the efficiency of managing working capital.

The results show that corporate governance significantly affects the efficiency of working capital management, the board size negatively affect the cash conversion cycle at 5% confidence level and the CEO tenure duration positively affect the working capital of firm at 1% confidence level. In other words, the smaller the size of the board of directors and the more experience the CEO has the better is the efficiency in managing working capital. This has been in line with the results reported by Gill and Biger (2013) where they confirmed highly significant impact of corporate governance on the efficiency of managing working capital. In addition, Fiador and Fiador (2016) argued that the board size and CEO tenure duration play a monitoring role and increase the attention to apply the corporate governance process all over the company especially managing the working capital of the firm.

Moreover, the results show that the size of the firm and the growth positively affects the efficiency of managing working capital by 1% and 10% respectively. Several empirical papers concluded that the larger the company the easier the access to the market and hence the easier the mangers feel to efficiently manage their working capital (Gill & Shah, 2012; Saddour, 2006). In addition, Isshaq et.al. (2009) argued that large firms tend to have better relationship with the suppliers and smooth relationship with their customers which makes it easier to manage their working capital efficiently. Jensen (1993) and Gill and Biger (2013) claimed that high growth companies tend to have better profitability and this in turn increases the retained earnings and based on the perching order theory this would be the cheaper source of cash when needed; thus managers can efficiently manage their working capital simply by having enough cheap cash to provide more days for customers to compete worth other competitors and pay suppliers on time.

Moreover, the interesting result was that high profitably manufacturing companies in Jordan tend to ignore managing their working capital efficiently n stead of trying their best to improve the level of working capital and make sure to have a better healthy future for their payment period and collection period. This result contradicts the results of Michalski (2008) where he argued that high profitable companies try to build better solid relationship with customers and suppliers and manage their working capital efficiently.

5. Conclusion

This empirical paper investigated the impact of corporate governance on the efficiency of managing working capital for the Jordanian manufacturing companies during the period of 2005-2016, such relationship is vital since it affects the sustainability and the growth of firms, in other words, the financial managers of the different manufacturing companies in Jordan have to balance their current assets and current liabilities really well in order to keep their financial operations in a good level and this in turn reduces the bankruptcy risk. This paper estimated the relationship using the panel analysis and reported the fixed effect model results because of the significant result of the Hausman test.

This paper found that smaller board of directors would help in managing the working capital better, for example this would make it easier to agree on a certain financial strategy and make sure that the policies are applied as suggested. In addition, the more experience the CEO's has the superior the decisions will be in managing their working capital. The results suggested that large size companies and high growth ones tend to efficiently manage their working capital better since they have to maintain healthy relationships with their customers and suppliers. Lastly, high profitable manufacturing companies tend to ignore managing their working capital efficiently since they feel secure with their financial position.

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أثر حوكمة الشركات على كفاءة إدارة رأس المال العامل: قطاع الصناعة في الأردن

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ملخص

الهدف الرئيسي من هذا البحث هو دراسة تأثير حوكمة الشركات على كفاءة رأس المال العامل. العينة من 49 شركة صناعية مدرجة في بورصة عمان خلال الفترة 2005–2016. استخدم هذا البحث تحليل مقطعي وسلاسل زمنية (تقنيات التأثير الثابت والعشوائي) من أجل التحقيق في تأثير حوكمة الشركات في إدارة رأس المال العامل بكفاءة. تضمن النموذج متغيرين لحوكمة الشركات؛ مدة منصب الرئيس التنفيذي وحجم مجلس الإدارة والتحكم في النموذج من خلال تضمين حجم الشركات والنمو وأداء الشركة. تشير النتائج إلى أنه كلما زادت خبرة الرئيس التنفيذي وصغر حجم مجلس الإدارة كانت إدارة الشركات الصناعية في إدارة رأس المال العامل بكفاءة في الأردن أفضل. بالإضافة إلى ذلك، تدير الشركات الكبيرة والعالية النمو رأس المال العامل بكفاءة بطريقة أفضل. أخيرًا، تميل الشركات الصناعية المرتفعة الربحية في الأردن إلى تجاهل إدارة رأس المال العامل بكفاءة.

الكلمات الدالة: رأس المال العامل، الحوكمة، الكفاءة، بورصة عمان، الشركات الصناعية.

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