

CORPORATE GOVERNANCE AND WORKING CAPITAL MANAGEMENT: EVIDENCE FROM CANADA

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ABSTRACT

This study examines the impact of corporate governance on working capital management based on a sample of Canadian companies in the S&P/TSX Composite Index. The study adopts two measures for working capital management, including cash holdings and cash conversion efficiency. The results show that cash holdings are not correlated with corporate governance variables while cash conversion efficiency is significantly negatively associated with the shareholding and compensation index and positively associated with the disclosure index. Therefore, this study finds some evidence of the relationship between corporate governance and working capital, but the direction of the relationship is mixed depending on the governance attributes measured.

Keywords: Corporate governance, working capital management, cash holdings, cash conversion efficiency

1.0 INTRODUCTION

Working capital management is one of the significant corporate financial decisions of firms (Naz et al., 2022) and is considered an important corporate management function (Kamau & Basweti, 2013). Working capital management refers to the management of a company's short-term assets and liabilities. Efficient management of working capital is essential for most firms and ensures that the firm has enough liquidity to meet its obligations and maintain its daily operations. It involves monitoring and optimizing the company's current assets (such as cash, accounts receivable, and inventory) and current liabilities (such as accounts payable and short-term debt) to ensure that there is a balance between the two (Ganesan, 2007). Effective working capital management involves improving the cash flow, reducing the amount of time required to collect payments from customers, managing inventory levels, and negotiating favorable payment terms with suppliers. Filbeck and Krueger (2005) suggest that maintaining an efficient working capital management system is crucial for firms to achieve a tradeoff between liquidity and profitability, which in turn helps prevent bankruptcy and ensures firms' survival and growth. The primary aim of working capital management is to ensure that the company maintains sufficient cash to meet its obligations while optimizing profitability. Therefore, efficient working capital management can help firms maintain a healthy cash flow, minimize the need for external financing, and improve overall profitability.

Due to the separation of ownership and control, corporate governance plays an important role in reducing the conflicts of interest between agents (i.e., managers) and principals (i.e., shareholders), thereby protecting the interests of shareholders (Clarke, 2007). Corporate governance is also essential in ensuring the efficient management of firms' resources (Kamau & Basweti, 2013). A company with a strong corporate governance structure is more likely to have efficient working capital management, as there is a greater emphasis on accountability, transparency, and risk management. This helps ensure that the company's resources are effectively managed and that working capital is used in a way that maximizes profitability and minimizes risks.

Prior research shows that companies with effective corporate governance mechanisms in place are more likely to have efficient management of financial resources while firms with weak working capital management are likely to be associated with lower firm cash flows and more severe agency problems (Naz et al., 2022). Similarly, Gill and Biger (2013) report that working capital management efficiency can be improved by having good corporate governance mechanisms in place based on a sample of American companies. However, the study by Achchuthan and Rajendran (2013) finds no relationship between corporate governance and capital management efficiency based on a sample of listed manufacturing companies in Sri Lanka.

Therefore, the aim of this study is to examine the impact of corporate governance on working capital management. This study contributes to the literature by providing additional evidence using a sample of Canadian companies. The structure of this paper is as follows. A review of past literature is provided in Section 2. The methodology including the data and sample, variable and model specifications are presented in Section 3. Empirical results are reported in Section 4 and Section 5 offers a conclusion of the study.

2.0 LITERATURE REVIEW

The management of working capital involves monitoring a company's assets and liabilities, including primarily the accounts receivable, accounts payable, inventory, and cash, to ensure that they are used effectively and the company has enough cash flow to cover its short-term operating costs and debt obligations. Among the different parts of working capital management, cash is particularly vulnerable to the opportunistic behavior of managers (Isshaq et al., 2009). The responsibility for formulating working capital policies rests with the board of directors and the CEO. Therefore, corporate governance plays an important role in monitoring the board of directors and the CEO on formulating sound working capital management policies (Coleman et al., 2020).

Corporate governance mechanisms such as board compositions, shareholding and compensation of managers and directors, shareholder rights, and disclosure quality, are different ways for mitigating the opportunistic behavior of managers. Risk-averse managers may want to maintain higher balances of working capital accounts that may be detrimental to shareholders' wealth (Naz et al., 2022). A poor working capital management decision induced by poor corporate governance may adversely affect a company's cash flows and exacerbate agency problems.

Effective corporate governance systems within a corporation can ensure that the company's resources are managed efficiently, leading to improved profitability and better financial results (Kowalewski, 2016; Naz et al., 2022). Gill and Biger (2013) also suggest that maintaining adequate liquidity is essential for the smooth operations of an organization, and it is the responsibility of the board members to formulate policies to ensure sufficient liquidity is maintained. The study by Zariyawati et al. (2009) finds that boards that have a higher degree of independence typically have more rigorous monitoring mechanisms in place, resulting in more efficient working capital management and a lower cash conversion cycle. Other research such as Gill and Biger (2013) and Jamalinesari and Soheili (2015) also finds that the efficiency of working capital can be improved by implementing effective corporate governance mechanisms. Khalaf and Tarawneh (2019) find that firms with more experienced CEOs and smaller boards that are deemed to be better governed are more efficient in managing their working capital. Ahmad et al. (2018) report that except for CEO duality, governance characteristics such as CEO tenure, audit committee, and board size have significant impact on working capital management efficiency. Coleman et al. (2020) show that board attributes such as board size and duality also have significant impacts on working capital management. On the other hand, studies including Achchuthan and Rajendran (2013) and Kamau and Basweti (2013) do not find significant relationships between corporate governance and working capital management. Gill and Mathur (2011) report a negative relationship between board attributes (including board size and CEO duality) and net working capital.

Based on the above review, we expect firms with better governance to be associated with more efficient working capital management. Hence, a positive relationship between corporate governance and working capital management is proposed and the following hypothesis is tested.

Hypothesis: There is a positive relation between corporate governance and working capital management.

3.0 METHODOLOGY

3.1 Data and sample

To examine the relationship between corporate governance and working capital management, data from Canadian companies in the S&P/TSX Composite Index for a period of 3 years between 2010 and 2012 has been collected. Firms that have incomplete datasets are dropped from the sample. Following prior research (Shahab et al., 2021), financial firms whose financial reporting is distinctly different from that of non-financial firms are excluded from the sample. Data on corporate governance are collected from The Globe and Mail while the accounting and financial information is collected from the Standard & Poor's Compustat database respectively. The final sample includes 111 companies.

3.2 Variables and model specifications

This study adopts two proxies to measure the efficiency of working capital as Gill and Biger (2013) suggest that the efficiency of working capital may not be fully expressed by one single measure. Following Gill and Biger (2013), working capital management is measured through cash holdings (CH) and cash conversion efficiency (CCE). The cash holding (CH) is calculated

as log of average cash and the cash conversion efficiency (CCE) is calculated as the ratio of cash flow from operations to sales.

To measure the effect of corporate governance on working capital management, this study adopts four corporate governance ratings developed by The Globe and Mail, including board compositions (BOARD), shareholding and compensation (COMP), shareholder rights (SRIGHT) and disclosure (DISCLOSE). Variables that may have an influence on the relationship between corporate governance and working capital management include firm size (LNFS), financial leverage (LEV), and firm growth (FGROW) are controlled for. Firm size is measured by the natural logarithm of total assets. Financial leverage is measured by the ratio of total debt to total assets. Firm growth is measured by the difference between the current year and the previous year’s sales divided by the previous year’s sales. Definitions of all variables are provided in Table 1.

Table 1: Variable descriptions

Variable code	Variable name	Variable description
Dependent variables (Working capital management)		
CH	Cash holdings	Log of average cash
CCE	Cash conversion efficiency	Ratio of cash flow from operations to sales
Independent variables (Corporate governance)		
BOARD	Board compositions	Using the index score rated by <i>The Globe and Mail</i>
COMP	Shareholding and compensation	Using the index score rated by <i>The Globe and Mail</i>
SRIGHT	Shareholder rights	Using the index score rated by <i>The Globe and Mail</i>
DISCLOSE	Disclosure	Using the index score rated by <i>The Globe and Mail</i>
Control variables		
LNFS	Firm size	Natural logarithm of total assets
LEV	Financial leverage	Ratio of total debt to total assets
FGROW	Firm growth	Difference between current year and previous year’s sales divided by previous year’s sales

The relationship between corporate governance and working capital management is examined using the following models:

$$CH_{i,t} = \beta_0 + \beta_1 BOARD_{i,t} + \beta_2 COMP_{i,t} + \beta_3 SRIGHT_{i,t} + \beta_4 DISCLOSE_{i,t} + \beta_5 LNFS_{i,t} + \beta_6 LEV_{i,t} + \beta_7 FGROW_{i,t} + u_{i,t}$$

$$CCE_{i,t} = \beta_0 + \beta_1 BOARD_{i,t} + \beta_2 COMP_{i,t} + \beta_3 SRIGHT_{i,t} + \beta_4 DISCLOSE_{i,t} + \beta_5 LNFS_{i,t} + \beta_6 LEV_{i,t} + \beta_7 FGROW_{i,t} + u_{i,t}$$

Where CH and CCE are dependent variables and represent working capital management. Corporate governance is measured by four governance ratings constructed by The Globe and Mail, including board compositions (BOARD), shareholding and compensation (COMP), shareholder rights (SRIGHT), and disclosure (DISCLOSE). Panel models with random effects are used to deal with influence of serial correlated errors.

4.0 EMPIRICAL RESULTS

4.1 Descriptive statistics

Descriptive statistics are presented in Table 2. The mean value of CH and CC (1) 09 and 0.21, respectively. The average index scores of board composition, shareholding and compensation, shareholder rights, and disclosure are 20.8 (out of a tota (2) of 31), 17.4 (out of 24), 22.4 (out of 33) and 9.1 (out of 12), respectively.

Table 2: Descriptive statistics

	Mean	SD	Min	Max
CH	2.09	1.14	-1.34	4.30
CCE	0.21	0.26	-1.20	3.33
BOARD	20.80	5.05	8.00	30.00
COMP	17.38	5.32	3.00	26.00
SRIGHT	22.38	6.62	2.00	31.00
DISCLOSE	9.14	2.85	1.00	12.00
LNFS	9.07	1.71	6.05	13.62
LEV	19.89	14.55	0.00	60.49
FGROW	0.18	1.05	-0.54	18.74

4.2 Correlation matrix

Table 3 presents the correlation coefficients of variables. The correlation analysis shows that cash holdings are positively related with board compositions, shareholding and compensation, shareholder rights and disclosure. On the other hand, the cash conversion efficiency is negatively correlated with shareholding and compensation and insignificantly associated with the other three governance variables.

Table 3: Pearson correlation

	1.	2.	3.	4.	5.	6.	7.	8.	9.
1.CH	1.00								
2.CCE	0.00	1.00							

3.BOARD	0.21	***	-0.01	1.00	0.55					
4.COMP	0.20	***	-0.11	**	0.55	***	1.00			
5.SRIGHT	0.21	***	0.04		0.49	***	0.44	***	1.00	
6.DISCLOSE	0.20	***	0.04		0.60	***	0.66	***	0.46	***
7.LNFS	0.36	***	-0.06		0.25	***	0.39	***	0.35	***
8.LEV	-0.14	**	-0.09		0.09	*	0.18	***	0.03	0.29
9.FGROW	0.02		0.68	***	0.00		-0.08		-0.01	-0.01
									-0.10	* -0.07
										1.00

*p<0.10. **p<0.05. ***p<0.01.

4.3 Multivariate analysis

The empirical findings on the relationship between corporate governance and working capital management of Canadian companies in the S&P/TSX Composite Index are presented in Table 4. Panel regressions with random effects are used. The results show that cash holdings are not correlated with corporate governance variables. This finding is consistent with the results reported by Drobetz and Grüniger (2007) who find an insignificant relationship between board size and corporate cash holdings.

As for cash conversion efficiency, it is significantly negatively associated with shareholding and compensation (COMP) and positively associated with disclosure (DISCLOSE). The results suggest that in terms of cash conversion efficiency, firms with better disclosure quality manage their working capital more efficiently consistent with the agency theory perspective, which suggests that corporate governance plays an important role in monitoring the working capital policies. On the other hand, firms with lower shareholding and compensation score have higher efficiency in working capital management. One possible reason is that if executives are rewarded based on short-term performance, they may be motivated to delay payments to suppliers or extend accounts receivable terms to customers, which could improve short-term earnings but have a negative impact working capital. Additionally, executives may be incentivized to invest in projects that generate quick profits but require significant working capital investment, which can strain the company’s cash flow.

Table 4: The impact of corporate governance on working capital management

Variables	CH		CCE		
	Coeff	t-Stat	Coeff		t-Stat
BOARD	0.012	1.52	0.001		0.99
COMP	0.006	0.43	-0.008	***	-5.60
SRIGHT	0.002	0.18	0.000		1.52
DISCLOSE	0.004	0.13	0.013	***	5.30

LNFS	0.219	***	3.01	0.005	***	7.08
LEV	-0.010	***	-2.64	-0.003	*	-1.88
FGROW	-0.003		-0.19	0.153	***	31.93
Adj R ²	0.055			0.523		

*p<0.10. **p<0.05. ***p<0.01.

5.0 CONCLUSIONS

The aim of this study is to examine the impact of corporate governance on working capital management. Employing a sample of Canadian companies in the S&P/TSX Composite Index, this study finds some evidence of the relationship between corporate governance and working capital management, measured by cash holdings and cash conversion efficiency. Corporate governance is measured by four governance indices rated by The Globe and Mail, including board compositions, shareholding and compensation, shareholder rights, and disclosure. Specifically, cash conversion efficiency is significantly negatively associated with shareholding and compensation while it is positively associated with disclosure. However, there is no significant relationship between corporate governance and cash holdings. Future studies could adopt other measures of working capital management such as current ratio, accounts payable period and accounts receivable period to evaluate the effect of corporate governance on working capital management.

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