Journal of Empirical Research in Accounting & Auditing
ISSN (2384-4787)
J. Emp. Res. Acc. Aud. 3, No. 1 (April-2016)

The Impact of Working Capital Management on Financial Leverage: Evidence from Bahrain Capital Market

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Received: 20 Jan. 2016, Revised: 3 Mar. 2016, Accepted: 28 Mar. 2016, Published: (Apr) 2016

Abstracts: This research examines the impact of the efficient working capital management on financial leverage of listed industrial companies in Bahrain Bourse, which is a non-tax charging country. Moreover, it is investigated the optimal capital structure by balancing from one hand, issuing debt as monitoring tool. It utilized the descriptive evaluative type of research. An organizationally based, descriptive portion of design was pursued using relevant data from both primary and secondary resources. The main findings of this research are as follows: Firstly, the Reliability Test shows that the Cronbach's Alpha is 0.936 and so there is very strong reliability in the data among all variables in this study. Secondly, the Means for all variables are more than 4 in the 5points-Likert-scale, which means that the respondents confirmed the effectiveness of these variables. Thirdly, the p-values of the independent variables: Days Inventory Outstanding, Days Sales Outstanding, and Days Payable Outstanding in association with the dependent variable: Debt-Equity Ratio is all 0.000, which is smaller than 0.01, level of significance, and there is extremely strong evidence of significant relationships between all independent variables and Debt-Equity Ratio. Fourthly, no significant difference among the four industrial companies means that there is high validity of the results. Finally, Days Inventory Outstanding is the most critical issue in attaining the optimal cash conversion cycle with 88.5%. The main findings of the study show that there are significant relationships between independent variables and dependent variables. In addition, there are no significant differences among the four listed industrial companies. Finally, the most critical issue to attain the optimal cash conversion cycle is ability to manage the Days Inventory Outstanding. The second critical issue is to manage the Days Sales Outstanding and the least one is the Days Payable Outstanding.

Keywords: Cash Conversion Cycle, Financial Leverage, Listed Industrial Companies, Bahrain Bourse.

Introduction

Agency theory represents the relationship of principal and agent. In agency relationship, principals (shareholders) hire agents (managers) to run business operations and hand over to them the decision-making power. In corporations, an essential issue presents regarding shareholders' interest: top management does not always perform in the best interest of shareholders (Ferrer, 2010). This critical issue exacerbates with the existence of bulk of money flowing in very quickly which is compliant with the Agency Cost Theory like in the case of industrial sector, there is a lot amount of cash in the management control to perform day-to-day operations and other company's obligations short-term as well as long-term obligations. This may encourage management to misuse the company's resources. This requires more

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investigation and analysis for this critical and crucial issue that in turn needs to find prudent strategy to diminishing and rectifying the critical problem, from one hand existence of huge free cash flows, to the other hand conflicting of interest between manager and shareholders for this vital industrial sector. It is really a vital sector as it has major contribution in the gross demotic product (GDP: an aggregate measure of production equal to the summation of the gross values added of all resident institutional units employed in production) of the Kingdom of Bahrain.

Furthermore, extensive interest in the field of finance has grown dramatically in recent years, a direct result of both the increasing complexity and instability of financial markets and the powerful competition among business corporations and other organizations to acquire capital from these markets. Academic research in finance in the past has however been focused mostly on various aspects of long-term financial decisions to the relative neglect of working capital management. This is true despite the reality that committed managers spend an unequal amount of their time and effort on short-term financial decisions. In recent times, however, there are huge signs of escalating interest among the academy and practitioners that dot to the broader credit, finally, of the need and importance of wide research on various aspects of working capital management (Oladipupo & Ibadin, 2013; Pungaliya, 2010). The researcher analyzes the working capital management proxy by the length of Cash Conversion Cycle (CCC), which is measured in number of days that it consumes for a company to convert resource inputs into cash flows.

Therefore, the researcher's tactic is to mitigate the agency issue with excessive cash flows in the listed industrial companies. The researcher firstly analyzes the efficient working capital management is to have balanced optimal proportions of the working capital components to achieve utmost profit and cash flow. The working capital management is proxy by the length of cash conversion cycle, which should be neither too short nor too long, that varies from time to time and from different sector to another.

The financial leverage is calculated by dividing total liabilities by stockholders' equity (stockholders' equity is equal to share capital and retained earnings less treasury shares). The researcher also investigates the importance of issuing debt with non-tax-deductibility benefit, like in the case of listed industrial companies in Bahrain Bourse, as there is no charging tax in Kingdom of Bahrain.

Therefore, the researcher tries to tackle this critical issue by examining the efficient working capital and also examining using more financial leverage as a monitoring tool to reduce management's access on free cash flow. On the same time the researcher tries to attain the optimal capital structure with non-tax deductibility benefit by making balance between from one hand the benefits of using more debts to increase control on the management's access on huge free cash flows which are accessible in the industrial companies and to the other hand avoiding excessive use of debt to reduce bankruptcy risk as interest payout is mandatory obligation with the absence of non-tax driven benefit as there is no charging tax in the Kingdom of Bahrain which may maximize the shareholders' wealth.

This study has the following objectives: firstly, to analyze the length of cash conversion cycle; secondly, to examine using financial leverage as a monitoring tool; thirdly, to explore the relationship between the length of cash conversion cycle and financial leverage; and finally, to address the optimal capital structure that maximizes the shareholders' wealth.

Significance of the Study

The findings of this study provide useful to the following beneficiaries:

Shareholders of Industrial Companies: This study will increase their awareness on the ways of controlling management, which in turn sustain the maximization of the firm's value.

Management of Industrial Companies: It will provide useful information regarding the efficient working capital management to enhance financial performance and generate more liquidity.

Customers of Industrial Companies: It will also hand them a comprehensive picture of the impact of working capital management on financial leverage, which in turn improve liquidity and internal control.

Contribution to the Body of Knowledge: They will get benefit from harvesting ideas for their further researches.

Scope and Limitation of the Study

This research is focused on examining the impact of the efficient working capital management on financial leverage of listed industrial companies in Bahrain Bourse, which is a non-tax charging country. Moreover, it is investigated the optimal capital structure by balancing from one hand, issuing debt as monitoring tool which is a non-tax driven benefit and to another hand, the cost of financial distress which is the cost of issuing excessive debt, as interest payout is a mandatory obligation. Moreover, the purposive respondents will be 4 financial managers and 48 senior accounting and finance employees. Thus, it is limited to the listed industrial sector in Bahrain Bourse within the derived variables and it may not be appropriate for other countries that charging taxes, for other sectors in the same country, nor even within the same sector with different tested variables.

The remainder of this study proceeds as follows. Section 2 reviews the literature. Section 3 presents the research methodology and data collection. Section 4 explains the extracted results. Finally, section 5 presents the conclusion and sets some recommendations.

Literature Review

The researcher addresses the following non-tax-based theories of capital structure (as there is no charging tax in Kingdom of Bahrain) to create the theoretical framework, which may lead to answer the research critical questions.

Pecking Order Theory: Companies usually favor for internal to external finance. It assumes that the cost of financing enlarges with asymmetric information. Financing comes from three sources, internal funds, debt and new equity. The pecking order model is normally in line with internal funds. When it is essential to choice of external financing, the least risky claim is best. Hence, debt is preferable to equity finance (Alhenawi, 2010; Odit & Gobardhun, 2011). Firms standing their sources of financing, first preferring internal financing (UlHassan, et al., 2014), then issuing debt (to decrease the adverse selection cost of equity, that is alleged of overvalued stocks), and lastly issuing equity as a last choice (Koslowsky, 2009; Kemper and Rao, 2013).

Agency Cost Theory: It occurs when anyone or entity (the agent) is competent to make decisions that influence, or on behalf of, another person or entity: the principal. The problem appears because sometimes the agent is forced to proceed in his own best interests rather than those of the principal. It also represents the relationship of principal and agent. In agency relationship, principals (shareholders) hire agents (managers) to manage business operations and hand over to them the decision-making power. In corporations, a fundamental issue presents concerning shareholders' interest: top management does not always operate in the best interest of shareholders (Ferrer, 2010; Kemper and Rao, 2013). It also states that managers may employ organizational resources to pursue their personal objectives. Moreover, the Agency problem worsens with availability of plentiful free cash flow, in which debt issuance (compulsory debt payouts) diminishes agency cost by controlling managers' access on free cash flow. It involves information asymmetry problems (Koslowsky, 2009; Salama, 2008), liquidity and cash flow problems (Kim, 2011; Odit & Gobardhun, 2011).

Signaling Theory: Debt issuance sends a positive signal of financially stable firm and as a result, share prices react positively to this news (Kemper and Rao, 2013). It is useful for describing behavior when two parties (individuals or companies) have right of entry to different information. In general, one party, the sender, must decide whether and how to correspond (or signal) that information, and the other party, the receiver, must decide how to read the signal. Managers always have better information about the future of the firm. For numerous practical and legal reasons, they do not representation this information. Instead, they send signals to the market. Since debt payments are mandatory and equity payments are not, a firm that issues debt sends a positive signal of financially stable firm and stock prices react positively to this news (Alhenawi, 2010).

Synthesis of the Study

Previous studies are mainly focused on the issuing debt in capital structure, which is for tax-deductibility benefit, except for the study of Alhenawi, 2010; where it stated that there are numerous non-tax-driven benefits of debt encourage REITs' (Real Estate Investment Trusts) managers to issue debt despite no apparent tax-driven benefit. The study confirmed weak evidence that leverage, by itself, produces value and also originated evidence that lends hold with the pecking order story of leverage. It concluded that REITs managers issue debt mostly to avoid issuing equity and to maximize wealth of existing shareholders. Moreover, even it found the benefits of issuing debt for non-tax-driven. However, it does not examine the relationship between working capital management and capital structure. Moreover, it does not address the optimal capital structure nor prudence mix of debt and equity rather it enlightened the benefits of issuing debts in spite of non-tax deductibility benefit.

The researcher of this study will evaluate the impact of working capital management proxy by the length of cash conversion cycle (liquidity indicator) on capital structure proxy by financial leverage with non-tax-driven benefits as monitoring tool (as there is no charging tax in Kingdom of Bahrain) of listed industrial sector since there is bulk of cash which may encourage the management to misuse the company's resources especially, its vital sector. As the industrial sector has major contribution in Bahrain Bourse.

Similarities:

All previous studies confirm of the importance of working capital management in general and specifically the cash conversion cycle as crucial tool to measure liquidity and profitability and considered the cash conversion cycle as one of most important indicator to measure the ability of the company to survive in the market as be as a vital entity.

Differences:

Most previous studies focused on the issuing debt in capital structure for tax-deductibility benefit. However, this study tackled the important of issuing debt with non-tax-driven benefits as monitoring tool (as there is no charging tax in Kingdom of Bahrain) and then found the impact of the proper cash conversion cycle on the capital structure.

Research Methodology

Sampling Design

Descriptive study incorporated the accumulation of fact, data, and figures germane to the papers focus, for the purpose of their organization, rudimentary analysis, tabulation and cause effect relationship expectation. The interpretative and explanatory style of the technique enabled the researcher to process proficiently the assembled raw data into a comprehensive collection of information that was then evaluated from positions occupied by the study's general and specific aims.

As the nature of this study required selecting the respondents among the senior accounting and finance employees along with their finance manager only, and as this meant that there was small population size. So, the researcher considered the whole population as a sample. Purposive sampling was used in the study where the researcher identified criteria for the selection of the respondents. This improved the reprehensive of sample by reducing sampling error (Table 1).

Respondents	Frequency	Percentage
Finance Managers	4	8%
Senior Acc. & Fin. Employees	48	92%
Total	52	100%

Table 1. Respondents Distribution

Research Instruments

The research instrument was the questionnaire, which was arranged into side component contains a question that assesses each of the variables. These were closed questions with multiple-choice answers where the respondents had to select only one answer.

Data Gathering Procedures

The researcher tallied respondents to the questions after the collection. The completed questionnaires were collected and the responses organized, coded and process on SPSS (Statistical Package for the Social Sciences). The weights assigned to the qualitative scale were considered. The mean of each item in the questionnaires was determined.

The mean was calculated to determine the respondent's average perceptions on the different variables that were investigated as well as the respondents' overall perceptions.

The Pearson Correlation was used to determine the significant correlation for the influence of working capital management on financial leverage of listed industrial companies in Bahrain Bourse.

Results and Discussions

First, it has to check the reliability of data before go for further analyses.

Cronbach›s Alpha
.936

Table 2. The Reliability Test

Since, the Reliability Test shows that the Cronbach's Alpha is 0.936, which is much greater than 0.700 and closer to 1.000; so there is very strong reliability in the data among all variables in this study. So, it is like the green light for further analyses.

		DIO	DSO	DPO	DER
DIO	Pearson Correlation	1			
DSO	Pearson Correlation	.885**	1		
DPO	Pearson Correlation	.857**	.776**	1	
DER	Pearson Correlation	.764**	.726**	.697**	1

****. Correlation is significant at the 0.01 level.**

Note: DIO (Days Inventory Outstanding); DSO (Days Sales Outstanding); DPO (Days Payable Outstanding); and DER (Debt-Equity Ratio).

Table 3. Correlations

Since, the p-values of the independent variables: DIO, DSO, and DPO in association with the dependent variable: DER is all 0.000, which is smaller than 0.01, level of significance. It means that there is extremely strong evidence of significant relationships between all independent variables and DER and thus, the null hypothesis can be rejected. Moreover, all correlations are greater than 0.6 and positive; which mean they are strongly moving in the same direction with each other. In other words, increases in any variable of DIO, DSO, and DPO leads to increase in DER.

	DIO	DSO	DPO	DER
Asymp. Sig.	.934	.961	.826	.991

*. Grouping Variable: Company

Note: DIO (Days Inventory Outstanding); DSO (Days Sales Outstanding); DPO (Days Payable Outstanding); and DER (Debt-Equity Ratio).

Table 4. Test Statistics

Since, it shows that there is no significant difference among the four industrial companies. So, the extracted results were slightly affected by the conducted questionnaire in these four different companies; which also means that there is high validity in the results.

	Frequency	Percent
DIO	46	**88.5**
DSO	39	**75.0**
DPO	28	**53.8**
Total	52	100.0

Note: DIO (Days Inventory Outstanding); DSO (Days Sales Outstanding); DPO (Days Payable Outstanding); and DER (Debt-Equity Ratio).

Table 5. The Problems Encountered

DIO is the most critical issue in attaining the optimal cash conversion cycle with 88.5%. Therefore, the first priority is to have optimal DIO, to be eligible to have optimal cash conversion cycle and to increase liquidity as the processing of inventory is consuming the majority time of conversion cycle.

DSO is the second critical issue in attaining the optimal cash conversion cycle with 75%. It is also so important and should give high attention to have optimal DSO, to be eligible to have optimal cash conversion cycle and to increase liquidity.

DPO is the least critical issue in attaining the optimal cash conversion cycle with 53.8% only. It is not that important as by increasing DPO, could decrease cash conversion cycle and increase liquidity at the expense of losing company reputation, which is more important than have slightly more liquidity. So, it is better to ignore it.

Conclusion and Recommendations

Conclusion

This study provides an empirical examination of the impact of the efficient working capital management on financial leverage of listed industrial companies in Bahrain Bourse, which is a non-tax charging country. The findings of the current study show that there is very strong reliability in the data among all variables. The respondents confirmed the effectiveness of all variables. In addition, there are significant relationships between independent variables and dependent variables, which is supported by Ferrer, 2010. On the other hand, there are no significant differences among the four listed industrial companies. It reports that the most critical issue to attain the optimal cash conversion cycle is the ability to manage the DIO, which is supported by Rao, 2010. The second critical issue is to manage the DSO; and the least one is the DPO, which is supported by Shakoor et.al, 2012. The current study holds a number of implications for future research. First, future research could investigate similar phenomena in countries with different political environments. Second, it would also be interesting to conduct the study in other industries, which would reveal implications regarding differences across sectors and potentially increase the sample size.

Recommendations

Based on the conclusion, the following recommendations are offered:

1. The management has to give more attention on attaining optimal cash conversion cycle as this mean having more liquidity, less risk and more profitability.
2. It has to shorten the DIO and DSO to have optimal cash conversion cycle.
3. It has to avoid extending DPO as this leads to loosing company reputation.

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