Exploring the Relationship between Working Capital Management, Profitability and Capital Structure

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ABSTRACT

Objective – This paper explores the relationship between working capital management (WCM), profitability and capital structure. A preliminary framework provides an understanding of the role of WCM components with capital structure and profitability.

Methodology/Technique – From the review of empirical studies it is confirmed that WCM is a main component in the financial aspects of the firms as even though WCM is targeted for the short-term decisions it has effect on the firm for the long-run.

Findings – Companies need to use working capital policy and procedures in order to navigate performance. Emphasizing on WCM would lead to formal cost controls and performance together with firm's growth and productivity. The framework is set to help financial manager of the firms to balance the costs and benefits of debt and equity and reduce common obstacles on managing cash flows for long-term fixed investment.

Novelty – The preliminary framework is original and unique that will contribute towards the enrichment of relevant literature. Practically, this study contributes to provide a better understanding of the managers and enable them to apply WCM strategies and make sure the firm is able to meet the stakeholder requirements.

Type of Paper: Review

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1. Introduction

Despite theoretical developments in the past decades, the understanding of corporate capital structure is still unclear (Beattie, Goodacre, and Thomson, 2006). Managing capital structure and increasing firm's profitability is the most debatable issue and it needs efforts to understand factors affecting capital structure. Besides capital structure, WCM is also considered as the part of financing decisions together with capital budgeting (Ross, Westerfield and Jordan, 2010). For companies, it is important that the manager is able to make a managerial decision to overcome financial deficit issues. The shortage of managing working capital (for e.g., cash surplus, cash deficits, increased cash conversion cycle) often led to mismanagement in firm's capital structure. But there has been a lack of studies investigating the relationship between WCM and firm's

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capital structure decisions (Uremandu, Ben-Caleb, and Enyi, 2012). Due to the importance of financing for corporate welfare, managers do their best efforts to reach out to the suitable debt equity financing decisions in the organization. In the context of understanding corporate capital structure decisions, WCM practices come into mind. The imbalance of capital adjustment together with the balance in costs and benefits of debt and equity is the most common obstacles for the firm. Different sectors have a different capital adjustment but their main goal is to minimize costs and increase benefits. However, Brooks and Mukherjee (2013) mentioned that the decision on managing current assets and liabilities and cash flows for long-term fixed investment as a part of capital budgeting is the financial issues for managers. Furthermore, Darun (2011) suggested that linking the WCM framework variables (perceived environmental uncertainty, budgetary control, organizational structure, the level of complexity and organizational culture) with financial structure i.e. capital structure is an immediate concern. Thus it is crucial to identify what factors of managing WCM are able to reduce the obstacles faced by the managers in balancing the capital structure and cost-benefit strategies. Thus this paper attempts of investigating the role played by WCM towards capital structure and firm's profitability. Next section deals with the review of literature where all the WCM components will be discussed critically. Finally, conclusion together with practical implication is provided to have better insights and opportunity to the industry in association with capital structure decision making.

2. Literature Review

To increase organization ability for innovative products, concepts, ideas and strategic planning in the dynamic competitive market, there is a strong requirement of understanding the fundamental factors that may impact the organization and its productivity. There have been many empirical pieces of evidence from previous literature investigating the importance of capital structure for the firms. Furthermore, San and Heng (2011) investigating the relationship between capital structure and firm performance for 49 Malaysian construction company found that there is a strong relationship between them. Furthermore, using a sample of 237 listed companies in Malaysia, Salim, and Yadav (2012) while investigating the relationship between capital structure and organizational performance for the period from 1995 to 2011 found that total debt representing capital structure possess a negative relationship to performance. Furthermore, Ting and Lean (2011) noted that determination of debt policy decisions is an important issue in Malaysian companies. Despite many studies on firm's value and capital structure, the issue to handle debt equity financing with appropriate strategies is still unsolved. Furthermore, Haron (2014) investigating capital structure issues in Malaysia revealed that since Modigliani and Miller (1958) many studies have been performed extensively on capital borrowings by debt and equity but still the understanding in this area is inconclusive. Similarly, researchers like (Deloof, 2003; Gill, Biger, and Mathur, 2010; Lazaridis and Tryfonidis, 2006; Mohamad and Saad, 2010) have conducted empirical research on investigating the influence of WCM on the profitability of the firms. However, the concept of WCM investigating in the corporate finance areas like corporate governance, capital structure and budgeting have been limited so far. The main reason behind such limitation is the perception of WCM to be related to short-term decisions and investments. This study with one step forward contributes by investigating the WCM factors quantitatively in order to know its relationship with capital structure decisions and profitability of firms.

2.1. Working capital management (WCM)

WCM continues to hold the central position in the dynamic business environment. It is the great challenge for the financial managers to manage current assets and current liabilities to main fund flows (Bhattacharya, 2009). Karl Marx was the first to evolve the concept of working capital whereas; Guthmann (1955) first defined working capital as, an excess of current assets over current liabilities, and this was further extended by Park and Gladson (1963) defining it as "the excess of current assets of a business over current items owed to employees and others" (p.1007). The working capital is commonly understood as net working capital in the

view of accountants. WCM is concerned with the problem that arises while managing firm's current assets, current liabilities and the interrelationship between them. The main goal of WCM is to manage firm's current assets and current liabilities with the fully maintained level of satisfaction. Insolvency and bankruptcy would be the case if the satisfaction level of working capital is not maintained appropriately. According to Deloof (2003), the way of management of working capital directly affects the profitability level of the firms.

Integration of business functions has been a priority for organizations in recent years in response to changing working capital needs and to reflect the increasing cost of capital. (Darun et al., 2015). Thus there is a need to understand the possible constraints in terms of costs and availability of financing. Corporate restructuring through integrated working capital approach would improve leveraging business intelligence to create efficient working capital solutions. In the integrated WCM approach managers are more focused on external variables in the decision-making process, and are managed in a more integrated manner. In the non-integrated WCM approach, managers are to strengthen internal processes associated and WCM components are managed in a more nonintegrated manner.

There are many preceding studies investigating a variety of variables in relation to WCM are potentially associated with the profitability. In this empirical work, the alternative theories and literature related to WCM were considered. The six determining perspectives of WCM approach: provided by Darun (2011): perceived environmental uncertainty, budgetary control, organizational structure, organizational culture, the level of complexity and asymmetric information was considered in this study to determine whether integrated or non-integrated WCM approach have an influence on capital structure decisions and firm's profitability. Thus the variables together with the theoretical predictions as to the direction of their relationship with profitability and capital structure are addressed in this study. Brief literature on the determinants of WCM explains in the following sub sections.

2.1.1 Perceived environmental uncertainty (PEU)

PEU is defined as the extent to which managers perceive uncertainty about their environment and their effect on the firm (Butler, 2001). The concept of uncertainty in the organization has always been a key variable explaining the interpersonal behavior of the management. In the organizational context, the better the organizational structure, the higher the effectiveness of the organization (Ellis and Shpielberg, 2003). In behavioral research, PEU has been widely used especially in the management contexts. In the profession of accounting, the uncertain environment is obvious to have several studies like (Chenhall and Morris, 1986; Ferris, 1982; Gordon and Narayanan, 1984) have found the impact of perceived uncertain environment within the accounting environment. Furthermore, Gul and Chia (1994) mentioned that PEU is a strategic level construct that measures perceptions of top management. Similarly, Sawyerr, McGee, and Peterson (2003) tested a model of the effects of perceived uncertainty on firm performance utilizing a sample of managers in the technology factors and found that increased perceived uncertainty results in better firm performance.

2.1.2 Budgetary control

Budgeting control refers to the establishment of budgets relating to the responsibility of managers to the requirements of a policy (Adams, 2001). The use of budget in the firms are the most common issues have been discussed by previous studies like (Bruns and Waterhouse, 1975; Nyland and Pettersen, 2004; Otley, 2003). However, control over budget is a critical tool that influences regulatory decision making, but yet the mechanism of budgetary control is unclear (Carpenter, 1996). Although budgeting processes are widespread in accounting systems that are used in all sorts of relationships between the organization and the outside world, the purpose of this study is to explain the use of budgeting and budgetary control within companies in order to help managers who run the firm.

2.1.3 Organizational structure

Organizational structure refers to the patterned relationships among the roles individual play in the formal organization (Flamholtz, 1996). Structured policy affect operations are centralized, wherein the decision-making authority is concentrated at the top of the organizational hierarchy (Griffin and Moorhead, 2010). Organizational structure provides a foundation for the organization as an effective control system that generates new approaches, and redesigned systems that are effective for an organization. Thus it is expected that organisational structure as a component of WCM will be able to control and redesign the capital structure mechanisms in the organization.

2.1.4 Level of complexity

Child(1972) defined complexity as the range of activities that are important for the operations of the organization. Furthermore, Campbell(1988) mentioned that complexity model possesses four main characteristics that have been found to be a significant contributor to the performance when utilized together (Jacko and Ward, 1996).The level of complexity influences the degree of dependency and interdependency in the activities of working capital. This level of complexities affects the decision making of managers in adverse market changes.

2.1.5 Organizational culture

Organizational culture refers to the belief, values, and assumptions that help an individual to behave in the organization (Dwivedi, 1995). It is very difficult for the organizations to function without any regulations, formal flow of information, government policies, procedures, and other activities. It is the duty of the organizations to build up the skills and abilities of their employees. Thus, organisational culture plays an important role to associate the employee behaviour in relation to the job tasks and the organization.

2.1.6 Asymmetric information

Information that is known to one party in a transaction but not to the other leading to adverse selection and moral hazard problems (Kettell, 2011).Asymmetric information is the situation where there is imperfect knowledge or information on borrowing and lending. There is asymmetric information whenever there is a lack of necessary information and control on the ability and willingness to repay the debt or borrowings (Bebczuk, 2003). Debt capital usage will increase with a decrease in the long-term debt when there is more accurate information in the market. Pecking order theory states that the higher the extent of asymmetric information would reduce the incentive to issue equity. Asymmetric information changes through time in the environment of taking financial decisions.

2.2. Capital Structure

Capital structure (CS) is defined as the mixture of financial tools that enhances firm's value. Research scholars, however, still have different opinions to confirm the role of capital structure to create firm value. In order to get optimal capital structure, the financial managers of the companies have to face great challenges. According to Artikis, Eriotis, Vasiliou, and Ventoura-Neokosmidi (2007), an incorrect financial decision may risk the company with financial distress and eventual bankruptcy. But it is the firm to decide what is an appropriate level of borrowing for the given debt equity base. Thus to assist this decision there is a need to change the debt equity level and increase shareholder's profitability.

In order to gain optimal capital structure, firms adopt different levels of financial leverage. Capital structure has the advantage of balanced debt and equity (Adeyemi and Oboh, 2002).Even though Modigliani and Miller

(1958) confirmed that the capital structure decisions highly affects firm value, some of the researchers like (Baker and Martin, 2011) still believes that capital structure does not affect firm's value.

Over many years under the model of the capital structure, three theories like trade-off theory, pecking order theory, and market timing theory have emerged in the capital market. Trade-off theory assumes that after the market imperfections the benefits of cost of debt and equity must be fulfilled; whereas the pecking order theory assumes that the financial hierarchy must be followed in order to reduce information asymmetry and agency issues between managers and other stakeholders. The final theory of market timing suggests that the cumulative outcome of the capital structure must be able to meet the equity market timings (Baker and Wurglar, 2002). However, the market timing theory has not been acknowledged by academicians and practitioners due to the lack of persistency.

Pecking order theory postulates that the cost of financing increases with asymmetric information. According to the pecking order theory firms have their own preference for using the capital in their businesses. Thus, demand on financial funds can be improved by applying pecking order theory. From the review of theoretical and conceptual aspects related to capital structure, pecking order theory influence corporate leverage.

2.3. Profitability

In determining firm's profitability there is a need of managing firm's current assets and current liabilities. The effect of profitability attributes on the firm value can be measured by identifying the short term leverage ratios. The subject of capital structure decision has been argued always by previous researchers. Some researchers concluded that there is a positive correlation between capital structure and profitability, whereas, some of them find out the opposite. The effect of capital structure on profitability has not been explored in the financial literature. Therefore, the concept of capital structure and profitability must be thoroughly investigated and understand for the long-term success of the organization. Furthermore, Mohammadzadeh et al. (2013) mentioned that funding is the most important issue for the organization and keeping in view the investment strategies and long-term profit, organizations should apply the compatible financial methods. These conflicting results between capital structure and profitability have motivated this study to investigate the relationship between them using subjective measures reaching out the managers responsible for decision making in the organization.

This study aimed to investigated relationship between WCM, capital structure, and profitability as the stand on the relationship between profitability and capital structure is still unclear due to studies like (Chen, 2004; Cohn, Mills, and Towery, 2014; Lemmon, Roberts, and Zender, 2008) having negative relationship between profitability and leverage ratio representing capital structure decisions. In addition, Juan García-Teruel and Martínez-Solano (2007) empirically investigated the relationship between WCM and corporate profitability for the Spanish SMEs for the period of 1996-2002. It is therefore confirmed that managers will be able to reduce firm's number of days, account receivables, and inventories. Whereas; studies like (Abor, 2005; Velnampy and Niresh, 2012) found there is a positive relationship between profitability and capital structure. It had been evidenced from previous studies that capital structure and WCM relationship should be prioritized to investigate. Furthermore, it was also noticed that due to different operations in the organizations the corporate structure also varies.

Figure 1. Preliminary framework

As shown in Figure.1 the relationship between WCM, capital structure, and firm's profitability have been developed based on relevant theories and previous literature. Asymmetric information was considered to be the contribution to the framework that helps the managers to make effective decisions in relation to debt-equity financing. An effective management of working capital provides an effective decision-making role towards debt-equity financing. The model developed was an approach to quantitatively validate the conceptual framework provided and suggested by Darun (2011) on investigating the role of WCM factors on the financial structure decisions. In addition to the five components provided an additional factor asymmetric information was undertaken as a major contribution for the study.

3. Conclusions

Management of working capital within an accounting system is a central objective of the organization. Managers in the organization reach out to all aspects of creating optimal capital structure. Firm's capital structure heavily depends on the factors like the probability of bankruptcy, profitability and asset structure. There are many other factors like industry affiliations, the economic condition of the country and government regulations that influence the financial structure of the company. Therefore, it is crucial for the company to create an optimal capital structure that determines the proportion of debt and equity financing as the process of financial management. Companies need to use working capital policy and procedures in order to navigate performance. Many studies have demonstrated an unusually large impact of WCM on firm's profitability and performance, while the concept of WCM has not been researched extensively towards corporate finance topics like capital structure, capital budgeting, and corporate governance.

From the review of empirical studies, it is confirmed that WCM is a main component in the financial aspects of the firms as even though WCM is targeted for the short term decisions it has effect on the firm for the long run. Thus it is claimed that emphasizing on WCM would lead to formal cost controls and performance together with firm's growth and productivity. The preliminary framework in Figure.1 illustrates how a firm's capital structure can be managed through an affirmative management of working capital by managers. The framework also shows the impact of cash flow decisions for the innovative projects are more aligned with the managerial initiations having appropriate representation of assets and liabilities. The components of WCM and capital structure represent the best profit of the companies. Therefore, management of working capital enables the

company's financial and fundamental health by maintaining uniform growth, profitability, and liquidity together with the operational success of the organization. The empirical results will help to gain knowledge by handling capital structure that is not straightforward and is dependent on working capital and its management. Additionally, this study will explore how integrated and non-integrated listed companies strategize themselves when it comes to utilizing WCM and capital structure to improve profitability. Practically, this study contributes to provide better understanding to the managers and enable them to apply WCM strategies and make sure the firm is able to meet the stakeholder requirements

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