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CONCEPTUALIZING THE DETERMINANTS OF WORKING CAPITAL FINANCING POLICY

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Abstract:
The purpose of this conceptual paper is to hypothesize the determinants that affect the decision of financing the requirements of working capital. A firm can adopt an aggressive, conservative, and matching strategy to finance its requirements of working capital. Selection of these strategies is affected by some factors. This paper hypothesizes that firms which generate high free cash flow would require more a short-term debt and; consequently, adopt a matching strategy. In addition, this paper hypothesizes that large firms can choose between conservative, matching, or aggressive financing strategy to finance their working capital requirements unlike small firms which have to adopt the matching financing policy. Finally, this paper hypothesizes that firms that have efficient working capital management tend to adopt the matching financing strategy and firms that have inefficient working capital management tend to issue equity to meet their financing needs. This paper recommends doing many empirical studies in this topic.

JEL: D20; D24; D25

Keywords: aggressive financing strategy, conservative financing strategy, financing decision, matching principle, working capital requirements

1. Introduction

A firm attempts to choose the appropriate decision of financing to meet the needs of different investment requirements, both in the short-term and in the long-term. Hence, the firm should continuously plan for its new financial needs. The financing

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decision is not only concerned about how to find the appropriate of financing source for the firm, but also concerned about the timing or maturity of available financial sources that ensure the best strategy of financing for the firm's different investments. A short-term decision includes two sides, which are: the decision of short-term investment and the decision of short-term financing. The decision of short-term investment includes the amount of working capital requirements (WCR) invested by a firm. WCR refers to the amount of current assets after deducting the account payable (Banos-Caballero, Garcia-Teruel & Martinez-Solano, 2016). On the other hand, the decision of short-term financing includes the strategy of financing WCR (Walker, 1968). Financing WCR is considered among the most crucial facets of a firm's financial management, which directly affects both of its profitability and risk (Walker, 1968; Weinraub & Visscher, 1998). Therefore, there are two important sides in the short term that are considered from the financial manager in a firm, which are: the quantity of WCR and how the firm finances it. This study focuses on the financing decision of WCR. The purpose of this study is to hypothesize the factors that could affect the decision of financing WCR.

Generally, there are many strategies that firms use to finance their assets, such as: applying the matching principle strategy, aggressive strategy, and conservative strategy. The idea of matching principle is that short-term assets should be financed by short-term financing sources and long-term assets should be financed by long-term financing sources. To illustrate, short-term assets refer to the current assets such as inventories and receivables whereas short-term financing sources refer to the current liabilities, such as payables and short- term debt. Long-term assets refer to the fixed assets while long-term financing sources refer to the long-term liabilities, such as long-term debts, and equities. Moreover, a firm follows an aggressive strategy in financing when it depends on short-term debts to finance its short-term assets and some of its long-term assets. However, the conservative strategy refers to use long-term financing sources to finance both short-term and long-term assets.

The matching principle is considered as the fit strategy which reduces the potential cost and risk. In the matching principle, financing short-term assets by short-term financing sources could reduce the cost of finance because the costs of financing the asset are known over the life of the asset, and by the end of asset's life, the cash flows generated by the asset are expected to be sufficient to service and retire the debt (Jun & Jen, 2005). Using long-term financial sources to meet the short-term requirements may incur firms more costs. As long-term financing sources, such as long-term banking loans and equities, have more costs than short-term debts or short-term banking loans (Guedes & Opler, 1996). In contrast, if a firm uses short-term financing sources to finance the long-term assets, this may incur a firm more risk as the firm must settle the loan in the short term. Firms may choose short-term debts as a permanent source to finance their long-term assets and refinance them as they mature. Firms use short-term debts to finance long-term assets because the advantages of the lower firm's interest expense, as interest rate of the short-term debts is lower than the interest rate of the long-term debts (Fosberg, 2012). However, this can make firms be exposed to high refinancing risks represented by the default risk and risk of increasing the interest rate

of the short-term debt. Therefore, matching of the maturities of debt and assets could mitigate these potential risks.

The matching principle can be applied for financing WCR. Assets are classified into two types: current assets (investment in working capital) and fixed assets (or long-term investments). Applying the matching principle means that current assets or working capital should be financed by a short- term debt, while fixed assets should be financed by a long-term debt or equity. However, the requirements of working capital are not financed by only short-term financing sources, but also can be financed by long-term financing sources (Walker, 1968). According to Merville and Tavis (1973), there are two types of working capital: permanent working capital and temporary working capital. Permanent working capital refers to the minimum level of working capital required for a firm's operating, which is often standard and does not change over time unless the firm changes its activities either by increasing or decreasing them. The permanent working capital is represented by the current assets that stay for a long time without changing or being liquidated during the year (Fosberg, 2012). While temporary working capital refers to the temporary commitments existence because of the increase in demand that is not expected to last, such as seasonal swings (Merville & Tavis, 1973). Accordingly, there are two types of commitment for working capital: funds committed on a permanent basis and funds committed on a temporary basis (Merville & Tavis, 1973). Therefore, applying the matching principle can be achieved if the permanent working capital is financed by long-term financing sources, while the temporary working capital is financed by short-term financing sources.

However, the matching principle is not always applied by the firms and there are other strategies adopted to finance the WCR. According to Walker (1964), strategies of financing WCR can be classified into aggressive and conservative categories; based on the degree of risk that is directly related to the type of capital a firm uses when financing its WCR. Aggressive strategy of financing WCR refers to the uses of a more risky source of finance while conservative strategy of financing WCR refers to the use of a less risky source of finance. The ability of a firm to liquidate its obligations can be used to determine the degree of the risk the firm can take. For example, if a firm finances the working capital by using equity, it will not cause any obligation to payment for the firm. **"***As working capital moves from one process to another, it changes form, i.e., cash changes to inventories to receivables and finally back to cash. Now if the original "cash" was obtained from equity sources, the firm would not be required to return these funds at a particular time; in other words, the capital is completely without risk*" (Walker, 1964). It is not necessary to pay the value of the equity back because it represents a long-term financial source. But if the firm finances the WCR by using debt, the risk resulting from the debt will depend on the maturity of the debt. "*The greater the disparity between the maturities of a firm's debt instruments and its flow of internally generated funds is, the greater the risk will be, and vice versa*" (Walker, 1964). If a firm uses a long-term debt, it has to settle the debt value after a long time. However, if the firm uses a short-term debt, it has to settle the debt value after a short time. Therefore, the risk from the short-term debt will be more than the risk from the long-term debt (Walker, 1964).

Financial managers should be sensitive to the determinants of the financing strategies of WCR due to its related with firm's profitability. There are some recent empirical studies that have studied the effect of financing strategies of WCR on the profitability of firms. These studies showed that there was a significant impact of the financing strategies of WCR on firm profitability (see for example: Banos-Caballero et al., 2016; Dincergok, 2018; and Panda & Nanda, 2018). Because of the importance of the financing strategies of WCR, which is directly related with improving profitability, the managers should be sensitive to the factors affecting the strategies of the financing of WCR to ensure a sufficient level of finance for the WCR to stay resilient and competitive, and to make a positive impact on the profitability of firms. There is a need to conduct many studies in this field to answer the question of why firms choose different strategies to finance their WCR. Therefore, there is a gap in literature which should be filled up by conducting studies in terms of the determinants that could affect the decision of corporate financing strategy of WCR.

2. Determinants Affecting the Strategies of Financing WCR

There are some factors that affect a firm's decision for choosing a strategy to finance its WCR. Firstly, a firm can follow the matching principle strategy to finance its WCR. Thereby, the firm is required to make a settlement schedule by matching the cash flow from the working capital investments and maturity of debt. However, firms which are financially distressed may not be able to generate enough cash flows from their operations to settle their short-term debts; consequently, these firms prefer to use long-term financing sources to finance their WCR. Firms which generate free cash flow from operation can meet their needs of financing WCR unlike firms which have little free cash flow and need more long-term external financing (Ooko, Githui & Omurwa, 2018). This assertion is consistent with the pecking order theory, which suggests that firms prefer to use the internal funding sources over the external funding sources due to lower costs (Myers, 1977). Nevertheless, generating a high level of free cash flow means a good financial position and representing good collateral to the lenders to offer loans to the firm. A firm which generates a high free cash flow has collateral and can ask for more debt to benefit from tax incentives, as debts are tax deductible. In this case, the firm has to make a trade-off between the benefits of tax incentives and the cost of debts. It can be said that if the tax incentives exceeds the cost of debts, firms will prefer to order more debt to financing purposes but if the tax incentives are less than the cost of debts; firms will prefer to finance their operations by internal financing sources. Therefore, generating a high free cash flow could affect the decision of financing, either by increasing or decreasing the demand of external financing, depending on the benefits generated from the tax incentives.

Argument above could illustrate how a free cash flow generated by a firm can affect the decision of financing in a firm, but we need here to illustrate how generating a free cash flow could affect the choosing of the strategy to finance WCR. Generating a free cash flow will provide an internal funding source for the firm, and in the same

time, to provide good collateral to lenders to get more debts. Thus, if the firm prefers to use this free cash flow to finance their WCR, that means it follows the matching principle as cash flow from operating represents short-term financing sources and WCR represents short-term investments. Additionally, if the firm prefers to order more debts, it will flow either the matching financing strategy or conservative financing strategy, depending on the type of the debt that the firm ordered. If the firm borrows a short-term debt, this means that the firm will meet the WCR by short-term financing sources, and thereby, follows a matching financing strategy. But if the firm borrows a long-term debt, this means that the firm will meet the WCR by long-term financing sources, and thereby, follows a conservative financing strategy. However, a firm which does not have a high level of free cash flow or bankruptcy risk could meet difficulties to obtain external debts because the lenders usually will not accept to offer their money for risky investments. Consequently, this firm will have to issue equities to meet their need of financing WCR, and thereby, must follow a conservative financing strategy of WCR.

In addition to free cash flow, a firm's size may have effect on the decision of financing WCR since large firms have easier access to the capital markets and are able to take debts more than small firms which face difficulty in obtaining finance. Small firms also have more difficulties in obtaining finance due to reluctance of lenders to provide finance to small firms because of their high potential risk compared to large firms (Ebben & Johnson, 2011). Consequently, small firms do not have many chances to obtain external financing sources, compared to large firms, to meet the needs of financing WCR (Baños- Caballero, García- Teruel, & Martínez- Solano, 2013). Small firms, thereby, have to meet their need of WCR financing by internal financing sources, which are represented by their operating cash flow. Therefore, it can be said that small firms tend to follow the matching principle to finance their WCR but large firms can choose between conservative, matching, and aggressive strategy to finance their WCR as they can obtain debts from lenders easily more than small firms.

The efficiency in managing working capital could be one of the factors that affect the decision of financing WCR. Efficient working capital management can be measured by the speed of cash conversion cycle (CCC). CCC is defined as the net period interval between a firm's cash expenditures for the purchase of productive resources and the cash flow recovery from the product sales (Richards & Laughlin, 1980). By reducing the CCC, firms could create an internal fund that enhances their financial flexibility and enables the mitigation of the dependence on external financial resources. Thus, CCC could play an important role on the decision of financing WCR. For example, if a firm manages its working capital in an efficient way by reducing the CCC, more cash will be available for the firm to meet the WCR financing need, and thereby, no need to take external financing (Almeida & Eid, 2014; Yazdanfar & Öhman, 2014). However, if there is an inefficient working capital management, CCC will be long and this prevents a firm from getting cash and requires the firm to ask for an external financing source to meet the need of financing WCR.

A longer CCC means that longer inventories conversion to cash, longer in the collection of receivables and shorter period in payable payment. The longer period of inventories conversion to cash represents a high level of stable inventories, which does not change in the short term. Similarly, a longer period in the collection of receivables represents illiquidity assets. Accordingly, the expected cash flow generated from these current assets will take a long time and this enables a firm to match between this cash flow and the financing needs for WCR. Therefore, firms which have a long CCC tend to use long-term financing sources more than short-term financing sources to finance their WCR, which consists with the conservative financing policy. Unlike firms, which have a short CCC tend to use short-term financing sources (the cash flow collecting from the short CCC) more than long-term financing sources to finance their WCR, which consists with the matching financing policy.

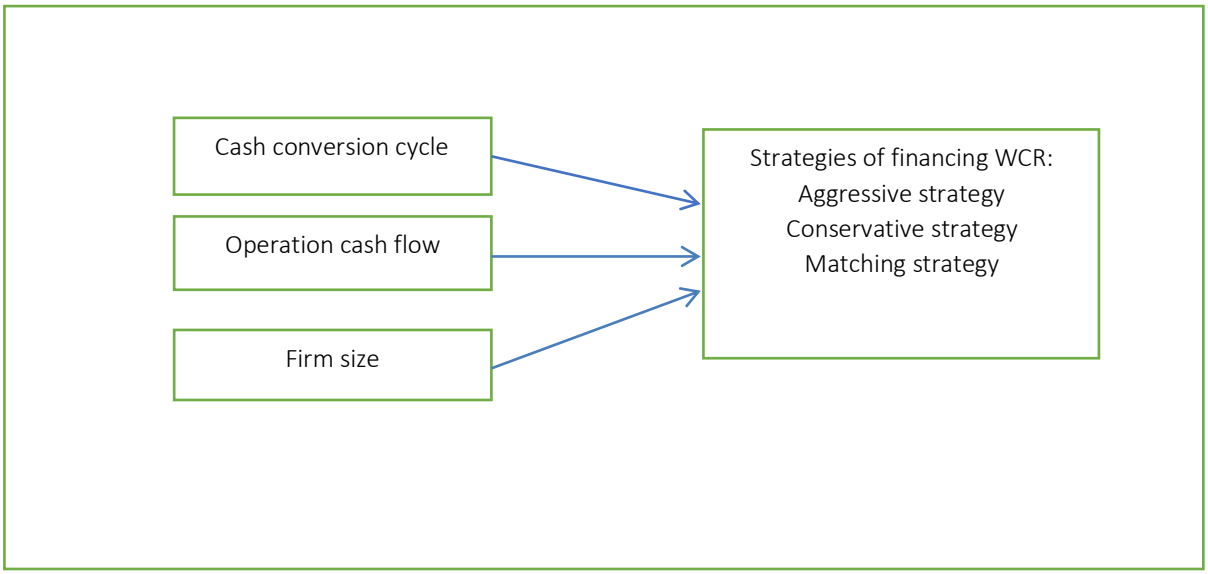

Figure 1: Determinants of Working Capital Financing Policy

3. Conclusion

Based on the matching approach, firms finance their temporary working capital by short-term financing sources and settle these short-term sources by the cash flows generated from their operations. In contrast, firms finance their permanent working capital by a long-term capital and then settle the cost of capital by the cash flow generated in a long-term. However, in fact, firms sometimes use long-term financing sources to meet the need of financing both the temporary and permanent working capital, and consequently, the matching principle is not always applied by the firms. A firm follows an aggressive strategy of financing WCR if it finances both the temporary and permanent working capital through a short-term financing source. While the firm follows a conservative strategy of financing WCR if it finances both the temporary and permanent working capital through a long-term financing source. Hence, the question here is that what the factors are those affect the decision of choosing one of these strategies by a firm. This study referred to some determinants that could affect the

decision of financing WCR by a firm, which included: operation cash flow, firm size, and efficiency of working capital management represented by CCC. This study recommends examining these determinants in an empirical study to get results, which could be beneficial for future academic studies in this field.

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