



Financial Theories with a Focus on Corporate Cash Holding Behavior: A Comprehensive Review

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ABSTRACT

This study reviews the role of different financial theories such as, trade off theory, pecking order theory and free cash flow theory in the decision making of corporate cash management practices. The review also shed a light on the ground breaking study of Modigliani and Miller (1958) in the field of corporate financial behavior. Majority of the literature depicts the prominence of trade off theory and pecking order theory in the cash management practices of firms. However, some empirical and theoretical studies also described the significance of free cash flow theory. Because, the managers desires to hold the distinctive power in the firm's financial and investment policies through holding higher cash level. Most importantly, based on the previous empirical findings, this study warrants the need to empirically extent the significance of financial theories in the future at sector level.

Keywords: Cash Management, Financial Theories, Financial and Investment Policies

JEL Classifications: G32, G02, G11

1. INTRODUCTION

The significance of efficient and effective cash management practices of firms have become an important research area in recent years due to the competitive financial environment. According to Opler (1999), corporate financial polies regarding the financial behavior, dividend payout, cash flow management, working capital, and investment plans have a significant role in corporate cash management policies, particularly, in maintaining the optimal level of cash.

In determining the behavior of firm's cash holding, grounding theories which remained more pertinent to cash management practices of firms include trade off, pecking order and free cash flow theory (Wasiuzzaman, 2014).

According to the tradeoff theory, firms maintain the optimal level of cash at the breakeven point where the marginal cost and benefit of holding cash are equal (Al-Najjar, 2011; Martínez-Sola et al., 2011). As pointed out by Opler (1999), based on Keynes

(1936), benefits of holding cash are derived from two vital motives: Precautionary and transaction motive. Hence, when firms considered the marginal benefits and cost of holding liquid assets, trade off perspective in cash management practices supported the optimal level of cash.

In contrast, another significant theory in line with cash management practices of firms is pecking order. This theory was grounded by the Myers (1984) and Myers and Majluf (1984). In line with this theory, firms first prefer the internal financing to finance their investment plans by utilizing the liquid assets and retained earnings. After that, debt is issued while, issuance of equity is considered as the last resort.

On one side, pecking order theory supported that firms with high profits would mostly finance the investment plans with internal resources therefore, these firms tend to hold high cash ratio. This argument is further supported by Afza and Adnan (2007); Uyar and Kuzey (2014) and Wasiuzzaman (2014) while, the tradeoff theory revealed the inverse relationship between cash holding behavior

and cash flows of firms (Gill and Mathur, 2011; Kim et al., 2011). This shows that the firm having high cash flows gives priority to the external funds for their investment opportunities and obtained the tax shield. However, this debate is generally considered as never ending debate.

In contrast, the free cash flow theory by Jensen (1986) described that managers preferred to hold higher cash level to enhance the volume of total assets in their control. They also tried to gain the distinctive powers in the firm's investment and financing decisions. As a result, this behavior affects the shareholder's wealth negatively. Therefore, the optimal level of cash holding is considered as a significant problem in the shareholder-manager situation. Most importantly, conflicts of interest arise among managers and shareholders over dividend payout policies. This situation happened and becomes more severe when; firm holds substantial free cash flows (Rozeff, 1982; Easterbrook, 1984). In addition, prominent issue is to encourage the managers to efficiently utilize the corporate cash reserves instead of investing these below the cost of capital (Kusnadi and Wei, 2011).

In general, a few researchers have focused on the validity of these theories which vary across different countries with mixed evidences (Naoki, 2010; Islam, 2012). Similarly, Alles et al., (2012) and Wasiuzzaman (2014) also emphasized that it is difficult to empirically support one theory over the others unambiguously. Therefore, it is important to further study that to what extent corporate cash holding theories enlightened the behavior of firms in the context of developing countries.

2. LITERATURE REVIEW

Based on the prominent financial theories related to the cash management practices of firms, many studies have been conducted across different economies. In the beginning, the majority of studies focused on the cash holding trends and behavior of firms across the United States (Chang-Soo et al., 1998; Faulkender and Wang, 2006; Bates and Kahle, 2009; Gao et al., 2013). However, the conclusions from this strand of research are relatively mixed and it is problematic to generalize in other countries due to the diverse financial environment.

Nevertheless, Chen and Mahajan (2010) found the similarities in cash management practices of firms across developed countries. Conversely, Iskandar-Datta and Jia (2012) compared the US firms with other firms from developed countries. They found the differences across countries in cash management behavior of firms are mainly due to institutional differences. Alternatively, Kusnadi and Wei (2011) also observed great variation in firm's cash holding level across the developed and developing countries. As a result, on the bases of previous literature, the outcomes of these developed economy studies could not be generalized across developing nations.

However, several theoretical perspectives have been formulated, in determining the cash holding mechanism of firms. Based on previous literature, the grounding theories which remained more pertinent to cash management practices of firms include

trade off, pecking order and the free cash flow theories (Wasiuzzaman, 2014).

2.1. Trade-off Theory

According to the tradeoff theory, firms considered the marginal benefits and cost of holding cash to maximize the shareholder's wealth (Dittmar et al., 2003). The benefits of cash holding stem from the theory of Keynes (1936), concerning the motive of liquidity assets: Transaction cost motive, precautionary motive, and speculative motive. In line with the transaction cost motive, holding cash allow firms to avoid or save transaction costs to raise funds or to liquidate assets. In relation to the transaction motives, firms hold the cash only to overcome the higher opportunity cost in case of lower cash levels (Tobin, 1956; Miller and Orr, 1966; Dittmar et al., 2003).

However, precautionary motive revealed that cash holding enables firms to finance their investments or project if other financing source is not available. In addition, Ozkan and Ozkan (2004) emphasized that to overcome the probability of higher cost of external financing firms also invest in liquid assets or they may enhance their cash level. Likewise, this argument is also supported by Opler (1999) and Bates and Kahle (2009). In addition, speculative motive argued that economic players hold cash or marketable securities in order to earn profit from future rising of interest rate. This is not appropriate for corporations.

These benefits are weighed against the alternative costs of holdings cash, since liquid assets generate low rates of return (Ferreira and Vilela, 2004). Moreover, Ferreira and Vilela (2004) argued efficient cash management has also a significant to reduce the chance of financial distress.

Despite the benefits of cash holding, cash holding has several drawbacks. According to Jensen (1986), cash holding could increase agency cost. Firms with higher cash holding are not required to access capital market for financing. This situation enables the corporate managers away from the market monitoring. Therefore, the managers could pursue their own interests rather than shareholders. In addition, the rate of return on cash or liquid assets is low because of liquidity premium. Cash can also be exposed to double taxation at corporate and individual levels if it is distributed to shareholders (Chang-Soo et al., 1998).

According to the previous empirical studies different proxies' for determinants of cash holding behavior of firm, have been incorporated to reflect this theory. For instance, Wasiuzzaman (2014), Uyar and Kuzey (2014), Al-Najjar (2011), Ferreira and Vilela (2004) and Opler (1999) employed the dividend payout, leverage, firm size, liquidity and risk, to empirically examine the firm's cash holding perspective in line with the trade-off theory. Nevertheless, these studies provide mixed results. It can be problematic to generalize in other economies due to the unique macro environment of the country.

Many studies such as Faulkender and Wang (2006), Ozkan and Ozkan (2004), and Afza and Adnan (2007) emphasized that cash is the output of investment and financing activities. Firms that

generate positive cash flows from their operations finance their investments with internal funds and dependent on storing large cash reserves on their balance sheets. Similarly, Gao et al., (2013) compared the cash policies in public and private U.S. firms and identify that, private firms have high cash flows and hold on much liquid assets. However, these arguments are inconsistent with the real trade off prediction. Firms with high cash flows should focused more on debt to minimize the tax liabilities. On the other side, many studies such as (Ozkan and Ozkan, 2004; Alles et al., 2012; Azmat, 2014; Uyar and Kuzey, 2014; Wasiuzzaman, 2014) supported the trade-off theory and signified the role of optimal level of cash.

On the other hand, consistent with the findings of past studies, a substantial amount of literature have focused on the significance of trade off theory centering on the cash holdings behavior of firms at the firm level only. Nevertheless this cash holding mechanism could be different across sector, as they are subject to different degree of munificence, dynamics and industry competition level. Therefore, it is equally important to validate the tradeoff theory empirically in the future at sector level.

2.2. Pecking Order Theory

The pecking order theory was first grounded by Myers (1984) and Myers and Majluf (1984). According to Myers (1984) firms follow an order when deciding which funds to use in the financing of investments. First, firms prefer to finance projects with internal funds. Secondly, they will adjust their dividend levels, even if dividends tend to follow a sticky policy. Firms will thereafter choose to sell liquid assets and finally used external capital as a last resort. If external financing is needed, firms prefer debt, than hybrid securities such as convertibles, and finally the issuance of equity (Myers, 1984). This order of financing comes from the theory of asymmetric information and the managers' objectives should be to minimize the costs related to these issues. This is because; managers have more knowledge on investment needs and the net present value of those investments. Moreover, the managers are also assumed to act in favor of the firm's current owners and will therefore try to issue new shares at the highest possible price. Equity investors who are aware of this issue will demand a higher risk premium. This premium is consequently based on information asymmetry, which increases the costs of financing investments with new equity. This is the logic for companies who prefer debt to equity (Myers and Majluf, 1984).

The level of cash holding is a result of a firm's investment and financing decisions. Firms use their cash flow to finance their investment opportunities or projects, to repay debt when due and then accumulate unused cash flow as cash balance if possible. If cash flow cannot cover the above expenditure, firms may use cash reserves as a buffer to avoid external financing. If operating cash flow and cash are not enough to cover all expenses, additional financing is required. Thus, the level of cash holding is determined by cash inflow and outflow, suggesting that there is no optimal cash holding (Opler, 1999).

Although firms' cash holding is explained by the pecking order, there has been no empirical study until the ground breaking study

of Opler (1999). They test the validity of both the trade-off theory and the pecking order theory on the target cash holding behavior by using the model of Shyam-Sunder and Myer (1999). Results confirm that both theories significantly explain the change of cash holding. However, the distinction between trade-off theory and pecking order theory in cash holding policy is not clear. In addition, Opler (1999) proposed that the distinction become vague as the cost of external financing increased.

Furthermore, Ferreira and Vilela (2004) argued that firms may use the cash for investments activities and also to pay debt of firms therefore, in return firms hold higher liquidity. Likewise, Dittmar et al. (2003) emphasized that firms having high cash flows distribute the dividend smoothly. On the other hand, they also rely on debt financing and holding high cash reserves.

According to the previous empirical studies, different financial factors have been incorporated to reflect this theory. Uyar and Kuzey (2014); Al-Najjar (2011) used the firms profitability and leverage to understand the cash holding mechanism. Moreover, cash flow and firm size was used by (Ferreira and Vilela, 2004). Frank and Goyal (2007) argued that pecking order mechanism may lead to the agency issues among the investors and the managers/owners.

Importantly, in the context of Malaysian firms, Wasiuzzaman (2014) while investigating cash management behavior of firms showed that both hypotheses of pecking order and static trade-off theories have still been unable to explain the behavior of firm's fully.

In contrast, at the sector level Kim et al., (2011) argued that firms with high growth opportunities tend to hold high cash levels. However, dividend paying firms and firms with high capital expenditures have the lower cash ratio. These results contradict with the pecking order theory.

To recap, in the existing body of literature, none of the study gives the preference to any single theory for determining the cash holding behavior in both firm level and industry level. Hence, this study warrants the need, to empirically analyze which theory and financial factors describe the cash holding mechanism for emerging market at sector level.

2.3. Free Cash Flow Theory

Corporate managers of an organization are basically the agents of shareholders, an agent representing a principal, serves the interest of the principal. The issue at hand is that the agent might have other goals and interests than the principal and could act to achieve these at the expense of the principal (Eisenhardt, 1989). Agency problems that might arise between shareholder and manager concerns are also caused by the optimal level of cash holding. The free cash flow theory on the analysis of such conflicts is now a major part of the financial literature.

According to the free cash flow theory of Jensen (1986), managers prefer to hold high cash level to enhance the volume of total assets in their control. They also tried to gain the distinctive

powers in the firm's investment and financing decisions. These policies may lead to the over investment issues (Ferreira and Vilela, 2004). Furthermore, Ferreira and Vilela (2004) argued that firms with strong affiliation with banks and firms practicing in superior investor protection countries hold lower cash levels. These conditions support the existence of manager discretion and agency cost issues in liquidity management. Similarly, Afza and Adnan (2007) described the significance of optimal level of liquid asset for the smooth functioning of the firms.

Finally, it can be argued that management may accumulate cash because it does not want to make payouts to the shareholders, and wants to hold these funds within the firm. Drobetz and Grüninger (2007) support this argument and revealed that dividend payments are positively related to cash reserves. This indicates that management may accumulate cash by cutting the dividend or it does not make payouts to shareholders, to keep funds within the firm.

According to the previous empirical studies, different financial factors have been incorporated to reflect this theory (Al-Najjar, 2011; Brenes et al., 2011; Kim et al., 2011; Gill and Shah, 2012; Azmat, 2014; Uyar and Kuzey, 2014; Wasiuzzaman, 2014; Al-Najjar, 2015). However, these studies followed the groundbreaking study of Opler (1999). They used the firm's profitability, dividend payout, leverage, firm size and liquidity to understand the cash holding mechanism. Moreover, growth, liquidity and firm size was used by Megginson et al., (2014) to reflect this theory empirically.

A number of researchers have investigated this theory in developed countries, but the same issue has not been evaluated for corporate firms in developing countries across sectors. However, at firm level different authors have their different views while, analyzing the agency problems in the light of free cash flow theory. Moreover, it is also significant to identify that, is this phenomenon prevalent across all sectors?

3. CONCLUSION

Based on the theoretical and empirical studies, this review concluded that trade off, pecking order and free cash flow theory are not mutually exclusive. Furthermore, these theories predict the uncertain role of different financial environment in cash holding behavior of firms. In addition, it is also concluded that optimal cash holding level can also be obtained in firms. However, in line with the previous strand of empirical literature review, most of the studies show the significance of the financial theories in corporate cash holding behavior at firm level only. Nevertheless, this cash holding mechanism could be different across sectors because each sector obstinately provide different financial base for firm. Furthermore, the distinctive nature of each sector may differently control the firm's cash level. Therefore, this study warrants the need to further empirically extent the significance of the tradeoff perspective and asymmetric information in the future at industry level and firms should also incorporate the unique nature of each industry as well.

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