

DETERMINANTS OF CASH HOLDINGS -A LITEARTURE REVIEW¹Mrs. Aparna Trivedi, ²Dr. S. S. BhakarResearch Scholar, Jiwaji University¹, Vice Chancellor ITM University Gwalior²
aparna14192@gmail.com¹, ssb1958@rediffmail.com²**ABSTRACT**

Cash holding plays a significant role in a company's day-to-day operations, hedging unforeseen market risks, acquisition, capital expenditure planning, upcoming liability payments and taking long-term value-enhancing investment decisions. Without cash holdings, companies cannot deal with their financing, operation, risk management and investment activities Extensive researches have been done by scholars on the topic of optimal level of corporate cash holding and factors that influence corporate cash holding. This paper discusses the motivation of cash holding and introduces the factors affecting corporate cash holding. This paper also presents the issues that researcher's should pay attention to in this field.

INTRODUCTION

Cash is an essential and liquid asset held by a business firm to meet its liquidity needs and facilitate various obligations. The motivation and objectives of holdings cash are different from one company to another company. Every company hold a significant amount of cash as it is the blood of the firm. So why do companies keep cash? What will be the value of cash holdings? What is the right amount of cash a company should hold? Are the business policies like investment, operations, financing, and risk management affected by cash holding? These questions keep on raising the interest of scholars, and several studies have been done in the past highlighting the importance of cash holding in Indian firms. In finance and banking, cash is usually defined as cash and cash equivalents. It is one of the three main asset classes in financial investing, along with bonds and stocks. Cash is defined as money in physical form.

In contrast, Cash equivalents are investment securities meant for short-term investing or assets that can be converted into cash within a year. Cash equivalents have high credit quality, low risk, low return profile and are highly liquid. Bank certificate of deposit, Government Treasury bills, corporate commercial paper, repurchase agreements, bankers acceptances and other money market instruments are examples of Cash equivalents. A Firm's combined cash and cash equivalents are most liquid and hence always shown on the top line of the balance sheet.

Cash holding plays a significant role in a company's day-to-day operations, hedging unforeseen market risks, acquisition, capital expenditure planning, upcoming liability payments and taking long-term value-enhancing investment decisions. Without cash holdings, companies cannot deal with their financing, operation, risk management and investment activities.

Gill and Shah (2012) defined cash holding as the cash held by the company reflected on its balance sheet and readily available for financing the investments in the physical assets and distributing them to the investors. Cash is very conducive to all the firms involved in every transaction and allows firms to exercise investments when needed.

The optimal amount of cash holding is still not defined but keeping cash in hand provides strong resilience against the unanticipated contingencies. Policies for cash holding vary from firm to firm depending on functionality, profit and sales, corporate investment, and the firm's financing choices. A firm cannot raise debt from the market whenever it wants to, whereas a firm can spend cash whenever it wants to. Holding cash keep firm away from external financing, information asymmetries, transaction costs, risk of liquidating assets for

making payments and other complications in case of immediate needs. It is preferable to use internal funds as the cost of external funding increases due to information asymmetry between external investors and firms (Myers and Majluf, 1984).

Moreover, as per Myers, 1977; Jensen and Meckling, 1976, transaction costs and other agency problems of asset substitution and underinvestment forces firms to hold cash for their financing needs. As per Acharya (2007), cash might reduce cash flow volatility resulting in mitigation of financial risks that could affect a firm's future profits. Factors, as mentioned earlier, influence managers to reserve a sufficient amount of money in imperfect capital markets.

The most vital thing for the firm is to manage financial stability. The financial crises of 2008-09 have affected many firms across the world, and firms have experienced many changes due to such crises. There have been many changes witnessed in the cash holdings in Indian companies. Cash is highly liquid, and when a company holds a small amount of cash, the company misses the great future opportunity of investment and operational risk. When companies hold excess cash, companies accumulate stock, thus resulting in wastage and failing to take up investment activities, resulting in loss and companies losing a dominant position in the industry. Therefore it is essential to explore the problem of cash holdings.

The significance of this paper is two-fold. Firstly, this paper reviews the research on cash holdings, which helps to know the current status of research on cash holdings issues and find defects in domestic-related research. Secondly, the systematic review of this paper is also conducive to finding new research directions and further improving the research on cash holding issues.

A REVIEW OF LITERATURE OF MOTIVATION OF CASH HOLDINGS

Why do firms hold cash? It is a crucial question for the firms. Holding cash is vital for any firm as cash acts as an emergency fund at bad times. Cash provides liquidity to the firms. Cash can be defined as cash and cash equivalents and short term marketable securities (Opler, Pinkowitz, Stulz & Williams 1999) (Bates, Kahle & Stulz, 2009) (Ferreira & Vilela 2004). When cash equivalents can be converted into cash quickly, it is known as cash equivalents, including govt treasury bills, money market funds, and repurchase agreements. From a financial perspective, cash holding is defined as cash and cash equivalents.

Keynes (1936) suggested two main motives for corporate cash holdings, precautionary motives and transaction costs. The motive that states that a firm benefits from holding cash as it saves the transaction cost is transaction cost motives, e.g. the cost of raising external finance and liquidating. The precautionary motive highlights the importance of anticipating future necessities and investment opportunities. The precautionary motives of cash help firms to insure against the expensive cost of raising funds from outside, and sometimes external finance is unavailable and provide financing in case of investment opportunities. In recent years, many authors have added findings of precautionary cash holdings. According to Ferreira and Vilela (2004), there is a negative association between capital markets development and cash holdings. This negative association supports the precautionary motives for cash holdings. In addition, Almeida et al. (2004) suggested that financially constrained firms tend to increase their cash holdings, and their study finds the relation of cash's accumulation according to the precautionary motive. The firms try to accumulate cash to face unexpected crises and uncertainties (Bates et al.). Agency problem also justifies the accumulation of funds as managers try to accumulate funds for investments and other strategies, as there is asymmetric information. One more motive that has not gained much importance in India is the tax system motive. Many Multinational companies may collect

cash in foreign subsidiaries to avoid the repatriation tax expense as they would suffer if they repatriate the profits earned in foreign jurisdictions (Foley et al., 2007).

TRADING MOTIVATION

Transactional motive is defined as the cash required to be held by the firm to meet its day-to-day business needs. Generally, the firm requires cash for managing the salaries and wages of its employees and workers, interests, dividend payouts, purchasing raw material, paying duties and taxes, settling customer bills, etc. It also receives cash by selling finished goods, debtors and investments. If the cash outflows do not meet the cash inflows, then the firm is bound to maintain some cash to meet its daily business requirements. The amount to be held for filling the transactional motive depends on cash inflows and cash outflows.

PREVENTION MOTIVATION

In addition to cash held by the firm for non-synchronization of anticipated cash inflows and outflows in the daily course of business, it also has to hold cash as a safety reserve to meet the contingencies or unforeseen circumstances arising in the course of the business (Damodaran, 2008) (Bates, 2009). The precautionary motive or hedging motive refers to the cash held by the firm for managing future contingencies or emergencies like labour strikes, lockdowns, fluctuations in demand, interruption in supplies of raw materials, the breakout of diseases, fluctuation in the price of raw materials, economic recession etc. Precautionary motives of holding cash ensure firm uninterrupted business operation in future. Generally, a part of cash required for precautionary motive is invested in short term securities to earn at least some positive returns.

SPECULATIVE MOTIVATION

The third motive of cash holding is termed as "Speculative Motive". Speculative motive refers to the cash held by a firm to exploit the speculative purposes or opportunities that may arise in the future. These opportunities help firms to avail the benefit of a bargain purchase. These opportunities generally exist in commodity sectors, where the prices of the materials fluctuate substantially in different periods. The firm's profit depends on its ability to buy or sell the material at the right time. Thus keeping the cash in hand allows the firm to exploit the possible opportunities out of a normal course of business. Some of the speculative opportunities can be expected fall in raw material prices, favourable changes in the government policies, low-interest rates, favourable exchange rate fluctuation etc.

A LITERATURE REVIEW OF THE FACTOR AFFECTING CASH HOLDINGS FINANCIAL DETERMINANTS

Financial determinants include the size of the firm, Liquid asset substitute, Capital Expenditure, Leverage, Dividend Payments, Cash Flow Volatility, R&D Expenses & Growth opportunities. Structural Determinants include CEO duality, Foreign and institutional shareholding and board size.

The size of the firm is one of the significant factors which will influence cash holding. Faulkender (2002) finds that the demand for cashing holding is lower in large firms because of the economy of scale. Moreover, Large firms are unlikely to face borrowing constraints as compared to small firms (Kim et. al.,1998). Firms that are smaller in size and are operating with high business risks and strong growth opportunities tend to hold more cash because the cost of raising funds from the market will be high. Generally, the transaction fees accompanying raised funds are fixed, and thus, the marginal cost is higher for small firms. During a financial crisis, firms have to pay higher costs (Warner 1977); and when the firm size is small, a liquidation may occur (Ozkan and Ozkan 2004). Hence, small firms have to hold surplus cash as a precautionary measure. These arguments suggest a negative relation between the size of a firm and the demand for cash holding.

Liquid asset substitute is another factor that is taken into consideration by firms for deciding the amount of cash holding. Liquid assets substitutes are defined as liquid assets other than cash which can be converted into cash to meet the cash requirements. Firms whose cash flow low decide to hold more liquid assets for investing when raising funds from outside is expensive. Keeping an appropriate amount of liquid assets may reduce the probability of applying to the capital markets to raise funds.

Capital expenditures improve new assets, and these assets ease borrowing through guaranteeing security; thus, higher borrowing decreases the need for holding cash. It is argued that capital expenditures can be applied as collateral to increase borrowing capacity, leading to lower cash levels (Bates, Kahle, and Stulz 2009). However, Opler et al. (1999) and Riddick and Whited (2009) propose a positive relationship between capital expenditures and cash holdings. They argue that firms with high capital expenditure ratios hold high cash levels as capital expenditures can be used to proxy for financial distress and growth opportunities.

Firms with higher cash flow volatility face a shortage of inside funds and there will be less certainty about their future occurrence. High cash volatility may also increase cost and subsequent abandonment of positive NPV projects. It has been argued that firms with higher volatile cash flows are more prone to liquidity constraints and are more likely to face financial distress in future. High cash volatility constraints firms to hold larger cash reserves to reduce the associated risk of financial distress. Therefore, in line with the trade-off theory, a positive relationship between cash flow volatility and cash holding is expected.

Leverage is an investment technique of using borrowed money to maximize an investment's potential return. The highly leveraged firms entail a high risk of bankruptcy and have to invest high costs in liquid assets and should hold a large amount of cash. However, there is another assumption that concludes that the firms with higher leverage hold less cash. Firms that operate on high leverage have better access to the debit/capital market and can easily raise funds whenever in need and hence these firms will hold less cash. So the factor leverage has an ambiguous relationship with the cash holding due to these competing assumptions.

Dividend payments also play a significant role in deciding the cash holding for a firm. The firms which pay dividends regularly can raise the funds by reducing the dividend payout to the shareholders and need not require to have larger cash in hand. Contrarily, the firms which do not pay dividends have to depend on the debt market for raising the fund. According to Ferreira and Viela, 2004, there is a negative relationship between dividend payments and cash holdings, since firms with a reputation for paying dividends can raise funds at low cost by cutting dividends. Hence it is expected that dividend payment has an inverse relation with cash holding. However, there is some empirical evidence found in the study of Brav (2005), which shows the opposite. Hence the relationship of dividend payment with cash holding is also ambiguous.

Growth opportunities hold a positive association with cash holding as the firms with higher investment opportunities are expected to hold more significant amounts of cash to reduce the likelihood of forgoing these investments. Additionally, pecking order theory proposes that profitable investment opportunities escalate the demand for gathering cash, thus leading to a positive relationship between investment opportunities and cash holding. Hence in line with many prior studies and theoretical backgrounds, it is expected to have a positive relationship between growth opportunities and cash holding.

Research and development expenses also have an impact on corporate cash holdings. D'Mello (2008) concluded that higher cash reserves were held by firms with high research and development expense ratios. Hence it is expected that research and development expenses will have a positive relationship with cash holding.

STRUCTURAL DETERMINANTS

CEO Duality and board size play an important role in maintaining the appropriate level of cash in the organisation. CEO duality represents the discretionary potential arising from the manager that serves simultaneously as CEOs and board directors. Though duality creates a stronger leadership it reduces the effectiveness of monitoring by the board. Lee/Lee (2009), Kuan (2011) and Yu (2015) reported a positive association between CEO duality and the corporate cash holding levels. There is mixed evidence on the impact of board size on cash holding. Harford (2008) discovers that the smaller board sizes are more effective and efficient in decision making whereas large board sizes are usually associated with an increase in agency cost and less effective decision making. However larger board size will result in better monitoring of managerial actions and reduce the manager's opportunities for private benefits (Boon, Field, Karpoff & Raheja, 2006).

The past studies have explored the relationship between the cash holdings of the company with various structural variables. CEO duality has a positive effect on the cash holding of the company depicting that dual role of CEO in the company better would be the cash holding and negative effect of institutional ownership on cash holding (Lee and Lee, 2009; Mohd et al., 2015). Similar to this, foreign and institutional shareholding have a positive impact on cash holding (Anand et al., 2012) however, another study found a negative impact of institutional shareholding on cash holding (Luo and Hachiya, 2005). Past studies have also found a positive impact of board size on the cash holding of the company (Lee and Lee, 2009). However, few studies indicate negative (Belghitar and Khan, 2013) and no impact (Harford et al., 2008) of board size on the cash holding of the company. So, the result of the past studies is inconclusive. Further, the literature indicates that past studies tried to determine the structural determinants of cash holding in isolation, but these studies do not comprehensively analyse the relationship with cash holding.

CONCLUSION

This paper comprehensively covers the researches related to factors affecting the optimal corporate cash holding which can help us to increase our understanding of cash holding, and also can help us bring to light the new research ideas for cash holdings. We find that foreign academic research about cash holdings is very comprehensive, and they already form wealth research results. However, the Indian researchers have not paid enough attention to this issue and hence the relevant literature in this empirical research is scarce.

The economic environment of western countries differs vastly from the Indian economic environment and hence the foreign empirical conclusions will not directly apply to the Indian companies. However, foreign research will certainly provide a theoretical basis and research method to study the cash holding issues. Therefore, there are vast opportunities for research in this area, and future researchers should focus and include the following points in their researches:

- 1) Researchers should not only rely on the theory only. They should combine the theory with the practice. The decision of cash holding in Indian firms is significantly affected by the Indian management rule, legal system and market condition. So these factors should be considered for analysing the cash holding of Indian firms and for designing the cash holding decision factor model. Concurrently, we must also focus on improving empirical research in India.

2) Consider the factor influencing cash holdings thoroughly. The researches on the influencing factors of cash holding consider two aspects. First is the internal characteristics of the company, and the second one is the macro-economic factors. However, suppliers and customers are the external stakeholders for the company having a significant impact on business operations and financial decisions. Hence the impact of supplier-customer relationships on cash holdings should also be explored.

3) In the actual situation, the company's behaviours about cash holding are affected by many factors. Hence one should consider multiple perspectives to determine the corporate cash holding level. It is very difficult to ascertain the primary and secondary motives in certain situations. Also, one should study the interaction between these various motives to have a better understanding of the cash holding levels of the companies.

REFERENCES

1. Acharya, V., Davydenko, S. A., & Strebulaev, I. A. (2012). Cash holdings and credit risk. *The Review of Financial Studies*, 25(12), 3572-3609.
2. Anand, L., Varaiya, N. P., & Thenmozhi, M. (2012, December). Corporate Governance and Firm's Cash Holdings: Evidence From India. In XI Capital Markets Conference (pp. 21-22).
3. Almeida, H., Campello, M., & Weisbach, M. S. (2004). The cash flow sensitivity of cash. *The journal of finance*, 59(4), 1777-1804.
4. Bates, T. W., Kahle, K. M., & Stulz, R. M. (2009). Why do US firms hold so much more cash than they used to?. *The journal of finance*, 64(5), 1985-2021.
5. Belghitar, Y., & Khan, J. (2013). Governance mechanisms, investment opportunity set and SMEs cash holdings. *Small Business Economics*, 40(1), 59-72.
6. Brav, A., Graham, J. R., Harvey, C. R., & Michaely, R. (2005). Payout policy in the 21st century. *Journal of financial economics*, 77(3), 483-527.
7. Damodaran, A. (2008). Dealing with cash, cross holdings and other non-operating assets: Approaches and implications (Working paper). New York, United States: New York University, Department of Finance.
8. D'Mello, R., Krishnaswami, S., & Larkin, P. J. (2008). Determinants of corporate cash holdings: Evidence from spin-offs. *Journal of Banking & Finance*, 32(7), 1209-1220.
9. Gill, A., & Shah, C. (2012). Determinants of corporate cash holdings: Evidence from Canada. *International journal of economics and finance*, 4(1), 70-79.
10. Harford, J., Mansi, S. A., & Maxwell, W. F. (2008). Corporate governance and firm cash holdings in the US. *Journal of financial economics*, 87(3), 535-555.
11. Faulkender, M. W. (2002). Cash holdings among small businesses. Available at SSRN 305179.
12. Ferreira, M. A., & Vilela, A. S. (2004). Why do firms hold cash? Evidence from EMU countries. *European financial management*, 10(2), 295-319.
13. Foley, C. F., Hartzell, J. C., Titman, S., & Twite, G. (2007). Why do firms hold so much cash? A tax-based explanation. *Journal of financial economics*, 86(3), 579-607.
14. Jensen, M. C. (1986). Agency costs of free cash flow, corporate finance, and takeovers. *The American economic review*, 76(2), 323-329.
15. J M Keynes (1936), "The General Theory of Employment, Interest and Money". Macmillan Cambridge University Press, for Royal Economic Society in 1936.

16. Kim, C. S., Mauer, D. C., & Sherman, A. E. (1998). The determinants of corporate liquidity: Theory and evidence. *Journal of financial and quantitative analysis*, 33(3), 335-359.
17. Kuan, T. H., Li, C. S., & Chu, S. H. (2011). Cash holdings and corporate governance in family-controlled firms. *Journal of Business Research*, 64(7), 757-764.
18. Lee, K. W., & Lee, C. F. (2009). Cash holdings, corporate governance structure and firm valuation. *Review of Pacific Basin Financial Markets and Policies*, 12(03), 475-508.
19. Luo, Q., & Hachiya, T. (2005). Corporate governance, cash holdings, and firm value: evidence from Japan. *Review of Pacific Basin Financial Markets and Policies*, 8(04), 613-636.
20. Mohd, K. N. T., Latif, R. A., & Saleh, I. (2015). Institutional ownership and cash holding. *Indian Journal of Science and Technology*, 8(32), 1-6.
21. Myers, S. C. (1977). Determinants of corporate borrowing. *Journal of financial economics*, 5(2), 147-175.
22. Myers, S. C., & Majluf, N. S. (1984). Corporate financing and investment decisions when firms have information that investors do not have. *Journal of financial economics*, 13(2), 187-221.
23. Opler, T., Pinkowitz, L., Stulz, R., & Williamson, R. (1999). The determinants and implications of corporate cash holdings. *Journal of financial economics*, 52(1), 3-46.
24. Ozkan, A., & Ozkan, N. (2004). Corporate cash holdings: An empirical investigation of UK companies. *Journal of banking & finance*, 28(9), 2103-2134.
25. Pinkowitz, L., & Williamson, R. (2001). Bank power and cash holdings: Evidence from Japan. *The Review of Financial Studies*, 14(4), 1059-1082.
26. Riddick, L. A., & Whited, T. M. (2009). The corporate propensity to save. *The Journal of Finance*, 64(4), 1729-1766.
27. Warner, J. B. (1977). Bankruptcy costs: Some evidence. *The journal of Finance*, 32(2), 337-347.
28. Yu, H. C., Sopranzetti, B. J., & Lee, C. F. (2015). The impact of banking relationships, managerial incentives, and board monitoring on corporate cash holdings: an emerging market perspective. *Review of Quantitative Finance and Accounting*, 44(2), 353-378.