Cash Holding: a review

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Abstract
Purpose – This paper is a review of the theoretical literature of cash holding.
Design/methodology/approach – A sample of 48 articles was published from 1934 to 2020 in the Scopus database using “cash holding theory”.
Findings – Although numerous studies have examined various issues of cash holding, they have produced mixed and inconclusive results.
Research limitations/implications – As with any review paper, as any new research is published, the current article will become less recent, and there is also a major limitation of some papers being excluded.
Originality/value – The paper will also give the reader Important research facts on the topic of cash holding.
Keywords Cash holding, Motivations, Trade-off theory, corporate finance
Paper type Literature review
1. Introduction

Cash holding is one of the most controversial topics regarding corporate finance in recent times, and it is showing a lot of interest from analysts, investors, and companies.

Cash is one of the components of current assets, and it is the most liquid and least profitable. The term "cash holding" refers to the amount of money a company holds, for the purpose of day-to-day transactions or for investing in assets.

General, there are two measures in the financial literature for measuring cash holding; the first measure is the cash to total assets (Ozkan & Ozkan, 2004; Subramaniam et al., 2011; Acharya et al., 2012; Nason & Patel, 2016; Farinha et al., 2018). The second measure is the cash to net asset ratio, where net assets are total assets minus cash and marketable securities (Opler et al., 1999; Dittmar et al., 2003; Bates et al., 2009; Liu & Mauer, 2011; Xu et al., 2016; Cheung, 2016; Wu et al., 2017; Feng & Rao, 2018; Ranajee & Pathak, 2019: Tran et al., 2020).

Studies have shown the growth of cash holdings in American companies in the recent period, which has led to an increase in the importance of companies’ motives to cash hold, especially in the case of the desire to hedge against the risks of economic uncertainty (Bates et al., 2009). On the other hand, good economic conditions do not require holding cash, given the high opportunity cost.

In this regard, there are two important points contributed to the increasing importance of cash holdings in the field of corporate finance:

First: Cash holding is one of the financing policies for companies, as it is used to reduce the cost of external financing, to service debt during financial distress, implement profitable investment opportunities, finance daily operations and long-term investment, hedge against risks, and then respond to unexpected changes in cash flows (Opler et al., 1999; Almeida et al., 2004; Ferreira & Vilela, 2004; Acharya et al., 2007; Bates et al., 2009).

Second, an important point is the presence of a noticeable increase in cash hold in both American firms and firms abroad in recent years (Almeida et al., 2004; Bates, 2009; Prescott, 2015; Chang & Chi, 2018; Orlova & Rao, 2018; Phan et al., 2019). The finance literature has shown the existence of problems related to cash holds, such as the problem of agency and inefficient management of liquidity (Jensen,
1986). However, there are two main motives for companies to move towards cash hold, represented in the precautionary motive and the transaction motive (Ozkan & Ozkan, 2004).

This paper is organized as follows. In Section 2, we present Cash holding motives. In Section 3, we describe the Traditional theories of cash holdings, and Section 4 concludes the study.

2. Cash holding motives

The issue of cash hold has been of great importance to academics for a long time (Wasiuzzaman, 2014). Keynes (1936) explained that companies resort to cash hold based on three motives: prevention, trade, and speculation. For the motive of prevention, companies resort to cash hold to deal with emergency conditions and ensure the continuity of operations. Whereas business motives refer to the need for companies to cash hold, for the purposes of day-to-day and business transactions. Finally, the speculative motivation mainly shows that through the daily business process, Companies resort to maintaining cash and providing sufficient liquidity to take advantage of profitable investment opportunities such as fluctuations in interest rates or the potential increase in the value of purchases. Following, In light of Keynes' study, scholars have conducted a number of more in-depth research studies into the motivations of companies for cash hold.

Several studies have clarified the reasons why companies of cash hold, the most important of which are transactions motive, agency motive, tax motives, reserve motive, and predation motives (Opler et al., 1999; Bates et al., 2009). The transaction motive assumes that when companies need cash, there is a basic cost when transferring from non-cash assets to cash assets, which requires maintaining an optimal level of cash, in order to carry out normal operations without any cash deficit such as wages, salaries, taxes and other accounts payable (Baumol, 1952; Meltzer, 1963; Ozkan & Ozkan, 2004). The agency motive assumes the entry of company managers into projects that may or may not affect the company’s valuation, which requires maintaining a high level of cash, and internal funding sources are characterized by reducing audit on the part of lenders compared to financing through money markets, but the financing literature shows that the availability of a high level of cash available to executives, leading to ineffective
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acquisitions and mergers (Jensen, 1986; Mikkelsen & Partch, 2003; Pinkowitz et al., 2006; Dittmar & Mahrt-Smith, 2007; Harford et al., 2008; Tong, 2011).

The prudential motive refers to the desire of companies to cash hold as financial reserves to meet unexpected events. It focuses on the unexpected fluctuations that companies may face in the future; it is also used to allocate future investments (Opler et al., 1999; Han & Qiu, 2007; Almeida et al., 2004; Ozkan & Ozkan, 2004; Bates et al., 2009).

The tax motive represents one of the other motives for retaining cash, as companies facing repatriation restrictions resort to keeping a high level of cash, and on the other hand, we find that branches of companies that face a lower tax level upon returning repatriation, maintain a low level of cash, compared to similar branches facing a high tax level in the event of repatriation (Foley et al., 2007).

According to the predation motive for cash holding, When comparing two competing companies with the same investment opportunities, the fact that one of the two companies hold a large amount of cash is justified, given that the cost of not investing in one of the investment opportunities tends to be increasing, in light of the other competitor seizing all available opportunities. Whatever the reason for a company's cash holding, the final goal in cash management should be to obtain enough cash to cover the purposes above.

3. Traditional theories of cash holdings

In dealing with the issue of cash hold, academic researchers have adopted a set of theories related to the structure of capital, starting from the trade-off theory, the pecking order theory, the agency theory, and transaction cost theory, to explain the liquidity of companies (Opler et al., 1999; Dittmar & Duchin, 2011; Venkiteshwaran, 2011).

3.1 The trade-off theory

The idea of the theory is based on companies trying to reach the optimum level of cash, through a balance between marginal utility and marginal cost (Opler et al., 1999; Ferreira & Vilela, 2004).

According to (Opler et al., 1999; Ferreira & Vilela, 2004; All-Najjar & Belghitar, 2011) that the benefits of holding cash include: minimizing the costs of raising external funds, considered as a buffer against unexpected events and in addition,
Availability of an appropriate level of liquidity is one of the necessary requirements for companies most exposed to monetary fluctuations, thus reducing the possibility of financial distress. On the other hand, some costs that appear as a result of cash holding, as excessive investment projects are less profitable, so the so-called agency costs appear, and there is another type of cost associated with cash hold called the opportunity cost (Richardson, 2006).

### 3.2 Pecking order theory (hierarchy theory)

Companies prefer to finance investments with first to internal sources of financing such as retained earnings, then to turn to the second source of financing, which is the use of debt, whether in the form of loans or bonds and finally resort to equity financing (Myers & Majluf, 1984; All-Najjar & Belghitar, 2011).

In light of the success of companies and the change in their wealth, the level of cash reserves changes, which is confirmed by financial Pecking Order theory in the absence of what is called the optimal level of cash (Opler et al., 1999).

Dittmar & Duchin (2011) study has shown that the theory of financial Pecking Order is more applicable to older companies, according to the cash management funding behavior.

Both the financial hierarchy theory and the trade-off theory have in common that management always works in the interest of the shareholders, indicating the absence of an agency problem between managers and shareholders.

### 3.3 Agency problems (free cash flow theory)

According to Jensen (1986), FCF is cash flow that exceeds and is available at the company, that required to fund all projects that have positive NPV when discounted at the relevant cost of capital. Agency theory explains the desire of corporate executives to have power discretion over long-term investment decisions, which necessitates to cash hold high on their balance sheets. According to the agency theoretic framework, holding excess cash will result in a reduction in firm value. Large amounts of cash enable managers to pursue their own interests and invest in potentially negative net present value projects (Jensen, 1986; Opler et al., 1999; Dittmar et al., 2003; Pinkowitz et al., 2006; Harford et al., 2008; Chang & Noorbakhsh, 2009).

Shareholders can solve the agency problem caused by managers entering into negative NPV projects, by reducing managers' cash positions, by asking
management to take a dividend action. However, Harford (1999) argues that managers face the problem of underinvestment or exploiting investment opportunities by holding high levels of cash, which benefits shareholders.

However, there is a sense of worry among shareholders as a result of CEOs high levels of cash, and besides the problem of agency of ownership also appears the problem of debt agency, including unfavorable lending requirements by banks, which requires the need to maintain high levels of cash (Steijvers & Voordeckers, 2009; Niskanen & Steijvers, 2010).

3.4 The transaction cost theory

This theory explains that the main reason why companies' cash hold is to reduce transaction costs (Keynes, 1934). Given the exposure of small companies to greater operational and financial risks compared to large companies, they are likely to retain greater cash liquidity. On the other hand, companies that do not have sufficient cash or sufficient internal funding sources to meet their obligations and bills, resort to external sources of financing, to transfer non-financial assets Cash into cash assets, which increases transaction costs such as interest expense (Fazzari & Petersen, 1993; Opler et al., 1999; Kim et al., 2011). In brief, the transaction costs of each company differ from the other, according to the liquid assets it owns, the cost of external financing, the length of the Cash Conversion Cycle, and the firm's financial position (Opler et al., 1999).

4. Conclusion

The issue of cash hold is one of the dilemmas of the science of finance, and one of the most important internal policies pursued by companies, it is closely linked to firms’ financing options and this has been confirmed by research studies in recent years of the increase in cash hold of US companies and other companies.

In this paper, the researcher reviews the theoretical rooting of cash hold, and focus on motivations and related theories, which can help us to understand the issue of cash hold, to help discover new research ideas, and to carry out many applied and comparative studies across the countries of the world, and then benefit CEOs in particular and the countries in general.

Since Keynes (1936) has shown the motives for cash holding represented in transactions and precautionary motives, studies have followed to explain the
reasons why companies cash hold, which studies have attributed to internal factors according to the characteristics of companies, as well as external factors related to the impact of the macroeconomic, and given the multiplicity of theories and motives that try to explain the main reason behind the cash hold, it's still a dilemma facing many researchers. So, the researcher recommends conducting more studies to find out the real reason behind the cash holding, with studies focusing on the Arab environment due to the lack of relevant studies.

References
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## Appendix A. Findings of empirical research vis-a-vis the five motives of cash holding

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## Appendix B. Findings of empirical research vis-a-vis the three theoretical of cash holding

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