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Corporate Governance and Cash Holdings: The Way Forward

ABSTRACT

Purpose – This study aims to provide a review of corporate governance and cash holdings because strong corporate governance is necessary for the efficient utilization of firm's liquid resources such as cash, to minimize the agency cost of high cash holdings and to improve the value of cash.

Design/methodology/approach – The author provides a literature review of corporate governance and cash holdings through a conceptual and theoretical argument rather than empirical research.

Findings – The author reviews empirical and theoretical work surrounding key corporate governance variables and identifies avenues for future research. The author finds that corporate governance mechanisms and cash holdings have received much attention during the last two decades. However, the significant role of corporate governance (both country-level and the firm-level) in controlling the entrenched behaviour of the managers is discussed separately in the literature. The combined effect of both country-level and the firm-level governance is lacking in the cash holdings literature. Additionally, this study has found that while much attention is paid to developed markets, very little is paid to developing markets even though agency problems are high.

Originality/value – The study contributes to the growing literature on corporate governance and cash holdings and provides a further understanding of the role of governance in minimizing the agency cost to increase value by assuring that firms' assets are used efficiently and productively in the best interests of investors and other stakeholders. In addition, it provides new ideas for policy makers and future researchers where they need to do more work.

Keywords Country-level governance, Firm-level governance, Cash holdings, Agency problems

Paper type Conceptual paper

JEL Codes G30 G15 G34

1. INTRODUCTION

Cash represents a major element in most firms' set of assets. Cash has importance and investment of this type has been discussed by a number of authors including; Opler et al. (1999); Dittmar et al. (2003); Brigham and Daves (2004); Dittmar and Mahrt-Smith (2007); Bates et al. (2009); Al-Najjar and Belghitar (2011) and Bigelli and Sánchez-Vidal (2012). Recently, Yung and Nafar (2014); Iskandar-Datta and Jia (2014) and Yu. et al. (2015) found an increasing incidence of firms hoarding cash in unprecedentedly large amounts, indicating the significance of such assets in the corporate sector.

Excessive cash hoarding by firms is a serious concern for shareholders. Firms hoard cash for different motives, one of which relates to diminishing transaction costs and avoiding loss of underinvestment due to the scarcity of funds (Keynes, 1936; Kim et al., 1998; Opler et al., 1999; Ozkan & Ozkan, 2004; Wayne & Partch, 2003). On the other hand, high cash is often associated with low returns on investment (Dittmar et al., 2003; Tong, 2010) as it is the asset class most likely to be misused by managers (Jensen, 1986). Managers' value-creating behaviour is discouraged by higher cash when they invest in negative NPV projects. The low monitoring on the additional cash holdings results in managers accumulating perquisites and private benefits. These disadvantages lead to the agency problem of high cash (Harford, 1999; Jensen, 1986).

Agency theory suggests that when managers are not properly monitored, they will extract private benefits from the excess cash because of non-alignment of the managers and the shareholders incentives (Dittmar & Mahrt-Smith, 2007; Dittmar et al., 2003; Harford et al., 2008; Kalcheva & Lins, 2007; Pinkowitz et al., 2006). This entrenched behaviour of the managers who are expected to waste the firms' resources such as cash reserves, decrease the value of the firm (Durnev & Kim, 2005; Fresard & Salva, 2008; La Porta et al., 1998). Such behaviour can be controlled by adopting the corporate governance provisions.

This paper reviews the role that corporate governance plays in affecting firm cash holdings and also discusses ways in which agency problems related to the high cash holdings can be mitigated against. Governance instruments include country-level and firm-level governance (Klapper, Leora, & Inessa, 2004; Nam & Nam, 2004). Government, politicians, judiciary, regulatory authority, shareholder rights and the creditor rights control the management of the firms externally (Dallas, 2004; Dittmar et al., 2003; La Porta et al., 1998). While the board of directors, independent auditors, independent directors to total directors' ratio, chief executive officer (CEO) and chairman internally monitor the firms (Gompers, Metrick, & Ishii, 2003), external governance mechanisms are often weak in developing financial markets relative to developed markets (Nenova, 2003). Studies have discussed the role of both internal- and external-governance in controlling the entrenched behavior of managers to mitigate the agency cost of high cash holding.

By reviewing existing literature, gaps in research on this issue are identified. The previous studies have discussed the significant role of corporate governance (both country-level and the firm-level) in mitigating the agency problems of cash holdings in developed markets. Few have diverted their attention to the developing financial markets although; the agency conflicts are high in these markets. Review of the corporate governance and cash holding literature has shown that the impact of country-level and firm-level governance on cash holdings is typically disaggregated by past researchers. Kalcheva and Lins (2007) and Ammann et al. (2011) have studied the impact of both country-level and the firm-level governance on cash holdings. But Kalcheva, & Lins, (2007) used managerial control and inspected the way country-level investor protection slightly effects cash holdings while Ammann et al. (2011) used measure based on 64 individual governance attributes provided by Governance Metrics International (GMI) for firm-level governance and checked its impact on cash holdings by controlling the effect of country-level governance. Both these studies used one-year data to investigate the impact of governance on cash holdings. But these studies do not reflect the complete picture on how governance at the firm-level and the country-level effect cash.

More studies are needed to investigate the combined effect of both firm-level governance and the country-level on the level and value of cash holdings. Specifically, the issues that we propose in this study include the value of high level of cash holdings when there is weak governance (both

country-level and the firm-level); the impact of strong firm-level governance on the higher cash holdings motivated by weak country-level governance; the value of higher cash resulted from strong country-level governance when there is weak firm-level governance; and the level and value of cash holdings when there is strong country-level as well as strong firm-level governance.

This paper starts with arguments on the importance of cash. The study next explores motives of holding high cash that leads to an agency problem. The role of both country-level and the firm-level governance on cash holdings by researchers are discussed in detailed. The paper concludes at the end by recognizing some main research issues that need further investigation.

2. Motives, Costs, and Theories of Cash Holdings

2.1 Motives for cash holdings

Why the firms hold cash reserve? The debate on the high cash holding is trace back to Keynes (1936), who was the first to show the major motives of holding the cash reserves; to diminish transaction costs from not having to liquidate assets when facing a payment and to avoid the loss of underinvestment because of limited funds. Based on these motives, two major hypotheses were developed that contribute to the determinants of cash holdings; trade-off model and financing hierarchy theory. Beside these two theories researchers have also argued that firm's cash-holding policy is also a substance of managerial preference when managers do not act in the best interests of shareholders. The type of agency conflict first documented by Jensen (1986) has been explored further in the later studies regarding cash holdings (see, for example, Dittmar and Mahrt-Smith 2007; Harford et al., 2008; Kalcheva and Lins, 2007). The motives and the costs attached to the cash holdings are discussed next.

2.1.1 Transaction Costs Motive:

The first motive related to the trade-off model is transaction cost minimization. According to this motive, to meet the cash needs for day to day operations and other routine matters, firm needs liquid resources. If the firm is short of cash at a time when needed, it has to liquidate its assets to meet cash needs for which sometimes it will have to pay a transaction cost. Thus, to avoid these transaction costs, a firm needs to hold liquid assets (Dittmar et al., 2003; Miller & Orr, 1966; Tobin, 1956). Another purpose of holding cash is to reduce the cost of raising funds from the capital market since; raising external financing includes both variable and fixed cost.

2.1.2 Precautionary Motive:

There are unexpected contingencies in the future for the firms, such as strikes, increasing the cost of raw material, change in demand and supply of raw material or any other unforeseen fluctuations. In these situations, the firm requires liquid assets to meet these needs. Holding cash for such motives is termed as evidence of the precautionary motive. The precautionary motive is based on the effect of information asymmetric for raising funds. Because of information asymmetric, there is a chance that the planned securities to be issued in the capital market might be over-priced, under-priced or equally priced since; external financing includes fixed costs and variable costs associated with the amount of capital raised. Thus, instead of the raising funds from capital markets, firms might be unwilling to do so because of high cost, argued by Opler et al., (1999) and Ozkan and Ozkan (2004). In case of cash shortage, the firms may reduce their future investments (Kim et al., 1998; Opler et al., 1999; Ozkan and Ozkan, 2004). Thus, to reduce future cash shortfalls, firms hold cash reserves.

2.1.3 Speculative Motive:

Kim et al. (1998); Opler et al. (1999) and Ozkan and Ozkan (2004), suggested that the main aim to hold cash for speculative motive is that, firms might reduce their future investments when they face cash shortages, for example, take-over or acquisition opportunities in the future. Van Horne and Wachowicz (2008) argued that for non-financial firms, it is important to hold cash for the purpose of speculations.

2.2 Cost of Cash Holdings

Along with the benefits, there are costs attached to the holding of high cash reserves which are: the cost of carry or the opportunity cost and agency cost of holding capital in the form of liquid assets.

2.2.1 Cost of Carry / Opportunity Cost:

When there is an assumption that the manager aim is to maximize the shareholder's wealth, the firm might incur the cost by holding the cash reserves, which is known as the cost of carry. Cost of carry is the "difference between the return on cash and the interest that would have been to be paid to finance an additional dollar of cash". The cost incurred is related to the difference between the earnings from holding cash and the interest that firms will pay to fund additional cash (Dittmar et al., 2003). In other words, the firm may incur the opportunity cost by holding the high cash levels. An opportunity cost is a cost related to cash deficits or leaving the opportunities. Ferreira and Vilela (2004) argued that the main cost of holding the cash is the opportunity cost. The interest income the firm is getting for holding cash in the current bank account is smaller than the returns that could potentially be earned if the cash would be invested in other good projects.

2.2.2 Agency Cost:

When the assumption about shareholders' wealth maximization is neglected then there is an opportunity for the managers to use cash in wasteful projects like, acquisitions and other loss-making investments that result in increasing the costs of holding the cash, known as agency cost (Jensen, 1986). When managers do not act in the best interest of shareholders, it might increase the agency cost of holding high levels of cash (Papaioannou, Strock and Travlos, 1992; Myers and Rajan, 1998). Jensen and Meckling (1976) and Matos (2001) reported the types of agency cost;

***Bonding Cost:** When the firms need to appoint an independent auditor, the expenses associated with such appointments, such as salaries paid in the process of implementing corporate governance principles in a firm, are known as bonding cost.*

***Residual Cost:** When the firm appoints an independent board and in carrying out the companies' corporate social responsibility, the expenses associated are known as the residual cost.*

***Monitoring Cost:** The cost related to the process of monitoring the activities of managers is known as monitoring cost.*

2.3 Other motives of cash holdings

Other than the major three motives and the costs discussed earlier, prior studies have identified some other motives for firms to hold cash. Papaioannou et al. (1992) suggested that managers tend to retain more cash as a source of joy. Myers and Rajan (1998) argued that firms hold high cash to obtain more private benefits. Opler et al. (1999) documented that rather paying dividends to stockholders, managers prefer the control that comes with holding cash. Dittmar et al. (2003) warn about the agency problems of high cash holdings. Tobin (1956); Miller & Orr, (1966) and Dittmar et al. (2003) argued that firms stockpile cash when the raising-costs and the opportunity-

costs are higher. A summary of the motives for cash holdings suggested in prior literature is provided in Table 1.

Table 1. Motives for Cash Holdings

S#	Motives for Cash Holdings	Source/ Authors
(i)	Transaction motive	Baumol (1952); Meltzer (1963); Miller and Orr, (1966); Mulligan (1997)
(ii)	Precautionary motive	Keynes, (1936); Myers and Majluf, (1984); Opler et al., (1999); Bates et al. (2009)
(iii)	Agency motive	Jensen, (1986); Dittmar et al. (2003); Mikkelsen and Partch, (2003); Harford, (1999); Pinkowitz et al. (2006); Dittmar and Mahrt-Smith, (2007); Harford et al., (2008); Gao et al. (2013)
(iv)	Financial constraint motive	Almeida et al. (2004); Khurana et al. (2006); Han and Qiu, (2007); Denis and Sibilkov, (2010)
(v)	Tax motive	Foley et al. (2007)
(vi)	Culture	García-Teruel (2008)
(vii)	Signalling motive	Harford et al. (2008).
(viii)	Diversification motive	Ran (2010)
(ix)	Product market competitiveness motive	Haushalter et al. (2007); Fresard, (2010); Enrique and Szalay (2010)
(x)	Corporate life cycle	Dittmar and Duchin (2011)
(xi)	Political connections.	Hill et al. (2013)
(xii)	Government quality	Chen et al. (2014)
(xiii)	State ownership	Megginson et al. (2014); Kusnadi et al., (2015)

(xiv)	Technology spill-overs.	Qiu and Wanb (2015)
(xv)	Cultural dimensions	Chen et al. (2015)

3. Theories of cash holdings

Based on the motives and the costs related to the high cash holdings, the major theories discussed in the literature are:

3.1 Trade-Off Model:

Trade-off model specially applied to firms was developed by Miller and Orr (1966), for the purpose of the optimal level of cash by balancing the costs of running out of cash and the costs of holding non-interest bearing cash. Trade-off theory suggests that by holding the optimal level of cash, firms increase their values by considering the marginal costs and marginal benefits (Ferreira and Vilela 2004). In other words, by weighting the marginal costs and marginal benefits, the firm set optimal level of cash, as argued by Afza and Adnan (2007). Opler et al. (1999) argued that the firm holds cash when there is an equilibrium between the marginal shortage of cash and the marginal benefit of holding cash.

Trade-off theory was expanded by Opler et al. (1999) by adding information asymmetry that is related to the rising cost of external resources and the agency cost of outside financing. Opler et al. (1999) documented that if the firm is short of cash, it should meet its cash needs from raising funds from; the capital market having the cost of information asymmetry, liquidate existing assets at low cost, reduce dividends and investment, renegotiate existing financial contracts, apply for debt having a cost of financial distress or some combination of this action

Thus, by supporting trade-off model they argued that firm can save all these costs by holding high cash reserves. They further argued that even if the firm has a chance of raising funds from

the capital market, it is not willing to do so, as suggested by the precautionary motive of information asymmetry. They suggested that firm hold high cash reserves when there is equilibrium between the marginal shortage of cash and the marginal benefit of holding cash. Ozkan and Ozkan (2004) supported Opler et al. (1999), by further arguing that the firm raises its cash level when the cost of external financing is high. Ferreira and Vilela (2004) have reported the following major benefits of high cash holdings;

- *Reducing the likelihood of cost of financial distress, to stay safe from unexpected losses,*
- *Meeting the cash needs for investment policy in case of financial constraints, otherwise firm might have the issue of underinvestment and the firms are able to achieve optimal investment policies and*
- *Reduction in the costs of raising external funds or liquidating existing assets, cash reserves as insurance in order to survive in a period of uncertainty and unstable situations on the market (precautionary motive).*

3.2 Financing Hierarchy Theory

Myers (1984) and Myers and Majluf (1984) have developed the financing hierarchy theory, which is contradictory to the Miller and Orr (1966) and Kim et al. (1998) trade-off model. According to this theory, there is no optimal level of cash holdings for a firm. The firms do not have a target level of cash, but cash is raise based on the investment needs (Hall et al., 2014). The firms follow a pecking order of financing to minimize costs related to information asymmetry (Myers, 1984; Myers & Majluf, 1984). The firm first uses the internal sources of financing such as retained earnings, and then fulfils its cash needs with the external sources such as debt (safe-debt and risky-debt) and external equity, when internal sources are not sufficient. In case of costly external funding, some studies favour debt as compared to equity issuance, since debt has lower information asymmetry costs than equity financing (Myers, 1984).

Dittmar et al. (2003) argued that cash can be seen as an outcome of the different financing and investment decisions proposed by the hierarchical pattern of financing. They have added that the firms with high level of cash-flows are those who distribute dividends, apply for debt financing, and as a result store cash. Ferreira and Vilela, (2004) argued that cash can be used for financing investments to pay firm's debt and in-turn stockpile cash. According to Almeida, Campello, and Weisbach (2004), financially constrained firms have higher propensity to save cash out of cash-flows. Acharya et al. (2007) added that these firms prefer higher cash to lower debt for hedging needs. Pinkowitz et al. (2006) further argued that financing hierarchy theory become stronger in privatized firms because of high information asymmetries related to supervision, lower levels of disclosure, and external auditing in private firms than listed firms.

3.3 Agency Theory

In literature two major explanations; operational considerations i.e., transaction cost and precautionary motives, and the agency issue related to corporate cash holding are discussed in general. Myers and Rajan (1998) and Papaioannou, Strock, and Travlos (1992) argued that managers tend to retain more cash as a preference to obtain more private benefits from liquid assets. These liquid assets are valued by outside shareholders on the basis of two predictable theories. The first one is related to the use of cash by well-intentioned managers to prevent the under-investment of positive NPV projects (Myers, 1984; Myers & Majluf, 1984). The second one is about using cash by entrenched managers to enable over-investment in negative NPV projects (Easterbrook, 1984; Jensen, 1986; Myers & Rajan, 1998). On the basis of these two school of thoughts, previous studies have discussed agency problems of the cash holding through following major motives.

***Flexibility Motive:** The managers who are self-interested, favor flexibility and freedom from capital market discipline (Easterbrook, 1984; Jensen, 1986). These managers stockpile some of the cash rather than investing in the valuable projects or exploit unanticipated investment opportunities when the firm generates excess cash flow.*

Spending Motive: *Spending motive contradicts flexibility motive, suggesting a low level of cash reserves in the firm. According to this motive, managers will prefer to spend most of the excess cash-flow on acquisition (Jensen & Meckling, 1976). These self-interested managers prefer to spend cash quickly in the present and markdown the ability to invest more in the future, resulting in over-investment (Harford et al., 2008; Kuan, Li, & Chu, 2011).*

Free Cash-flow Motive: *The free cash-flow motive is suggested by Jensen (1986) and Stulz (1990), guessing that shareholders will limit the managers' access to free cash-flow to mitigate agency conflicts over its deployment. Managers are provided with sufficient internal capital by the shareholders to efficiently fund all good projects. The purpose is to restrict managers from access to internal capital that benefits them at the expense of shareholders.*

Shareholder Power Motive: *Stulz (1990) and Myers and Majluf (1984) showed the trade-off, the shareholders are facing in defining how much liquidity should be at managers' disposal and the potential for under-investment due to information asymmetry between capital providers and managers. Similar to the spending motive, a negative relationship is predicted by shareholder power motive between agency problems and cash reserves. But its prediction is primarily driven by better-controlled managers holding larger cash reserves rather than worse-controlled managers holding smaller reserves.*

These motives indicate that managers are accountable to make strategic decisions about the excess cash reserves whether to pay the dividend to shareholders, spend on internal projects, use it for external acquisition, or continue to hold it (Harford et al., 2008). The countries with strong investor protection control managers by forcing them to return the excess cash in the form of a dividend, supporting shareholder power motive (La Porta et al., 2000). In these countries, it is costly for the managers to peruse their own welfare over shareholders' interests. Thus, reducing the agency conflicts by limiting the flexibility that managers have for potentially harming corporate assets (Bailey, Karolyi, & Salva, 2006; Hope, Kang, & Zang, 2007). While, the firm in the countries with weak corporate governance encourages the managers to hold more cash (Dittmar et al., 2003). This high cash results in under-investment by the managers that harm the

interests of shareholders (Dittmar et al., 2003; Easterbrook, 1984; Jensen, 1986). Thus, flexibility motive dominates in these countries. The next section has reviewed the studies on the role of country-level and the firm-level governance in effecting cash holdings.

4. Corporate Governance and Cash Holdings

Researchers have tried to find the ways to monitor firms (both internally and externally) to avoid the misuse of high cash holdings. Because low monitoring on the additional cash holdings results in private benefits for managers (Jensen, 1986). Instead of paying dividends to stockholders the managers prefer the control that comes with holding cash (Opler et al., 1999). The disadvantage of cutting dividend or resorting of costly external financing, increase the level of cash that leads to agency cost and the decreasing value of the firm (Harford, 1999), by enabling the firms to invest in non-profitable NPV projects (Myers, 1977). Thus, to control the entrenched behavior of managers, investors may go for strong monitoring to control the agency conflicts. We have tried to review the studies related to high cash holdings, agency problem of high cash and monitoring by the governance mechanism (both at firm-level and country-level governance).

4.1 Country-level Governance

The role of corporate governance is to control the entrenched behaviour of the managers who are expected to waste the resources of the firms. The evidence from the US showed no support for agency perspective in the earlier investigations on cash holdings but later studies have proven the miss-use of extra cash resulted from the divergence of interest between managers and the shareholders. The first extensive study on cash holdings was conducted by Opler et al. (1999), who have provided a little evidence on the wastage of cash by the managers. Wayne and Partch (2003) reported the similar findings that the firms with persistent large cash holdings in the US do not squander the resources indicating that large cash holdings do not affect the firm performance. On contrary, the wastage of firm resources such as cash on poor acquisitions was reported by Harford (1999).

The cross-country analysis has provided the mixed evidence on the impact of country-level investor protection on cash holdings and among them most of the studies agreed on the agency perspective of high cash reserves. La Porta et al. (2000) found lower dividend for the firms in the

countries with weak investor protection, indicating a higher level of cash. The study by Dittmar et al. (2003) was the first that inspected the direct impact of corporate governance on cash holdings. They studied a sample of more than 11,000 firms from 45 countries including developing countries like India and Brazil. Their focus of the study was to investigate the determinants of cash holdings by using a country-level proxy. They found that the firms in the countries with poor investor protection have higher liquid assets which reflect expected agency problems, while the firms in the countries with strong investor protection and developed external capital markets hold less cash. Their findings indicate that shareholders want to limit the cash at managers' discretion and move to do so when managers have sufficient power. They have added that the determinants like asymmetric information and investment opportunities become less important in the countries with weak shareholder protections.

Kalcheva and Lins (2007) took in the corporate governance controls at the firm-level and inspected the way the country-level investor protection slightly effects cash holdings. They found that internationally the firms with weak shareholder protection hold more cash but the result was insignificant, and the managerial control over the cash negatively affect the firms value, showing that cash is not invested in profitable projects. The reason behind the contradictory results of both Dittmar et al. (2003) and Kalcheva and Lins (2007) related to the impact external shareholders' protection on cash holdings is because they both have used 1-year sample period for their study. The results of Kalcheva and Lins (2007) study also showed that when there is weak external shareholder protection the firm value decreases, if more cash is held by the managers but if the managers pay the dividend the firm value increases although, there is weak external shareholder protection. They argued that excess cash held by the control managers is not related to firms' value when there is strong external shareholders protection. This showed that strong external shareholders protection disciplined managers to stop doing the unnecessary investment that might affect value negatively when there is weak firm-level protection.

Pinkowitz et al. (2006) studied cross-sectional time series data on a sample of firms from 35 countries over the period of 11 years. They have investigated two components of investor protection separately, a legal rights component and an enforcement component¹. By applying

¹ Legal rights component include legal rights granted to the investors and an enforcement component is the quality of a country's institutions that determines the extent to which these rights are respected and enforced.

various specifications of valuations regressions of Fama and French (1998) model, they found that the relationship between cash holdings and firm value is much weaker in countries with poor investor protection as compared to the countries having good investor protection². In additional support on the importance of agency theories, they found that the relationship between dividends and firm value is weaker in countries with stronger investor protection. They have also found that cash is worth less to the minority shareholders for the firms operating in the countries with low investor protection. In other words, in countries with low investor protection, the management and controlling shareholders exploit the rights of minority shareholders by using the corporate resources for their own benefit, resulting in high agency cost between management and minority shareholders.

In the US, Dittmar et al. (2007) found the extensive impact of governance on the value of cash holdings by comparing poorly- and well-governed publicly traded firms. They have supported the findings of Pinkowitz et al. (2006) and argued that value of the cash is doubled in the well-governed firm, as compared to the poorly-governed firm, showing that corporate governance controls the agency problems associated with excess cash holdings. They have not found any evidence on the negative impact of large cash holdings on operating performance for the firms with good governance. The evidences discussed shows that the value of the cash is lowered for the firms operating in the countries with weak country-level governance.

The US evidence documented by Harford et al. (2008) contradicts the previous literature. By studying the 1872 firms covering the period from 1993 to 2004, Harford et al. (2008) found smaller cash reserves for the firms with weaker corporate governance structures³. They argued that the firms prefer to share repurchase instead of increasing dividends when distributing cash to shareholders, dodging future pay-out promises. They further argued that rather than hoarding the cash, weakly controlled managers in these firms try to spend cash on unnecessary capital expenditures and acquisitions. Thus, increase in the capital expenditures and acquisitions results from the combination of excess cash and weak governance. Harford et al. (2008) further added

² A dollar of liquid assets is worth \$0.91 in countries with above-median investor protection while it is worth only \$0.33 in other countries.

³ Harford et al. (2008) have used shareholder rights developed by Gompers, Ishii, and Metrick, (2003).

that combination of excess cash and weak governance leads to lower profitability and lower valuations for the firms.

The evidences discussed have shown that even with the strong country-level protection like the US, the managers in the firms with weak firm-level governance waste resources by investing in sub-optimal investment that harm the value of the shareholders. Caprio, Faccio, and McConnell (2013) and Iskandar-Datta and Jia (2014) also provided the evidences, which contradicts the findings of Dittmar et al. (2003), Kalcheva and Lins (2007) and Pinkowitz et al. (2006) that there exists inverse relationship between corporate governance and cash holdings but support the results of Harford et al. (2008).

Caprio et al. (2013) showed the positive impact of strong shareholder rights on cash holdings by using a UK legal origin dummy as a proxy for strong shareholder rights. Iskandar-Datta and Jia (2014) employed corrected- and revised-anti-director rights indices developed by Spearman (2009) and Djankov et al. (2008) respectively, on a huge sample of 18,192 firms from 41 countries for the period 1996–2008. They have also found the positive impact of strong shareholder rights on cash holdings. Thus, considering the literature on the investor protection and cash holdings in financial markets, we come to know that still there are confusions on the role of country-level governance on cash holdings. More studies are needed to investigate this issue. The next section has reviewed some of the important studies on firm-level governance and their impact on cash holdings.

4.2 Firm-level Governance

In developed financial markets, shareholders can force managers to return excess funds to them, declining the agency cost because of strong shareholders protection, as argued by La Porta et al. (2000). The work did later on corporate governance and cash holdings in the US showed that even in the countries with strong shareholder protection, managers in the poorly-governed firms cannot systematically utilize its liquid assets (Harford et al., 2008). This show that even with the strong external protection, the agency problems cannot be controlled when there is weak firm-level governance. Other than developed financial markets, managers are expected to waste the firm resources which lead to severe expected agency costs of managerial entrenchment in the

countries with weak country-level shareholder protection (Claessens & Fan, 2002; Claessens & Laeven, 2003; Klapper & Love, 2004; Lemmon & Lins, 2003; Lins, 2003). Thus, the firm-level governance and its role are important to control the agency problems even in the presence of strong- or weak-country-level protection.

The study by Kalcheva and Lins (2007) took the proxy for managerial control and found that the managerial control over the cash negatively affect the firms value, showing that cash is not invested in profitable projects. They have also shown that when there is weak country-level shareholder protection, the firm value decreases if more cash is held by the managers. Researchers tried to be more specific and take into account the firm-level governance to investigate its role in minimizing the agency cost of cash holdings. Taking the data from listed American Standard and Poor 1,500 firms, Chen (2008) investigated firm-level corporate governance including managerial ownership, board independence and antitakeover provision, and their impact on cash holdings. In his investigation, he compared cash holdings between the listed new-economy firms which need great amounts of cash asset for investment opportunities with high return potential, versus the old-economy firms for which investment opportunities are comparatively low. In newly listed economy firms' governance mechanisms positively effects cash holdings. They gave support to agency theory for holding the cash that corporate governance in listed new-economy firms may create shareholder protections that make investors willing to accept higher levels cash. While in old-economy firms the impact of governance mechanism was negative because of the lack of new opportunities the higher cash may be misutilize by managers and that's why the shareholders want to limit cash in these firms to avoid the unnecessary investment.

Chen and Chuang (2009) did a similar sort of study on a sample of high-tech firms listed on NASDAQ from 1997 to 2003. They found that growing firms accept high levels of cash if the rights of shareholders are strong, supporting the view of Chen (2008). In high-tech firms' CEO ownership, the directorship of venture capitalists (VC's) and independent directors showed positive effects on cash holdings, consistent with the interest-alignment hypothesis. These firms store cash to avail opportunities in the future. They further argued that these variables play critical roles in corporate cash policy and the influence of board increases when the CEOs of the firms are also their founders or when VC's hold a big stake of company shares. The evidences

discussed show that the role of firm-level governance is very prominent, even in the presence of strong country-level protection. The firms hold higher cash only when they seek opportunities in the future otherwise, the strong firm-level governance limits cash level where chances of private benefits are higher.

In case of studies in the developing financial markets where country-level governance is weak, authors have found mixed evidence about the impact of corporate governance on cash holdings. Lee and Lee (2009) found fewer cash ratios in the firms with lower managerial entrenchment, smaller boards, and more independent boards. They studied a sample consists of 1,061 firms during the period 2001 to 2005 in five Asian countries including Malaysia, Indonesia, Philippines, Singapore, and Thailand. They found that smaller board results in strong monitoring because of less free-riding problems and the independent boards independently monitor the firm's operations. These firms use the extra cash in the profitable projects, indicating the positive impact of smaller boards, and more independent boards on firm performance. A major part of their sample was from the developing markets which showed that the strong firm-level governance limits the entrenched behaviour of managers by decreasing cash levels when there is weak country-level governance.

Bokpin et al. (2011) have found a positive impact of board size on corporate cash holding and a negative impact of board composition on cash holding for the firms listed on Ghana Stock Exchange (GSE). Based on a sample of 3,239 observations of 597 French listed firms during 2001–2007, Boubaker and Nguyen (2015) have also documented that the increase in the level of cash is strongly tied to the degree of board effectiveness. They found that the splitting role of CEO and chairman, and the number of independent directors is vital in mitigating the agency problem by negatively affecting cash holdings. They have added that levels of cash holdings are higher for firms in which the CEO is also the chair of the board of directors.

Yu et al. (2015) examined a sample of 8,771 firms for the period of 15 years starting in 1991 and finish in 2005, listed on Taiwan stock exchange. They have studied the relationship among a number of banking relationships, the percentages of managerial ownership and board ownership, and the firm's level of cash holdings. They found that the greater percentages of managerial ownership and board ownership are related to greater levels of corporate cash holding while

lower levels of cash holdings are associated with a larger number of banking relationships. Both managerial incentives and board monitoring are substitutes for each other especially when firms were found to have poorly incentivized managers. They have also found that the differences among the firms having a different lifecycle (more or less than 5 years) and the firms with improved growth opportunities tend to hold more cash. These findings confirm that along with the country-level governance, the firm-level governance also plays the most influential role in affecting the level of firms' cash holdings.

5. Discussion

The review carried out in this paper has focused on the main issues examined by numerous empirical and theoretical papers on the level of firm's cash holdings, managers behavior in utilizing cash holdings in the presence of weak- and strong-governance and the role of corporate governance to optimally utilize the liquid assets in the welfare of the shareholders by minimizing the agency cost and maximizing the firm value. During the last two decades, these issues have been discussed by many researchers. This review has highlighted some of the major issues regarding the behavioural (agency) theory of cash holding; the major motives of holding cash (*flexibility motive, spending motive, free cash flow motive and shareholder power motive*); and lastly the role of country-level and the firm-level governance in affecting firm's cash holding. The literature on cash holdings gives considerable attention to the important issues regarding the role of corporate governance in effecting cash holdings and its value but there are some areas and issues which need a further investigation that is discussed here.

5.1 Studies in Developing Markets

Managers in the firms with a high ratio of cash and other liquid assets needed to fund the entire firm's assets into profitable investment projects. But there is an incentive for the managers to invest the excess liquid assets in non-profitable projects and pursue their own interests to the disadvantage of shareholders especially when there is not efficient monitoring over them Jensen (1986). The studies have shown that weak corporate governance encourages the managers to

hold more cash (Dittmar et al., 2003). The managers in markets with weak governance generally accrue private benefits and harm shareholders' interests by tunnelling⁴.

Tunnelling can take two forms: under-investment and over-investment of the free cash-flows (Colombo & Stanca, 2006). Under-investment occurs when the management of a firm does not derive benefits from the positive net present value projects. Shareholders' value is harmed in this case because the managers do not perform their fiduciaries. The second form of tunneling in the financial market takes place due to the over-investment of the free cash-flows. According to Jensen (1986), over-investment takes place when the size of a firm is increased beyond the optimal level by investing in unhealthy projects due to the private interests of the management. Over-investment also includes empire-building by the management of a firm. The managers do not pay dividends to the shareholders and utilize the free cash-flows for their own private benefits (Rashid & Islam, 2008).

The firms hoard huge cash reserves in developing markets and the chances of empire-building by the management are much higher in these developing markets (Lee & Song, 2010). In spite of cross-country studies on corporate liquidity policy (Dittmar et al., 2003; Kalcheva & Lins, 2007; Ammann et al., 2011; Iskandar-Datta and Jia, 2014; Yung & Nafar 2014), very limited attention is paid to the developing markets. Although the chances of private benefits are higher, easier and also typically riskier in developing markets with weak country-level shareholder protection (Acemoglu et al., 2003; Claessens & Laeven, 2003; Klapper & Love, 2004; La Porta, Lopez-de-Silanes, Shleifer, & Vishny, 2002; Lemmon & Lins, 2003; Lins, 2003).

Even though, some of the studies have discussed cash holdings for developing markets in various contexts. For instance, Yu et al. (2015) examined the firms listed on Taiwan stock exchange to examine the firm-level governance impact on cash; AL-Dhamari and Ismail (2014) found the moderating role of firm-level governance between free cash-flows and earnings predictability in Malaysian; Bokpin et al. (2011) examined the role of foreign share ownership in predicting corporate cash holding for the firms listed on Ghana Stock Exchange. In China, Chen et al.

⁴ Tunnelling means the misuse and stealing of the firm resources like cash.

(2014) tested the effect of government quality on cash holdings; Megginson et al. (2014) checked the relationship between cash holdings and state ownership declines and Kusnadi et al. (2015) studied non-financial firms listed on the Shanghai and Shenzhen stock exchanges. But these studies in developing financial markets have not yet considered the role of corporate governance (both country- and firm-level) in affecting cash holdings. There is, therefore, a need to investigate the role of corporate governance mechanisms in (at both country- and firm-level) that impact upon cash holdings as well as the question of how corporate governance in developing markets helps to improve the value of cash holdings.

5.2 The role of Firm-level Governance in the Presence of Country-level Governance

According to Mensah et al. (2003), there is an ideal situation when manager manages the capital provided by investors in their best interest. The separation of financing and the management indicates the separation between ownership and control (Berle & Means, 1932). To maximize the utility of the firm resources, the principal (shareholder) has to do a lot to keep the amount of convergence of interest at maximum with the agents (managers) (Jensen & Meckling, 1976).

Corporate governance in this regards plays its role to monitor the management of the firm and help firms in the alignment of interest between the agent and the principal. Authors have discussed the impact of both country-level and the firm-level governance on cash holdings. Studies have revealed that agency problem of the high cash holdings are higher in the firms with weak governance because managers in the firms with weak corporate governance use excess cash to seek their own welfare (Dittmar et al., 2003; La Porta et al., 2000). The cross-country analysis related to the influence of cash holdings on firm performance has shown that cash holdings are valued at a discount to the countries with weak investor protection as compared to the countries with strong investor protection (Kalcheva & Lins, 2007; Pinkowitz et al., 2006). Dittmar and Mahrt-Smith (2007) have argued that when there are potential managerial agency problems, the value of cash can be determined by investors expectations of using that cash. They have added that cash holdings increase with shareholder protection levels and when agency problems are likely to be greater, shareholders allocate lower value to an additional dollar of cash reserves.

But the latest evidence by Iskandar-Data and Jia (2014) contradicts previous findings and found that there is a direct relationship between corporate governance and cash holdings. Some other studies control the effect of firm-level governance i.e., the managerial control and inspected the effect of country-level protection on cash holdings. In spite of poor firm-level governance, the impact of managerial control cannot affect high cash holdings when there is strong country-corporate governance (Kalcheva & Lins, 2007). While in the US setting Harford et al. (2008) argued that the managers were using cash in the non-profitable projects in the firms with poor firm-level governance. These evidences are showing that the effect of corporate governance on cash holdings and the value of cash are not yet clear.

There are some studies that have shown that the protection to the shareholders at the firm-level has a significant impact on the level of cash holdings. For example, in the US Chen (2008) found the significant impact of firm-level corporate governance including managerial ownership, board independence and antitakeover provision on cash holdings. Chen & Chuang, (2009) showed that the effect of CEO ownership, the directorship of venture capitalists and independent directors on cash holdings. Yu et al. (2015) also reported the significant relationship between the various firm-level governance measures and cash holdings in the developing financial market. Thus, both country-level and the firm-level corporate governance mechanisms have a significant role in effecting the level and value of cash holdings. But studies are lacking on the interaction of both country-level and the firm-level governance in effecting cash holdings to get the clearer picture on how country-level and the firm-level governance combinedly effecting cash holdings.

By reviewing current studies, we come up with some of the predictions about cash level and how governance plays its role on the value of cash. Table 2 summarises of cash holding predictions in different corporate governance scenarios.

Table 2. Summary of cash holding predictions

	Firm-level Corporate Governance	
Country-level Corporate Governance	Strong	Weak

Strong	Low Cash Holdings	Moderate Cash Holdings
Weak	Moderate Cash Holdings	High Cash Holdings

Implications from the pattern shown in Table 2 include:

- 1) *When there is strong firm-level governance and country-level protection the level of cash decreases. Because the firms operating in the countries with strong investor protection can raise the funds at any time due to developed financial capital markets. Thus, there will be low cash levels when there is strong country-level protection and strong firm-level governance further reduces the cash levels to reduce the managerial empire buildings.*
- 2) *The firms with high cash holdings due to weak firm-level governance can be moderated by the strong country-level governance. Because the higher level of cash that might be consumed by managers on the wasteful projects in the future due to weak monitoring can be controlled with strong country-level governance.*
- 3) *When there is weak country-level protection, the higher cash that might be used in the over-investment can be moderated by strong firm-level governance to improve the value of cash. The exploitation of the liquid resources by the managers in the firms with weak country-level protection can be reduced by reducing the agency costs for the shareholder by adopting strong firm-level governance.*
- 4) *When there is weak governance (both country-level and the firm-level), the firms hold a higher level of cash resulting in under-investment that might have a negative impact on firm value. Because the chances of extracting private benefits are higher in the firms with weak governance and less monitoring over the managers allow them to store cash for their own personal benefits.*

6. Concluding Remarks

Cash holding literature has expanded rapidly in recent years. In particular, researchers have attempted to identify the major motives for cash holdings in both single markets and internationally. Two classical explanations for high cash reserves are: the desire to avoid transaction costs when firms need cash, but do not want to liquidate assets and face under-investment scenarios in the future. If the firms hold cash for these two motives, then there is no need to monitor the firm as it is fulfilling its fiduciary duties. However, a number of studies have proven that these two motives are not the only drivers of the propensity to hold high cash, with the divergence of management and the shareholder interests - the agency motive – also being important.

Agency motive advocates that management of the firms is utilizing its cash resource in under- or over-investment, which harms the value of the shareholders. Thus, shareholders need to discipline the management of the firms that have high cash reserves. Corporate governance in this regards plays important role in monitoring the firm by forcing the management to efficiently utilize free cash. Researchers have shown the significant impact of both country- and firm-level governance on cash holdings. But the role of both country- and firm-level governance were discussed separately in the past studies. The literature on the impact of country-level governance and cash holdings has shown mixed results in the cross-country analysis. While, keeping the control on country-level governance, the firm-level governance has also shown their significant impact on cash holdings. Both firm-level and the country-level governance have shown their strong impact in effecting the value of cash.

Although the literature has discussed various issues relating to high cash holdings, corporate governance and the value of cash to the outside shareholders, academic study has yet to identify the combined impact of both firm- country-level governance on cash holdings. For instance; the role of strong firm-level governance in effecting cash holdings in the presence of strong external protection; the effect of strong firm-level governance on cash holdings and the value of cash in the presence of weak country-level governance; how cash holding behaves in the presence of strong country-level governance when there is poor firm-level governance and how managers utilize higher cash reserves when there is weak country-level as well as weak firm-level

governance. Another important issue missing from the literature is that – both in absolute terms and relative to developed financial markets - only a few studies have explored cash holding issues in a developing market context even though the agency problems are high in these markets.

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