

# The Impact of Boards of Directors' Characteristics on Cash Holdings

Ayed Ahmad Khalifah Aizyadat

Department of Finance & Banking Science, Irbid National University, Irbid, Jordan

## Email address:

ayed@inu.edu.jo

## To cite this article:

Ayed Ahmad Khalifah Aizyadat. The Impact of Boards of Directors' Characteristics on Cash Holdings. *International Journal of Finance and Banking Research*. Vol. 8, No. 2, 2022, pp. 57-61. doi: 10.11648/j.ijfbr.20220802.11

**Received:** January 27, 2022; **Accepted:** February 15, 2022; **Published:** March 29, 2022

---

**Abstract:** This study examined the influence of corporate governance on company cash holding by explaining the relationship between board size, board independence, board gender and cash holding using a sample of 87 non-financial companies including industrial and service companies that listed on the Amman Stock Exchange from 2018 to 2020. By using random-effect generalized least square (GLS) regression model. The findings indicate that board size negatively influences cash holdings, while board gender has a positive association with cash holdings. Further, board independence did not have a direct effect on cash holdings in Jordan. This research contributes to the development of improved corporate governance policies that can help improve firm cash holdings. This study encourages Jordanian companies to use women who can give better monitoring services while also benefiting from their experiences. The results, which are robust to a range of alternative proxies and to additional tests, provide new insights into the determinants of level cash holdings.

**Keywords:** Cash Holdings, Board Size, Board Independence, Board Gender, Jordan Stock Market

---

## 1. Introduction

Corporate cash holding strategies are critical to a company's financial strategy. The drivers of corporate cash holdings, as well as the existence of an optimal level of cash holdings, have received a lot of attention in the empirical literature on corporate governance [15, 20]. In general, cash accounts for a considerable share of a company's overall assets. In the United States, for example, the average cash ratio is 23.2 percent [9], 9.9% in the UK [35], and 9.1% in Turkey [39]. Because almost all companies keep more cash than they need, it's important to know why they're keeping it [30]. According to Gill and Shah [19], cash holding refers to cash on hand or readily available for physical asset investment and distribution to investors.

Managers face a difficult financial decision when determining the amount of cash available. When there is a separation between ownership and control, decisions about whether to raise or reduce cash holdings may result in agency costs of free cash flow [24, 34]. The agency conflicts between shareholders and management play a critical role in determining the ideal amount of cash under these circumstances [17]. Indeed, managers may choose to employ

liquid resources in a discretionary manner in the lack of feasible investment initiatives, and so may choose to invest in unproductive ventures at the expense of company value [34, 36]. In this case, having a robust corporate governance framework can help to alleviate the agency issues that arise as a result of such liquidity [17].

The board of directors is one of the key corporate governance approaches under agency theory to ensuring that managers operate for the benefit of shareholders [4]. Lipton & Lorsch and Jensen [22, 29] argue that small boards are more effective than bigger boards because members of the board have more difficulty solving the agency problem. Jensen [22], state that smaller boards are favored because they make better decisions, have greater coordination, and have less communication problems.

Raheja and Adams & Ferreira [1, 37] state that independent directors improve monitoring and minimize agency problems by safeguarding the wealth of minority shareholders. In addition, Boon, Field, Karpoff and Raheja [10] argue that companies with high managerial influence or poor institutional investor ownership have lesser board independence. Gender diversity in top management promotes decision-making by increasing independence [13]. Gender

diversity on boards is seen as a crucial component in improving corporate governance quality, with several corporate governance regulations in industrialized nations emphasizing the significance of gender variety to minimize problems originating from like-minded persons and thus improve board effectiveness.

## 2. Literature Review and Hypotheses Development

### 2.1. Board Size and Cash Holdings

Large boards are slow and ineffective, and agency conflict is on the rise in large boards, particularly those controlled by insiders and with limited non-management ownership [17]. According to Yermack [40], larger boards are less efficient than smaller boards since smaller boards allow for more decision-making. Jamil, Anwar, Afzaal, Tariq, & Asif, [21], investigated the determinants of corporate cash holdings of non-financial firms in Pakistan. A sample of 50 companies listed at Karachi Stock Exchange for a period of 3 years (from 2012-2014) was selected. Through regression analysis they found that board size has positive and significant relationship with cash holdings by the firms. In the same line, Lee & Lee and Kusnadi and MengYun, Husnain, Sarwar, & Ali, [28, 27, 32] finds that board size is positively influenced by cash holding.

On the other hand, Sattar, & Reeb [6] argue that large boards would give more monitoring and guidance. This could result in a negative link between cash holdings and the size of the board. Al-Najjar, & Clark, [5], examined the relationship between board size and cash holding on MENA countries from 2000 – 2009. The findings revealed that board size and cash holding have a statistically significant negative effect. As a result, companies with high of may hold less cash in order to reduce agency conflicts. Which implies that firms with high levels of could hold less cash in an effort to reduce agency conflicts. Ajanthan, & Kumara, [2], examined the relationship between board size and cash holding using 90 Sri Lankan firms at August 2016. The results showed that board size effect negatively with cash holdings. In addition Masood, & Shah [31] founds negative relationship between board size and cash holdings. However, Drobetz, & Grüninger, and Khan, Bibi, & Tanveer, [18, 26] finds that board size is not associated with cash holding. Therefore, the one hypothesis is developed as follows:

H1: There is a negative relationship between board size and cash holdings.

### 2.2. Board Independence and Cash Holdings

Myers and Rajan [33], stated that managers prefer to spend more money on themselves. Independent directors can serve as good monitors and help to reduce the agency problem [11]. The relationship between board independence and cash holdings has a mixed impact. MengYun, Husnain, Sarwar, & Ali, [32], finds that board independent affect cash holdings negatively. In line with this, Lee & Lee and Chen & Wang and Cambrea, Calabrò,

La Rocca, & Paolone, [28, 15, 12] who also found negative association between board independence and cash holdings.

In contrast, with poor corporate governance, board independence would be unable to adequately monitor management, thus leading to an increase in agency problems by allowing managers to follow their own interests. Kusnadi, [27] examined the relationship between board gender and cash holdings. The findings revealed that board size and cash holding have a statistically significant positive effect. However, Kuan, Li, & Liu, and Harford, Mansi, & Maxwell, [20, 26] board independence is not associated with cash holding. Thus, the second hypothesis is developed as follows:

H2: Board independent negative affects cash holdings.

### 2.3. Board Gender and Cash Holdings

According to Arguden [7], women not only respond positively to the concerns of shareholders, employees, consumers, and the local community, but they also tend to focus on long-term goals. In a variety of scenarios, the literature shows that women are less likely than men to take risks [14, 16]. According to tradeoff theory, which is based on the cost-benefit tradeoff, corporations with more females on their boards of directors tend to hold the optimal amount of cash. Furthermore, firms with a higher percentage of female employees have lower agency costs [23].

Alghadi, Mazlan, & Azhari, [3], examined the relationship between board gender and cash holding utilizing Jordan listed companies from 2011 – 2017. The findings revealed that board gender and cash holding have a statistically significant positive effect. In the same line, MengYun, Husnain, Sarwar, & Ali, [32] examined the relationship between board gender and cash holding using 558 Pakistani firms over the period of 2006-2017. The results showed that board gender effect positively with dividend policy. In contrast, Atif, Liu, & Huang, [8], revealed a negative relationship between board gender and cash holding. However, Sarang, Aubert, & Hollandts, [38], finds that board gender is not associated with cash holding. Due to the mixed results on managerial ownership, the following hypothesis is proposed:

H3: There exists a positive and significant relationship between board gender and cash holdings.

## 3. Methodology

### 3.1. Population and Sampling

This study examines the relationship between corporate governance (board size, board independence and board gender) on cash holdings of Jordanian listed companies from the Amman Stock Exchange has been used from 2018 to 2020. First, because the financial industry is governed by distinct rules, it was left out of the sample. Second, due to a lack of data from some companies, the sample has been further decreased.

### 3.2. Model Specification

To investigate the influence of boards of directors on cash

holdings, the following regression model is employed.

$$CASH_{it} = \beta_0 + \beta_1 BSIZ_{it} + \beta_2 BIND_{it} + \beta_3 BGEN_{it} + \varepsilon_{it}$$

**Table 1.** Measurement of variables.

Variables	Variable name	Measurement
CASH	Cash holdings	Cash and cash equivalent to net assets.
BSIZ	Board Size	Number size of the corporate board at the last of fiscal year
BIND	Board Independence	Proportion of independent directors on board to the entire board of directors
BGEN	Board Gender	Number of female directors on board

**Table 2.** Summary statistics.

variable	Obs.	Min	Max	Mean	S.D	Prob.	Skewnes	Kurtos
CASH	261	.0073	.7149	.0980	.1324	.0534	2.7074	9.9926
BSIZ	261	4	13	7.9540	2.3050	7	.4299	2.3840
BIND	261	0	.9032	.3345	.1032	0.3333	1.1208	9.0491
BGEN	261	0	1	.2183	.4139	0	1.3632	2.8583

**Table 3.** Correlation matrix results.

Variable	CASH	BSIZ	BIND	BGEN
CASH	1			
BSIZ	-0.2136	1		
BIND	0.1168	-0.2674	1	
BGEN	0.7058	-0.1426	0.0994	1

**Table 4.** GLS regression results of dividend model.

VARIABLE	FIXED-EFFECT		ROUND-EFFECT		GLS	
	COEFFICIENT	PROB.	COEFFICIENT	PROB.	COEFFICIENT	PROB.
BSIZ	-.0197648	0.002	-.0096469	0.004	-.003483	0.052
BIND	-.0137488	0.825	.0096871	0.859	.0283335	0.182
BGEN	.1509189	0.000	.1834052	0.000	.193931	0.000
VIF	1.07					
F - Stat	Prob-f	0.0000				
Hausman	chi2 =	0.0010				
Homo	No Hetero					

## 4. Empirical Results

This study predicts a positive relationship between board size and cash holdings. Table 4 shows that the board size has a significant and negative relationship with cash holdings ( $\beta = -0.0034$ ,  $p=0.052$ ). This result is consistent with the previous study by Chen & Wang and MengYun, Husnain, Sarwar, & Ali, and Cambrea, Calabrò, La Rocca, & Paolone, [12, 15, 32] discovered a negative and significant correlation between board size and cash holdings. As a result, the first hypothesis (H1) is approved.

The assumption in this study is that board independence and cash holdings have a positive association. The direction of the link between board independence and cash holdings is positive and insignificant ( $\beta = 0.0283$ ,  $p=0.182$ ) as shown in Table 4. The findings support our expectations and empirical.

Study by Kuan, Li, & Liu, and Harford, Mansi, & Maxwell, [26, 20] who found a positive and insignificant relationship between board independence and cash holdings. This finding demonstrates that in a country like Jordan, where corporate governance is poor, institutional investors are the reason for the firms the reduction cash holdings. Hence, hypothesis second (H2) is rejected.

Board gender is expected to be positively associated with cash holdings. As show in Table 4, there is significant and positive relationship between board gender and cash holdings ( $\beta = 0.1939$ ,  $p=0.000$ ). The result is in-line with Alghadi, Mazlan, & Azhari, and MengYun, Husnain, Sarwar, & Ali, [3, 32] who found that board gender was significantly related with cash holdings. According to tradeoff theory, which is based on the cost-benefit tradeoff, corporations with more females on their boards of directors tend to hold the optimal amount of cash. Hence, hypothesis third (H3) is accepted.

## 5. Conclusion

Cash holdings and effective corporate governance mechanisms are essential for improving the firm's value and maximizing shareholder wealth. As a result, this research focused on 87 non-financial companies listed on the Amman Stock Exchange, using a random-effect generalized least square (GLS) regression model to investigate the impact of internal monitoring mechanisms (board size, board independence, and board gender) on a firm's cash holdings.

The findings of this study show that there are various factors that influence cash holdings. The findings suggest that board independence and board gender have a positive

impact on dividend policy, whereas board size has a significant and negative impact. The findings also show that in Jordan, there is no significant association between board independence and firm complexity, as well as cash holdings.

The research recommends that more studies be conducted, including more variables and such as CEO duality, managerial and family ownership and other measurements to measure the cash holdings.

## References

- [1] Adams, R., & Ferreira, D. (2007). A theory of friendly boards. *Journal of Finance*, 62, 217-250.
- [2] Ajanthan, A., & Kumara, K. U. (2017). Corporate governance and cash holdings: Empirical evidence from an emerging country, Sri Lanka. *International Journal of Accounting and Financial Reporting*, 7 (2), 112-128.
- [3] Alghadi, M. Y., Mazlan, A. R., & Azhari, A. (2019). The Impact of Board Gender and Multiple Directorship on Cash Holdings: Evidence from Jordan. *International Journal of Finance and Banking Research*, 5 (4), 71.
- [4] Allen, F. (2005). Corporate governance in emerging economies. *Oxford Review of Economic Policy*, 21 (2), 164-177.
- [5] Al-Najjar, B., & Clark, E. (2017). Corporate governance and cash holdings in MENA: Evidence from internal and external governance practices. *Research in International Business and Finance*, 39, 1-12.
- [6] Anderson, R. C., Sattar, M. A., & Reeb, D. M. (2004). Board characteristics, accounting report integrity, and the cost of debt. *Journal of Accounting and Economics*, 37 (3), 315-342.
- [7] Arguden, Y. (2012). Why Boards Need More Women. Retrieved from <https://hbr.org/2012/06/why-boards-need-more-women>.
- [8] Atif, M., Liu, B., & Huang, A. (2019). Does board gender diversity affect corporate cash holdings?. *Journal of Business Finance & Accounting*, 46 (7-8), 1003-1029.
- [9] 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.
- [10] Boon, A. L., Field, L. C., Karpoff, J. M., & Raheja, C. G. (2007). The determinants of corporate board size and composition: An empirical analysis. *Journal of Financial Economics*, 85 (1), 66-101.
- [11] Byrd, J. W., & Hickman, K. A. (1992). Do outside directors monitor managers? Evidence from tender offer bids. *Journal of Financial Economics*, 32 (2), 195-222.
- [12] Cambrea, D. R., Calabrò, A., La Rocca, M., & Paolone, F. (2021). The impact of boards of directors' characteristics on cash holdings in uncertain times. *Journal of Management and Governance*, 1-33.
- [13] Carter, D. A., Simkins, B. J., & Simpson, W. G. (2003). Corporate governance, board diversity, and firm value. *Financial review*, 38 (1), 33-53.
- [14] Charness, G., & Gneezy, U. (2012). Strong evidence for gender differences in risk taking. *Journal of Economic Behavior and Organization*, 83 (1), 50-58.
- [15] Chen, I.-J., & Wang, B.-Y. (2014). Corporate governance and cash holdings: Empirical evidence from an emerging market. Paper presented at 41st conference southwestern finance association, USA. March 14, 2014.
- [16] Croson, R., & Gneezy, U. (2009). Gender differences in preferences. *Journal of Economic Literature*, 47 (2), 448-474.
- [17] Dittmar, A., Mahrt-Smith, J., & Servaes, H. (2003). International corporate governance and corporate cash holdings. *Journal of Financial and Quantitative Analysis*, 38 (1), 111-133.
- [18] Drobetz, W., & Grüniger, M. C. (2007). Corporate cash holdings: Evidence from Switzerland. *Financial markets Portfolio*, 21, 293-324.
- [19] Gill, A., & Shah, C. (2012). Determinants of corporate cash holdings: evidence from Canada. *International Journal of Economics and Finance*, 4 (1), 70-9.
- [20] 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.
- [21] Jamil, S., Anwar, A., Afzaal, N., Tariq, A., & Asif, M. (2016). Determinants of corporate cash holdings: Empirical analysis of Pakistani firms. *IOSR Journal of Economics and Finance*, 7 (3), 29-35.
- [22] Jensen, M. C. (1993). The modern industrial revolution, exit, and the failure of internal control systems. *Journal of Finance*, 48 (3), 831-880.
- [23] Jurkus, A. F., Park, J. C., & Woodard, L. S. (2011). Women in top management and agency costs. *Journal of Business Research*, 64 (2), 180-186.
- [24] Kalcheva, I., & Lins, K. V. (2007). International evidence on cash holdings and expected managerial agency problems. *Review of Financial Studies*, 20 (4), 1087-1112.
- [25] Khan, Bibi, & Tanveer, (2016). THE IMPACT OF CORPORATE GOVERNANCE ON CASH HOLDINGS: A COMPARATIVE STUDY OF THE MANUFACTURING AND SERVICE INDUSTRY. *Financial Studies*, 20 (3).
- [26] Kuan, T. H., Li, C. S., & Liu, C. C. (2012). Corporate governance and cash holdings: A quantile regression approach. *International Review of Economics & Finance*, 24, 303-314.
- [27] Kusnadi, Y. (2011). Do corporate governance mechanisms matter for cash holdings and firm value?. *Pacific-Basin Finance Journal*, 19 (5), 554-570.
- [28] Lee, K. W. & Lee, C. F. (2009). Cash holdings, corporate governance structure and firm valuation. *Review of Pacific Basin Financial Markets and Policies*, 12 (3), 475-508.
- [29] Lipton, M., & Lorsch, J. W. (1992). A modest proposal for improved corporate governance, *Business Lawyer*, 48 (3), 59-77.
- [30] Maheshwari, Y., & Rao, K. V. (2017). Determinants of Corporate Cash Holdings. *Global Business Review*, 18 (2), 1-12.

- [31] Masood, A., & Shah, A. (2014). Corporate governance and cash holding in listed nonfinancial firms in Pakistan. *Business Review*, 9 (2), 48-71.
- [32] MengYun, W., Husnain, M., Sarwar, B., & Ali, W. (2021). Board Financial Expertise and Corporate Cash Holdings: Moderating Role of Multiple Large Shareholders in Emerging Family Firms. *Complexity*, 2021.
- [33] Myers, S., & Rajan, R. (1998). The paradox of liquidity. *Quarterly Journal of Economics*, 113 (3), 733-771.
- [34] Opler, T., Pinkowitz, L., Stulz, R. M., & Williamson, R. (1999). The determinants and implications of corporate cash holdings. *Journal of Financial Economics*, 52 (1), 3-46.
- [35] Ozkan, A., & Ozkan, N. (2004). Corporate cash holdings: An empirical investigation of UK companies. *Journal of Banking & Finance*, 28 (9), 2103-2134.
- [36] Pinkowitz, L., Stulz, R. M., & Williamson, R. (2006). Does the contribution of corporate cash holdings and dividends to firm value depend on governance? A cross-country analysis. *Journal of Finance*, 61 (6), 2725-2751.
- [37] Raheja, C. (2005). Determinant of board size and composition: a theory of corporate boards. *Journal of Financial and Quantitative Analysis*, 40 (2), 283-306.
- [38] Sarang, A. A., Aubert, N., & Hollandts, X. (2017). Board of Director's Composition and Corporate Cash Holdings: Evidence from French Listed Companies. etrieved from: <http://www.affi2017-uga.fr/program/1/142.pdf>
- [39] Uyar, A., & Kuzey, C. (2014). Determinants of corporate cash holdings: evidence from the emerging market of Turkey. *Applied Economics*, 46 (9), 1035-1048.
- [40] Yermack, D. (1996). Higher market valuation of companies a small board of directors. *Journal of Financial Economics*, 40 (2), 185-202.