

# The Influence of Corporate Liquidity, Networking Capital on Cash Holdings in Iraqi Islamic Banks

<sup>1</sup>Essra Abdulsattar Ahmed Al-Shaikhli, <sup>2</sup>Dr. Rafidah Binti Othman, <sup>3</sup>AP Dr. Harcharanjit Singh, <sup>4</sup>Assma Abdulsattar Ahmed Al-Shaikhli, <sup>5</sup>Mohammed W. A. Saleh, <sup>6</sup>Isha Kampoowale

<sup>1</sup>PhD. Scholar, Azman Hashim International Business School, Universiti Teknologi Malaysia, Kuala Lumpur, Malaysia, <sup>2</sup>Senior lecturer, Azman Hashim International Business School, Universiti Teknologi Malaysia, Kuala Lumpur, Malaysia, <sup>3</sup>Associate Professor, Azman Hashim International Business School, Universiti Teknologi Malaysia, Kuala Lumpur, Malaysia, <sup>4</sup>Senior lecturer, Education College for woman, Aliraqia University, Baghdad, Iraq, <sup>5</sup>Deptment of Accounting and auditing, Palestine Technical University- Kadoorie, <sup>6</sup>PhD. Scholar Azman Hashim International Business School, Universiti Teknologi Malaysia, Kuala Lumpur, Malaysia

Email: [abdulsattar.a@graduate.utm.my](mailto:abdulsattar.a@graduate.utm.my), [rafidah.othman@utm.my](mailto:rafidah.othman@utm.my), [harcharanjit@utm.my](mailto:harcharanjit@utm.my), [Assma.sattar@aliraqia.edu.iq](mailto:Assma.sattar@aliraqia.edu.iq), [mohammed.w.saleh@ptuk.edu.ps](mailto:mohammed.w.saleh@ptuk.edu.ps), [kampoowale@graduate.utm.my](mailto:kampoowale@graduate.utm.my)

To Link this Article: <http://dx.doi.org/10.6007/IJARAFMS/v14-i2/21549> DOI:10.6007/IJARAFMS/v14-i2/21549

**Published Online:** 17 May 2024

## Abstract

Empirical research suggests that several variables affect cash holdings. The main goal of this conceptual paper is to investigate the influence of corporate liquidity and networking capital on the cash holdings of Iraqi Islamic banks. An organized analysis of the previous literature led to the development of the conceptual framework. The current work determined the significant effect of the factors studied on cash holdings. Moreover, this research gave some insight into the influence of corporate liquidity and networking capital on the cash holdings in Iraqi Islamic banks. This study emphasizes the significance of the addition to the literature on the aspects affecting cash holdings. The results might be helpful to financial management consultants, investors, and managers. The conceptual framework was supported by trade of theory. Furthermore, discussed are some consequences of this conceptual paradigm for theory and practice.

**Keywords:** Corporate Liquidity, Networking Capital, Cash Holdings, Islamic Bank

## Introduction

Islamic banks are financial institutions that operate based on the principles of Islamic law, without engaging in debt and credit transactions (Sadaa et al., 2022). These banks have encountered various challenges in their pursuit of suitable investment strategies for their

deposits, which align with the principles of Islamic investment, such as avoiding speculation and promoting participation. Additionally, they strive to achieve an appropriate return on their investments. Islamic banks have more liquidity risks compared to conventional banks owing to the relatively limited availability of liquidity sources inherent in Islamic banking practices. However, as compared to the conventional banks; the Islamic bank development in Iraq is slow, and the public lack of confidence in Islamic banking and understanding of Islamic financing (Eidan, 2022). Furthermore, during the COVID-19 epidemic, banks relied heavily on conventional, low-risk assets such as the dollar, the Swiss franc, and other government bonds. This resulted in a depletion of cash reserves kept by banks, which in turn resulted in a low level of investor tolerance towards financial risks, particularly due to the evolving character of crises (Almayyahi, 2022).

Cash holdings plays an essential part in the operations of all companies worldwide since it is necessary for facilitating transactions. Although, there is no universal agreement on cash levels in companies worldwide; it is widely recognized that cash plays a crucial role in providing organizations with flexibility. In the time of crisis, companies have the capability to effectively address their requirements. Cash serves to mitigate the gap between a company's retained profits and its investment requirements. Cash-holding firms adopt revenue smoothing measures to sustain a continuous growth in cash holding (Musyafa & Kholilah, 2023). The influence may also extend to long-term indicators like the Company's financial capacity to satisfy its long-term commitments and its possibilities of getting long-term loans (Khaghaany & Jabbar, 2022).

Islamic banking has various challenges, including a lack of information about Islamic financial products, standardized methods, a limited product selection, and a lack of liquidity management tools. Iraqi local banks deposit excess cash with the CBI as treasury entities. Placements without strong banking models. Prior research has revealed that the agency issue significantly impacts a company's cash holdings. Research shows that organizations with fewer shareholder rights keep more cash. In cases when shareholders' interests are not protected, investment opportunities and knowledge asymmetry have little influence on cash holdings (Salehi et al., 2023). Previous research has shown that countries with low economic growth and emerging economies are very exposed to globalization influences, increasing the risk of financial instability. This danger arises during emerging nations' early financial liberalization. Therefore, nations with freshly developed markets must minimize their sensitivity to external shocks and international investors' shifting positions, who send huge capital flows to these countries. Iraq has the most underdeveloped banking industry in the Middle East and North Africa (more than 80% of the population does not have a bank account). The banking sector's financial stability is severely lacking, which worsens the financial and economic crisis (Shubbar & Vladimirovich, 2019).

In addition, Islamic banks suffer more liquidity risks than regular banks due to their substantial liquidity sources. This stems from Islamic banking's structure and religious requirements. First, Islamic banks' assets are very illiquid since Sharia allows consumers to terminate a Murabaha contract before ownership transfer, even if the bank has acquired the commodity. This may prevent the bank from selling such assets at a fair price. Second, Islamic banks cannot handle excess short-term assets, notably cash. Islamic regulations restrict both paying and receiving interest. The Sharia prohibition on debt sales adds another source of illiquidity for Islamic banks and financial institutions (Aziz et al., 2017). In contrast, some

studies indicated that significant growth has been seen in cash reserves. Some companies keep excess cash because of information asymmetry or a superior future investment opportunity. In corporations with abundant cash flow, information asymmetry affects investor attention and stock liquidity. When liquidity is limited, businesses require external funding to settle short-term loans, which incurs additional expenses (Salehi et al., 2023). Furthermore, several techniques are used to determine the causes and significance of working capital. The cost of capital allocated to liquid assets is also a kind of cash reserve. The company incurs an opportunity cost in the form of reduced profits when it holds a significant amount of cash (Amahalu, 2019).

Based on twenty-one (21) Islamic banks listed in the Iraqi Stock Exchange Figure 1.1, showed the cash holdings positions of all Islamic Bank in Iraq for 2018-2022. Based on Figure 1.1 it can be observed, the aggregate cash holdings decrease is exponential and it reached nine (9) billion IQD in 2018 compared to 3.18 billion IQD in 2022. In addition, the Islamic bank cash holdings fluctuated from 2018 to 2022 since it has declined significantly from 9% in 2018 to 3.18% in 2022. Past studies recommended that future research should examine the declining cash holdings trends in the banking sector (Bangun & Natsir, 2022). One of the most significant parts of the country's economy is the Islamic bank, which is often believed to be the biggest contributor overall. The problem of decline has a substantial influence on the general economy and the decrease in Iraq.

An economic slowdown refers to the deterioration of a country's economy, as seen by a decline in the cash holdings held by the Islamic bank on the Iraq stock exchange. This indicates that the actual economic growth is negative, and effective management of the bank's cash is of utmost importance. According to the Islamic bank statistics contribution of cash holdings was it reached 3.18 billion dinars in 2022 compared to 9 billion dinars in 2018. The present research highlights the issue and attempts to determine the factors that could influence the cash holdings in Iraqi Islamic banks.

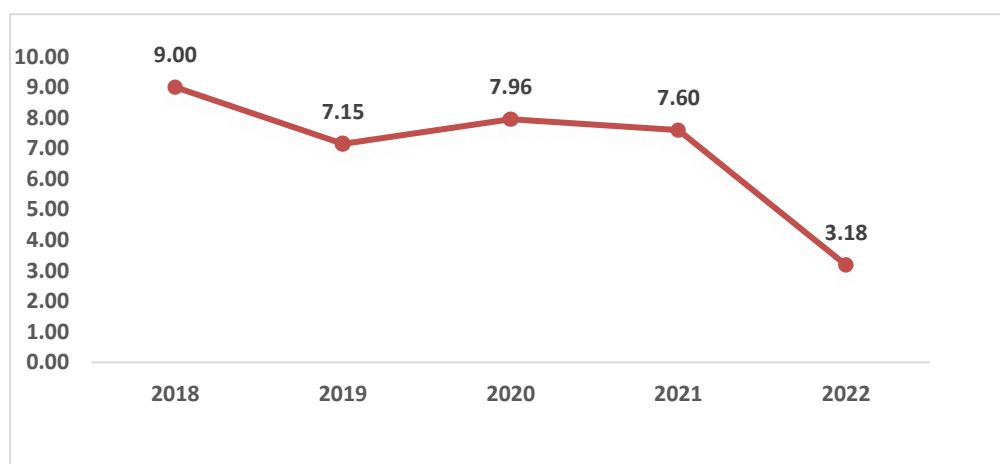


Figure 1.1 Cash holding (Source: Annual Report on the ISX 2018-2022)

The background to this research problem is the difference in research results regarding cash holding. Banks are supposed to maintain ideal cash holdings that boost shareholder value. It is critical to understand what factors affect managers' decisions on the ideal quantities of cash

to store, especially when these holdings continue to climb or fall. Users of financial data and stakeholders have a right to know why a company has a certain amount of cash on hand. Specifically, this investigation seeks to fill a knowledge vacuum by examining the impact of corporate liquidity and networking capital on cash holdings at Iraqi Islamic banks, two factors that have received little attention in prior research. Furthermore, this research is regarded as the first examination of cash holdings in Iraqi Islamic banks.

## **Review of Literature**

### **Cash holdings**

Cash holdings refers to amount of money that a company keeps to meet their current expenditure and investment opportunities (Khan et al., 2016). Meanwhile, according to Wildiany et al (2022) cash holding refers to the total value of cash and cash equivalents that a corporation has and may readily convert into cash. Based on the statement provided, it can be inferred that cash holding refers to the amount of cash that a firm has accessible or kept on hand to meet its operating requirements, unforeseen financing needs, and investments. This study define cash holding as the cash and cash equivalents divided by total assets. A review of the literature revealed that many researchers agreed on the variables that impact cash holdings and their different measures. Previous studies have provided different definitions of cash holdings. Cash is the most liquid asset and is decided by a company's capacity to meet its financial obligations on time (Shabbir et al., 2016).

Cash holding is essential because it provides organizations with liquidity, which means that they can pay off their commitments on time even when circumstances are tough. to boost sales and profits, a firm should focus on building up cash reserves by carefully managing the timing of cash inflows and outflows to achieve a net positive cash flow situation. Therefore, cash is an essential factor that enables a company to survive and prosper (Gill & Shah, 2011). Moreover, as further details, Gill & Shah (2012) define cash holding as the cash available for investment or the cash physically present in assets that investors may receive. This study therefore tried to look into the connection between corporate liquidity and networking capital with cash holdings at Iraqi Islamic banks. This study will thus use the definition of cash holdings provided by Altameemi, (2022). According to Tayem (2017) firms tend to maintain larger amounts of liquid assets when they encounter more expenses associated with obtaining external funding. There is also evidence that other variables, such as corporate liquidity and networking capital, are the primary determinants of cash holdings (Hussain et al., 2022; Wildiany et al., 2022). Investors and financial experts pay close attention to cash holdings since they play an essential role in the development and survival of the company (Magerakis et al., 2015).

### **Underpinning Theories**

Miller & Orr (1966) formulated "the trade-off theory," which is the origin of ideas about corporate cash holdings. This theory suggests that a company determines the optimal cash holding amount by weighing the incremental costs and benefits of cash retention. Liquid assets reduce risk and minimize transaction costs; however, they provide lower returns. According to the static tradeoff theory, cash holdings are established by the marginal cost of a lack of liquidity assets as well as the opportunity cost of retaining liquidity assets (Hu et al., 2019). Cash holdings are presumed to originate from operational cash inflows rather than from debt issuance. The advantages of keeping cash include the reduction of transaction costs associated with external borrowing, as stated by Keynes' (1936) transaction cost

incentive, and the prevention of underinvestment. The costs associated with cash hoarding include a range of reasons. These include the firm's inability to invest the cash, resulting in missed opportunities for returns and the potential advantages of debt financing that are influenced by tax considerations. Moreover, cash might be used at the discretion of managers, which in turn leads to the occurrence of agency charges. The result of this trade-off is that cash has a value that is contingent upon its associated costs and benefits. Therefore, these factors may be used to determine the most efficient amount of cash (Weidemann, 2018).

Based on the tradeoff theory, companies aim to determine the most advantageous amount of cash to retain by carefully considering the advantages and costs associated with cash holdings (Eneh et al., 2019). The advantages of keeping cash are associated with wisdom, the capacity to participate in lucrative prospects when there are restrictions on obtaining external funding, and a reduction in expenses compared to selling assets or seeking outside finance (Ferreira & Vilela, 2004). Based on this premise, this research used the trade-off theory as its foundational framework to examine the link between the independent variables of the study and cash holdings. Consequently, several companies maintain higher levels of cash in order to mitigate the expenses related to obtaining capital. The precautionary incentive examines the negative effects of knowledge asymmetry on debt. A firm's capacity to engage in lucrative initiatives may be limited by a lack of liquid assets and the absence of external funding. Consequently, it becomes more advantageous to maintain a higher cash reserve in order to minimize the risk of significant financial difficulties (Alnori & Bugshan, 2023). According to this theory, a company's value is maximized when the additional advantages gained from retaining cash are equivalent to the additional expenditures incurred from maintaining cash reserves. Keeping cash reserves decreases the likelihood of encountering financial difficulties, decreases the expenses associated with transactions, and creates additional investment possibilities that might otherwise be inaccessible to the organization owing to financial problems (Alnori & Bugshan, 2023). Existing research has put forward numerous theories to elucidate the factors that determine cash holdings. Based on the trade-off theory, companies establish a desired level of cash reserves that strikes a balance between the benefits and drawbacks of maintaining easily convertible assets (Alnori & Bugshan, 2023). Previous research indicates that the level of cash held by firms is primarily determined by the trade-off theory. For instance, when considering the motivation behind cash holdings, the trade-off theory examines how internal and external operational factors, such as operational uncertainty and diversified operations, influence corporate cash holdings (Zeng et al., 2023).

### **Trade-off Theory and Corporate Liquidity**

According to the trade-off theory of cash holdings businesses must determine an optimal level of cash reserves by weighing the marginal gains and marginal costs associated with holding liquid assets (Miller & Orr, 1966). Liquidity is a metric that indicates a company's capacity to meet its financial commitments or repay its short-term debt (Adiputra & Nataherwin, 2022). Nevertheless, it is crucial to highlight that the increase in bank liquidity may expose banks to potential risks and curtail their capacity to provide liquidity (Mousa et al., 2022). Thus, the optimal option regarding cash keeping will align with the company's objective of maximizing corporate value (Rasyid, 2020). Past research indicates that based on the trade-off theory, companies that possess greater amounts of liquidity tend to maintain lower levels of cash reserves (Naumoski, 2022).

### **Trade-off Theory and Net Working Capital**

Networking capital is a significant determinant that might impact the cash availability of a corporation (Bangun & Natsir, 2022). Networking capital, as defined by Gao et al (2013), is the disparity between current assets and current liabilities, excluding cash. Other often used substitutes for cash include assets that may be readily converted into cash, such as current assets or liquidity assets (Mohd-Ashhari & Faizal, 2018). The trade-off theory states that businesses will hold less cash regardless of the amount of cash they require if the liquid assets can be liquidated (Ferreira & Vilela, 2004).

Past research indicated that networking capital is part of current assets and is seen when a corporation has assets that exceed its outstanding debt or commitments. This implies that there is a positive relationship between the networking capital and the quantity of cash available for operational purposes (Bangun & Natsir, 2022). The trade-off theory posits that organizations strive to determine an optimum level of cash holdings by carefully considering the advantages and costs associated with such holdings (Eneh et al., 2019). Net working capital is not just associated with assets but also exhibits a correlation with corporate obligations. Consequently, it can be inferred that the disparity between these two variables may be used in company operations without impeding the firm's liquidity. Thus, past studies have adopted trade off theory to examine the correlation between networking capital and cash holdings (Bangun & Natsir, 2022).

### **Corporate Liquidity and Cash Holdings**

Corporate liquidity ratios assess the capacity of a firm to meet its short-term obligations using its readily available assets (Isayas, 2022). The implementation of efficient corporate liquidity management is crucial in order to achieve a company's overarching financial goals and objectives in the long run (Akinadewo et al., 2023). Hence, it is important to maintain a sufficient amount of cash holdings in order to have a robust corporate liquidity position (Wirianata & Viriany, 2023). A past study indicated that corporate liquidity is positively related to cash holdings (Farida & Nuryadin, 2023). Previous studies have shown that corporate liquidity has a positive influence on the cash holdings (Nafees et al., 2017; Rasyid, 2020). Past research result on the correlation between corporate liquidity and cash holdings varied. Past research investigated the correlation between corporate liquidity cash holdings among Pakistani firms (Shabbir et al., 2016). In addition, Sari et al (2023) focused on the health sector in Indonesia for the period 2018-2021. Furthermore, Rasyi (2020) investigated the correlation between corporate liquidity and cash holdings on the manufacturing companies in Indonesia which indicated the limitations of the research only for a period of three years. In addition, past research examined the correlation between corporate liquidity and cash holdings in New Zealand local councils (Hoque et al., 2022). Anggrahini et al (2023b), suggested that future studies are expected to examine the correlation between corporate liquidity and cash holdings. According to the research article and discussion, there is a correlation between corporate liquidity and cash holdings in the Iraqi Islamic bank. Based on this discussion, the following hypothesis were developed.

**H<sub>1</sub>:** Corporate liquidity has a positive correlation with cash holdings.

### Net Working Capital and Cash Holdings

Networking capital is expected to play a significant role in determining the business's cash holding policy (Arfan et al., 2017). Networking capital has the potential to serve as a substitute for cash holdings due to its ability to be readily converted into cash when required (Anggrahini et al., 2023a). Net working capital serves as a replacement for liquid assets and is inversely connected to cash. (Hapsari & Norris, 2022). Net working capital stands for cash holding (Morais et al., 2019) Businesses may quickly convert it into cash to generate capital. The company's networking capital should be kept at a moderate level. Companies with high levels of net working capital are experiencing a shortage of cash (Wahjoe Hapsari & Nabila Roma Norris, 2022). Past studies investigated the correlation between net working capital and cash holdings among Indonesian firms and highlighted that future researchers can extend the period of the study (Valent & Yanti, 2023).

Prior scholars have examined the correlation between networking capital and cash holdings, but their studies have encountered several problems. Specifically, the constraints of available data and the potential for excluding pertinent factors (Hoque et al., 2022). In addition, past researchers who investigated the correlation between networking capital and cash holdings in manufacturing companies in Indonesia indicated that the population sample is significantly reduced since not all manufacturing enterprises provide comprehensive financial statement information on the variables investigated (Audrey et al., 2023). Past research has also concentrated on investigating the effect of networking capital on the cash holdings of manufacturing companies in Indonesia. Thus, the results do not have generalizability to firms outside the industrial sector unless other companies have comparable features (Arfan et al., 2017). Therefore, future research may investigate the correlation between networking capital and cash holding (Subing & Yalin, 2023). Based on the research article and discussion, there is a link between networking capital and cash holdings in the Iraqi Islamic bank. Based on this discussion, the following hypothesis was developed.

**H<sub>2</sub>:** Net working capital has a positive correlation with cash holdings.

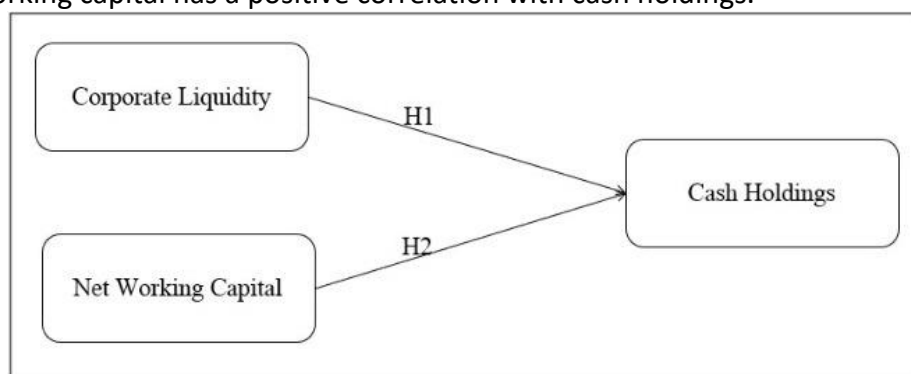


Figure 1.2: Conceptual Framework

### Design/methodology/approach

Journal papers, conference materials, proceedings, and books related to the topic and keywords were extensively reviewed in order to develop the conceptual paper. This theoretical framework was developed according to the findings of the literature analysis and the differences between the research (Figure 2). Previous studies have shown that corporate liquidity and networking capital have a beneficial influence on cash holdings, according to the literature review and that mainly the corporation has storage assets that effectively meet its immediate requirements.

## Results and Discussion

The conceptual paper was created by a meticulous analysis of scholarly publications, conference materials, conference proceedings, and relevant books pertaining to the subject matter and specific keywords. After considering the extent of the literature study and the differences observed across the research, a theoretical framework was developed (Figure 2). Past studies have shown that corporate liquidity and networking capital have a favorable influence on cash holdings, as shown by the literature review. As a result, cash holdings constitute a crucial part of the capital structure of businesses in the actual world of imperfect markets. Unique financial institutions should determine their ideal cash-holding level.

## Integrative Framework

According to Zeng et al (2023), it has been shown that the cash holding level of global businesses is exhibiting a growing trend. This can be linked to the competitiveness between firms from a financial viewpoint, and it basically symbolizes the cash flow battle value. Hence, the accumulation of cash reserves may enhance the overall worth of businesses (Chen et al., 2023). As stated by Zeng et al (2023) corporate cash holding is a crucial financial decision made by companies. The level of cash reserves plays a crucial role in a company's ability to manage risk, get financing, and ultimately decide its overall worth. The greater leverage level and increased net working capital resulted in a bigger cash balance. This is because highly liquid firms tend to have more cash on hand, which allows them to meet their short-term loan obligations promptly. Therefore, it is essential that the operational operations be executed with optimal functionality and effectiveness. Companies also have the possibility to invest their cash. Typically, investors perceive leverage as a company's ability to meet its obligations to third-party creditors who provide loans. However, some investors believe that expanding companies will inevitably require debt as additional capital to cover operational expenses that cannot be financed with their own funds (Endri et al., 2020).

In addition, other liquid assets, such as debts or stocks, might also impact a company's ideal cash reserves since they can be seen as alternatives to cash. Consequently, it is reasonable to anticipate that companies possessing a greater amount of non-cash liquid assets will decrease their cash reserves (Ali & Yousaf, 2013). The focus of this research is solely on cash holding in the Islamic banks and in further research it can be expanded to the entire conventional bank. This conceptual paper aims to enhance the comprehension of the relationship between company liquidity, net working capital, and cash holdings in the field of accounting. This paper provides valuable insights for owners and managers of Islamic banks in Iraq, helping them to better understand the relationship between corporate liquidity, networking capital, and cash holdings. It also offers guidance on optimizing the utilization of their existing resources. The objective of this conceptual paper is to identify a positive correlation between the study variables and cash reserves, perhaps resulting in a determination of the importance of corporate liquidity, net working capital, and cash holdings in a banking context. Furthermore, prior studies have shown the effectiveness of increasing financial reserves and cultivating stronger connections with customers and stakeholders.

## Implications of the Study

This paper catalyzes Islamic bank owners and managers, as well as the government of Iraq, to apply a heightened and revitalized level of attention to the many components of cash holdings and the factors that impact them. Taking into consideration the results of previous research, this research is able to make the argument that cash holdings are significantly influenced by



corporate liquidity and net working capital. In spite of the relevance of the conceptual framework, it has not been subjected to any empirical investigation. It is possible that more contributing factors, such as other independent and mediating factors, were taken into consideration in subsequent research. In further study, it may be possible to investigate the impacts of other independent and mediation factors and put them through experimental testing. Furthermore, this research sheds light on the connection that exists between Iraqi Islamic banks.

### Conclusion

This research conducted a quantitative investigation to explore the variables that affect the cash holding of Islamic banks in Iraq, which is considered to be a developing capital market. The primary variables are corporate liquidity and networking capital. This conceptual paper focuses on the two fundamental elements of corporate liquidity and networking capital, and their impact on cash holdings. Emphasizing the importance of cash holdings in Iraqi Islamic banks will also incentivize other firms to efficiently use the resources of these banks. Previous research supports the idea that trade-off theory is crucial in explaining financial choices, such as cash holdings, in developing nations (Al-Najjar, 2013). From an international standpoint, this research has significant implications as it demonstrates that despite variations in financial and governance institutions, developing economies still have common financial factors. Therefore, banks in these nations adhere to almost identical strategies when it comes to maintaining their cash holdings. Further examination of the elements that might influence financial choices is needed to explore the issue of cash holdings in emerging nations.

### References

- Adiputra, I. G., & Nataherwin, N. (2022). The Effects of Liquidity, Company Growth, and Net Working Capital on Corporate Cash Holding Among Manufacturing Companies Listed in Indonesia Stock Exchange During 2015-2020. *Tenth International Conference on Entrepreneurship and Business Management 2021 (ICEBM 2021)*, 49–55.
- Akinadewo, I. S., Ogundele, O. S., & Akinadewo, J. O. (2023). An Appraisal of the Determinants of Corporate Cash Holdings: Evidence from the Nigerian Manufacturing Firms. *Resmilitaris*, 13(2), 6914–6925.
- Al-Najjar, B. (2013). The financial determinants of corporate cash holdings: Evidence from some emerging markets. *International Business Review*, 22(1), 77–88.
- Ali, A., & Yousaf, S. (2013). *Determinants of Cash holding in German Market* (Vol. 12, Issue 6). [www.iosrjournals.org](http://www.iosrjournals.org)[www.iosrjournals.org](http://www.iosrjournals.org)28%7C
- Almayyahi, A. R. A. (2022). The Role of Financial Risks and Financial Sustainability in the Iraqi Stock Markets during COVID-19 Pandemic. *Journal of Asian Multicultural Research for Economy and Management Study*, 3(3), 37–47.
- Alnori, F., & Bugshan, A. (2023). Cash holdings and firm performance: empirical analysis from Shariah-compliant and conventional corporations. *International Journal of Islamic and Middle Eastern Finance and Management*, 16(3), 498–515.
- Altameemi, A. F. M. (2022). The Effect of Internal Growth Rate and Cash Holding on the Sustainability of Owners' Wealth Growth: Applied Study of a Sample of Companies Listed on the Iraq Stock Exchange. *2020 International Conference on Resources Management*.
- Amahalu, N. (2019). Determinants of Cash Holdings: Evidence from Agricultural Firms Listed On Nigeria Stock Exchange. *International Journal of Academic Research in Accounting*,

- Finance and Management Sciences*, 9(2), 211–223.
- Anggrahini, N., Hariyani, D. S., & Sulistiyowati, L. N. (2023). Growth Opportunity, Leverage, Net Working Capital and Firm Size on Cash Holding. *3rd International Conference on Education and Technology (ICETECH 2022)*, 751–759.
- Arab Salehi, M., Torki, L., & Abdulrazzaq, D. N. (2023). The impact of corporate governance, ownership structure, and cash flow on the value of the companies listed on the Iraqi Stock Exchange. *Iranian Journal of Accounting, Auditing and Finance*.
- Arfan, M., Basri, H., Handayani, R., Shabri, M., Fahlevi, H., & Dianah, A. (2017). Determinants of cash holding of listed manufacturing companies in the Indonesian stock exchange. *DLSU Business and Economics Review*, 26(2), 1–12.
- Audrey, N., Pratiwi, N. B., Wicaksono, A., & Carolineto, S. T. (2023). The Effect of Leverage, Growth Opportunity, Net Working Capital And Dividend Payment Towards Cash Holding Manufacturing Companies Listed On IDX Period 2018-2020. *E3S Web of Conferences*, 388.
- Aziz, A. I., Sharif, A. A., & Salih, D. G. (2017). Liquidity management and profitability In Islamic banks of Kurdistan region of Iraq: Cihan bank for Islamic investment and finance as a case study. *International Journal of Research-GRANTHAALAYAH*, 5(5), 73–87.
- Bangun, N., & Natsir, K. (2022). The effect of operating cash flow, net working capital, and earning quality on cash holding of consumer goods companies. *Tenth International Conference on Entrepreneurship and Business Management 2021 (ICEBM 2021)*, 405–411.
- Chen, X., Chen, W., Hu, T., Yang, B., & Zeng, J. (2023). Regional carbon efficiency and corporate cash holdings: evidence from China. *Humanities and Social Sciences Communications*, 10(1), 1–11.
- Endri, E., Sulastri, S., Syafarudin, A., Mulyana, B., Imaningsih, E. S., & Setiawati, S. (2020). Determinants cash holding of coal mining companies listed on the Indonesian Stock Exchange. *Academy of Strategic Management Journal*, 19(6), 1–9.
- Eneh, O. M.-R., Okegbe, T. O., & Ndubuisi, A. N. (2019). Determinants of Cash Holdings: Evidence from Agricultural Firms Listed On Nigeria Stock Exchange. *International Journal of Academic Research in Accounting*, 9(2), 211–223. <https://doi.org/10.6007/IJARAFMS/v9-i2/6169>
- Farida, F., & Nuryadin, N. (2023). *Identify the Determinant Factors Affecting Cash-Holding of the Automotive Industry in Indonesia*.
- Ferreira, M. A., & Vilela, A. S. (2004). Why do firms hold cash? Evidence from EMU countries. *European Financial Management*, 10(2), 295–319.
- Gao, H., Harford, J., & Li, K. (2013). Determinants of corporate cash policy: Insights from private firms. *Journal of Financial Economics*, 109(3), 623–639.
- Gill, A., & Shah, C. (2011). Determinants of Corporate Cash Holdings: Evidence from Canada. *International Journal of Economics and Finance*, 4(1). <https://doi.org/10.5539/ijef.v4n1p70>
- Gill, A., & Shah, C. (2012). Determinants of corporate cash holdings: Evidence from Canada. *International Journal of Economics and Finance*, 4(1), 70–79.
- Hapsari, D. W., & Norris, N. R. (2022). The Determinant Of Cash Holding. *Jurnal Akuntansi*, 26(3), 358–373.
- Hoque, M. N., Bhuiyan, M. B. U., Nomura, T., & van Zijl, T. (2022). Determinants of cash holdings—evidence from New Zealand local councils. *Public Money and Management*, 42(8), 605–615. <https://doi.org/10.1080/09540962.2020.1836803>

- Hu, Y., Li, Y., & Zeng, J. (2019). Stock liquidity and corporate cash holdings. *Finance Research Letters*, 28, 416–422.
- Hussain, S., Ayub, M., & Yousaf, I. (2022). Factors affecting Cash Holding Choice Chosen by the Finance Manager: Evidence from the manufacturing Industry of Pakistan. *Journal of Development and Social Sciences*, 3(3), 448–459.
- Isayas, Y. N. (2022). Determinants of banks' profitability: Empirical evidence from banks in Ethiopia. *Cogent Economics & Finance*, 10(1), 2031433.
- Khaghaany, M., & Jabbar, Z. S. (2022). Impact of Accruals Quality on the Firm's Cash Holdings: A Cross-Sectoral Evidence from Iraq. *Webology*, 19(1).
- Khan, Y., Saqib, M., & Ahmad, A. (2016). Cash holdings and business group membership in Pakistan. *The Discourse*, 2(2), 75–83.
- Magerakis, E., Siriopoulos, C., & Tsagkanos, A. (2015). Cash holdings and firm characteristics: Evidence from UK market. *Journal of Risk & Control*, 2(1), 19–43.
- Miller, M. H., & Orr, D. (1966). A model of the demand for money by firms. *The Quarterly Journal of Economics*, 80(3), 413–435.
- Mohd-Ashhari, Z., & Faizal, D.-R. (2018). Determinants and performance of cash holding: evidence from small business in Malaysia. *International Journal of Economics, Management and Accounting*, 26(2), 457–473.
- Morais, F., Nave, A., & Rodrigues, R. G. (2019). Cash holdings determinants from Brazilian listed firms. *Innovation, Engineering and Entrepreneurship*, 1043–1050.
- Mousa, A. K. A., Hassan, N. L., & Pirzada, K. (2022). Board Governance Mechanisms and Liquidity Creation: A Theoretical Framework. *GATR Journal of Finance and Banking Review*, 7(2), 122–134. [https://doi.org/10.35609/jfbr.2022.7.2\(3\)](https://doi.org/10.35609/jfbr.2022.7.2(3))
- Musyafa, K. A., & Kholilah, K. (2023). *Cash Holding, Financial Leverage, Profitability, Firm Size, Income Smoothing: Moderating Managerial Ownership*.
- Nafees, B., Ahmad, N., & Rasheed, A. (2017). The determinants of cash holdings: Evidence from SMEs in Pakistan. *Paradigms*, 11(1), 111.
- Naumoski, A. (2022). ANALYSIS OF DETERMINANTS OF CORPORATE CASH HOLDING OF LISTED MANUFACTURING COMPANIES ON THE MACEDONIAN STOCK EXCHANGE. *Southeast European Review of Business and Economics*, 3(1), 9–25. <https://doi.org/10.20544/SERBE.05.01.22.P01>
- Rasyid, R. (2020). The influence of profitability, liquidity, firm size and leverage on cash holding. *The 2nd Tarumanagara International Conference on the Applications of Social Sciences and Humanities (TICASH 2020)*, 405–409.
- Sari, T. R., Primasari, D., & Farida, Y. N. (2023). The effect of profitability, company size, leverage, liquidity, and free cash flow on dividend policy. *Keynesia: International Journal of Economy and Business*, 2(1), 22–34.
- Shabbir, M., Hashmi, S. H., & Chaudhary, G. M. (2016). Determinants of corporate cash holdings in Pakistan. *International Journal of Organizational Leadership*, 5, 50–62.
- Shubbar, H. H., & Vladimirovich, G. A. (2019). Basis of implementation of improving financial stability in the banking system in Iraq. *RELIGACIÓN. Revista de Ciencias Sociales y Humanidades*, 4(16), 245–253.
- Subing, H. J. T., & Yalin, F. L. (2023). Analysis of the Factors Influencing Cash Holding in Corporation. *Research of Economics and Business*, 1(1), 23–35.
- Tayem, G. (2017). The determinants of corporate cash holdings: The case of a small emerging market. *International Journal of Financial Research*, 8(1), 143–154.
- Valent, C., & Yanti, Y. (2023). Institutional Ownership, Board Size, Growth Opportunities, Net

- Working Capital and Cash Holding. *International Journal of Application on Economics and Business*, 1(1), 705–715. <https://doi.org/10.24912/ijaeb.11.705-715>
- Wahjoe Hapsari, D., & Nabila Roma Norris. (2022). Determinant Of Cash Holding. *Jurnal Akuntansi*, 26(3), 358–373. <https://doi.org/10.24912/ja.v26i3.960>
- Weidemann, J. F. (2018). A state-of-the-art review of corporate cash holding research. *Journal of Business Economics*, 88, 765–797.
- Wildiany, R., Mahri, A. J. W., & Utami, S. A. (2022). Cash Holding in Companies Registered on the Jakarta Islamic Index: Analysis of Net Working Capital Factors, Levels of Leverage, and Levels of Profitability. *Indonesian Journal of Economics and Management*, 3(1), 161–173.
- Wirianata, H., & Viriany, V. (2023). DETERMINANTS OF CASH HOLDINGS MODERATED BY FIRM SIZE. *International Journal of Application on Economics and Business*, 1(2), 361–375.
- Zeng, H., Zheng, L., Li, X., Zhang, Y., & Chen, L. (2023). Are optimistic CEOs and pessimistic CFOs the best partners? Evidence from corporate cash holdings. *Humanities and Social Sciences Communications*, 10(1), 1–19.