



Liquidity Risk Management Strategies in Optimizing Cash Waqf Mobilization and Utilization

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Article Info	Abstract
<p>Article history:</p> <p>Received, 13 January 2026 Revised, 27 Juny 2026 Accepted, 27 Juny 2026 Available online, 29 Juny 2026</p> <hr/> <p>*Corresponding author email:ghazytriyatno@gmail.com</p>	<p>Despite growing studies on cash waqf governance, limited research synthesizes liquidity risk management strategies across institutions and contexts. This study fills the gap by systematically reviewing liquidity risk mitigation approaches and identifying governance implications for sustainable Islamic wealth management. Specifically, it aims to identify liquidity risks in the management of cash waqf and formulate effective risk management strategies to optimize the mobilization and utilization of waqf funds. Using a Systematic Literature Review (SLR) method supported by the Parsif.al tool, this research analyzed 131 peer-reviewed articles published between 2016 and 2025 from the Semantic Scholar database. The PICO framework and a rigorous quality assessment process guided the analysis. The findings reveal that liquidity risks in cash waqf management stem from mismatches between short-term obligations and long-term investments, volatility in cash inflows, and the absence of liquidity reserves. To mitigate these risks, waqf institutions have adopted strategies such as investment diversification, establishing liquidity buffers, scheduling benefit disbursements, and applying principles of good governance. The effectiveness of these strategies is influenced by structural issues, including the lack of unified national regulation, weak transparency, and limited managerial capacity among nazhir (waqf managers). As policy recommendations, the study advocates for strengthening national regulatory frameworks,</p>
<p>Keywords:</p> <p>cash waqf, liquidity risk management, Islamic social finance, waqf governance.</p>	

implementing minimum liquidity ratios, digitalizing reporting systems, and professionalizing waqf managers. These measures are expected to foster a more sustainable, productive, and resilient cash waqf ecosystem capable of addressing contemporary socio-economic challenges.

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INTRODUCTION

Cash waqf has evolved into a strategic instrument in Islamic social finance, playing a vital role in promoting sustainable economic development within communities (Shaikh, Ismail, and Mohd Shafiai 2017; Ab. Aziz and Yusof 2019). In Indonesia, the potential of cash waqf is enormous, with national estimates reaching up to IDR 180 trillion per year. However, its actual collection remains very low, amounting to only around IDR 855 billion in 2022, according to data from the Indonesian Waqf Board (BWI). Due to its flexibility and sustainability, cash waqf is believed to be capable of addressing the challenge of public funding shortages, particularly in Muslim-majority countries facing difficulties in optimizing tax revenues and development spending (Shaikh, Ismail, and Mohd Shafiai 2017). Its wide-ranging applications, from financing education and healthcare services to supporting microenterprises and developing public infrastructure, demonstrate its contribution to economic equity, poverty alleviation, and strengthening the real sector (Ab. Aziz and Yusof 2019). When integrated with modern mechanisms such as waqf banks or sukuk, cash waqf not only preserves its traditional philanthropic purpose but also aligns with contemporary financial systems to maximize its socio-economic impact.

In Indonesia, the potential of cash waqf is substantial, in line with the country's status as home to the largest Muslim population in the world, approximately 231 million people, or 87% of the total population (Bayinah et al. 2021). Public awareness of the role of Islamic social finance in addressing socio-economic challenges is also steadily increasing. Research shows that Islamic social finance instruments, including cash waqf, hold strategic potential for empowering communities, reducing poverty, and promoting sustainable development (Adinugraha, Shulhoni, and Achmad 2023). The overall economic potential of waqf is estimated at IDR 180 trillion per year, yet its actual realization remains limited; according to BWI data, the total cash waqf collected in 2022 only reached around IDR 855 billion. Furthermore, the growing interest from the millennial generation, which accounts for over 25% of Indonesia's population, further underscores the prospects for cash waqf growth, especially when supported by transparency and professional governance from waqf managers (nazhir) (Nour Aldeen, Ratih, and Sari Pertiwi 2022).

However, the effectiveness of cash waqf in addressing social and economic challenges still faces structural barriers, particularly liquidity risk and managerial inefficiencies. Despite its significant potential to support sustainable development and poverty alleviation, various

studies indicate that limited financial expertise, lack of transparent reporting, and inefficient fund utilization undermine the impact of cash waqf initiatives (Fatimah Anwar et al. 2024). Additionally, liquidity risk arises when waqf institutions are unable to convert funds into productive investments or maintain a consistent flow of fund distribution, thereby threatening long-term sustainability (Nour Aldeen, Ratih, and Sari Pertiwi 2022).

Liquidity risk in the context of cash waqf arises from structural mismatches between short-term obligations, such as distributions to beneficiaries (mustahik), and long-term investments in productive waqf assets. This issue is exacerbated by the dominance of illiquid waqf assets, primarily in the form of land, which limits the waqf institutions' ability to meet short-term financial needs (Yakob et al. 2021). Limited availability of cash funds hinders the development of waqf projects and reduces institutional efficiency. Moreover, the absence of strategic investment planning and the lack of diversification further intensify the liquidity challenges faced by waqf institutions (Bachri and Rosyadi 2024).

The absence of a systematic risk management framework can threaten the sustainability of donor-funded initiatives, particularly within Islamic microfinance institutions, where soft budget constraints and limited financial oversight have been linked to increased credit risk and inefficiency (Mohamed and Elgammal 2023). Furthermore, without robust risk-based planning and pre-agreed financing mechanisms, donor trust may decline, ultimately limiting these institutions' ability to achieve their intended social impact (Willits-King et al. 2020). Research on risk management, especially in the context of cash waqf, remains relatively limited. Therefore, this study aims to fill that gap in the literature and contribute to the formulation of relevant and applicable risk mitigation strategies.

The development of the literature on Islamic social finance shows that previous studies have paid a lot of attention to the governance aspect (Wijayanti and Widiastuti 2022), Efficiency of Waqf Institution Management (Maulida and Mi'raj 2024; Maulida and Laila 2023), as well as various investment strategies to optimize waqf assets (Afif, Zahro, and Awaludin 2025; Mahmud and Noordin 2024). However, the current literature tends to address these issues partially, leaving a crucial gap in the field of risk management. To date, researchers have not found comprehensive synthesis research that specifically integrates liquidity risk management, cash waqf sustainability, and integrated governance frameworks. This research gap is particularly problematic, considering the inability to manage liquidity risks, such as an imbalance between short-term liabilities and long-term investments that can directly threaten the long-term sustainability of cash waqf funds. Therefore, this study is here to fill this gap by presenting a systematic analysis that links liquidity risk mitigation and integrated governance to realize a sustainable Islamic wealth management ecosystem.

This research seeks to identify the types and characteristics of liquidity risk in cash waqf management, analyze the liquidity risk management strategies employed by Islamic Social Finance Institutions, evaluate the effectiveness of liquidity management policies in maintaining trust and productivity of cash waqf funds, and formulate policy recommendations for a sustainable and resilient cash waqf governance framework.

RESEARCH METHOD

Systematic Literature Review (SLR) is used to identify, evaluate, and summarize existing research relevant to a specific set of research questions, or to identify gaps in current studies to suggest areas for further investigation (Paul et al. 2021). Parsif.al¹ is an online tool that supports researchers in conducting SLRs, particularly in the context of Liquidity Risk Management. This tool was utilized in the current review to plan and manage the various stages of the SLR, namely the Planning, Study Selection, Quality Assessment, and Data Extraction phases.

The objectives of this review are as follows:

1. To analyze the current state of liquidity risk management strategies in the management of waqf-based assets, particularly cash waqf, within the framework of Islamic wealth management.
2. To evaluate integrative approaches in the mobilization and utilization of cash waqf to support asset optimization and the achievement of socio-economic goals in Islamic wealth management.

Research Questions

The research questions serve as the main focus for identifying relevant studies and extracting data. The PICO mnemonic (Population, Intervention, Comparison, and Outcome) is used to break down the review objectives into searchable keywords and to assist in formulating the research questions (Schiavenato and Chu 2021). PICO has been widely used in medical and social sciences to encourage researchers to consider the essential components of a research question. Schiavenato and Chu provide detailed guidelines on the use of PICO, which can be adapted to the context of this study.

Table 1: PICO Criteria.

PICO	Description	Adapted Theme
Population	Application area or industry domain	Cash Waqf Management in the Context of Islamic Finance and Liquidity Risk
Intervention	Methodology, tool, or technology addressing a specific issue	Liquidity risk management strategies in the mobilization and utilization of cash waqf
Comparison	Methodology/tool/technology used for comparison (if applicable)	Not applied
Outcome	Results relevant to key factors for practitioners	Optimization of cash waqf mobilization and utilization through effective liquidity risk management

The following explains the elements of PICO and their application in this review.

Three research questions were formulated based on the PICO criteria, definitions of waqf and sharia-based liquidity management, as well as the predetermined objectives:

¹ [Parsil.al](https://parsil.al)

1. How are liquidity management strategies applied in the mobilization and utilization of cash waqf within the framework of Islamic asset and wealth management?
2. What are the best approaches or models used to optimize the use of cash waqf funds to ensure liquidity and sustainability?
3. What are the main challenges and policy gaps in the implementation of liquidity management strategies in the integration of waqf within the Islamic wealth management system?

Search query string

Keywords and synonyms were selected based on the PICO criteria, which include the following key terms: Waqf, Islamic Endowment, Shariah-Compliant Asset Management, Islamic Wealth Management, Asset Management, Wealth Management, Investment Management, Portfolio Management, Financial Planning, Waqf Investment, Endowment Fund Management, and Islamic Financial Planning, Shariah Compliance. Each search string was executed in the Semantic Scholar database, which was chosen for its advanced search capabilities and broad interdisciplinary content coverage. The search queries used for each database are shown in Table 2 and were applied across all sections of the title, abstract, and keywords/metadata. The Parsif.al tool was used at this stage to help manage duplicate records found in the search results.

Table 2: Identified Papers by the database

Database	Query	N ^o Results
semantic scholar	TITLE-ABS-KEY (("Waqf" OR "Islamic endowment" OR "Shariah-compliant asset management" OR "Islamic wealth management") AND ("Asset management" OR "Wealth management" OR "Investment management" OR "Portfolio management" OR "Financial planning" OR "Waqf investment" OR "Endowment fund management" OR "Islamic financial planning" OR "Shariah compliance"))	241

Study Selection and Quality Assessment

To ensure relevance and reflect the latest developments in the integration of waqf into sharia-based asset and wealth management, article selection was limited to publications from 2016 to 2025. This time frame covers significant evolution in waqf-based financial innovation, institutional standardization, and the expansion of Islamic wealth management practices that incorporate waqf instruments. The initial selection was conducted based on article titles and abstracts, following predefined exclusion criteria (Table 4). In cases of uncertainty at this stage, the full document was reviewed to determine its inclusion or exclusion based on the same criteria.

Table 4: Inclusion and Exclusion Criteria.

Inclusion Criteria	Exclusion Criteria
<ul style="list-style-type: none"> • Articles that include at least 2 keywords (e.g., Waqf, Islamic Endowment, Liquidity Risk, Cash Waqf, Shariah-Compliant Asset Management, Islamic Wealth Management) in title, abstract, or keywords. 	<ul style="list-style-type: none"> • Articles published before 2016 • Articles that are not written in English

<ul style="list-style-type: none"> • Articles discussing liquidity risk management strategies, mobilization, or utilization of cash waqf in the context of sharia-based asset or wealth management. • Papers related to Waqf integration in Islamic asset and wealth management. 	<ul style="list-style-type: none"> • The paper is a form of grey literature, e.g., a technical report or dissertation. • Articles not relevant to at least 2 of the specified keywords.
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Articles that met the eligibility criteria were then read in full and evaluated for quality using the following questions:

1. Does the article discuss the integration of waqf within the framework of asset and wealth management based on Sharia principles?
2. Does the article propose a model, framework, tool, or methodology to enhance the management or optimization of waqf assets?
3. Is there a discussion on regulatory aspects, governance, or compliance with Sharia financial principles?
4. Does the article highlight innovations or modernization, such as the use of financial technology (fintech), blockchain, or other digital technologies in waqf management?
5. Does the article present practical applications, case studies, or empirical evidence related to waqf asset management?
6. Do the authors identify and discuss limitations, challenges, or threats to the reliability and validity of the research findings?
7. Is there an explicit statement of the research objectives, including goals, motivation, issues, and research questions?

Each article was given a maximum score of 7 points, with the eligibility threshold set at 4.5. Articles scoring below this threshold were excluded from the final analysis. The systematic literature review (SLR) process adopted in this study is illustrated in Figure 2.

Define the “Data Extraction” form

The data extraction form must include essential information to answer the research questions concerning liquidity risk management strategies in the mobilization and utilization of cash waqf. Synthesizing relevant literature is a critical step in this study, particularly in identifying key themes such as liquidity risk mitigation, cash waqf investment models, and optimization strategies. Although Ramesh, Glass, and Vessey (2004)(Ramesh, Glass, and Vessey 2004) Proposed a classification scheme to categorize studies based on topic, method, and level of analysis. This study adapts the framework with a focus on financial risk management and Islamic social finance.

Classification and Fields to Consider for Data Extraction	Description and Examples
Research Type	<ul style="list-style-type: none"> • Theoretical Research: Focuses on Islamic finance principles, liquidity risk theories, and conceptual frameworks for cash waqf. Example: Studies analyzing Sharia-compliance in liquidity management. • Empirical Research: Uses financial data, case studies of waqf institutions, or regulatory reports to measure liquidity risk impacts.

	Example: Comparative analysis of liquidity buffers in Indonesian vs. Malaysian cash waqf institutions.
By Process Phases	Structuring data based on stages of cash waqf management (e.g., fund mobilization, investment, disbursement). Examples: <ul style="list-style-type: none"> • [Reference] applies the ISRA-IFP liquidity risk framework to evaluate phases of waqf fund utilization. • [Reference] uses the AAOIFI governance stages to assess liquidity oversight in waqf institutions.
By Financial Instruments & Frameworks	Analyzing tools/models used for liquidity risk mitigation (e.g., Islamic liquidity pools, sukuk, fintech platforms). Example: <ul style="list-style-type: none"> • [Reference] reviews Waqf-linked Sukuk as a liquidity management tool in GCC countries.
By Application Context	Identifying sector-specific implementations (e.g., healthcare, education, SME financing) and regional practices. Example: <ul style="list-style-type: none"> • [Reference] compares cash waqf liquidity strategies in Islamic banks vs. dedicated waqf institutions in Turkey.
Gaps and Challenges	Highlighting barriers (e.g., regulatory fragmentation, low public trust) and unmet needs (e.g., standardized liquidity metrics for waqf). Example: <ul style="list-style-type: none"> • [Reference] identifies a lack of Sharia-compliant short-term liquidity instruments for waqf institutions.
Key Findings	Categorizing outcomes: <ul style="list-style-type: none"> • Strategies: Waqf cash pooling, dynamic asset allocation. • Models: Liquidity stress-testing frameworks for waqf. • Policy Proposals: Centralized waqf liquidity hubs.
Evaluation Methods	Case studies of waqf institutions, econometric analysis of liquidity ratios, and stakeholder surveys. Example: <ul style="list-style-type: none"> • [Reference] uses SWOT analysis to evaluate liquidity risks in Jordanian waqf funds.

The data extraction criteria must align with the research objectives, including liquidity management approaches, regulatory considerations, and performance outcomes in cash waqf institutions. Kitchenham and Charters (2007)(Kitchenham, B., & Charters 2007) Recommend including additional insights such as policy recommendations, implementation challenges, and the comparative advantages of various strategies. Although the extraction form may be refined during the review process, any modifications should be made carefully to maintain efficiency. A solid understanding of Islamic finance and liquidity risk management will assist in establishing appropriate data extraction criteria for this study.

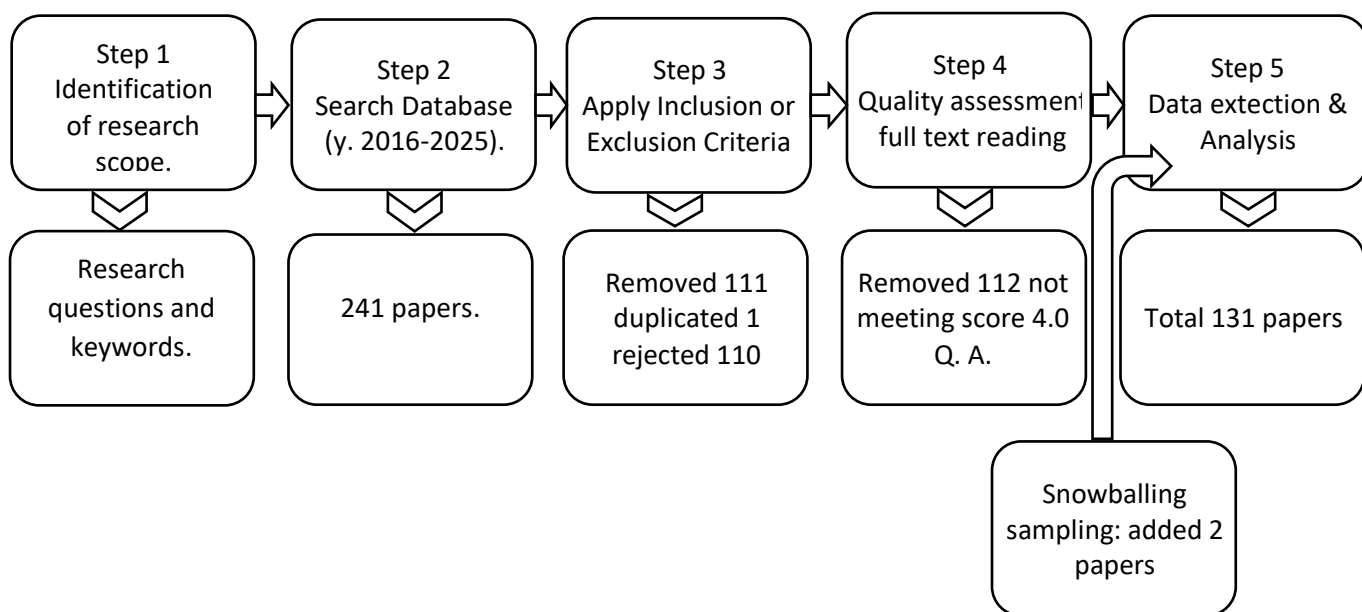


Figure 1: SLR process.

RESULT AND DISCUSSION

Figure 2 shows the number of final articles per year after undergoing the study selection and quality assessment process. The data is presented in the form of a bar chart, with the horizontal (x) axis representing the years from 2016 to 2025, and the vertical (y) axis indicating the number of articles on a scale from 0 to 250.

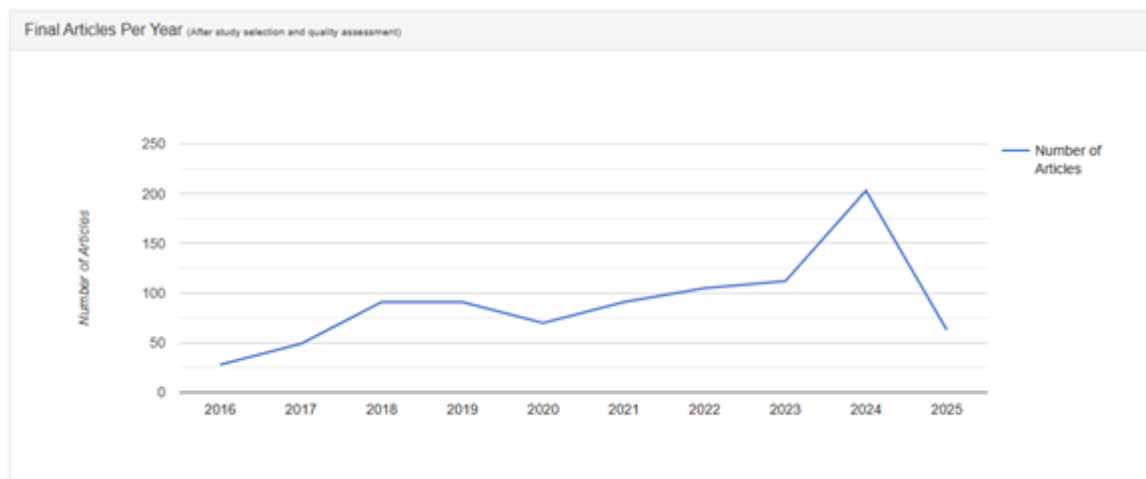


Figure 2: Papers distribution by years

The chart shows that the number of articles fluctuated from year to year. In 2016–2017, the number of articles ranged between 28 and 49, followed by a significant increase in 2019, reaching around 91 articles. In 2020, there was a decline to approximately 70 articles, then a rise again in 2021, approaching 100 articles. However, in 2023–2024, there was a sharp increase, peaking at around 203 articles. Meanwhile, 2025 shows a stable or slightly declining trend, with the number of articles ranging between 63 and 100.

This figure illustrates the dynamics of research productivity or publication trends related to liquidity risk in waqf during the 2016–2025 period, with the highest point in 2024

and the lowest in 2016. These fluctuations may reflect various factors such as shifts in research policy, academic interest, or the impact of certain global events.

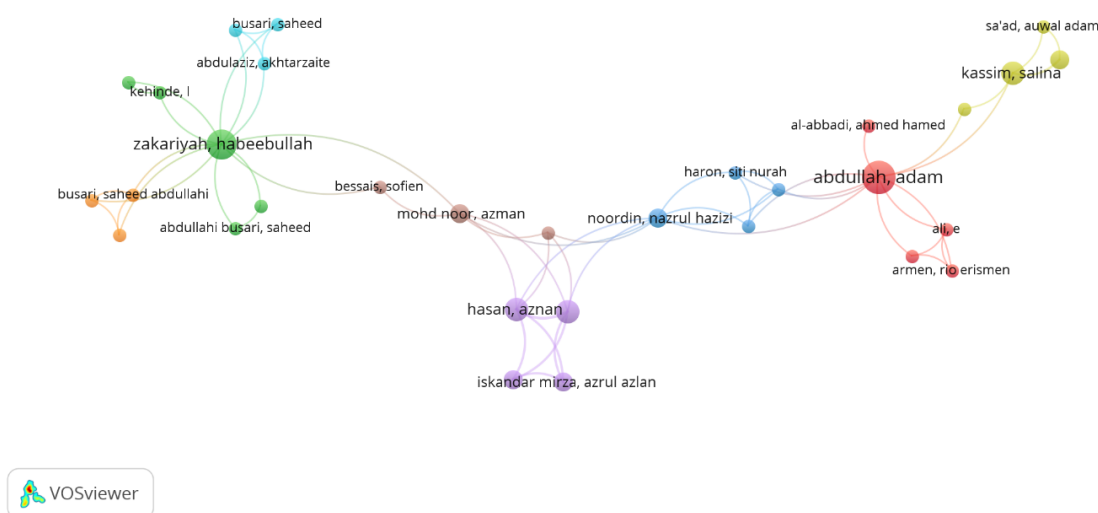


Figure 3: Co-citation Analysis

Figure 3 above is a visualization of the authorship collaboration network generated using VOSviewer software. Each node in the figure represents an individual author, while the edges (lines) connecting the nodes indicate collaboration or co-authorship relationships in scientific publications. The size of each node reflects the frequency of the author’s involvement in the collaboration network—the larger the node, the more frequently the author collaborates with others. Different colors group authors into clusters that represent closely connected collaboration groups.

Several authors play central roles in this network, including Zakariyah Habeebullah, Abdullah Adam, and Hasan Aznan, as indicated by the relatively large node sizes and numerous connections. The green cluster surrounds Zakariyah Habeebullah, representing a collaboration group involving authors such as Busari Saheed and Abdulaziz Akhtarzaite. Meanwhile, Abdullah Adam (in the red cluster) is connected to many authors, including Kassim Salina, Armen Rio Erismen, and Al-Abbadi Ahmed Hamed. The purple cluster, led by Hasan Aznan, is linked with Iskandar Mirza Azrul Azlan and Mohd Noor Azman, indicating a strong research group.

Overall, this visualization illustrates a complex and interconnected pattern of scientific collaboration, which can be used to analyze the influence and strategic position of each author within their academic publication ecosystem.

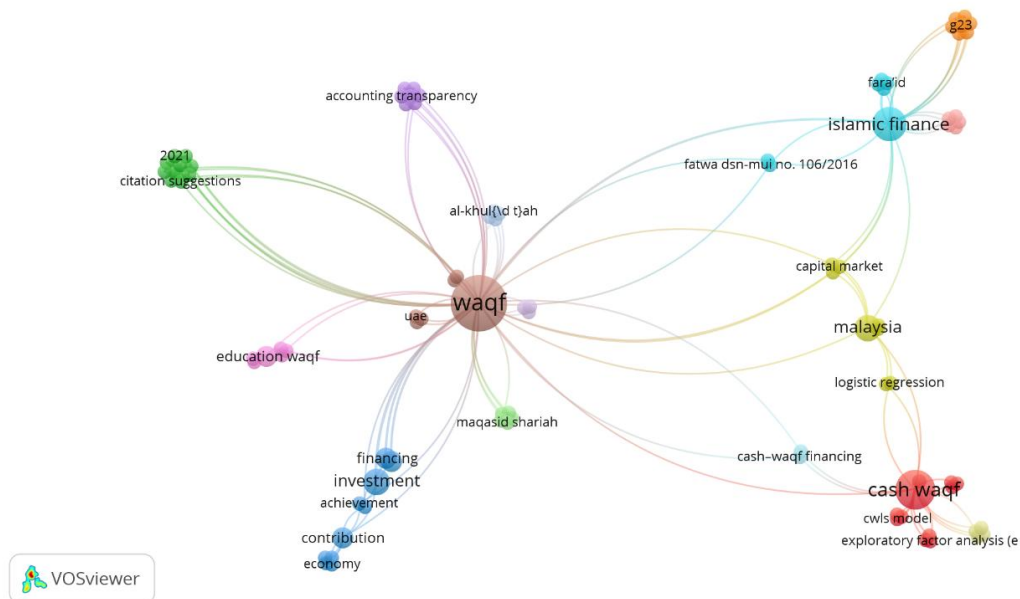


Figure 4: Co-occurrence Map of Keywords

Figure 4 above is a visualization of the keyword co-occurrence network generated using VOSviewer software. This visualization illustrates the relationships between keywords that frequently appear together in scientific publications related to the topic of "waqf." Each node represents an individual keyword, while the connecting edges reflect the frequency of co-occurrence between those keywords. The size of a node indicates the importance or frequency of that keyword's appearance, and the colors represent clusters of closely related thematic groups.

At the center of the map is the keyword "waqf," which serves as the primary term and is widely connected to various other terms. This keyword is linked to several important themes such as "investment," "education waqf," "cash waqf," "Islamic finance," "Malaysia," and "maqasid shariah." For example, the red cluster in the lower right focuses on the topic of "cash waqf" and research methodologies such as exploratory factor analysis and the CWLS model. The blue cluster in the lower left highlights the economic contribution, financing, and investment aspects of waqf. Meanwhile, the yellow cluster emphasizes connections between waqf and specific countries such as Malaysia, along with analytical approaches like logistic regression.

Other keywords such as "accounting transparency," "citation suggestions," and "fatwa DSN-MUI No. 106/2016" reflect a diversity of perspectives, including regulatory, academic, and shariah principles. This visualization is highly valuable for identifying key research focuses, emerging trends, and areas that can be further explored in contemporary waqf studies.

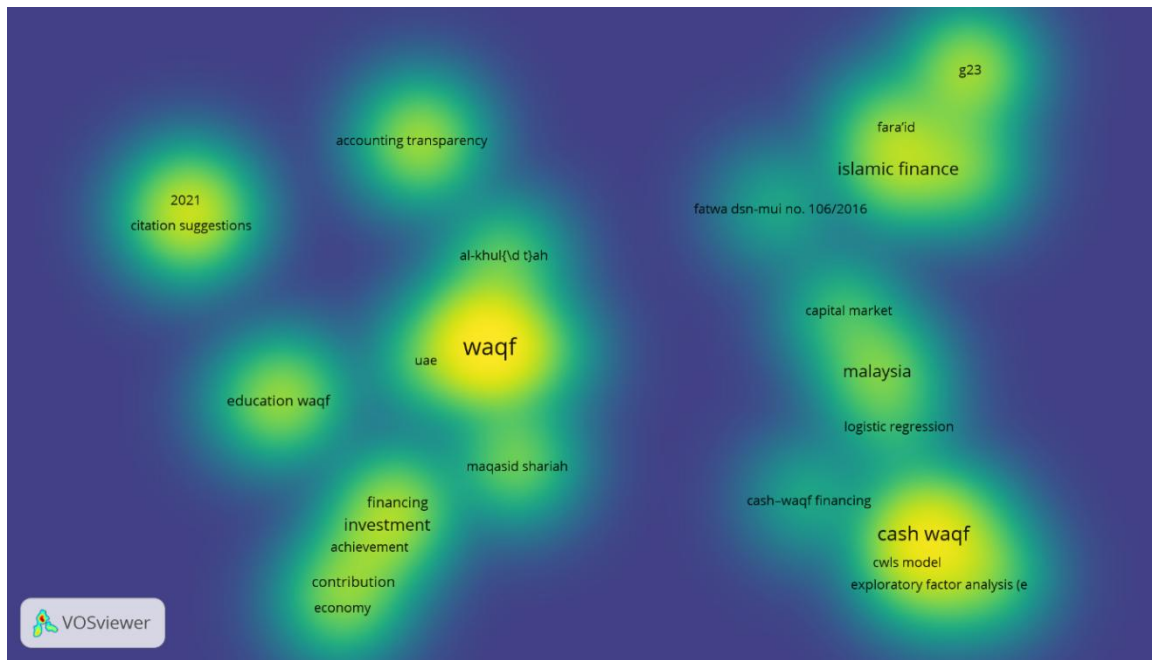


Figure 5: Keyword co-occurrence heatmap

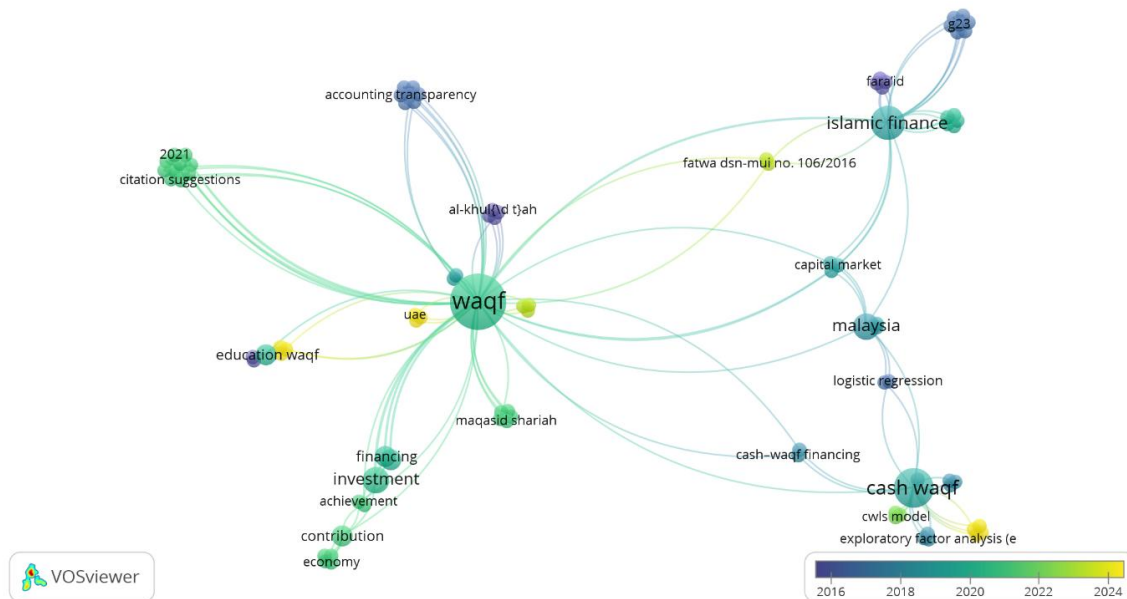


Figure 6: Overlay Visualization

Figure 5 (heatmap) and Figure 6 (overlay visualization by year) are the results of a bibliometric analysis using VOSviewer, focusing on keywords related to the topic of “waqf.” These two visualizations provide in-depth insights into research trends, intensity, and topic development in the academic literature.

In Figure 5 (heatmap), yellow areas indicate high frequency or intensity of keyword co-occurrence. The keyword “waqf” is positioned at the center of the map with a very bright yellow intensity, signifying that it is the main focus in related publications. Other dense areas surround keywords like “cash waqf,” “Islamic finance,” and “investment,” indicating that these subtopics also hold strong relevance in waqf-related research.

Meanwhile, Figure 6 (overlay visualization) shows the time distribution (by year) of the studied keywords. The color scale from purple to yellow represents a timeline: purple indicates older publications (around 2016), while yellow marks more recent research (up to 2024). The visualization shows that topics such as “exploratory factor analysis,” “cash waqf,” and “education waqf” have become research focal points in recent years (2022–2024), as indicated by brighter colors. On the other hand, topics such as “al-khulūdīyah,” “accounting transparency,” and “g23” appear more dominant in earlier periods (darker colors).

Overall, both visualizations indicate that “waqf” is a central and continuously evolving topic, with subthemes such as cash waqf, waqf investment, and Islamic finance integration becoming increasingly relevant research areas. This suggests that future research can be further focused on quantitative approaches, waqf asset management, and the integration of waqf within modern financial systems.

Liquidity Risk Identification

Liquidity risk remains a formidable challenge in the management of productive waqf assets, particularly within complex structural financing frameworks such as the Build-Operate-Transfer (BOT) model. Monaya (2018) Her investigation into the development of underutilized waqf land through BOT schemes underscores a critical structural bottleneck: the legal and Shariah-based prohibition against utilizing waqf land as collateral. This restriction significantly impedes nazhir (waqf managers) from accessing institutional banking credit, thereby creating severe cash flow constraints during the development and operational phases. This financing barrier is further compounded by the inherent legal rigidity of waqf property, which dictates its inalienability. Because the underlying real estate cannot be liquidated, sold, or easily restructured to meet short-term financial obligations, waqf institutions operating under BOT arrangements are highly vulnerable to liquidity shocks when project revenues fail to match projected timelines.

To navigate these liquidity constraints, contemporary waqf institutions have increasingly adopted financial market instruments, though these models introduce distinct liquidity dynamics. In the context of waqf unit trusts, Sulaiman et al. (2021) highlight that mitigating liquidity risk necessitates sophisticated and sustainable investment strategies. They emphasize that employing aggressive asset portfolio diversification and implementing fixed-price unit trust mechanisms are vital to buffering against market volatility and ensuring capital stability, especially during high-redemption periods. Conversely, relying on non-commercial funding channels introduces separate vulnerabilities. Furqon (2020) demonstrates that a heavy dependence on external funding sources, such as government subsidies or Qard al-Hasan (benevolent) loans, poses high liquidity risks. Because these disbursements are often subject to bureaucratic delays, fiscal shifts, or institutional uncertainties, they fail to provide the predictable cash inflows required to sustain ongoing waqf operations.

Consequently, addressing liquidity risk in productive waqf management demands a holistic, multidimensional governance framework rather than isolated financial adjustments. The synthesis of structural rigidities in property development and the volatility of capital market instruments underscores the need for a synchronized strategy. This approach must encompass the strengthening of internal financial management, such as establishing mandatory liquidity reserve ratios, alongside the strategic diversification of funding sources.

Furthermore, fostering institutional collaborations with private investors through Shariah-compliant public-private partnerships (PPP) can alleviate capital shortfalls without jeopardizing the permanence of the waqf asset. Ultimately, integrating these diverse strategic levers is paramount to ensuring the financial resilience and long-term socio-economic sustainability of the contemporary waqf ecosystem.

Investment Duration and Obligation Mismatch

One of the main structural challenges in waqf asset management, especially in the context of optimizing idle land, is the significant mismatch between the duration of investment and the fulfillment of financial obligations. Based on a study conducted by Pitchay et al. (2018), the proposed cooperative-waqf model in Malaysia shows a high vulnerability to the risk of imbalance between the long-term timeline of physical investment projects and short-term financial obligations that must be met immediately. This vulnerability is further exacerbated by the limitations of sharia-compliant financial instruments. As emphasized by Hasan and Siraj (2017), the absence of flexible liquidity instruments makes it difficult for waqf institutions to manage short-term cash flows when their funds are tied to development projects that take a long time to generate returns (gestation period).

This phenomenon of duration mismatch not only burdens the management of conventional physical assets, but also penetrates the realm of the modern digital financial ecosystem. In Indonesia, a similar issue has emerged in the development of Islamic fintech based on waqf. Rusydiana (2019) underlined that the need for long-term funding to build massive technological infrastructure is often not aligned with short-term payment or liquidity obligations. The characteristics of digital projects that require large capital retention at the outset clash with the liquidity expectations of stakeholders. As a result, modern waqf management institutions (nazhir) that adopt technology are often faced with acute liquidity pressures due to imbalances in inflows and outflows.

This dilemma is further complicated by external factors in the form of regulatory uncertainty and the lack of incentive policies that support risk mitigation in the waqf sector. Study by Mohsin (2013) Regarding cash waqf, it shows that without an adaptive and supportive legal umbrella, waqf institutions will continue to have difficulty creating a safe space to manage their liquidity risks. Therefore, to overcome this systemic mismatch, an integrated and collaborative approach is needed. Financial regulators, Islamic financial services institutions, and stakeholders must work together to formulate new investment instruments. This instrument is not only required to comply with sharia principles, but also must have high flexibility to bridge short-term liquidity needs without sacrificing the sustainability of long-term waqf investments.

Cash Inflow Volatility

Cash inflow volatility is one of the most significant challenges faced by waqf institutions (nazhir) and Islamic financial entities today. Uncertainty in the receipt of cash waqf funds is often influenced by macroeconomic fluctuations, public literacy levels, and inconsistent donor behavior. Mikail, Djafri, and Ahmad (2024) emphasized that this uncertainty of cash inflows directly threatens the sustainability of waqf benefit programs, especially programs that are integrated with microfinance initiatives. When the distribution of funds for microfinance is disrupted due to the drag on liquidity, the expected socio-

economic impact of waqf instruments will decrease drastically. Therefore, integrating waqf instruments with the microfinance sector requires a robust risk management mechanism to maintain cash flow stability in a sustainable manner.

As a concrete solution to such financial vulnerability, some researchers propose the formation of an external liquidity cushion through financial model engineering. Through the Integrated Cash Waqf and Islamic Crowdfunding Model (I-CWCM), Sulaeman and Abbiyu Muhamad Ghozali (2023) propose the importance of establishing a backup risk fund. In this ecosystem, reserve funds function as a safety net that is deliberately set aside to cover potential losses or instability of cash flows in the future. With this backup risk fund, waqf institutions can ensure that productive financing programs for Micro, Small, and Medium Enterprises (MSMEs) continue to run consistently without having to stop when waqf fundraising decreases.

In addition to the provision of capital fund reserves, mitigation of cash flow volatility also requires structural reforms in the internal governance aspect of institutions. Maghbul and Alhajam (2018) emphasized that a good governance structure is the main pillar in mitigating liquidity shocks. They proposed a comprehensive framework that includes the establishment of a special investment monitoring unit and the strengthening of the sharia audit mechanism. The presence of these two functions ensures that each incoming fund is accurately mapped, investment risks are anticipated early, and the entire governance of waqf funds runs in a transparent and accountable manner, which in turn will increase public confidence and the stability of fundraising.

Alternative strategies to minimize the impact of cash flow volatility can be pursued through risk diversification by involving third parties. Lita et al. (2023) explore the application of the principle of shirkah (partnership) in the management of waqf assets, which emphasizes the risk-sharing mechanism among the parties involved. Through this strategic partnership scheme, waqf institutions do not bear the burden of liquidity risk alone, but distribute it to stakeholders or trusted business partners. This approach has proven to be effective in mitigating the negative impact of sudden declines in cash flows due to a shared commitment to mutually support the operational stability of waqf projects.

Overall, the volatility of cash flow in the cash waqf ecosystem is not an obstacle that cannot be overcome if managed with an integrative strategy. This risk control requires a balanced combination of strong institutional governance, adequate provision of risk reserve funds, and risk-sharing-based strategic collaboration with Islamic financial institutions. Through the implementation of these comprehensive measures, waqf institutions are not only able to ensure the stability of their internal liquidity, but also exponentially expand and maintain the long-term socio-economic impact of the waqf funds collected.

Lack of Liquidity Reserves

One of the most pervasive operational bottlenecks in contemporary waqf management is the critical absence of dedicated liquidity reserves, an issue that severely paralyzes the financial flexibility and strategic responsiveness of waqf institutions. Without an autonomous financial safety net, these organizations find themselves structurally constrained when deploying programs or responding to shifting economic conditions. This institutional vulnerability is vividly illustrated in the research by Hassan, Rahman, and Yazid (2018), which examines prominent Malaysian waqf institutions such as Unit Wakaf Johor

(UWJ) and Perbadanan Wakaf Selangor (PWS). The study underscores that due to the lack of independent, specialized financial divisions within these institutions, they remain heavily reliant on budgetary allocations and overarching funding from their respective State Islamic Religious Councils, namely MAIJ and MAIS. This bureaucratic and financial dependency strips waqf managers of their agility, leaving them ill-equipped to independently navigate liquid fund management, allocate capital during unforeseen crises, or swiftly capitalize on time-sensitive, high-yield investment opportunities.

This liquidity crunch is further exacerbated by a classic asset-liability maturity mismatch, which is deeply rooted in traditional waqf allocation paradigms. Historically and practically, a vast majority of accumulated waqf funds are aggressively channeled into capital-intensive, long-term developmental projects, such as the construction of schools, mosques, and healthcare facilities. While these projects yield undeniable, profound socio-economic returns over decades, they simultaneously lock up capital into highly illiquid, immovable tangible assets. Consequently, waqf institutions often find themselves asset-rich but cash-poor, starved of the liquid cash flows required to lubricate daily operational demands, administrative overheads, and immediate maintenance costs. This systemic imbalance creates a fragile operational paradox: institutions tasked with providing continuous societal welfare are themselves perpetually vulnerable to short-term insolvency shocks, simply because their wealth is frozen in brick and mortar.

To transcend these structural limitations and safeguard the long-term sustainability of the cash waqf ecosystem, a paradigm shift toward dynamic and sophisticated financial management strategies is imperative. Waqf institutions must move beyond passive asset stewardship and actively adopt modern treasury management practices, chief among which is the institutionalization of mandatory liquidity reserves or stabilization funds. By delineating a specific portion of incoming cash flows exclusively for liquid buffers, institutions can insulate themselves from operational disruptions and create a financial cushion for urgent socio-economic interventions. Furthermore, establishing autonomous financial management frameworks within these organizations will empower nazhir (waqf managers) with the agency to execute agile portfolio rebalancing. Ultimately, integrating robust liquidity buffering mechanisms into the governance matrix ensures that waqf institutions can seamlessly balance their dual mandates: honoring long-term societal commitments while maintaining the day-to-day operational resilience necessary to thrive in a volatile economic landscape.

Liquidity Management Strategies

Liquidity management is a crucial pillar in the administration of money waqf to ensure a balance between asset growth and the availability of ready-to-use funds. Waqf institutions are required to always have sufficient fresh funds to finance short-term operations as well as distribute waqf surplus to beneficiaries (mawquf 'alayh) promptly. To achieve a balance between risk and return trade-off, an investment diversification strategy is the main approach that is highly recommended. In line with the thinking of Sulaiman et al. (2019), the allocation of waqf portfolios into liquid but stable instruments, such as state sukuk, sharia-compliant unit trusts, or sharia deposits, is able to protect the principal value of waqf assets from market volatility. Through measurable diversification, waqf institutions not only minimize the risk of capital loss, but are also able to secure sustainable income streams.

In addition to portfolio diversification, challenges in the form of cash inflow uncertainty require waqf institutions to implement strong preventive strategies, one of which is through the establishment of liquidity reserve funds. This strategy requires waqf managers (nazhir) to set aside a portion of the surplus from the investment proceeds as internal reserves, instead of distributing all profits directly. This reserve fund functions as a financial buffer that can be used at any time for urgent needs, such as the cost of maintaining productive waqf assets or maintaining the continuity of benefit distribution when economic conditions deteriorate. The urgency of this strategy is reinforced by the findings of Ramadhan (2021), which indicate that the absence of liquidity reserves is often the root cause of managerial inefficiency, especially when waqf institutions face a drastic downturn due to external crises.

The third strategic component that should not be ignored in waqf financial governance is beneficiary scheduling. This strategy focuses on cash outflow management by compiling a timeline for the distribution of social funds in a planned, structured, and periodic manner. Without strict scheduling, waqf institutions are vulnerable to experiencing a momentary liquidity crisis due to the sudden withdrawal of large funds for social programs. By applying the asset-liability matching principle, waqf managers can adjust the maturity schedule of their investment income to the time of disbursement of assistance. This approach ensures that the social commitment of waqf institutions can be fulfilled consistently without having to disrupt the institution's daily operational liquidity.

Policy Effectiveness Evaluation

An in-depth evaluation of the effectiveness of waqf management policies in Indonesia and Malaysia shows significant structural barriers, especially related to regulatory fragmentation and standardization. One of the main obstacles is the lack of uniform national guidelines for waqf management, both in terms of accountability and financial reporting. In Malaysia, waqf governance is under the jurisdiction of the State Islamic Religious Council (MAIN) in each state, while in Indonesia, coordination between nazhir institutions and the Indonesian Waqf Board (BWI) still faces alignment challenges. This misalignment triggers inconsistencies in operational practices in the field and makes it difficult to measure the success of waqf programs comprehensively in various regions (Ambrose, Hassan, and Hanafi 2018).

In addition to the problem of standardization, limited transparency and weak supervision mechanisms in the management of waqf funds are crucial issues that are increasingly urgent. Many waqf institutions have not adopted a digital-based and publicly accessible financial reporting system, creating an accountability gap (Sulaiman et al. 2021). In the modern financial era, the public and donors demand high information disclosure regarding the allocation and real impact of the funds they endow. When transparency is ignored and internal oversight tends to be weak, this information asymmetry will slowly erode public trust in the credibility of waqf institutions, ultimately hindering the potential for mass mobilization of cash waqf funds.

This structural obstacle is exacerbated by the low capacity of human resources and the lack of risk management expertise among nazhir (waqf managers). Many waqf managers are selected based on aspects of traditional religious understanding, but they have not been equipped with adequate managerial competence, financial analysis, and risk mitigation. As a result, the investment placement of waqf funds is often not optimal, which leads to many

waqf assets becoming unproductive or even abandoned (Mukhlisin and Mustafida 2019). Therefore, comprehensive policy reform is necessary. This reform should not only touch on the regulatory aspect at the top level, but must include massive human resource capacity building, professionalization of nazhir, and the application of good waqf governance principles for the sustainability of the waqf ecosystem.

Policy Recommendations

Efforts to increase the effectiveness of cash waqf management and optimize its contribution to socio-economic development require strategic and comprehensive policy transformation. The first fundamental step focuses on strengthening integrated national regulations. These regulations should include codification of standard operating procedures (SOPs), strict sharia supervision, and professional governance principles to eliminate fragmentation due to reliance on inconsistent local interpretations (Jaharudin 2025). Complementing the regulatory framework, macroprudential intervention in the form of the implementation of a minimum liquidity ratio for waqf management institutions is a very crucial risk mitigation instrument. This policy not only serves as a financial cushion against the volatility of cash inflows, but also ensures continuity and flexibility of fund management in responding to urgent benefit distribution needs without having to sacrifice long-term investment (Mafaza et al. 2021).

In the contemporary era, the strengthening of financial governance must be supported by the modernization of infrastructure through the digitization of liquidity monitoring and reporting systems. The urgency of digitalization is based on the demands of modern waqf governance that prioritizes absolute transparency and public accountability. Through the integration of information technology, waqf institutions can monitor cash flows in real-time, minimize the risk of information asymmetry, and mitigate potential fund governance errors. Furthermore, the information disclosure generated by this digital system can significantly increase public trust, which in turn will broaden the basis of public participation in the mobilization of cash waqf funds (Azganin, Kassim, and Sa'ad 2021).

The last key factor that determines the success of the implementation of all the above policies is capacity building and risk management training for Nazhir (waqf managers). Nazhir's professionalization agenda through standardized competency certification programs and periodic coaching is non-negotiable. This step has proven effective in strengthening not only technical competence in managing complex financial portfolios, but also in enforcing high ethical standards in waqf institutions (Masse and Aderus 2022; Senjiati and Yadiati 2021). Through a harmonious combination of strong regulations, liquidity protection, digital infrastructure, and Nazhir's superior capacity, a healthy, productive, and sustainable cash waqf ecosystem will be created to meet the challenges of the times.

CONCLUSION

Based on the findings of the review, this study concludes that liquidity risk in cash waqf management is a major challenge that directly affects the effectiveness of fund mobilization and utilization. This risk arises from mismatches between short-term obligations and illiquid assets, volatility in cash inflows, and the lack of sufficient liquidity reserves. To address these issues, waqf management institutions have implemented various risk management strategies, such as investment diversification, the establishment of liquidity reserves, and scheduled disbursements to beneficiaries. In addition, the application of good governance

principles and the enhancement of Nazhir's professionalism have proven to be critical elements in ensuring the sustainability of cash waqf and strengthening public trust.

As a policy recommendation, this study calls for the strengthening of national regulations integrated with standardized operating procedures and consistent Sharia supervision. The government and waqf authorities should establish minimum liquidity ratios for all waqf institutions and develop transparent, real-time digital reporting systems. Furthermore, the professionalization of waqf managers through certification and risk management training should be a priority on the agenda. These policies are essential for creating a more adaptive, productive, and resilient cash waqf ecosystem capable of addressing current and future socio-economic challenges.

Finally, to advance academic and practical discourse in this field, future research should focus on developing empirical liquidity risk models to quantitatively measure the liquidity performance of waqf institutions. Additionally, comparative studies across different countries and regulatory jurisdictions are highly recommended to identify international best practices and explore how diverse economic environments shape liquidity mitigation strategies.

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