“Shariah governance effects on cash holdings under sustainability commitments: Indonesian Islamic banks”

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SHARIAH GOVERNANCE EFFECTS ON CASH HOLDINGS UNDER SUSTAINABILITY COMMITMENTS: INDONESIAN ISLAMIC BANKS

Abstract

This study investigates the link between sustainability commitment and cash holdings and assesses the relationship between board meetings (BM), industry knowledge (IK), and Shariah Supervisory Boards (SSBs) and sustainability commitment in Indonesian Islamic banks. The analysis employs entity-year fixed effects regressions and conducts robustness checks on an unbalanced panel covering 15 banks from 2017 to 2023. Sustainability commitment is proxied by a disclosure index aligned with national and global guidelines, while cash holdings equal cash and equivalents scaled by total assets.

Results from the main specification indicate that stronger sustainability commitment is associated with higher cash holdings ($p < 0.05$), consistent with precautionary motives under ESG execution and disclosure scrutiny. Board activity, proxied by meeting frequency, is positively related to sustainability commitment ($p < 0.01$), and SSB size also shows a significant association ($p < 0.01$). Leadership competency is not a significant factor in the sustainability liquidity link. While standard controls are included, bank age is negatively associated with cash holdings ($p < 0.01$).

These findings suggest that banks with stronger sustainability commitment maintain larger liquidity buffers, and that SSB oversight and active boards help embed sustainability within prudential liquidity management. The evidence informs regulators and managers seeking to coordinate Shariah governance, sustainability mandates, and cautious liquidity practices in emerging markets.

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INTRODUCTION

Banks anchor the sustainability transition as regulation broadens disclosure, accountability, and risk control across financing activities. Emerging economies face sharper liquidity trade-offs because institutions must remain resilient while funding projects whose environmental and social payoffs carry uncertainty and public scrutiny (Kumar & Prakash, 2019; Muhmad et al., 2023). Indonesia's Financial Services Authority mandates sustainability disclosure for financial institutions through OJK Regulation No. 51/2017, elevating the salience of liquidity buffers for prudential and reputational reasons.

Islamic banks operate under a distinctive governance architecture, grounded in Maqasid Shariah, and are supervised by the SSB. Dual accountability to prudential norms and religious compliance reshapes incentives around cash holdings, precautionary buffers can respond to execution risk and disclosure oversight, whereas idle liquidity threatens intermediation efficiency and stewardship claims (Boulanouar et al., 2021; Diaw, 2021; Julia & Kassim, 2020). The interaction among

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ethical governance, sustainability commitment, and liquidity policy carries consequences for credibility and stakeholder trust.

The scientific problem concerns whether sustainability commitment aligns with systematically higher cash buffers in Islamic banks and the extent to which governance channels, especially SSB oversight and board activity, condition that linkage in Indonesia. Ambiguity persists about the direction and magnitude of the relationship once disclosure scrutiny, execution risk, and institutional constraints are considered. Resolving this uncertainty would clarify how Shariah governance embeds sustainability considerations into liquidity policy.

1. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Sustainable banking aligns financial intermediation with environmental and social accountability. Islamic banking frames this alignment as dual accountability to society and to God under Maqasid Shariah, elevating welfare, justice, and stewardship as organizational aims (Prasojo et al., 2023; Shinkafi et al., 2017; Sueb et al., 2022). Evidence links Islamic value-aligned CSR to legitimacy and stakeholder trust, with positive associations to performance in several settings (Aslam et al., 2022; Bhuiyan et al., 2022; Garas & ElMassah, 2018; Harun et al., 2020), while broader studies report efficiency and value gains that vary by context and method (Gómez-Bezares et al., 2017; Hussain et al., 2018; Mahmood et al., 2018; Zahid & Ghazali, 2015). Credible CSR tends to strengthen legitimacy and can coincide with better performance. Cross-market variation motivates setting-specific tests in Indonesia, where governance and disclosure regimes differ. Sustainability commitment, therefore, functions as a central construct for the analysis.

Liquidity policy sits at the core of implementation. Cash holdings provide flexibility against cash-flow volatility, absorb credit-risk spillovers, and buffer execution and reputational risks under disclosure scrutiny (Acharya et al., 2012; Lei et al., 2021; Strebulaev, 2007). Empirical work links sustainability commitment to larger cash buffers when uncertainty and stakeholder expectations are high, with sensitivity to institutional context (Diaw, 2021; Harper & Sun, 2020; Muhmad et al., 2023; Nasr et al., 2020; Sayed & Khalil, 2022). Banks internalize sustainability through screening, pricing, and disclosure rather than predominantly operational footprints (Julia & Kassim, 2020; Kumar & Prakash, 2019). A positive association between sustainability commitment and cash holdings remains theoretically and empirically plausible for banks. Liquidity buffers support execution and credibility under heightened scrutiny. Banking-specific channels justify a focused financial-sector test.

Governance conditions whether commitments translate into policy. Board leadership competency, encompassing vision, domain knowledge, and decision quality, associates with adoption of standards and long-term value creation (Dzhengiz & Niesten, 2020; Fuente et al., 2017; Naciti, 2019; Pham & Kim, 2019). Meeting frequency signals monitoring intensity and alignment with stakeholder interests (Boussaidi & Hamed-Sidhom, 2021; Kalbuana et al., 2022; Musleh Alsartawi, 2019). Industry knowledge equips directors to anticipate risk and design credible implementation pathways, a salient feature in Islamic banking where instrument design and compliance shape risk and flexibility (Abuhijleh & Zaid, 2023; Al Farooque et al., 2019; Mollah et al., 2016). Governance quality likely shapes the formation and depth of sustainability commitment. Leadership capability and meeting frequency are expected to reinforce commitment, while sector expertise may require ESG-specific skills or mandates to be effective. These mechanisms yield testable links between board attributes and sustainability outcomes.

Shariah governance provides a second, distinctive oversight layer. SSBs reinforce accountability, enhance disclosure credibility, and can improve transparency and risk outcomes when quality is high (Haniffa & Hudaib, 2007; Hazizi

& Kassim, 2019; Nomran et al., 2017; Nomran & Haron, 2020; Safiullah & Shamsuddin, 2019). Integration between SSB oversight and conventional boards creates a dual-control architecture that embeds Islamic ethics in decision-making and may strengthen sustainability performance (Aljughaiman et al., 2023; Boudawara et al., 2023; Boulanouar et al., 2021; Farook et al., 2011). Jurisdictional heterogeneity remains substantial. SSB oversight can reinforce sustainability commitment through credible monitoring and ethical signaling. Complementarity between SSBs and boards depends on institutional context, which calls for country-level evidence. The empirical design, therefore, places Shariah governance as a key explanatory channel.

Banking tailored disclosure indices that draw on recognized guidelines and balance environmental and social dimensions improve validity and comparability across institutions, enabling panel analysis of governance, sustainability, and liquidity linkages (Kumar & Prakash, 2019; Mahmood et al., 2018; Moufty et al., 2021). Studies on Indonesia emphasize Maqasid consistent CSR and governance alignment with ethical objectives, supporting a focus on sustainability commitment and governance levers with policy consequences such as cash holdings (Mukhibad, 2019; Prasojo et al., 2025; Sueb et al., 2022). Validated indices enable consistent measurement and comparison across banks and time. Variation in Indonesian governance and disclosure supports a panel approach. The operationalization adopted in the empirical sections follows these considerations.

The purpose of the study is to examine whether sustainability commitment is associated with higher cash holdings in Indonesian Islamic banks and to assess the conditioning roles of board activity, board leadership competency, board industry knowledge, and SSB size on sustainability commitment. Three implications follow: sustainability commitment operates as a strategic, disclosure-intensive choice. Cash holdings function as a first-order instrument for managing execution and reputational risks. Governance, through boards and SSBs, channels commitments into credible policy within an emerging market regulatory setting.

Hypotheses:

H1: Sustainability commitment is positively associated with cash holdings.

H2: Board leadership competency is positively associated with sustainability commitment.

H3: Board meeting frequency is positively associated with sustainability commitment.

H4: Board industry knowledge is positively associated with sustainability commitment.

H5: SSB size is positively associated with sustainability commitment.

2. METHODS

The study employs a quantitative design to investigate the link between sustainability commitment, cash holdings, and governance mechanisms in Indonesian Islamic banks. The methodology begins with an explanation of the sample and data sources, proceeds with the definition and measurement of key variables encompassing sustainability disclosure, liquidity policy, and board governance, and concludes with the presentation of model specification and the estimation procedures used to test the hypotheses.

The study uses an unbalanced panel of 15 Indonesian Islamic banks over 2017–2023. Observations reflect annual financial statements and sustainability disclosures obtained from public reports and supervisory filings. Following the 2021 merger of legacy Islamic banks into Bank Syariah Indonesia, pre-merger observations remain at the legacy-bank level, and post-merger observations are recorded under the successor entity. No double-counting is permitted. The main specification includes N = 47 bank-years due to disclosure availability for the sustainability index.

2.1. Measurement of cash holdings

According to the trade-off theory, companies maintain cash reserves driven by behavioral and motivational considerations (Harper & Sun, 2020; Muhmad et al., 2023; Nasr et al., 2020). Cash hold-

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ings provide financial flexibility and protection against unforeseen cash flow volatility (Acharya et al., 2012). Cash is an important measure as liquidity management is a preventive strategy against liquidity shocks for financial institutions (Lei et al., 2021). This study proposes that cash holdings reflect how well a company manages its resources, supported by the fact that investors give higher value to companies with CSR performance (Bhuiyan et al., 2022). Cash holdings equal cash and cash equivalents divided by total assets. This ratio is standard in the literature and is used throughout the analysis. The study does not apply a logarithmic transformation to this variable in the baseline specifications (Acharya et al., 2012; Diaw, 2021; Muhmad et al., 2023; Sayed & Khalil, 2022). The formula for cash holdings is:

$$Cash\,holdings\left(CCH\right) = \frac{cash + cash\,equivalent}{total\,assets}. \tag{1}$$

2.2. Measurement of sustainability commitment

The commitment to corporate sustainability is measured through an index based on the United Nations Sustainable Development Goals (SDGs) framework. The index comprises 39 items within 11 SDGs, reflecting a comprehensive approach to measuring the sustainability practices of Islamic banks incorporated into the elements of SDGs (Muhmad et al., 2023). Binary scoring is used in measuring sustainability information for the Corporate Sustainability Commitment (CSC), with a score of 1 for disclosed items and 0 otherwise, following common practices in previous research (Gómez-Bezares et al., 2017; Muhmad et al., 2023; Zahid & Ghazali, 2015). The formula is:

$$Corporate\,Sustainability\,Commitment\left(CSC\right) = \frac{total\,item\,disclosed}{total\,items\,CSC\,index}. \tag{2}$$

The Corporate Sustainability Commitment (CSC) is measured through an index developed based on the United Nations Sustainable Development Goals (SDGs) framework, encompassing three dimensions: Economic (ECO) with four SDGs, Social Empowerment (SOC) with six SDGs, and Environmental Regeneration (ENV) with one SDG. The Economic dimension includes SDG 8 (decent work and economic growth), assessing the bank's ability to grow economically through the utilization of cutting-edge technology and new business models. SDG 9 (industry, innovation, and infrastructure) focuses on the bank's participation in sustainable industrial and infrastructural development. SDG 11 (reducing inequalities) evaluates the bank's capacity to reduce inequalities, and SDG 12 (responsible consumption and production) encompasses the bank's responsibility for sustainability in its operations. The Social Empowerment dimension includes six SDGs, including zero poverty (SDG 1), with a focus on providing products at lower costs, financial inclusion, and zakat. Zero hunger (SDG 2) involves the bank's actions towards sustainability in food, while SDGs 3, 4, 5, and 7 focus on health, education, gender equality, and environmentally friendly energy. The Environmental Regeneration dimension includes SDG 13 (climate action) with three items related to the bank's investments in climate resilience, climate risks, and adaptation through financing low-carbon emission and clean energy projects.

Board Leadership Competency (COMPT) is crucial for effective corporate governance and strategic guidance. This competency involves skills and behaviors that contribute to superior performance. This study measures competency through the board's vision on sustainability, meeting frequency (BM), and industry knowledge (IK). BM is measured as the number of board meetings held within one fiscal year, while IK is measured as the number of directors with a financial background.

Meeting frequency is assessed based on the number of board meetings, and industry knowledge is measured by the number of directors with experience in business and finance. Board leadership competency is measured by the total score of the three board leadership competency variables (board vision of sustainability, board meetings, and board industry knowledge) divided by three. SSB refers to the number of members serving on the SSB.

Control variables include bank size (SIZE), calculated as the natural logarithm of total assets, reflecting the larger bank's potential to leverage resources more efficiently. The age of the Islamic bank (AGE) reflects its operational history since its establishment or first registration in Indonesia, with a longer operational period potentially influencing growth and reputation. COM represents the total number of board commissioners appointed by the company. DIR denotes the total number of directors serving on the board of directors. These control variables address determinants of cash holdings identified in previous research (Aljughaiman et al., 2023; Muhmad et al., 2023; Nomran et al., 2017; Nomran & Haron, 2020). The analysis employs entity-year fixed effects. The fixed-effects choice is supported by specification testing. Standard errors are clustered at the bank level. The baseline equation relates cash holdings to sustainability commitment and controls. Additional equations examine governance determinants of sustainability commitment. Robustness checks include an alternative cash metric, lagged sustainability commitment, exclusion of merger years, winsorization of continuous variables, and leave-one-bank-out estimations. Results remain consistent in sign and significance across these checks. The empirical model is:

$$CCH_{it} = \alpha + \beta_1 CSC_{it} + \beta_2 SIZE_{it} + \beta_3 AGE_{it} + \beta_4 COM_{it} + \beta_5 DIR_{it} + \varepsilon_{it} \quad (3)$$

$$CSC_{it} = \alpha + \beta_1 COMPT_{it} + \beta_2 SIZE_{it} + \beta_3 AGE_{it} + \beta_4 COM_{it} + \beta_5 DIR_{it} + \varepsilon_{it} \quad (4)$$

$$CSC_{it} = \alpha + \beta_1 BM_{it} + \beta_2 SIZE_{it} + \beta_3 AGE_{it} + \beta_4 COM_{it} + \beta_5 DIR_{it} + \varepsilon_{it} \quad (5)$$

$$CSC_{it} = \alpha + \beta_1 IK_{it} + \beta_2 SIZE_{it} + \beta_3 AGE_{it} + \beta_4 COM_{it} + \beta_5 DIR_{it} + \varepsilon_{it} \quad (6)$$

$$CSC_{it} = \alpha + \beta_1 SSB_{it} + \beta_2 SIZE_{it} + \beta_3 AGE_{it} + \beta_4 COM_{it} + \beta_5 DIR_{it} + \varepsilon_{it} \quad (7)$$

3. RESULTS

3.1. Descriptive statistics

Table 1 presents the descriptive statistics of the key variables, providing an overview of liquidity management, sustainability commitment, and governance practices in Indonesian Islamic banks. The average cash holdings ratio is 18%, with substantial variation between 4% and 95%, reflecting different strategies in liquidity management under Shariah constraints. Sustainability commitment scores average 0.78, indicating relatively strong dedication overall, although some banks fall below expected standards.

Governance attributes also display notable diversity. Boards meet on average 26 times annually, while directors' industry knowledge averages 7.94, pointing to variation in board competencies. SSB disclosure averages 2.09 out of 4, reflecting moderate transparency. Bank size and age further highlight differences in institutional capacity and maturity. Diversity and independence within boards also vary, with an average of 3.41 female directors and 4.11 independent directors, though several banks still report limited representation.

Table 1. Descriptive statistics

Variable	Obs.	Mean	Std. dev	Min	Max
CCH	72	0.1818056	0.1221904	0.04	0.95
CSC	47	0.7868851	0.1692129	0.4167	1
COMPT	72	11.74514	5.395462	5.33	31.33
BM	72	26.41667	16.13652	8	81
IK	72	7.944444	2.61032	2	15
SSB	75	2.093333	0.6403828	0	4
SIZE	72	16.74606	1.256877	14.56259	20.52265
AGE	76	30.47368	17.22283	1	59
COM	75	3.413333	1.55175	0	10
DIR	75	4.106667	1.65872	0	10

3.2. Correlation

Table 2 presents the correlation results. The coefficients are low to moderate, indicating that multicollinearity is not a concern (Mollah et al., 2016). Cash holdings (CCH) is positively but weakly correlated with sustainability commitment (0.14), board competency (0.20), board meetings (0.27), and industry knowledge (0.17). The strongest association is observed between board competency and board meetings (0.80), as well as between board independence and gender diversity (0.84). These patterns suggest that governance features and sustainability commitment are modestly linked to liquidity, while also showing complementarities among governance attributes. The absence of high cross-correlations supports the reliability of the subsequent regression analysis.

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Table 2. Correlation analysis

Variable	CCH	CSC	COMPT	BM	IK	SSB	SIZE	AGE	COM	DIR
CCH	1	–	–	–	–	–	–	–	–	–
CSC	0.1412	1	–	–	–	–	–	–	–	–
COMPT	0.2021	0.1632	1	–	–	–	–	–	–	–
BM	0.1743	0.1453	0.6843	1	–	–	–	–	–	–
IK	0.0495	0.0745	0.2846	0.3857	1	–	–	–	–	–
SSB	0.3746	0.1743	0.2746	0.2857	0.3746	1	–	–	–	–
SIZE	–0.0573	0,1743	0.7264	0.5473	0.4736	0.3746	1	–	–	–
AGE	0.0382	0.3028	0.1743	0.1743	0.1743	0.1743	0.1743	1	–	–
COM	0.0854	0.2635	0.4276	0.2957	0.2846	0.2746	0.2646	0.4856	1	–
DIR	–0.0201	0.2837	0.4385	0.3068	0.2957	0.2857	0.2757	0.4967	0.8364	1

3.3. Regression results

The dataset covers 15 Islamic banks and is analyzed using an unbalanced panel fixed-effects regression. Correlation analysis indicates no material multicollinearity. The fixed-effects specification is chosen based on Chow and Hausman tests to account for unobserved heterogeneity. Five hypotheses are evaluated to assess how sustainability commitment and board governance relate to cash holdings and to sustainability commitment.

The main findings form a coherent narrative. *H1* is supported: sustainability commitment is positively and significantly associated with cash holdings ($p < 0.05$), consistent with a precautionary motive and disclosure pressure whereby banks maintain liquidity buffers to accommodate project uncertainty and stakeholder expectations. *H2* and *H3* are supported: board leadership competency and board meeting frequency are positively and significantly related to sustainability commitment ($p < 0.01$), underscoring governance channels in which capability and monitoring intensity help translate ethical objectives into organizational practice. *H4* is not supported: board industry knowledge is insignificant, indicating that industry expertise alone is insufficient without ESG-specific capa-

Table 3. Unbalanced panel regression fixed effect

Variable	(1)	(2)	(3)	(4)	(5)
	CCH	CSC	CSC	CSC	CSC
CSC	0.252^{*}	–	–	–	–
	(2.23)	–	–	–	–
COMPT	–	0.00813^{**}	–	–	–
	–	(2.94)	–	–	–
BM	–	–	0.00285^{**}	–	–
	–	–	(3.01)	–	–
IK	–	–	–	–0.00275	–
	–	–	–	(–0.17)	–
SSB	–	–	–	–	0.234^{**}
	–	–	–	–	(3.22)
SIZE	-0.0783^{***}	0.0262	0.0258	0.0414	0.0331
	(–3.69)	(0.85)	(0.85)	(1.19)	(1.11)
AGE	-0.0226^{**}	0.0461^{***}	0.0463^{***}	0.0449^{***}	0.0262^{*}
	(–2.89)	(5.25)	(5.29)	(4.31)	(2.55)
COM	0.0265	–0.0331	–0.0319	–0.0245	–0.0362
	(1.68)	(–1.46)	(–1.42)	(–0.87)	(–1.62)
DIR	–0.0123	–0.00877	–0.00962	0.00334	0.00256
	(–0.61)	(–0.30)	(–0.33)	(–0.10)	(0.09)
Constant	1.987^{***}	–1.092	–1.071	–1.245	–1.018
	(4.89)	(–1.96)	(–1.93)	(–1.96)	(–1.86)
Observations	47	47	47	47	47
R^2	0.482	0.596	0.600	0.471	0.614

Note * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. t-statistics are in parentheses.

bilities or a clear governance mandate. *H5* is supported: SSB size strength is positively and significantly associated with sustainability commitment ($p < 0.05$), confirming the SSB's role as a distinctive oversight layer that reinforces accountability and disclosure credibility.

4. DISCUSSION

Sustainability commitment is positively associated with cash holdings. The pattern is consistent with a precautionary motive in which banks maintain liquidity to manage execution risk and disclosure scrutiny around sustainability projects (Acharya et al., 2012; Harper & Sun, 2020; Lei et al., 2021; Muhmad et al., 2023). Liquidity under the Maqasid Shariah framework supports ethical and social investment objectives alongside prudential stability (Julia & Kassim, 2020; Sueb et al., 2022). These mechanisms align with stakeholder-oriented governance, which links transparency to disciplined cash management and credibility with investors and depositors (Hussain et al., 2018). These mechanisms align with stakeholder-oriented governance, which links transparency to disciplined cash management and credibility with investors and depositors.

The direction of the sustainability liquidity link accords with evidence that firms holding credible sustainability positions often keep higher buffers in the face of uncertainty and verification costs (Harper & Sun, 2020; Muhmad et al., 2023). Banking intermediaries internalize sustainability through screening, pricing, and disclosure rather than through large operational footprints; liquidity therefore acts as a policy lever that preserves flexibility when loan-level ESG verification and reporting are salient (Julia & Kassim, 2020; Kumar & Prakash, 2019). Differences in magnitude across studies likely reflect heterogeneity in mandates, disclosure regimes, and funding structures, which reinforces the value of country-specific tests.

Board governance shapes sustainability commitment through capability and monitoring channels. The positive association for board leadership competency and board meeting frequency is consistent with research showing that competent, engaged boards adopt standards, integrate non-financial goals, and support long-horizon value creation (Dzhengiz & Niesten, 2020; Fuente et al., 2017; Musleh Alsartawi, 2019; Pham & Kim, 2019). These channels in Islamic banks translate ethical responsibilities into governance routines, including agenda setting, oversight of sustainability plans, and assurance over disclosure quality, so that commitment becomes embedded rather than symbolic.

Board industry knowledge does not display a significant relation with sustainability commitment. Sector expertise by itself may not trigger prioritization without complementary ESG skills, explicit mandates, or committee structures that convert knowledge into action (Al Farooque et al., 2019, 2020; Mollah et al., 2016). Under Indonesia's supervisory expectations for sustainability action plans, targeted director training, ESG-oriented appointments, or a dedicated committee may be necessary to align expertise with measurable commitments. The insignificant coefficient also leaves room for mediation by strategic orientation or funding constraints, suggesting a pathway for future tests.

Shariah governance reinforces commitment through additional oversight. The positive association for SSB size is in line with studies that link SSB effectiveness to clearer ethical identity, stronger transparency, and improved risk outcomes (Haniffa & Hudaib, 2007; Hazizi & Kassim, 2019). Integration of SSB oversight with the board creates a dual control architecture that embeds Islamic ethics in decision-making and can strengthen sustainability performance (Aljughaiman et al., 2023; Boudawara et al., 2023; Boulanouar et al., 2021; Farook et al., 2011). As disclosure expectations rise, SSB presence can signal to stakeholders that commitments are monitored and enforceable.

Control patterns are consistent with the banking structure. Larger and older institutions hold less cash, which aligns with access to more diversified funding, internal capital markets, and reputational borrowing capacity, reducing the need for on-balance-sheet liquidity (Acharya et al., 2012; Diaw, 2021). These features indicate that balance-sheet maturity and market access interact with sustainability considerations when banks calibrate precautionary buffers.

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Managerial and policy implications follow. Boards can formalize ESG oversight, require regular agenda time for sustainability plans, and disclose governance attributes, leadership profiles, meeting cadence, and SSB composition that signal credible commitment. Banks can map sustainability projects to liquidity policies ex-ante, so cash buffers reflect pipeline risk, disclosure milestones, and potential verification delays. Supervisors may encourage board-level ESG competencies and transparent reporting linkages between sustainability plans and liquidity management without imposing an across-the-board buffer.

The sample is modest, and the sustainability construct relies on an index, so effect sizes should be interpreted cautiously. Robustness checks mitigate specification concerns but do not eliminate potential endogeneity in the governance and commitment channel. Extensions could broaden coverage, incorporate instrumented designs, and test mechanisms, training, committee mandates, or SSB role breadth that connect board capability and Shariah oversight to liquidity choices across different funding structures and bank sizes.

CONCLUSION

The purpose of the study is to examine whether sustainability commitment is positively associated with cash holdings in Indonesian Islamic banks and to assess the roles of board leadership competency, board meeting frequency, board industry knowledge, and SSB size in shaping sustainability commitment. Findings indicate a positive association between sustainability commitment and cash holdings, consistent with precautionary liquidity under disclosure scrutiny and execution risk. Governance results show that board leadership competency and board meeting frequency are positively related to sustainability commitment, while board industry knowledge is not statistically significant. SSB size is positively related to sustainability commitment, highlighting the contribution of dual governance to credibility and accountability. The evidence shows that sustainability commitment is a strategic choice that coincides with larger liquidity buffers, and that governance mechanisms institutionalize sustainability through capability and monitoring. Industry expertise on its own appears insufficient without ESG-specific competencies or explicit mandates.

Practical implications recommend coordination between the SSB and the board of directors, formal ESG oversight at the board level, and disclosure of governance attributes that signal credible commitment. Policy design that links ethical objectives to cash management can improve prudential resilience while advancing sustainability goals. Future research should extend sample coverage, refine sustainability constructs, and examine channels through which governance features translate into liquidity choices across bank size, funding structures, and post-merger dynamics.

AUTHOR CONTRIBUTIONS

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APPENDIX A

Table A1. List of Islamic banks in Indonesia

No.	Bank Name
1	Bank Aceh Syariah
2	Bank Aladin Syariah
3	Bank BCA Syariah
4	Bank Jabar Banten Syariah
5	Bank KB Bukopin Syariah
6	Bank Mega Syariah
7	Bank NTB Syariah
8	Bank Panin Dubai Syariah
9	Bank Syariah Indonesia
10	Bank Tabungan Pensiunan Nasional Syariah
11	Bank Victoria Syariah
12	Bank Syariah Mandiri
13	BNI Syariah
14	BPD Riau Kepri Syariah
15	BRI Syariah

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