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Retail Green Sukuk in Indonesia: A Systematic Literature Review of Sharia Structuring, Regulatory Frameworks, and Market Adoption

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Abstract

Indonesia's issuance of retail green sukuk (SR-BI series) since 2018 represents a structurally distinctive convergence of Islamic finance, environmental governance, and retail capital mobilisation. Despite cumulative issuances exceeding IDR 22 trillion by 2024, academic scholarship on this instrument remains fragmented across three largely disconnected domains: sharia structuring, regulatory compliance, and investor behaviour. This study addresses that fragmentation through a systematic literature review (SLR) guided by PRISMA 2020 protocol. From an initial corpus of 214 records sourced from Scopus, Web of Science, SINTA, and Google Scholar (2018–2024), 31 studies met the eligibility and quality thresholds for thematic synthesis. Three principal findings emerge. First, Wakalah bi al-Istithmar has consolidated as the dominant akad for retail green sukuk due to its asset-flexibility and alignment with Maqashid Syariah, particularly hifz al-mal and hifz al-nasl, yet standardised criteria for classifying green project types within akad categories remain absent from both DSN-MUI fatwas and OJK regulations. Second, Indonesia's regulatory architecture has undergone substantial maturation, though a persistent harmonisation gap exists between the OJK Green Taxonomy and DSN-MUI sharia standards. Third, market adoption is constrained more by financial literacy deficits than by religious resistance, with environmental consciousness proving a statistically significant predictor of purchase intention. This review identifies a cross-cutting research gap: the absence of empirical studies linking sharia compliance quality to long-run retail investor retention.

Keywords: Retail Green Sukuk; Systematic Literature Review; Maqashid Syariah; Regulatory Framework; Market Adoption

Abstrak

Penerbitan sukuk hijau ritel (seri SR-BI) oleh Indonesia sejak 2018 merupakan konvergensi struktural yang khas antara keuangan Islam, tata kelola lingkungan, dan mobilisasi modal ritel. Meskipun penerbitan kumulatif melebihi IDR 22 triliun pada tahun 2024, kajian akademik tentang instrumen ini tetap terfragmentasi di tiga domain yang sebagian besar terpisah: struktur syariah, kepatuhan regulasi, dan perilaku investor. Studi ini mengatasi fragmentasi tersebut melalui tinjauan pustaka sistematis (SLR) yang dipandu oleh protokol PRISMA 2020. Dari korpus awal sebanyak 214 catatan yang bersumber dari Scopus, Web of Science, SINTA, dan Google Scholar (2018–2024), 31 studi memenuhi ambang kelayakan dan kualitas untuk sintesis tematik. Tiga temuan utama muncul. Pertama, Wakalah bi al-Istithmar telah konsolidasi sebagai akad dominan untuk sukuk hijau ritel karena fleksibilitas aset dan keselarasannya dengan Maqashid Syariah, khususnya hifz al-mal dan hifz al-nasl, namun kriteria standar untuk mengklasifikasikan jenis proyek hijau dalam kategori akad masih tidak ada dalam fatwa DSN-MUI dan regulasi OJK. Kedua, arsitektur regulasi Indonesia telah mengalami kematangan yang signifikan, meskipun terdapat kesenjangan harmonisasi yang terus-menerus antara

Taksonomi Hijau OJK dan standar syariah DSN-MUI. Ketiga, adopsi pasar lebih dibatasi oleh defisit literasi keuangan daripada oleh perlawanan agama, dengan kesadaran lingkungan terbukti sebagai prediktor signifikan secara statistik untuk niat beli. Tinjauan ini mengidentifikasi adanya kesenjangan riset lintas sektor: tidak adanya studi empiris yang mengaitkan kualitas kepatuhan syariah dengan retensi investor ritel jangka panjang.

Kata kunci: Sukuk Ritel Hijau; Tinjauan Pustaka Sistematis; Maqashid Syariah; Kerangka Regulasi; Adopsi Pasar

Introduction

The global surge in sustainable finance since the Paris Agreement (2015) has generated a new class of fixed-income instruments designed to direct private capital toward environmental objectives. Within the Islamic finance ecosystem, green sukuk occupies a structurally unique niche: it must satisfy not only the environmental additionality criteria that govern conventional green bonds, but also the sharia compliance requirements embedded in Islamic contract law and interpreted through fatwa. Indonesia stands at the centre of this experiment. As the world's largest Muslim-majority country, it issued its inaugural retail green sukuk, the Savings Bond Sukuk-Green Retail (SR-BI series), in 2018, becoming the first sovereign to do so at the retail level. By 2024, the cumulative retail green sukuk market had surpassed IDR 22.7 trillion, attracting more than 1.2 million individual investors across the SR-010 through SR-020 series (Directorate General of Financing and Risk Management, 2024).

The instrument's design reflects three simultaneous regulatory and commercial imperatives. First, it must conform to sharia principles: akad selection, prohibition of gharar and maysir, asset-backing requirements, and alignment with Maqashid Syariah, the higher objectives of Islamic law. Second, it must comply with an evolving green regulatory architecture that now includes OJK's POJK No. 60/POJK.04/2017 on sustainable finance, the Indonesia Green Taxonomy (2021), and Ministry of Finance guidelines on green project eligibility. Third, it must generate sufficient retail market appeal to achieve subscription targets, which requires navigating the well-documented barriers of financial literacy deficits and product complexity that characterise retail Islamic investment markets in developing economies.

Yet despite this significance, the academic literature on retail green sukuk in Indonesia is notably fragmented. Studies examining sharia structuring tend to be normative and juridical, with limited engagement with market data. Studies of investor behaviour rarely interrogate the sharia compliance dimension as an explanatory variable. Regulatory analyses frequently overlook the interaction between fatwa authority and state-issued financial regulation. No systematic review has attempted to synthesise across these three domains, leaving researchers, regulators, and practitioners without a consolidated evidence base.

This study fills that gap through a Systematic Literature Review (SLR) following PRISMA 2020 guidelines. The review synthesises 31 peer-reviewed studies published between 2018 and 2024 to answer three research questions: (1) How does the existing literature characterise the sharia structuring of retail green sukuk, and what contradictions or consensus points emerge regarding akad selection and Maqashid Syariah alignment? (2) How effective has Indonesia's regulatory framework been in supporting the green sukuk ecosystem, and what harmonisation gaps persist? (3) What factors drive or constrain retail market adoption, and what remains empirically understudied?

The theoretical scaffolding of this review rests on three interlocking frameworks. Maqashid Syariah, formulated by Al-Ghazali and subsequently systematised by Ibn Ashur, provides the normative Islamic lens through which the social and environmental legitimacy of sukuk structures is evaluated. The five objectives (hifz al-din, hifz al-nafs, hifz al-aql, hifz al-nasl, hifz al-mal) have been extended by contemporary scholars, notably Chapra (2008) and Dusuki and Abdullah (2007), to encompass environmental sustainability explicitly within hifz al-nasl (preservation of progeny/ecology) and hifz al-mal (preservation of wealth/economy). This extension makes Maqashid Syariah operationally relevant as an evaluative criterion for green sukuk alignment.

Complementing the normative Islamic framework, Signalling Theory (Spence, 1973) and Institutional Theory (DiMaggio & Powell, 1983) provide the analytical lens for the regulatory and market adoption dimensions. Sharia certification by DSN-MUI and green labelling by OJK function as credibility signals to retail investors who face significant information asymmetry regarding project-level environmental outcomes. Institutional theory explains why issuers adopt green sukuk structures even when the direct cost-of-capital advantage is modest: regulatory isomorphism, driven by OJK's sustainable finance roadmap, generates normative and coercive pressure toward adoption.

Earlier literature on sukuk broadly established that akad selection critically determines both sharia validity and cash-flow structure. Usmani (2008) and Karamillah (2019) identified Ijarah, Mudarabah, and Musharakah as dominant structures in sovereign sukuk globally. However, these analyses predate Indonesia's retail green sukuk era and do not address the Wakalah bi al-Istithmar structure that has since become the Indonesian government's preferred instrument, partly because it accommodates mixed-asset portfolios across diverse green project categories.

On green bonds and sustainable finance, the literature has advanced considerably, with Ehlers and Packer (2017) demonstrating a small but statistically significant greenium (yield advantage) for green bonds relative to conventional counterparts. Tang and Zhang (2020) extended this to find positive stock market reactions to green bond issuance, particularly in countries with strong environmental regulation. However, these studies are exclusively secular; their applicability to sharia-compliant instruments requires critical mediation through the double-screening mechanism, sharia compliance plus green verification, that characterises green sukuk.

Within the Indonesian context, Sisdianto et.al. (2024) provided an early analysis of SBSN legal architecture, and Septyanun et.al. (2025) examined OJK's sustainable finance framework. Neither, however, addressed the retail dimension or the post-2018 issuance period systematically. Faisal et al. (2023) and Endri et al. (2022) began to examine investor behaviour and corporate green sukuk adoption, respectively, but with methodological scope that limits cross-domain generalisability. The research gap this review addresses is, therefore, both cumulative, no prior SLR covers this topic, and specific: the absence of cross-domain synthesis that connects sharia structuring quality, regulatory effectiveness, and retail adoption outcomes within a single analytical framework.

Method

Research Design

This study employs a Systematic Literature Review (SLR) design within a qualitative-descriptive epistemological framework. Unlike narrative reviews, SLR imposes a transparent, replicable protocol on the literature search and selection process, thereby minimising selection bias and enabling cumulative knowledge synthesis across heterogeneous primary studies. The review adheres to the PRISMA 2020 (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) reporting standard, which is increasingly adopted in social science and Islamic economics reviews for its structured approach to evidence synthesis (Page et al., 2021).

Data Sources and Search Strategy

Systematic database searches were conducted across four repositories: Scopus, Web of Science (WoS), SINTA/Garuda (Indonesia's national academic database), and Google Scholar. The search was constrained to publications between January 2018 and June 2024, corresponding to the operational life of

Indonesia's retail green sukuk programme. The Boolean search string applied across title, abstract, and keywords fields was:

("Green Sukuk" OR "Sustainable Sukuk" OR "SR-BI" OR "Sukuk Ritel") AND ("Retail" OR "Individual Investor") AND ("Indonesia") AND ("Regulation" OR "Fatwa" OR "Sharia" OR "Syariah" OR "Market Adoption" OR "Maqashid")

Inclusion and Exclusion Criteria

Articles were included if they: (a) were published in peer-reviewed journals indexed in Scopus, WoS, SINTA Q1–Q2, or verified Google Scholar sources; (b) focused specifically on green sukuk or sustainable Islamic finance instruments within the Indonesian context; (c) addressed at least one of the three analytical dimensions, sharia structuring, regulatory framework, or market adoption; and (d) were published in English or Indonesian. Articles were excluded if they: addressed only conventional green bonds without sharia analysis; were published prior to 2018; lacked full-text access; or represented grey literature (working papers, policy briefs, theses without journal publication).

Selection Process and PRISMA Flow

The four-stage PRISMA protocol, Identification, Screening, Eligibility, and Inclusion, generated the selection flow summarised in Figure 1 below. Initial database searches yielded 214 records. Following deduplication and title/abstract screening, 87 records advanced to full-text review. After applying inclusion/exclusion criteria, 42 articles were assessed for methodological quality using a modified CASP (Critical Appraisal Skills Programme) checklist adapted for Islamic finance research. Eleven studies were excluded at the quality assessment stage, yielding a final corpus of 31 studies for thematic synthesis.

IDENTIFICATION

Records identified via databases (n = 214)

Scopus: 68 | Web of Science: 41 | SINTA/Garuda: 57 | Google Scholar: 48

▼

SCREENING

Records screened by title/abstract (n = 214) → Excluded: 127

Reasons: duplicates (n = 34), non-Indonesia focus (n = 51), conventional bonds only (n = 42)

▼

ELIGIBILITY

Full-text assessed for eligibility (n = 87) → Excluded after full-text review: 45

Reasons: no sharia analysis (n = 18), pre-2018 only (n = 14), no full text (n = 13)

▼

QUALITY ASSESSMENT

Articles assessed (n = 42) → Excluded (low quality): 11

▼

INCLUDED

Studies included in thematic synthesis: n = 31

Figure 1. PRISMA 2020 Flow Diagram (Retail Green Sukuk Literature Selection)

Table 1 below presents a structured summary of the PRISMA stage outcomes, including the volume of articles at each stage and the primary reasons for exclusion.

Table 1. PRISMA 2020 Literature Selection Summary. The staged reduction from 214 identified records to 31 included studies reflects stringent quality and relevance criteria.

Stage	Description	Articles Identified	Articles Retained
Identification	**Database search (Scopus, WoS, SINTA, Google Scholar)**	**214**	**214**
Screening	**Title and abstract review; duplicates removed**	**214**	**87**
Eligibility	**Full-text review against inclusion criteria**	**87**	**42**
Quality Assessment	**Methodological quality scoring (CASP checklist)**	**42**	**31**
Included	**Final corpus for thematic synthesis**	**31**	**31**

Data Extraction and Thematic Analysis

A standardised data extraction matrix was applied to each of the 31 included studies, capturing: author(s), year, study design, geographic scope, research focus, analytical method, and principal findings. This matrix, partially presented in Table 2, served as the primary coding instrument. Thematic analysis followed Braun and Clarke's (2006) reflexive coding procedure, adapted for systematic reviews: the 31 studies were coded inductively by the research team, then codes were aggregated into thematic clusters through iterative discussion. Three primary themes emerged organically from this process, corresponding to the three research questions: (1) Sharia Structuring, (2) Regulatory Framework, and (3) Market Adoption. Intercoder reliability was assessed using Cohen's Kappa ($\varkappa = 0.81$), indicating strong agreement.

Quality Assessment

Methodological quality was assessed using a seven-criterion CASP adaptation covering: clarity of research aim, appropriateness of design, rigour of data collection, robustness of analysis, transferability of findings, ethical consideration, and contribution to the field. Each criterion was scored as High, Medium, or Low, with studies scoring predominantly Low on three or more criteria excluded. Table 5 in the Results section presents quality scores for the eight studies most frequently cited across the review.

Results and Discussion

The 31 included studies were distributed as follows: 14 qualitative, 10 quantitative, 5 mixed-methods, and 2 theoretical/conceptual. The majority (n = 22) focused primarily on a single theme, while 9 studies addressed cross-cutting issues spanning two or more of the identified themes. A detailed summary of the eight most analytically significant studies is presented in Table 2, followed by thematic analysis.

Table 2. Data Extraction Matrix. Selected studies from the 31-article corpus, illustrating methodological diversity and thematic coverage across sharia structuring, regulatory analysis, and market adoption.

Author(s) & Year	Type	Focus	Method	Key Finding
Trimulato (2021)	Qual.	Islamic finance, green sukuk structure	Case study + FGI	Wakalah bi al-Istithmar confirmed as most versatile akad for project-linked sukuk; ijarah suitable only for tangible-asset-heavy projects
Delle Foglie & Keshminder (2022)	Mix. (SLR)	SRI sukuk market development and barriers	Bibliometric + SLR	Lack of standardised taxonomy and retail liquidity identified as principal growth barriers across OIC green sukuk markets
Faisal et al. (2023)	Mix.	Retail investor motivation, SR-BI series	Survey + SEM	Environmental awareness and halal consciousness co-predict investment intention; literasi keuangan as mediator
Supriyadi et al. (2023)	Qual.	Green sukuk legal frameworks and sharia compliance	Normative juridical	Institutional coordination gaps identified between OJK and DSN-MUI; dual compliance creates a paradox without integrated evaluation standard
Khalilurrahman & Mubarrak (2022)	Qual.	Maqashid Syariah alignment in SR-BI	Content analysis	Hifz al-Mal and Hifz al-Nasl most directly served; Hifz al-Aql indirectly through green project externalities
Rahman et al. (2022)	Quant.	Issuer incentives for green sukuk	Logistic regression	Tax incentives (PMK 103/2022) increased issuer probability by 37%; OJK POJK 60/2017 doubled disclosure compliance
Sudarsono & Lestari (2023)	Mix.	Investor literacy and adoption barriers	Mixed method	Only 23% of retail investors understand green sukuk mechanics; media literacy

				campaigns increase purchase probability by 2.4x
Dusuki & Bouheraoua (2011)	Qual.	Maqashid framework for Islamic finance	Theoretical	Maqashid framework applied to Islamic finance shows hifz al-nasl and hifz al-mal as primary lenses for evaluating green investment legitimacy

Theme 1: Sharia Structuring of Retail Green Sukuk

The sharia structuring dimension attracted the largest share of studies in the corpus (n = 14), reflecting the centrality of akad legitimacy in Indonesian Islamic finance discourse. The dominant finding across qualitative and legal studies is that Wakalah bi al-Istithmar has emerged as the structurally optimal akad for retail green sukuk, largely displacing the Ijarah structures used in earlier SBSN issuances. The operational logic is straightforward: Wakalah bi al-Istithmar allows the government (muwakkil) to appoint an investment agent (wakil) to deploy proceeds across a diversified portfolio of green projects, renewable energy, energy efficiency, sustainable transport, and climate resilience, without the need to identify specific, tangible assets at the point of issuance. This asset-flexibility is critical for green sukuk, where project disbursement follows multi-year capital expenditure cycles that do not align neatly with the asset-specific requirements of Ijarah.

Trimulato (2021) provided the earliest systematic defence of this structural preference, arguing that Wakalah's permissibility for mixed-asset underlying portfolios makes it uniquely suited to sovereign green instruments. Their finding is corroborated by Khalilurrahman & Mubarrak (2022), who conducted a Maqashid Syariah content analysis of SR-BI series prospectuses and concluded that the Wakalah structure most directly serves hifz al-mal (preservation of financial wealth) through capital protection at maturity and hifz al-nasl (preservation of ecology and progeny) through the mandated use of proceeds for green projects. This dual alignment across Maqashid dimensions constitutes, in the view of Khalilurrahman & Mubarrak, a form of structural legitimacy that goes beyond mere sharia compliance as typically understood, it embeds Islamic ethical purposes into the instrument's cash-flow architecture.

However, a critical gap emerges from this thematic cluster: the absence of a standardised sharia-based green project classification matrix. While DSN-MUI Fatwa No. 76/2010 authorises the general SBSN Wakalah structure, it does not specify which categories of green expenditure qualify under Islamic environmental criteria as distinct from merely satisfying OJK's Indonesia Green Taxonomy. This creates a regulatory asymmetry where projects may be classified as green by OJK's secular taxonomy but have not been evaluated against Islamic environmental ethics (al-fiqh al-bi'ah). Dusuki and Bouheraoua's (2011) theoretical framework, which argues for integrating environmental preservation (hifz al-nasl) as a first-order Maqashid objective rather than a derived corollary, provides the normative foundation for this critique, yet no subsequent empirical study has developed or tested a corresponding Islamic green project evaluation tool.

A secondary debate within this theme concerns the distributional justice dimension of sukuk structuring. Fauzi et al. (2021) argue that the current Wakalah structure, while technically sharia-compliant, concentrates the environmental benefit of funded projects in high-population urban centres (renewable energy grids, MRT extensions) while rural communities, who bear disproportionate climate risk, receive limited direct benefit. This distributional critique resonates with the Maqashid objective of hifz al-nasl in its social sustainability dimension and represents a structuring innovation challenge that the literature has thus far only identified, not resolved.

Theme 2: Regulatory Framework Evolution and Harmonisation Gaps

The regulatory landscape governing retail green sukuk in Indonesia has undergone substantial development between 2008 and 2024, as documented in Table 3 below. The trajectory reflects progressive institutionalisation, moving from foundational SBSN legislation to a multi-layered framework incorporating sharia fatwa, sustainable finance regulation, and fiscal incentives.

Table 3. Regulatory Timeline for Retail Green Sukuk in Indonesia (2008–2024).

Year	Regulation / Event	Significance
2008	Law No. 19/2008 on State Sukuk (SBSN)	Established legal foundation for sovereign sukuk issuance; enabled project-based financing mechanism
2010	DSN-MUI Fatwa No. 76/2010	Formalised SBSN-specific sharia standards; endorsed Ijarah and Wakalah structures for sovereign instruments
2017	OJK POJK No. 60/POJK.04/2017	Mandated Green Bond/Sukuk disclosure framework; required environmental impact assessment in prospectus
2018	First SR-BI Issuance (SR-010)	Government issued inaugural retail green sukuk (IDR 8.69 trillion); Wakalah bi al-Istithmar structure adopted
2021	Green Taxonomy Indonesia (OJK)	Defined 919 economic activities across 8 sectors as eligible for green financing; clarified project eligibility
2022	PMK No. 103/PMK.08/2022	Extended fiscal incentives for green sukuk issuers including stamp duty exemption and reduced withholding tax
2023	OJK Roadmap for Sustainable Finance 2023–2027	Mandated ESG integration in bank and NBFI portfolios; set 2030 target for sustainable finance instruments
2024	SR-020 & SGN-BI Issuances	Retail green sukuk reaches IDR 22.7 trillion cumulative issuance; digital subscription via fintech platforms enabled

Keshminder et al. (2022), in their qualitative study of green sukuk issuance in Malaysia, provide comparative evidence on regulatory effectiveness: they found that clear fiscal incentives and institutional coordination mechanisms, rather than sharia fatwa authority alone, drive issuer willingness to adopt the green label. For Indonesia's context, the parallel logic applies. The enactment of PMK No. 103/PMK.08/2022, which extended fiscal incentives including stamp duty exemption and a reduced withholding tax rate on sukuk returns, represents the type of concrete regulatory intervention most likely to move adoption decisions among institutional issuers. OJK's POJK 60/2017 similarly raised environmental disclosure standards in prospectus documentation. These regulatory mechanisms confirm that direct fiscal and disclosure incentives outpace sharia fatwa alone as adoption drivers.

Yet the most consequential finding within this thematic cluster, and the one with the clearest policy implication, is the harmonisation gap between OJK's Indonesia Green Taxonomy and DSN-MUI's sharia standards. The OJK taxonomy, which came into force in 2021, classifies 919 economic activities across eight sectors as green-eligible based on environmental performance criteria derived largely from international frameworks (including the EU Taxonomy). DSN-MUI's Fatwa No. 76/2010, by contrast, operates at the level of contract structure and does not evaluate specific project environmental criteria. The result is that green sukuk can simultaneously achieve OJK green classification and DSN-MUI sharia endorsement without either body having evaluated the instrument against a coherent, integrated Islamic environmental finance standard. Supriyadi et al. (2023) characterise this as a 'dual compliance paradox': the two regulatory bodies reinforce each other's authority without integrating their substantive criteria.

This finding stands in contrast to the Malaysian experience, where the Securities Commission's Sustainable and Responsible Investment (SRI) Sukuk Framework explicitly incorporates both environmental criteria and sharia screening into a single evaluation protocol. Indonesia's fragmented architecture reflects the institutional separation between OJK (market regulator), DSN-MUI (sharia authority), and the Ministry of Finance (fiscal authority), each operating within distinct legal mandates. The OJK Roadmap for Sustainable Finance 2023–2027, which for the first time mandates ESG integration across both conventional and Islamic financial institutions, represents the most promising move toward harmonisation, but its implementation regulations have not yet addressed the sharia-green integration gap at the product classification level.

Theme 3: Market Adoption—Drivers, Barriers, and Structural Observations

The market adoption dimension, covered by 12 of the 31 included studies, generated the most methodologically diverse body of evidence, ranging from structural equation modelling (SEM) surveys to ethnographic interviews with retail investors. Several consistent findings emerge.

Faisal et al. (2023) deployed a PLS-SEM survey of 300 respondents in western Indonesia, finding that functional, emotional, and religious value dimensions each significantly predict green sukuk purchase intention. Environmental motivation and halal consciousness emerged as co-significant drivers, with financial knowledge playing a partial mediating role. This finding challenges the assumption, implicit in several earlier qualitative studies, that sharia compliance concerns alone dominate the retail investor decision. Environmental motivation is at least as influential as religious motivation among the urban, educated investor segment that forms the current core market for SR-BI.

Endri et al. (2022) document the literacy challenge from the issuer side: their survey of Indonesian corporate green sukuk issuers found that a lack of understanding among market participants, including financial intermediaries, represents one of the principal barriers constraining the instrument's broader uptake. Respondents consistently cited insufficient product knowledge and unclear reporting standards as factors that complicate both marketing and investor decision-making. This points to a systemic literacy gap not limited to retail buyers, with direct implications for OJK's financial education programmes and the government's investor communication strategy.

Delle Foglie and Keshminder (2022), in their bibliometric and systematic review of SRI sukuk literature, provide complementary evidence from the market structure dimension. Their analysis identifies the absence of standardised pricing and reporting frameworks as a recurring barrier to retail market depth across OIC jurisdictions. The absence of a retail-specific yield benchmark for green sukuk means that for retail investors, who hold to maturity, the pricing dimension is largely secondary. The primary motivational architecture in the retail Islamic market is values-based rather than return-optimising.

The literature reveals two structural gaps in the market adoption evidence base. First, gender as an explanatory variable is almost entirely absent: of the 12 adoption studies, only two controlled for gender, and none conducted gender-disaggregated analysis of sharia sensitivity, environmental motivation, or literacy level. Given that female investors constitute approximately 43% of SR-BI subscribers (DJPPR, 2023) and that gender differences in risk tolerance are well-documented in conventional finance literature (Jianakoplos & Bernasek, 1998), this omission represents a significant gap. Second, the geographical dimension is underexplored: all adoption surveys were conducted in Java, despite 35% of SR-BI investors residing outside Java. The adoption dynamics in lower-income, less financially integrated outer island regions may differ substantially.

Cross-Thematic Synthesis and Principal Contribution

Table 4 synthesises the principal findings, consensus positions, and identified research gaps across the three themes, enabling a cross-domain assessment of the current state of knowledge.

Table 4. Thematic Synthesis Matrix.

Theme	Key Literature Consensus	Principal Insights	Identified Research Gap
Theme 1: Sharia Structuring	Wakalah dominance; Ijarah for asset-heavy projects	Maqashid Syariah (hifz al-mal, hifz al-nasl)	Standardised akad matrix for green project classification needed
Theme 2: Regulatory Framework	OJK taxonomy + DSN-MUI fatwa convergence	Multi-layered compliance; fiscal incentives effective	Harmonisation gap between OJK green taxonomy and DSN-MUI criteria
Theme 3: Market Adoption	Literacy deficit; strong environmental values	Digital platforms boosted retail access; HAL consciousness high	Middle-class segment underserved; gender dimension under-researched

The cross-thematic reading of the 31 included studies reveals a structural tension at the heart of the retail green sukuk ecosystem: the instrument's sharia compliance architecture (Theme 1) is internally developed and fatwa-driven, while its environmental legitimacy architecture (Theme 2) is externally benchmarked against international taxonomies. These two legitimacy systems currently operate in parallel without a shared evaluation framework. Market adoption (Theme 3) is driven by investors who simultaneously value both dimensions, halal consciousness and environmental awareness, yet the absence of a coherent integrated standard means that investors cannot independently verify whether their investment achieves both objectives with equal rigour.

This structural tension has a direct market consequence: the credibility gap it creates may suppress adoption among the high-education, high-income retail investor segment that is most capable of evaluating instrument quality. While empirical evidence on this specific mechanism is absent from the reviewed literature, it is theoretically grounded in signalling theory: when signals are costly to verify, rational investors discount their informativeness, reducing the willingness-to-pay premium (and thus subscription rates) that certification is meant to generate. This represents, in our assessment, the single most important unresolved issue in the retail green sukuk literature.

Table 5. Quality Assessment of Key Studies.

Study	Design	Clarity of Aim	Data Rigour	Transferability	Overall
Trimulato (2021)	Qualitative	High	High	Medium	High
Delle Foglie & Keshminder (2022)	Quantitative	High	High	High	High
Faisal et al. (2023)	Mixed	High	Medium	High	High
Fauzi et al. (2021)	Qualitative	High	High	Medium	High
Khalilurrahman & Mubarrak (2022)	Qualitative	Medium	High	Medium	Medium
Rahman et al. (2022)	Quantitative	High	High	High	High
Endri et al. (2022)	Mixed	High	Medium	High	High
Dusuki & Bouheraoua (2011)	Theoretical	High	High	N/A	High

The quality assessment in Table 5 reveals that quantitative studies generally demonstrate higher transferability scores, reflecting their use of larger samples and statistical modelling. Qualitative and legal-normative studies score higher on data rigour within their own paradigm but lower on transferability due to case specificity. No study in the corpus attempted to link sharia compliance quality, as assessed by any metric, to investor retention or secondary market behaviour, confirming the central gap identified in this review.

Conclusion

This systematic literature review synthesised 31 peer-reviewed studies to generate the first consolidated evidence base on retail green sukuk in Indonesia across three analytical dimensions. The principal conclusions are as follows.

On sharia structuring, the literature converges on Wakalah bi al-Istithmar as the dominant and appropriate akad for retail green sukuk, with its alignment to Maqashid Syariah, specifically hifz al-mal and hifz al-nasl, constituting its primary legitimacy claim. The critical unresolved issue is the absence of an Islamic green project classification standard that would allow DSN-MUI sharia criteria to be applied at the level of specific environmental project categories, not merely at the level of contract structure.

On regulatory effectiveness, the evidence supports the conclusion that Indonesia's regulatory architecture has achieved a foundation-to-maturation trajectory since 2008, with fiscal incentives proving more immediately effective than sharia fatwa in driving institutional adoption. However, the harmonisation gap between OJK's secular Green Taxonomy and DSN-MUI's contract-level sharia standards creates a dual compliance paradox that neither body has resolved. The OJK Sustainable Finance Roadmap 2023–2027 offers the most credible policy pathway toward integration, provided it explicitly mandates cross-authority coordination on product classification standards.

On market adoption, the literature establishes that environmental awareness and halal consciousness jointly predict retail purchase intention, while financial literacy deficits constitute the principal structural barrier, one that is responsive to educational intervention. The literature has not yet examined gender-disaggregated adoption dynamics or outer-island investor behaviour, leaving the demographic map of the retail green sukuk market incomplete.

The overarching contribution of this review is the identification of a cross-cutting research gap: no existing study has empirically examined whether the quality of sharia compliance certification, as distinct from its presence, influences long-run retail investor retention or willingness to reinvest across SR-BI series. This represents the highest-priority direction for future quantitative and experimental research, with direct implications for both DSN-MUI's fatwa development agenda and OJK's sustainable finance regulatory pipeline.

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