

# Blended Finance as a Solution for SDG Financing: Global Voices in Scientific Literature (2010–2025)

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## ABSTRACT

This study examines the global progression of blended finance as a mechanism for financing Sustainable Development Goals (SDGs) via bibliometric and content analysis of publications from 2010 to 2025. The research employs Scopus-indexed data and analytical tools, including VOSviewer and Biblioshiny, to delineate publication trends, topic clusters, and collaborative networks across many fields and locations. The findings identify three primary study clusters: (1) the mobilization of private capital via concessional mechanisms, (2) governance, transparency, and additionality in development finance, and (3) sectoral applications in climate, infrastructure, and MSME development. The United Kingdom, Malaysia, and the United States excel in academic production and inter-institutional cooperation, although rising economies like Indonesia and India are enhancing their research prominence. Notwithstanding conceptual advancement, the study reveals enduring deficiencies in empirical validation and fair implementation in least developed countries (LDCs). The work advances theory by framing blended finance as a hybrid mechanism that amalgamates public-private governance with sustainable investment principles. It underscores the necessity for transparency, impact assessment, and inclusive design to guarantee catalytic and equitable results.

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## 1. INTRODUCTION

The Sustainable Development Goals (SDGs) were established in 2015 with the understanding that public and concessional funding alone would be inadequate to meet their ambitious objectives. Numerous emerging nations persistently encounter an expanding investment deficit. The World Investment Report 2022 by the [1] indicates that developing economies encounter a

sustainable investment shortfall above USD 4 trillion each year. The finance deficit—aggravated by the pandemic, geopolitical instability, and climatic threats—demands creative financing models that can attract private capital in conjunction with public and concessional sources. Blended finance has emerged as a vital strategy for attaining the SDGs within the context of the global financing gap [2].

The Organisation for Economic Co-operation and Development (OECD) established a universally accepted definition of blended finance as “the strategic use of development finance to mobilise additional finance towards sustainable development in developing countries” [3]. The OECD Development Assistance Committee (DAC) established five blended finance principles to implement this approach: (1) grounding in a development rationale; (2) structuring to attract commercial finance; (3) customizing to local context; (4) emphasizing effective partnerships; and (5) ensuring transparency and results through monitoring. These principles have been extensively embraced as the normative basis for global blended finance governance [3], [4].

Empirical data demonstrate the increasing significance of blended financing in global development finance frameworks. The 2023 Joint Report on the Mobilization of Private Finance by Multilateral Development Banks (MDBs) and Development Finance Institutions (DFIs) disclosed that MDBs mobilized USD 87.9 billion in private capital, marking a 24% increase from 2022, with USD 10.2 billion allocated to lower-income countries [5]. Complementary market data from [6] reveal a significant increase in blended transactions targeting climate adaptation, renewable energy, and sustainable agriculture—sectors closely linked with SDG targets [6]. The cumulative evidence indicates that blending has transitioned from a specialized notion to a fundamental component of development financing, with institutional and market sophistication progressively enhancing over the past decade [6].

The inquiry regarding the beneficiaries of blended finance is becoming increasingly pertinent. Analyses conducted by the OECD and the United Nations Capital Development Fund (UNCDF) indicate that least developed countries (LDCs) consistently garner less than 10% of total mobilized private money, despite their significant demand [3]. This uneven distribution illustrates systemic risk perceptions, insufficient investment pipelines, and restricted absorptive capacity.

The resultant spatial and sectoral concentration prompts significant inquiries over the developmental equity of blended finance, especially in scenarios where private capital exhibits risk aversion [7] [1]. It also indicates that the potential of blended finance—to mobilize private capital in its absence—remains only partially realized.

Moreover, effectiveness, openness, and additionality continue to be significant topics of debate in the academic and policy literature. The [8] highlighted that financial and developmental additionality—ensuring that concessional inputs genuinely generate new and significant investments—is often inadequately documented and quantified inconsistently. The International Finance Corporation [5] has emphasized the necessity of transparency concerning subsidy amounts, risk-sharing methods, and price terms to maintain confidence and prevent “hidden concessionality.” Independent watchdogs, like [9], have similarly advocated for enhanced disclosure standards in their DFI Transparency Index, contending that public awareness of blended transactions can improve accountability, facilitate learning, and bolster investor confidence.

Notwithstanding its increasing utilization, blended finance has yet to prove its efficacy in bridging the SDG financing gap on a large scale, particularly in the world's most impoverished and vulnerable economies. Ongoing challenges encompass inadequate mobilization ratios in relation to the investment gap, geographic concentration in middle-income areas, uncertainty in evidencing additionality, and insufficient transparency concerning concessional terms and developmental outcomes [5], [8]. These constraints undermine confidence among policymakers and investors, since the disparity between the language of catalytic mobilization and the reality of capital flows is apparent. Academics and organizations warn that in the absence of uniform measurement standards, definitive effect frameworks, and fair access systems, blended finance may exacerbate rather than mitigate financial disparities [1][3].

This study aims to deliver a thorough bibliometric and content-driven synthesis of the international academic discourse on blended finance from 2010 to 2025. The objective is to delineate publishing trends, collaboration networks, and theme clusters within the literature to elucidate the evolution of research on blended finance over time and across countries. The paper examines how scholars define essential principles such as mobilization, additionality, concessionality, and risk sharing across several sectors, emphasizing differences in interpretation and application. It also analyzes persistent problems of governance, transparency, and inclusivity that influence the implementation of blended finance in developmental settings. The research aims to synchronize academic viewpoints with empirical data obtained from significant institutional sources, including reports from multilateral development banks (MDBs) and development finance institutions (DFIs) such as the IFC and OECD policy frameworks [3], [4]. This synthesis aims to identify thematic convergences, contradictions, and knowledge gaps to inform a research agenda that enhances the effectiveness, legitimacy, and equity of blended finance mechanisms in promoting the Sustainable Development Goals (SDGs).

## 2. METHODS

This study employs a bibliometric and content analysis framework to systematically map, quantify, and assess global academic contributions on blended finance from 2010 to 2025. Bibliometric analysis facilitates a systematic and reproducible evaluation of publishing trends, authorship networks, institutional associations, topic development, and citation patterns across academic fields [10]. The bibliometric method was enhanced by qualitative content analysis to attain conceptual depth that exceeds quantitative metrics. The research employed the Scopus database, noted for its vast multidisciplinary scope, to guarantee thorough inclusion of peer-reviewed literature. Search queries encompassed the terms “blended finance,”

“SDG financing,” “impact investing,” “development finance,” and “public-private partnerships,” sorted by publication years 2010–2025, document categories (articles, reviews, book chapters, and conference papers), and language (English). The data extraction process occurred in March 2025, guaranteeing the incorporation of the latest available articles.

Subsequent to data collection, bibliographic details (title, authors, source, abstract, keywords, citations, and affiliations) were exported in CSV format and analyzed utilizing VOSviewer and Biblioshiny for R software. These approaches facilitated the creation of co-authorship, co-occurrence, and citation networks to identify prominent scholars, institutions, and nations contributing to the blended finance literature. Cluster mapping techniques were utilized to illustrate thematic structures and intellectual connections across study subfields, adhering to the methodologies proposed by [11]. Co-occurrence analysis of author keywords was employed to delineate conceptual trends across time, emphasizing the progression of topics such as mobilization, additionality, risk-sharing, and climate financing. Co-citation and bibliographic coupling studies elucidated the conceptual foundations and research horizons influencing the discourse on blended finance as a means for financing Sustainable Development Goals (SDGs).

A qualitative content analysis was performed on the most-cited and thematically central papers found using citation clustering, complementing the bibliometric mapping. This stage sought to elucidate how scholars establish, implement, and evaluate blended finance ideas in practice. Documents were systematically categorized based on common themes, including concessionality, transparency, governance frameworks, policy alignment, and effect assessment. A comparative analysis was conducted to contrast academic discourse with institutional standards, including the OECD DAC Blended Finance Principles [3], the Joint MDB Report on Private Finance Mobilization [12] and [13]. This integrated methodological approach—merging quantitative bibliometrics with

qualitative synthesis—strengthens findings by encompassing both macro-level publication trends and micro-level theoretical insights, facilitating a comprehensive

understanding of global scholarship's engagement with blended finance as a means to sustainable development.

### 3. RESULTS AND DISCUSSION

#### 3.1 Keyword Co-Occurrence Network

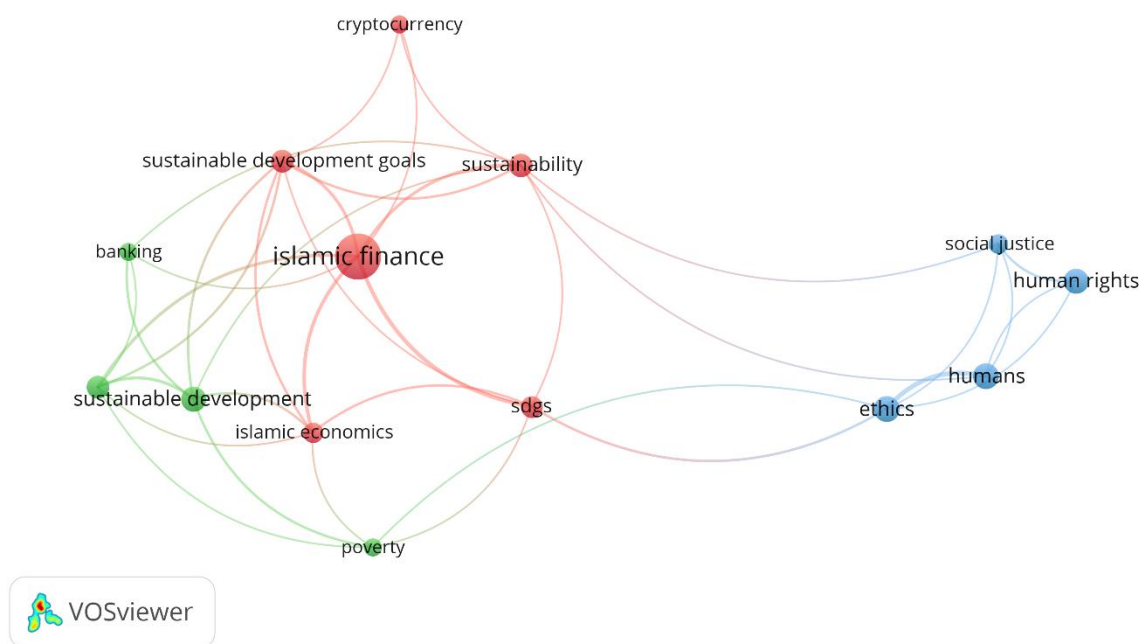


Figure 1. Network Visualization

Source: Data Analysis Result, 2025

Figure 1 reveals the VOSviewer network visualization depicts the organization of research issues in Islamic finance into three principal conceptual clusters, interconnected by common interests in sustainability and ethical development. The primary node, Islamic finance, predominates the network, indicating its crucial function as the intellectual foundation connecting economics, sustainability, and social ethics. The thickness of the connecting lines signifies the frequency and intensity of co-occurrence among keywords, illustrating areas of overlap in scholarly discourse and the persistence of theme silos.

The initial cluster (red) pertains to Islamic finance, sustainability, sustainable development goals (SDGs), and cryptocurrency. This cluster emphasizes an expanding corpus of research that

investigates the ways in which Islamic financial principles might bolster global sustainability initiatives and the digitization of finance. Scholars in this field frequently examine sharia-compliant investment frameworks, green sukuk, and ethical fintech as strategies to generate resources for sustainable initiatives. The existence of cryptocurrencies in this cluster signifies ongoing discussions concerning Islamic fintech and digital currencies, especially in relation to its adherence to Islamic ethical and legal standards. This indicates a convergence between technological innovation and faith-based finance as mechanisms for attaining sustainability.

The second cluster (green) links sustainable development, finance, poverty, and Islamic economics. This category signifies a conventional yet perpetually advancing area

of study that examines the function of Islamic financial institutions in fostering inclusive economic growth and alleviating poverty. Research within this cluster frequently examines the role of instruments like zakat, waqf, and microfinance in fostering sustainable development outcomes. The connection between banking and poverty highlights the importance of financial inclusion—a fundamental developmental commitment of Islamic finance designed to tackle structural inequalities while conforming to non-interest-based principles. This cluster strengthens the developmental and institutional dimensions of Islamic finance within global economic frameworks. The third cluster (blue) is conceptually separate yet ethically congruent, focusing on ethics, human rights, social justice, and humanity. This research area conceptualizes Islamic finance not solely as an economic instrument but as a moral and social framework grounded in justice and human dignity. The relationship between ethics, human rights, and social justice underscores the literature's expansion beyond financial models to address normative issues of equity, stewardship, and collective well-being. Researchers in this cluster characterize Islamic finance as an ethical framework that provides alternatives to profit-driven capitalism by prioritizing collective prosperity and moral responsibility. This corresponds with modern initiatives in responsible and impact investing that aim to integrate ethical principles into economic decision-making.

The interrelations within clusters, particularly via sustainability and the Sustainable Development Goals (SDGs), demonstrate how Islamic finance functions as a conduit between economic and ethical discussions. The network illustrates interconnections between Islamic finance (red cluster) and ethics/social justice (blue cluster), indicating a nascent multidisciplinary domain that integrates development finance, moral philosophy, and sustainability science. The incorporation of SDGs across clusters signifies a unified global lexicon for assessing ethical and developmental efficacy inside Islamic financial systems. The image illustrates that Islamic finance research is transitioning from a limited institutional perspective to a comprehensive framework that incorporates sustainability, technology, and ethics.

This map illustrates that Islamic finance occupies the intersection of three developing academic domains: sustainable economic development, ethical governance, and digital change. The thematic range from banking and poverty alleviation to cryptocurrency and human rights indicates that researchers are progressively perceiving Islamic finance as a versatile, values-driven methodology adept at addressing both conventional socio-economic issues and contemporary technology upheavals. This thematic diversity highlights the capacity of Islamic finance to serve as a catalyst for ethical and sustainable transformation, linking moral imperatives with financial innovation to achieve the Sustainable Development Goals.

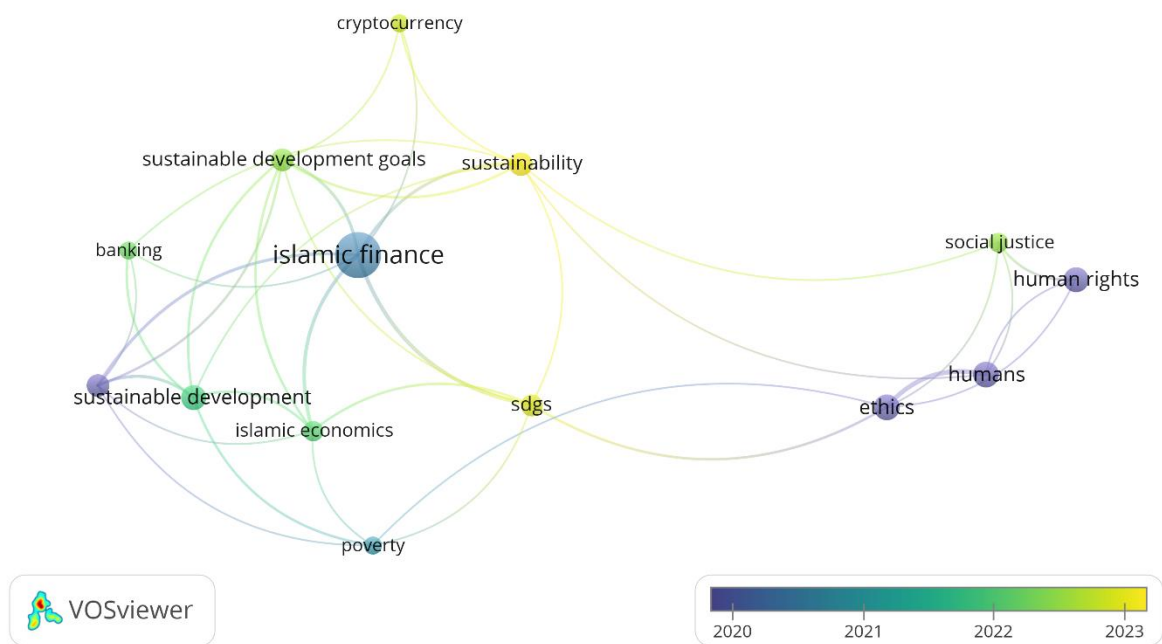


Figure 2. Overlay Visualization

Source: Data Analysis Result, 2025

The overlay visualization depicts the chronological progression of research issues in Islamic finance from 2020 to 2023. The color gradient—from deep blue (earlier issues) to bright yellow (newer topics)—illustrates the evolving scholarly focus from basic talks on sustainable development and Islamic economics to growing intersections with sustainability, cryptocurrencies, and social justice. The primary focus, Islamic finance, serves as the conceptual foundation, demonstrating sustained research activity over time, while recent theme developments illustrate the evolution of Islamic finance study in relation to global priorities and digital revolution.

During the initial phase (2020–2021), research mostly concentrated on conventional and developmental themes, denoted by blue and green nodes, including sustainable development, banking, poverty, and Islamic economics. These themes underscore the enduring focus on Islamic finance as a means for equitable growth, ethical investment, and poverty reduction. The interconnections among Islamic finance, sustainable development, and banking reflect an ongoing

focus on institutional responsibilities, social welfare, and adherence to Sharia rules in mitigating economic inequality. During this period, the literature solidified its theoretical framework by integrating Islamic financial systems with overarching developmental objectives, including the Sustainable Development Goals (SDGs).

Conversely, the yellow nodes—sustainability, cryptocurrency, and social justice—represent research horizons that have emerged post-2022. These themes signify a transition towards modern concerns, wherein academics investigate the alignment of Islamic finance with digital innovation and global environmental paradigms. The emergence of cryptocurrency indicates a growing scholarly focus on fintech and digital currencies within Islamic ethical parameters, while its association with social justice and human rights highlights an emerging moral and humanitarian aspect. This transformation indicates that contemporary Islamic finance research is evolving from compliance-focused study to a comprehensive examination of ethics, technology, and sustainability, establishing it as a vital contributor to socially

responsible and technologically flexible financial systems.

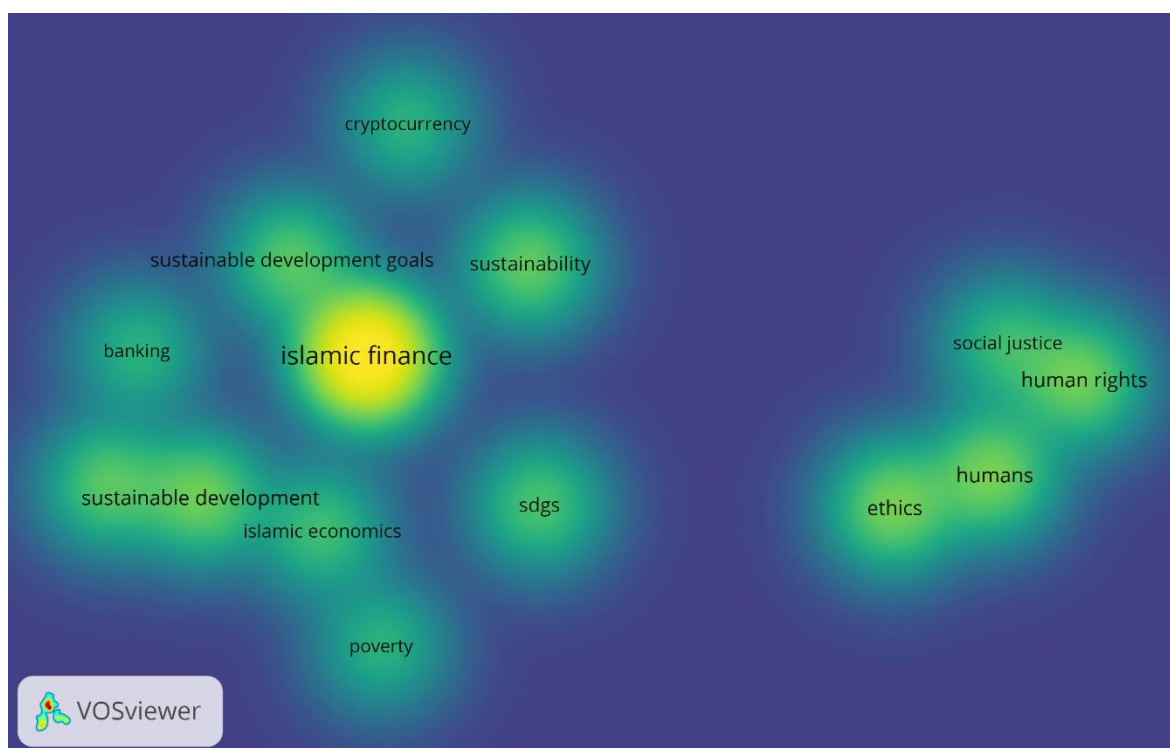


Figure 3. Density Visualization

Source: Data Analysis, 2025

The density visualization emphasizes the most extensively researched subjects in Islamic finance. The vibrant yellow region surrounding Islamic finance indicates the peak concentration of academic focus, underscoring its significance as the intellectual and conceptual nucleus of the research network. Prominently featured are well-lit subjects such as sustainable development goals, sustainability, sustainable development, and Islamic economics, suggesting that conversations around sustainability and development prevail in the discourse. The coexistence of banking with poverty in a concentrated area highlights the importance of inclusive financial systems and the developmental function of Islamic finance in mitigating poverty via ethical investment and fair wealth distribution. The subdued illumination of bitcoin indicates a burgeoning scholarly interest in the digital evolution of Islamic finance, especially in investigating how blockchain-based instruments might

adhere to Sharia rules while fostering sustainable economic innovation.

A separate but similar focus emerges in the right section of the map, where concepts such as ethics, social justice, human rights, and humanity coalesce. This region embodies an expanding intellectual movement that contextualizes Islamic finance within wider ethical, humanitarian, and social justice frameworks. The green-to-yellow density gradient among these clusters indicates a conceptual connection between finance-oriented and ethics-oriented paradigms. It indicates that although the primary focus of Islamic finance study is on development and sustainability, an increasing volume of literature is incorporating normative aspects of human welfare, ethical duty, and justice. Collectively, these dense clusters suggest that modern Islamic finance studies is developing into a multifaceted subject that integrates financial innovation with sustainability requirements and ethical governance to



promote comprehensive socio-economic advancement.

### 3.2 Co-Authorship Network

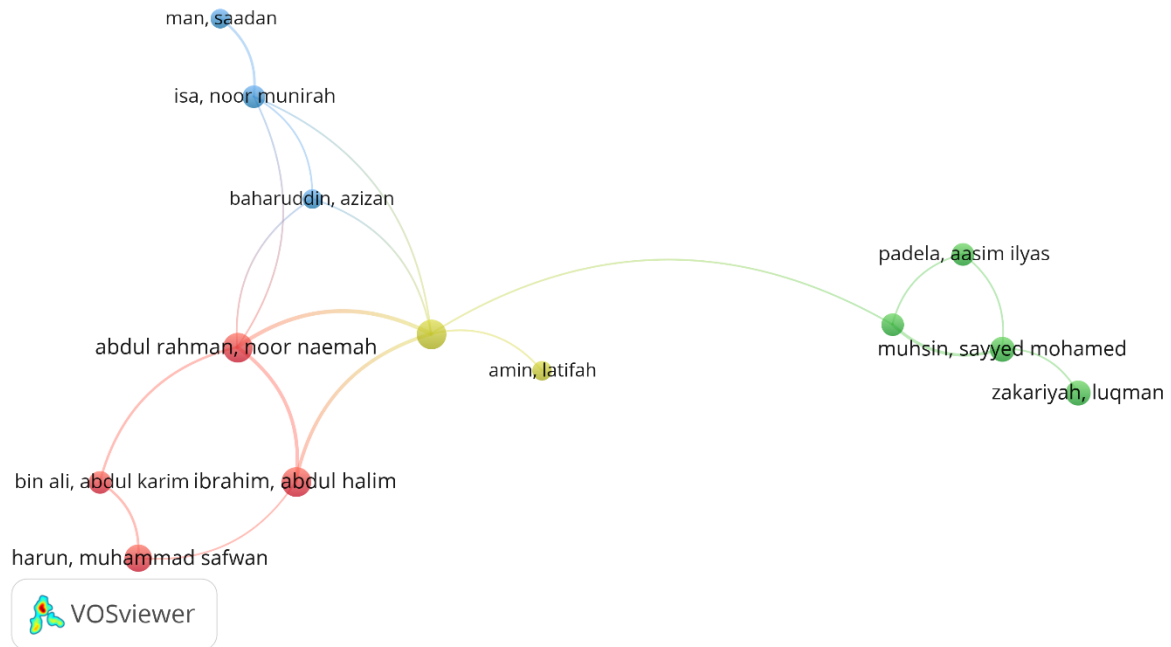


Figure 4. Author Collaboration Visualization

Source: Data Analysis, 2025

Figure 4 illustrates the visualization of author collaboration illustrates multiple interconnected research clusters within the Islamic finance literature, indicating different but occasionally overlapping academic groups. The foremost cluster, directed by Noor Naemah Abdul Rahman, comprises contributors including Abdul Halim Bin Ali, Abdul Karim Ibrahim, and Muhammad Safwan Harun, signifying a unified research network centered on Islamic law, ethics, and financial jurisprudence. A smaller yet interconnected group—comprising Noor Munirah Isa, Azizan Baharuddin, and Saadan Man—seems to focus on interdisciplinary research that integrates Islamic finance with sustainability and ethical development

concepts. The visualization underscores a nascent international collaborative cluster led by Sayyed Mohamed Muhsin, Aasim Ilyas Padela, and Luqman Zakariyah, whose research frequently examines global and comparative aspects of Islamic finance ethics and governance. Latifah Amin serves as a bridge between various cultures, acting as an intellectual conduit between Sharia-based financial study and contemporary sustainability discussions. This network illustrates an increasing diversification and globalization of Islamic finance research, transitioning from regionally concentrated cooperation to more globally interconnected academic partnerships.



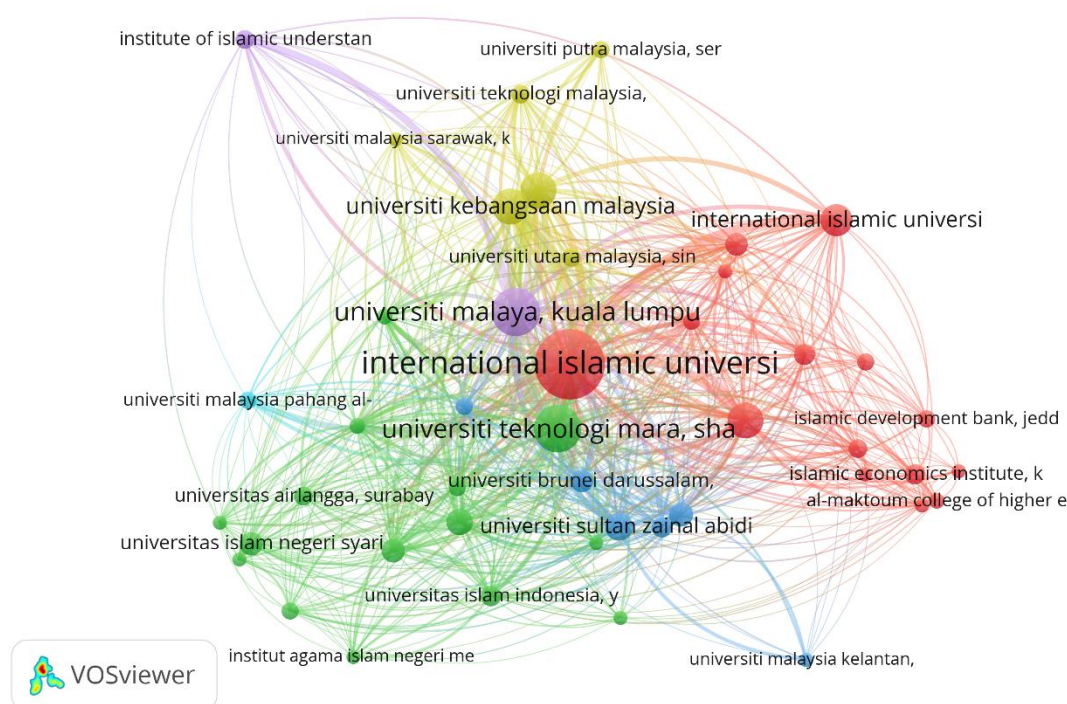


Figure 5. Affiliation Collaboration Visualization

Source: Data Analysis, 2025

Figure 5 reveals the depiction of institutional collaboration reveals that research on Islamic finance is primarily centered in Malaysian academic institutions, creating a dense and interconnected network of universities and research centers. The International Islamic University Malaysia (IIUM) stands as the preeminent and core entity, underscoring its prominence in worldwide Islamic finance scholarship and its broad partnerships with other institutions. Adjacent to IIUM are prominent institutions such Universiti Teknologi MARA (UiTM), Universiti Malaya (UM), Universiti Kebangsaan Malaysia (UKM), and Universiti Utara Malaysia (UUM), each functioning as vital centers that facilitate regional and thematic research partnerships. These universities are closely interconnected through co-authorships and collaborative projects, illustrating Malaysia's strategic position as a global center for Islamic finance education, policy research, and innovation.

The map delineates international connections between Malaysian institutions and global entities, including the Islamic Development Bank (Jeddah), Al-Maktoum College of Higher Education (United Kingdom), and the Islamic Economics Institute (King Abdulaziz University, Saudi Arabia), alongside regional collaborators such as Universitas Islam Indonesia, Universitas Airlangga, and Universitas Islam Negeri Syarif Hidayatullah Jakarta in Indonesia. These transnational collaborations signify a burgeoning Southeast Asian research ecosystem that unites academic, financial, and policy-oriented institutions under common objectives of advancing Sharia-compliant and sustainable financial systems. The color-coded clusters represent multidimensional partnerships—spanning legal and ethical foundations, financial innovation, and socio-economic impact—illustrating that Islamic finance research has developed into a collaborative, transnational, and multidisciplinary domain, with Malaysia at its intellectual nucleus.

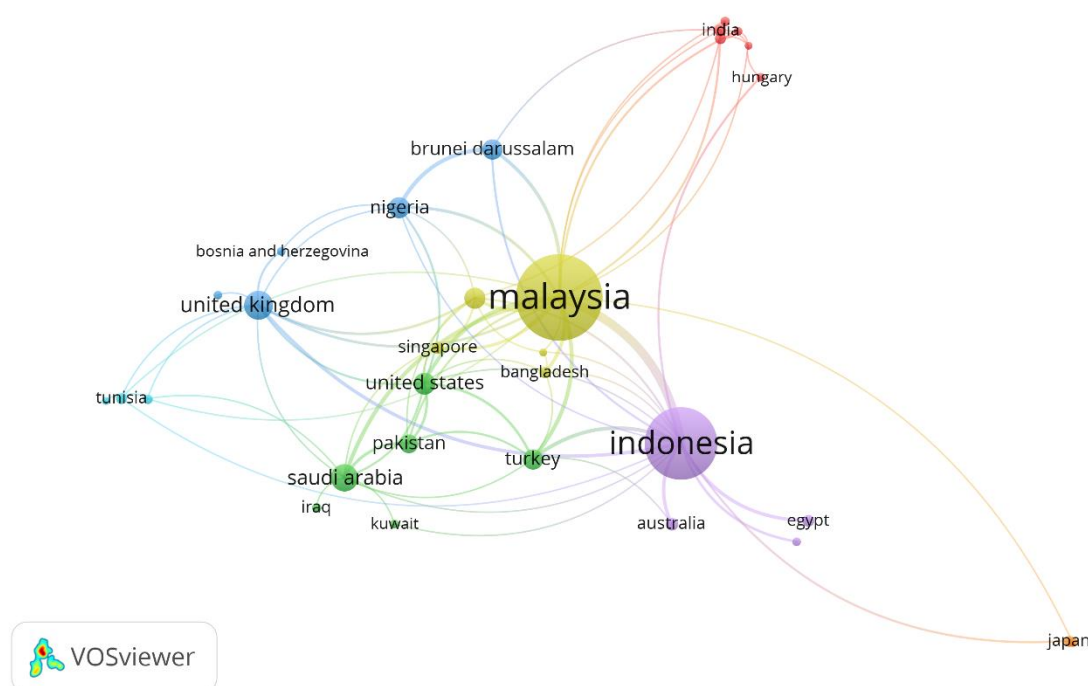


Figure 6. Country Collaboration Visualization

Source: Data Analysis, 2025

Figure 6 The visualization of nation collaboration illustrates a worldwide interconnected network in Islamic finance research, with Malaysia and Indonesia identified as the primary centers of academic output and collaboration. Malaysia's substantial node size signifies its role as the primary catalyst for international research collaborations, often co-authoring with nations including Saudi Arabia, Pakistan, the United Kingdom, the United States, and Brunei Darussalam. This centrality highlights Malaysia's enduring institutional dedication to Islamic finance education, regulation, and innovation, establishing it as the intellectual cornerstone of worldwide debate in the domain. Indonesia, closely associated with Malaysia, constitutes a robust regional cluster that integrates Southeast Asia with extensive academic networks in Australia, Egypt, and Japan, underscoring its increasing significance in merging Sharia-compliant financial systems with sustainability and fintech research.

The image illustrates the proliferation of Islamic finance study beyond its conventional strongholds in Muslim-majority

nations. Emerging contributors like India and Hungary constitute a unique collaborative subgroup, indicating a growing scholarly interest from non-Muslim contexts in ethical and sustainable financial models influenced by Islamic values. Simultaneously, interregional connections among the United Kingdom, United States, and Middle Eastern nations such as Saudi Arabia and Kuwait illustrate the evolution of Islamic finance into a globally integrated field of study with common policy and developmental significance. This map demonstrates that Islamic finance studies has evolved into a transnational and interdisciplinary domain, mostly centered in Malaysia and Indonesia, although enhanced by a variety of worldwide viewpoints that jointly promote the theory and practice of ethical and sustainable finance.

### 3.3 Citation Analysis

To contextualize the evolving relationship among blended finance, sustainability, and the attainment of the Sustainable Development Goals (SDGs), it is imperative to analyze the most significant

academic contributions that have influenced global discussions on sustainable finance and development trajectories. The subsequent table delineates 10 of the most extensively cited papers from 2018 to 2023 that have substantially enhanced both theoretical and empirical comprehension of the roles of financial innovation, green financing, and policy integration in advancing the UN 2030 Agenda. These studies illustrate a convergence of topics in climate action,

technological innovation, financial inclusion, and environmental governance, offering a thorough overview of the intellectual framework supporting sustainable development funding. These papers elucidate how financial systems, policy frameworks, and institutional mechanisms can collaboratively expedite the global sustainability transition through multidisciplinary ideas.

Table 1. Top Cited Research

Citations	Authors and year	Title
345	Soergel, B., Kriegler, E., Weindl, I., ... Lotze-Campen, H., Popp, A. (2021)	A sustainable development pathway for climate action within the UN 2030 Agenda
267	Sinha, A., Mishra, S., Sharif, A., Yarovaya, L. (2021)	Does green financing help to improve environmental & social responsibility? Designing SDG framework through advanced quantile modelling
241	Nundy, S., Ghosh, A., Mesloub, A., Albaqawy, G.A., Alnaim, M.M. (2021)	Impact of COVID-19 pandemic on socio-economic, energy-environment and transport sector globally and sustainable development goal (SDG)
239	Abbasi, K.R., Hussain, K., Haddad, A.M., Salman, A., Ozturk, I. (2022)	The role of Financial Development and Technological Innovation towards Sustainable Development in Pakistan: Fresh insights from consumption and territory-based emissions
235	Bruce M, C., James, H., Janie, R., ... Stephen, T., Eva, L.W. (2018)	Urgent action to combat climate change and its impacts (SDG 13): transforming agriculture and food systems
221	Liu, H., Yao, P., Latif, S., Aslam, S., Iqbal, N. (2022)	Impact of Green financing, FinTech, and financial inclusion on energy efficiency
221	Chishti, M.Z., Sinha, A. (2022)	Do the shocks in technological and financial innovation influence the environmental quality? Evidence from BRICS economies
221	Shahzad, U., Ferraz, D., Nguyen, H.-H., Cui, L. (2022)	Investigating the spill overs and connectedness between financial globalization, high-tech industries and environmental footprints: Fresh evidence in context of China
172	Tolliver, C., Keeley, A.R., Managi, S. (2019)	Green bonds for the Paris agreement and sustainable development goals
163	Alkaraan, F., Elmarzouky, M., Hussainey, K.,	Sustainable strategic investment decision-making practices in UK companies: The influence of governance mechanisms on synergy between industry 4.0 and circular economy

Citations	Authors and year	Title
	Venkatesh, V.G. (2023)	

Source: Scopus, 2025

The bibliometric data presented above underscores significant contributions in the domain of sustainable finance and SDG-focused development. The highly referenced paper by [14]Mwhich has garnered 345 citations, delineates a sustainable development trajectory that incorporates climate action within the overarching UN 2030 Agenda, highlighting the necessity for cohesive policy frameworks to synchronize mitigation initiatives with social and economic objectives. [15] utilize sophisticated quantile modeling to illustrate how green financing improves corporate environmental and social responsibility, offering an analytical framework for financial interventions linked with the Sustainable Development Goals (SDGs).

[16] elucidate the COVID-19 pandemic's global ramifications on socio-economic systems, energy transition, and transport networks, highlighting systemic vulnerabilities that jeopardize the advancement of Sustainable Development Goals (SDGs). [17] and [18] emphasize the synergistic impact of financial growth, technical innovation, and FinTech in advancing sustainability, especially in emerging economies such as Pakistan. In addition to these findings, [19] and [20] investigate the dynamic relationship among financial globalization, innovation shocks, and environmental quality, providing new empirical evidence from BRICS and China.

Prior yet impactful research by [21] highlights the necessity of reforming agriculture and food systems to fulfill SDG 13 for climate action, whilst [22] stress the essential function of green bonds in financing obligations under the Paris Agreement. [23] present the nascent paradigm of Industry 4.0–Circular Economy synergy, illustrating how governance mechanisms influence sustainable investment decisions within the corporate sector. These studies collectively provide a cohesive intellectual framework for

comprehending the interplay between financial innovation, governance, and global collaboration in promoting sustainable development. They emphasize the increasing significance of blended and green financing as essential mechanisms for mobilizing capital towards fair, climate-resilient, and inclusive economic change.

### Practical Implications

The results of this study possess numerous practical implications for policymakers, development financiers, and institutional investors aiming to expedite the attainment of the Sustainable Development Goals (SDGs). The bibliometric data indicates an increasing agreement on the significance of blended finance as a catalytic tool for mobilizing private investment for the public benefit. Policymakers can leverage this understanding to enhance incentive structures—such as risk-sharing guarantees, concessional instruments, and impact-linked performance models—to draw private investments into sectors aligned with the Sustainable Development Goals (SDGs). Secondly, by pinpointing the focus of research on climate finance, infrastructure, and MSME development, professionals in multilateral development banks (MDBs) and development finance institutions (DFIs) can formulate context-specific blending models that cater to both commercial feasibility and inclusivity, especially in low-income and least developed countries (LDCs). The thematic connections among sustainability, governance, and ethics indicate that implementing blended finance necessitates a more robust incorporation of environmental, social, and governance (ESG) principles alongside transparency mechanisms, as advocated by the OECD DAC and Publish What You Fund. This study offers a framework for enhancing capacity among governments and intermediaries, emphasizing the necessity for data transparency, local pipeline development,

and strong assessment procedures to guarantee that blended funding is additional, equitable, and transformative.

### **Theoretical Contribution**

This research advances the theoretical framework of blended finance within the context of sustainable development and financial intermediation. This study empirically advances the notion of catalytic capital by utilizing bibliometric mapping to illustrate how academic discourse defines the roles of concessionality, risk transfer, and additionality in mobilizing private financing for public purposes. The study enhances the comprehension of hybrid financial architectures that amalgamate public, private, and philanthropic resources by synthesizing lessons from more than a decade of worldwide literature (2010–2025). The research connects development finance theory and institutional economics by framing blended finance as a coordination mechanism and a governance tool inside intricate multi-actor ecosystems. The observed conceptual clusters—sustainability, inclusive growth, and impact measurement—indicate that academic discourse increasingly perceives blended finance not solely as a financing method but as a systemic facilitator of sustainable capitalism. This research enhances the theoretical discourse on SDG financing ecosystems by correlating bibliometric evidence with normative frameworks such as the OECD Blended Finance Principles (2018) and the UNDP SDG Finance Hub, establishing a basis for a novel, empirically substantiated model of sustainable financial intermediation that reconciles impact with market efficiency.

### **Limitations and Directions for Future Research**

This study provides extensive insights; nonetheless, it possesses significant limitations intrinsic to bibliometric and content-based techniques. The analysis is solely based on articles indexed in the Scopus database, which, while extensive, may omit pertinent policy papers, institutional reports, and non-English literature that contribute to

the blended finance conversation. Secondly, bibliometric methods assess co-occurrence and citation intensity but fail to encapsulate the qualitative depth or contextual subtleties of policy implementation across many locations and sectors. Third, although the paper delineates global research trends, it does not directly assess the causal relationship between blended finance initiatives and SDG outcomes, thereby allowing for empirical validation. Subsequent research should integrate bibliometric mapping with case-based or econometric methodologies, examining sector-specific evidence (e.g., climate adaptation, health, digital infrastructure) and frameworks for impact quantification. Furthermore, the incorporation of AI-driven text mining and cross-database studies (e.g., Web of Science, policy repositories, MDB data) may produce more comprehensive insights into the practical evolution of knowledge networks, governance innovations, and financial architectures.

## **4. CONCLUSION**

This report offers a thorough bibliometric and content analysis of international research on blended finance as a means to attain the Sustainable Development Goals (SDGs) from 2010 to 2025. The findings affirm that blended finance has developed into a vital area of policy and research that connects public-private investment, sustainable development, and financial innovation. Thematic clusters delineate three principal trajectories: (1) mobilization and additionality—analyzing the catalytic application of concessional capital; (2) governance and transparency—concerning accountability, measurement, and ethical considerations; and (3) sectoral applications—emphasizing its significance in climate finance, MSME development, and infrastructure. Malaysia, the United Kingdom, and the United States are essential centers in academic collaboration, with growing contributions from developing nations and international entities. Notwithstanding conceptual progress,

empirical validation is still restricted, especially for efficacy in least developed countries (LDCs) and frameworks for impact measurement. Therefore, the study advocates for enhanced integration of evidence-based policy formulation, inclusive collaborations, and transparent data systems to optimize the

developmental additionality of blended finance. This research establishes that, when properly controlled, blended finance can be a revolutionary tool for sustainable global investment by linking academic discourse with practical application.

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