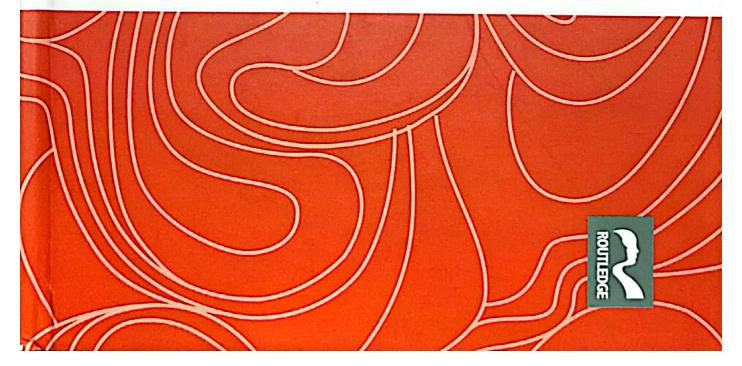


ISLAMIC SUSTAINABLE FINANCE

POLICY, RISK AND REGULATION

Edited by Mohd Ma'Sum Billah, Rusni Hassan, Razali Haron and Nor Razinah Mohd Zain





Islamic Sustainable Finance

The central idea of sustainability in the modern world is intricate and ever-changing. Closely related to the realm of finance and socioeconomic discussion, the phrase "sustainable impact finance" has become increasingly popular among bankers, practitioners, financial analysts, investors and the relevant experts seeking an impactful connection between the best financing mechanisms or tools and sustainable development related investments or projects.

This book opens up the discussion by offering a Shari'ah-compliance perspective. It is a primer on how Islam addresses and offers solutions to the challenges facing us within the spirit of maqasid al-Shari'ah, among others, in tackling poverty, food supply, health and well-being, quality education, reducing inequalities, responsible consumption and production and climate action. It discusses the connection between Islamic sustainable finance and the Sustainable Development Goals (SDGs) and explains the strategic action-plan of Islamic banks towards achieving Islamic sustainable finance.

The book considers the relevant policies and regulations, evaluating the role of regulators, discussing jurisprudential solutions and focusing on the role of Islamic banking standards in relation to Islamic sustainable finance. Further, it explores the issue of risk mitigation and the effective role of Takaful. It presents a practical case study from the banking industry in Malaysia, which evaluates the carbon footprint of bank loans and climate change risk mitigation. Finally, it highlights sustainable finance innovations in an Islamic concept.

The book will appeal to advanced students, researchers and scholars of Islamic banking and finance, as well as those concerned with environmental social governance and Sustainable Development Goals research. Regulators, policy makers and Shari'ah-compliant practitioners will also find it to be a useful guide.

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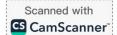


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This book is dedicated to the remembrance of my most beloved parents Allamah Mufti Nur Mohammad (r) and Ustazah Akhtarun Nisa' (r) who have nourished me with their love and wisdom. May Allah (swt) shower them with His Love and Mercy and grant them Jannat al-Ferdaus. I would also like to dedicate this book to my lovely wife Dr Khamsiah Nawawi (Head, OSHE-Hospital UKM) and our heart-touching kids Dr Ahmad Mu'izz Billah (Head of Surgical Department and Medical officer at the Mukah Hospital, a Government hospital under the Ministry of Health, Malaysia), Ahmad Mu'azz Billah (OP-Cadet-RMC, BSc Hons. Formerly affiliated with the JPM. Putrajaya and currently serves at Accenture, Malaysia), Ahmad Muniff Billah (OP-Cadet-RMC. Winner of Gold Medal Award 2023 in his outstanding innovative research project and currently pursuing with his BSc Honors in Aviation Management and Piloting, MSU) and Akhtarun Naba' Billah (Pursuing with her LLB Honors, IIUM and Winner of Dean's List), for their continuous supports and sacrifices.

May all be blessed with Muwaddau Wa Rahmah, Qurratu A'yun and Mardhaati Allah (swt) in the life and the next.

This book is also dedicated to the Ummah and the whole of humanity.

Mohd Ma'Sum Billah, PhD

A special dedication to my parents, my extended family, my teachers and Murabbi who inspired, guide and shape me to be the person I am today. A special thanks also to the Institute of Islamic Banking and Finance (IIUM) team members for their unwavering support in bringing the Institute to a higher level. May Allah provide us with the fortitude and dedication to contribute to the well-being of our institution and to the Ummah.

Rusni Hasan, PhD



Infinite gratitude to my loving parents, family and my teachers for their care and wisdom. May Allah (SWT) grant them the best reward. Also, for the endless support and trust entrusted in me by the Institute of Islamic Banking and Finance (IIUM) for their mission to be the Centre of Excellence.

Razali Haron, DBA

This book is dedicated to the loving memory of my parents, Sayiran Binti Hassan Raza and Haji Mohd. Zain Bin Haji Harun. My greatest gratitude goes to my husband, Mohd. Yusmadi Bin Mohd. Yunan for teaching me the value of being patience. Thank you also to all my respected teachers, especially Prof. Dr. Mohd Ma'Sum Billah and Prof. Dr. Engku Rabiah Adawiah Engku Ali. May Allah bless them always, Ameen.

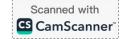
Nor Razinah Mohd Zain, PhD

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Part II

Islamic Sustainable Finance

Policies and Regulations

8 Islamic Sustainable Finance

The Role of Regulators

Ibtisam Ilyana Ilias and Rusni Hassan

Introduction

The significance of sustainability in Islamic finance is proven when sustainability indicator has been chosen as one of the key indicators in the Islamic Financial Development Indicator 2021 (IFDI) which measures the Islamic finance industry's development status. The Sustainability Indicator is a weighted index of Corporate Social Responsibility (CSR) activities and environmental, social, and governance (ESG) practices for all Islamic finance sectors and asset classes. Malaysia ranked first in its Sustainability Indicator. This achievement is reinforced by the country's drive for green and sustainable and responsible investment (SRI) sukuk along with ESG-aligned Islamic funds such as for waqf (charitable endowment). Saudi Arabia is also among the active markets developing CSR and ESG-aligned Islamic finance sectors, especially in charity and zakat disbursement. Distinguished top countries are Singapore and South Africa which achieved high CSR and ESG scores led by some institutions such as Sabana Industrial Real Estate and Al-Baraka Bank South Africa. Jordan, on the other hand, is the second biggest disburser of CSR funds, especially Qard al-Hassan (benevolent loan). Figure 8.1 depicts that IFIs from various jurisdictions have intensified their endeavours to materialize ESG-oriented principles. It is submitted that the successful execution of ESG-related agenda does not merely rely on the individual financial institutions (FIs) but requires strong will and commitment of financial regulators. The financial regulators including central banks play overriding roles to support sustainable finance and address climate change within the financial industry (Batten et al., 2016; Dikau & Volz, 2021).

The establishment of two global networks, namely, the Central Banks and Financial Supervisors Network for Greening the Financial System (NGFS), and the Sustainable Banking and Finance Network (SBFN) is distinctive proof of the financial regulators efforts to spearhead sustainability agenda within the realm of the worldwide financial system (Monetary Authority Singapore, 2022). According to NGFS (2019), financial regulators, including central banks, should not turn blind eye to climate change which has been prevalently acknowledged as one of the plausible sources of financial risk. Financial regulators are expected to form a superior ESG management across the financial sector other than to maximize funding to ESG-related activities (SBFN, 2022). Furthermore, to support climate-related

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Table 8.1 The Most Active Market Developing CSR and ESG-Aligned Islamic Finance

Rank	CSR	ESG	
	Average -7	Average –8	
1	Saudi Arabia 139	Malaysia 200	
2	Jordan 83	Singapore 50	
3	Oman 73	Saudi Arabia 39	
4	Singapore 73	South Africa 37	
5	Maldives 62	Indonesia 35	
Metric Used	Funds disbursed to charity, zakat, and Qard al- Hassan, disclosed CSR index score	Number and value of ESG sukuk outstanding, number and value of ESG Islamic funds outstanding, presence of sustainability guidelines given the presence of Islamic finance in the country, ESG reporting index score	

Source: ICD - Refinitiv Islamic Finance Development Report 2022

financial disclosure, the recommendations of the Task Force on Climate-Related Financial Disclosures (TFCFD) have unequivocally reflected the undivided commitment of the financial regulators to implant sustainability in the financial system framework (TCFD, 2019; TCFD, 2017).

Understanding Sustainable Finance

The underlying principle of sustainable finance is "incorporating ESG elements into the business or investment decisions for the benefit of both clients and society at large" (Swiss Sustainable Finance, n.d.). Thus, financing is not only utilized as a mechanism to encourage economic prosperity but also simultaneously protect the environment and uphold social and governance aspects. There is also a view that "sustainable finance also encompasses transparency in relation to risks related to ESG factors that may have a consequence on the financial system, and the mitigation of such risks through the appropriate governance of financial and corporate actors" (European Commission, n.d.). Environmental elements cover mitigation of climate change crisis, decarbonization, reduction of greenhouse gas emissions, and renewable energy, for instance, solar, wind, and hydrogen. Social criteria encompass human working conditions, labour rights, employee well-being, poverty alleviation, healthcare, and education. Governance factors consider eradication of bribery and corruption, effective strong institutions, and tax transparency. Thus, to

promote sustainable finance, industry players such as Islamic banks must consider these elements, for instance, whether to finance an oil and gas company that supplies renewable energy, a construction company involved in deforestation, or a company that practices discrimination in staff hiring. The growing awareness of sustainability and public pressure influence the Fis to genuinely consider ESG concerns and report their sustainable activities as well as the sustainability compliance of the companies and industries that they fund (Saraç & Hassan, 2020).

Green finance and climate finance are often used interchangeably with sustainable finance (Kunhibava et al., 2018). However, United Nations Environment Programme (UNEP) offers an all-embracing definition because sustainable finance comprises environmental, social, and economic aspects, whereas green finance restricts itself to climate and other environmental finance (United Nations Environment Programme, 2016). Of the three considerations of sustainable finance, the environmental element receives greater attention from most regulators particularly to address climate change risks. This is attributed to the fact that climate change is perceived as a threat to the environment and concurrently triggers detrimental impacts on all economic sectors. For this chapter, sustainable finance will be used to refer to ESG unless a specific mention is made of the environmental aspect only.

Islamic Sustainable Finance

The main actor in upholding Islamic sustainable finance are IFIs operated in accordance with Shari'ah principles and highly imbued moral and ethical principles (El-Ghazali, 2002). Observance of ethical and moral behaviours are not only restricted to humans but extend to human relationship with nature and other creatures (Quran, 2:6, 28:77). The founding principle of Islamic finance is sustainable use of livelihood and resources, effective waste management, and restricting the discharge of dangerous compounds into the environment. Premise on this, Islamic intellectuals and environmental experts embrace the view that the concepts of green finance, which aim to allocate investments towards activities that help the environment, are naturally compatible with Islamic financing (Ahmed et al., 2015; Obaidullah, 2018). Islamic scholars assert that since Shari'ah mandates environmental sustainability, Islamic financing is required to support environmental protection and adhere to the sustainable finance criteria that mandate the integration of business decisions with environmental protection (Obaidullah, 2018).

Islamic finance prohibits interest taking, gambling, uncertainties, and other activities strictly banned under Shari'ah, which are primarily motivated by the general goal of improving social fairness and welfare (Obaidullah, 2018; Visser, 2019). Moreover, specific tools have been devised to promote risk and reward sharing between wealthy individuals and those in need, such as zakat and waqf (Hassan et al., 2020). One of the primary objectives of zakat is to ensure a balanced distribution of income as well as poverty alleviation. Considered an act of worship, zakat imposes an annual obligation on a Muslim with wealth surpassing a specific limit (nisab) to allocate a certain percentage of their income and assets among a specified group of individuals. On the other hand, waqf is a philanthropic



endowment with broad economic consequences that contribute significantly to social welfare (Kahf, 2000, 2004). Thus, reinforcing welfare and justice through avoidance of unethical business practices as well as the imposition of zakat and waqf demonstrate essential Islamic concepts which align with the social factor element of sustainable finance.

Furthermore, Islamic finance stipulates the necessity of economic activities to comply with fair and just principles. Fair dealing and upholding justice form substantial components of Shari'ah, such as ensuring good governance and transparency (A'la Mawdudi, 2013). Haniffa and Cooke (2002) view that the notion of transparency compels disclosure of organizations' strategy, actions, community contributions, resource use, and environmental preservation Moreover, they believe that transparency implies citizens' right to information, such as contract awards, anti-corruption rules, political party funding, and so on so forth. Hence, Islamic finance through observance of the rule of fair dealing equally complies with the third pillar of sustainable finance, namely, governance.

The preceding discussion reveals that the concept of sustainable finance intersects with the Shari'ah principles which form the basis of Islamic finance. Thus, IFIs' role in achieving sustainable finance is affirmative. Observing both compliances with Shari'ah and sustainability principles would ensure sustainability in the entire economic system. Indeed, maqasid al-Shari'ah itself holds the elements of environmental protection and promotion of social values and good governance. Clearly, Quran has accentuated that Muslims must observe the principle of moderation in life and concomitantly underscored adherence to the principle of accountability in utilizing natural resources in more than 750 verses (Ibrahim, 2016). While self-initiative is one way to advocate Islamic sustainable finance, arguably, the regulators assume a superior role to ensure a comprehensive adoption of sustainable finance by relevant industry players in line with defined strategies that are prudently crafted.

Regulatory Nutshell Affecting Islamic Sustainable Finance

Financial regulators are established based on different models. According to the integrated model, which is widely adopted globally, central banks are entrusted as financial regulators (Asian Development Bank, 2017). This model can be seen in countries including Malaysia, Singapore, Bangladesh, Brazil, and China. However, in several other jurisdictions, there is a separation of functions between financial regulators and central banks. According to this model, financial regulators and central banks are two different entities, whereby the former is established as an independent supervisory authority with the power of financial regulations, and the latter focuses on monetary policy (Asian Development Bank, 2017). The Financial Conduct Authority and Prudential Conduct Authority in the United Kingdom and the Financial Services Authority of Indonesia (OJK) are examples of this model. There are contradictory views with regards to mandating the financial regulators and central banks to oversee sustainability. Some argued that the central banks'



core functions are to oversee financial stability, market conduct, and prudential supervision (Demekas & Grippa, 2021). Raising their mission on sustainability may result in dangers and unanticipated effects, as well as straining their authority and opposition from the central banking community. Furthermore, the central bank's legal mandate is called into doubt. Park and Kim (2020) remarked that regulating inflation and financial stability are the overarching objectives of a central bank. Thus, entrusting the central bank with climate-related risks assessment and subsequent modification of its policies related to monetary and macroprudential to ensure alignment with the said assessment may be construed as a sheer violation of its duty.

Opposing the earlier examples, some literature advances solid justifications for mandating financial regulators and central banks to deal with sustainable finance particularly environmental and ecological risks resulting from climate change. Matters within the jurisdictions of central banks and financial regulators such as financial market, price, and macroeconomic stability can be adversely ieopardized by climate change risks (Campiglio et al., 2018; Prudential Regulation Authority, 2015; Volz, 2017). Durrani et al. (2020) propounded that two types of financial risks will be potentially generated by environmental and climate change, namely, physical and transition risks. These risks will influence macroeconomic conditions on both the demand and supply sides, potentially resulting in huge financial losses and price volatility in food and energy. Financial risks are systemic and theoretically permanent if not handled, posing a challenge to central banks' policy objectives of achieving financial stability. In line with this reasoning, central banks cum financial regulators in several countries have incorporated sustainability as part of their mandates and concurrently developing policies on green central banking (Dikau & Ryan-Collins, 2017). The countries include Bangladesh Bank, the Banco Central do Brasil, and the People's Bank of China. In respect of sustainable finance initiatives in the Islamic financial industry, similar enthusiasm is shown by Bank Negara Malaysia (BNM) and the Monetary Authority of Singapore (MAS). Also, Indonesia's financial regulator. OJK, issued a roadmap for sustainable finance in 2014 and included sustainable development in their corporate objectives.

Several financial regulators such as BNM, OJK, MAS, and Bangladesh Bank have undertaken some measures to achieve the objective of incorporating sustainable finance within the financial industry framework. It is important to highlight that these regulators do not exclusively regulate Islamic finance but conventional finance as well. BNM, for example, is a regulator for the conventional financial system under the Financial Services Act 2013 and simultaneously is assigned to govern the Islamic financial system in the country. In Singapore, on the other hand, there is no specific law on Islamic finance. The government of Singapore takes a fine-tuning approach to accommodate both Islamic and conventional finance within a common regulatory framework. Hence, as far as sustainable finance is concerned, the regulatory approaches may overlap but are equally applicable to both FIs and IFIs. The following discussion highlights the roles of the regulators to reinforce sustainability in the Islamic financial industry.



Regulatory Division Focusing on Sustainable Finance

One of the important signals of the regulators' concern for sustainability is by implementing or embedding ESG considerations across all regulators' functions. For example, to develop a sustainable banking framework, Bangladesh Bank established the Sustainable Finance Department in 2015. This framework is integrated into the bank's core business operations through the implementation of green banking and Corporate Social Responsibility (CSR) (Bangladesh Bank, n.d.). This department comprises two wings, namely, green banking wing and CSR wing. The former oversees policy development and monitoring different elements of green banking, such as green finance, environmental risk management, in-house environmental management, climate risk fund, green marketing, green branch, green product innovation, and green strategic planning. The latter on the other hand deals with policy formulation and monitoring of CSR activities of the banks and FIs. Additionally, the wing is also responsible to manage Bangladesh Bank Disaster Management and Social Responsibility Fund. In Malaysia, the regulator's readiness to embrace sustainable finance is demonstrated through the setting up of a sustainability unit by BNM. Among the functions of this unit is to coordinate and oversee the overall climate strategy key initiatives. The unit integrates climate-related risk into the financial stability agenda and provides technical support to the six tracks of BNM's key functions (BNM, 2021). This approach enables regular discussions at the board and senior management levels about climate-related issues.

Frameworks in Supporting Sustainable Finance

Proper framework and tools will ensure a structured implementation of the sustainable-related policy. For example, BNM has introduced the Value-Based Intermediation Financing and Investment Impact Assessment Framework (VBIAF) and Climate Risk Management and Scenario Analysis to support climate risk management. In respect of the latter, two primary tools have been developed, namely, Climate Risk Scenario Analysis and Stress Testing and Climate-Related Data Catalogue (BNM, 2021). In Singapore, thematic climate scenarios have been included in the industrywide stress test in encouraging the improvement of climate-related risk assessment (Monetary Authority Singapore, 2022). Stress testing and scenario analysis are crucial in evaluating the probable consequence of climate risks on Fls and the overall economy.

Establishing ESG-Related Taxonomy

In ensuring increased investment and standardized data collection for analysis, ESG-based taxonomy is crucial to facilitate the convergence of understanding, terminologies, and vocabulary on sustainable finance (Durrani et al., 2020). One of the importance of climate taxonomy is to alleviate the occurrence of green bubble and green washing (Park & Kim, 2020). In this regard, BNM has issued the Climate Change and Principle-Based Taxonomy in 2021 to provide a common and



consistent system for FIs to assess and categorize economic activities according to the extent whereby these activities meet climate objectives (BNM, 2021). OJK is collaborating with eight government ministries to create the Indonesia Green Taxonomy Edition 1.0 in 2022 through the Integrated Financial Services Sector Policy Group (GKKT) and related work units. Meanwhile, in Singapore, the MASconvened Green Finance Industry Taskforce (GFIT) is developing a taxonomy for Singapore-based FIs by classifying activities into two classifications, firstly, activities that could be considered green, or secondly, activities that are transitioning to green (Monetary Authority Singapore, 2022).

Guidelines to Regulate Sustainable Finance

One effective way to handle ESG issues is to incorporate sustainable-related risks inside the regulatory and supervisory framework, presuming that most banks would not proactively pursue such steps (Park & Kim, 2020). Nonetheless, voluntary guidelines can send a powerful message to FIs if they emanate from financial regulators. Furthermore, these voluntary guidelines may also bring positive outcomes if they are designed to stimulate banks in identifying and managing credit risks that may arise resulting from climate risks. Reference can be made to the step taken by OJK in imposing a mandatory requirement on its regulated FIs to practise sustainable finance throughout their business activities via Regulation No. 51/Pojk.03/2017 on Application of Sustainable Finance to Financial Services Institution, Issuer and Public Listed Companies (Nugroho et al., 2019). OJK has also established technical guidelines for supervisors to facilitate the said regulator in monitoring the application of sustainable finance regulations. Other than that, the guidelines also assist OJK in assessing Indonesian banks' Sustainable Finance Action Plan and Sustainability Report (International Finance Corporation, 2019).

In Malaysia, BNM together with the Securities Commission Malaysia and Bursa Malaysia co-developed the Task Force on Climate-Related Financial Disclosures (TCFD) application guide for Malaysian FIs. TCFD aims to ensure reliable, meaningful, and comparable climate-related disclosures by Fis (BNM, 2021). Issued in June 2022, the guide is a step towards obligatory compliance with TCFD-aligned, climate-related financial risk disclosures for regulated FIs by 31 December 2024. Furthermore, VBIAF sectoral guides provide an impact-based risk management toolkit for FIs in incorporating ESG risk considerations into their financing and investment decision-making processes. In December 2020, MAS issued the Guidelines on Environmental Risk Management which established a unified understanding of the risk-proportionate management of environmental risks. The guidelines outline MAS' supervisory expectations for competent governance, sound risk management, and meaningful disclosure of environmental risks. MAS actively engages Fls in their efforts to comply with the guidelines (MAS, 2022). Bangladesh Bank improved its Environmental Risk Management rules (ERM) in 2017 by releasing the Guidelines on Environmental and Social Risk Management. In comparison with the earlier version of ERM standards, social indicators and other criteria are



embedded in the latest guidelines which oblige banks to adopt ERM policies into their credit risk management (Durrani et al., 2020).

Issuance of Policies Affecting Private EGS-Related Financing or Investment

Financial regulators are expected to play an aggressive role in boosting green finance initiatives (Durrani et al., 2020). This role can be executed in several ways, such as issuing financing instruments or implementing regulatory policies or initiatives to encourage private funding for EGS-related financing or investments. Furthermore, financial regulators can assist green sukuk issuers secure capital market access, decreasing financing and/or issuance costs, and even investing in the green sukuk market themselves. A collaboration between BNM and industry to explore public-private partnerships for the development of innovative protection products and blended finance options that allow for alternative risk-sharing arrangements is a fine example of this regulatory role. This initiative aims to create an ecosystem conducive for FIs to scale up the transition towards sustainable finance (Kuen, 2022). In 2022, BNM has introduced an RM1 billion low-carbon transition facility to match funds provided by the FIs to help SMEs embrace sustainable and lowcarbon practices. Another RM800 million is allocated for SMEs and start-ups in strategic green and technological fields. A similar approach is adopted by Bangladesh Bank with the allocation of a BDT two billion refinance scheme for renewable energy and green products, including Shari'ah-based products, as well as a refinance scheme for IFIs for investment in green products or initiatives (Bangladesh Bank, n.d.).

Cooperation to Boost Sustainable Finance

Financial regulators should also increase cooperation and policy coordination both at regional and global levels to scale up sustainable finance. There are several means to materialize this initiative, such as a regional carbon tax, regional finance warranty programme, a regional fund for funding low-carbon projects, or a regional green sukuk market (Durrani et al., 2020). Globally, NGFS is best exemplified as a primary platform for international collaboration. Among others, it allows financial regulators to collaborate on the next milestones in handling climate and environmental risks. Additionally, NGFS enables financial regulators to cooperate in augmenting sustainable finance and sharing their best practices. In view of the influential role of NGFS, financial regulators are heavily encouraged to join this global network.

ESG-Related Awareness and Capacity-Building Programs

Awareness programs should be organized to enable savers and investors to understand ESG-related challenges and opportunities. It is essential to keep an ongoing synergy with industry players to guarantee the presence of more experts and employees mastering this nascent area. This step can be implemented through



the development of comprehensive and structured programs related to ESG risk management in the financial industry. Additionally, the role of academia and industry professionals should not be overlooked because their inputs are valuable to strengthen the learning content. Furthermore, considering human resources are critical to secure sustainable finance goals, it is vital to create capacity-building programs on the ESG agenda, policies, problems, and opportunities to train both employees of the regulator as well as employees of the regulated entities. The financial regulators may also consider organizing dialogue with stakeholders or consultation events with FIs or competent experts from international bodies to elevate sustainable practice understanding among the employees of both financial regulators and FIs. Finally, it is observed that most countries have designed their respective sustainability roadmap conforming to the United Nations Sustainable Development Goal and Paris Agreement. Therefore, consistent engagement with appropriate government authorities is pivotal to harmonize the sustainability agenda in the financial sector with national climate policies. This approach will guarantee smooth and precise transformation trajectories for different economic sectors. In the same breath, this strategy will ensure greater contribution from the financial sector to effectively accomplish sustainable finance goals.

Conclusion

The foregoing discussion discloses that sustainable finance is a neutral concept applicable to both conventional and Islamic finance alike. As a matter of fact, sustainable finance focusing on ESG elements are indivisible elements of Shari'ah and have long been embedded in Quran and Sunnah. Irrespective of the model adopted, financial regulators play a critical role to ensure a successful realization of sustainable finance within the Islamic finance industry. Except for countries that solely apply Islamic financial systems, financial regulators of conventional finance are concurrently the regulators of Islamic finance. Thus, similar mechanisms are adopted albeit for different industries. Financial regulators of Islamic finance, such as BNM, OJK, MAS, and Bangladesh Bank, have undertaken various measures to promote sustainable finance among their regulated entities including IFIs in line with their respective national policies. Though the effectiveness of these measures is still too early to quantify, at least the major efforts are ongoing. Undoubtedly, the existing mechanisms such as policies, guidelines, and other regulatory interventions are subject to future improvements. It is submitted that there is a need for a cohesive and close synergy between financial regulators and relevant stakeholders to establish sustainable finance in the Islamic finance industry, regionally or globally.

Notes

- 1 NGFS was established by eight central banks and supervisory authorities in 2017.
- 2 The Sustainable Banking and Finance Network (SBFN) is an informal group of 74 financial regulators and banking associations that seek to develop sustainable banking policies, guidelines, and practices.



References

- Ahmed, H., Mohieldin, M., Verbeek, J., & Aboulmagd, F. (2015). On the sustainable development goals and the role of Islamic finance. World Bank Policy Research Working Paper, 7266. https://openknowledge.worldbank.org/entities/publication/9a9b2fd6-6908-55bf-bcd2-b184da6750d7
- A'la Mawdudi, S. A. (2013). First principles of Islamic economics. Kube Publishing Ltd.
- Asian Development Bank. (2017). Proposed policy-based loan for subprogram 2 and technical assistance grant republic of Indonesia: Financial market development and inclusion program. https://www.adb.org/projects/48207-002/main
- Bangladesh Bank. (n.d.). Sustainable finance department. Retrieved January 6, 2023, from www.bb.org.bd/en/index.php/about/deptdtl/61
- Bank Negara Malaysia. (2021). Annual report 2021. www.bnm.gov.my/documents/20124/3026128/ar2020 en ch2b greenfs.pdf
- Batten, S., Sowerbutts, R., & Tanaka, M. (2016). Let's talk about the weather: The impact of climate change on central banks. https://www.bankofengland.co.uk/working-paper/2016/lets-talk-about-the-weather-the-impact-of-climate-change-on-central-banks
- Campiglio, E., Dafermos, Y., Monnin, P., Ryan-Collins, J., Schotten, G., & Tanaka, M. (2018). Climate change challenges for central banks and financial regulators. *Nature Climate Change*, 8(6), 462-468.
- Demekas, M. D. G., & Grippa, P. (2021). Financial regulation, climate change, and the transition to a low-carbon economy: A survey of the issues. International Monetary Fund.
- Dikau, S., & Ryan-Collins, J. (2017). Green central banking in emerging market and developing country economies. https://neweconomics.org/uploads/files/Green-Central-Banking.pdf
- Dikau, S., & Volz, U. (2021). Central bank mandates, sustainability objectives and the promotion of green finance. *Ecological Economics*, 184, 107022.
- Durrani, A., Volz, U., & Rosmin, M. (2020). The role of central banks in scaling up sustainable finance: What do monetary authorities in Asia and the Pacific think? *ADBI Working Paper Series*. https://www.adb.org/publications/role-central-banks-scaling-sustainable-finance-asia-pacific
- El-Ghazali, M. (2002). Islam and economic conditions. Nahdet Masr Publishing Co.
- European Commission. (n.d.). What is sustainable finance? Retrieved December 27, 2022, from https://finance.ec.europa.eu/sustainable-finance/overview-sustainable-finance_en
- Haniffa, R. M., & Cooke, T. E. (2002). Culture, corporate governance and disclosure in Malaysian corporations. *Abacus*, 38(3), 317–349.
- Hassan, M. K., Saraç, M., & Alam, A. W. (2020). Circular economy, sustainable development, and the role of Islamic finance. In *Islamic perspective for sustainable financial system* (pp. 1-26). Islambul University Press.
- Ibrahim, M. (2016). Governor's keynote address at the global Islamic finance forum 5.0 "future of Islamic finance: Delivering actions today for a sustainable tomorrow".
- International Finance Corporation. (2019). *IFC and OJK raising the bar on environmental, social, and corporate governance standards*. www.ifc.org/wps/wcm/connect/8a1337a6-87cf-487d-964b-94b55cb45883/IFC-OJK+IFC+Collaboration+Case-Brochure-FIN. pdf?MOD=AJPERES&CVID=nvw4462
- Kahf, M. (2000). al Waqf al Islami, Tatawwuruh, Idaratuh, Tanmiyatuh. Dar al-Fikr al-Mu 'ashir.
- Kahf, M. (2004). Shari'ah and Historical Aspects of Zakat and Awqaf. In *Background paper* prepared for Islamic research and training institute. Islamic Development Bank.
- Kuen, Y. L. (2022, November 25). Greening finance, financing green. STARESG. https://www.bnm.gov.my/documents/20124/6059436/StarESG+P2-3.pdf
- Kunhibava, S., Ling, S. T. Y., & Ruslan, M. K. (2018). Sustainable financing and enhancing the role of Islamic Banks in Malaysia. *Arab Law Quarterly*, 32(2), 129–157.



- Monetary Authority Singapore. (2022). Sustainability report 2021/2022. https://www.aprea.asia/knowledge-hub/featured-insights/esg/monetary-authority-of-singapore-mas-sustainability-report-2021-2022
- Network for Greening the Financial System. (2019). A call for action. Climate change as a source of financial risk. www.ngfs.net/sites/default/files/medias/documents/synthese_ngfs-2019 17042019 0.pdf
- Nugroho, L., Badawi, A., & Hidayah, N. (2019). Discourses of sustainable finance implementation in Islamic bank (Cases studies in Bank Mandiri Shari'ah 2018). *International Journal of Financial Research*, 10(6), 108-117.
- Obaidullah, M. (2018). Managing climate change: The role of Islamic finance. *IES Journal Article*, 26(1).
- Park, H., & Kim, J. D. (2020). Transition towards green banking: Role of financial regulators and financial institutions. *Asian Journal of Sustainability and Social Responsibility*, 5(1), 1-25.
- Saraç, M., & Hassan, M. K. (2020). Islamic perspective for sustainable financial system. Istanbul University Press.
- Sustainable Banking and Finance Network. (2022). Home. www.sbfnetwork.org/
- Swiss Sustainable Finance. (n.d.). What is sustainable finance? Retrieved December 27, 2022, from www.sustainablefinance.ch/en/what-is-sustainable-finance-content-1-1055. html
- Task Force on Climate-related Financial Disclosures. (2017). Final report: Recommendations of the task force on climate-related financial disclosures. Basel: Task force on climate-related financial disclosures. www.fsb tcfd.org/wp-content/uploads/2017/06/FINAL-2017-TCFD-Report-11052018.pdf
- Task Force on Climate-related Financial Disclosures. (2019). 2019 status report. www. fsb-tcfd.org/wp-content/uploads/2019/06/2019-TCFDStatus-Report-FINAL-053119.pdf
- United Nations Environment Programme. (2016). Inquiry working paper: Definitions and concepts background note (No. 16, 13). https://wedocs.unep.org/bitstream/handle/20.500.11822/10603/definitions concept.pdf?sequence=1&isAllowed=y
- Visser, H. (2019). Islamic finance: Principles and practice. Edward Elgar Publishing.