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Book Review: Financial Innovation and Engineering in Islamic Finance

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The book Financial Innovation and Engineering in Islamic Finance by Samir Alamad (2017) serves as one of the primary academic references for understanding how Islamic principles can shape financial innovation that is ethical, stable, and just. Through historical, theoretical, and empirical analysis, Alamad presents a new conceptual framework for Shariah financial innovation that emphasizes the integration of conventional innovation theory and Shariah values. This article summarizes the main points of thought in the book, highlighting its theoretical and practical contributions to the development of the global Islamic finance industry. Samir Alamad successfully demonstrates that Shariah is not an obstacle to innovation, but rather an ethical and normative framework that guides the direction of innovation to ensure it remains just and sustainable. Thus, Islamic financial innovation has the potential to become a more stable and inclusive global financial model compared to the interest-based capitalist system.

Keywords: Financial Innovation; Financial Engineering; Islamic Finance

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INTRODUCTION

Financial innovation is the process of creating new financial products, services, technologies, or processes that improve financial markets' efficiency, accessibility, and performance. In other words, it refers to the development and popularization of new financial instruments, institutions, or technologies (As-Salafiyah et al., 2022). that change how individuals and organizations manage money, invest, borrow, or transfer funds.

Meanwhile, financial engineering is the application of mathematical methods, statistical tools, computer science, and economic theory to design, develop, and implement innovative financial products, processes, and solutions to complex financial problems. In simpler terms, financial engineering uses quantitative techniques to structure financial instruments, manage risks, and optimize investment strategies.

Financial engineering in Islamic finance refers to the process of designing and structuring Shariah-compliant financial products and instruments by applying quantitative methods, financial theory, and Islamic legal principles (fiqh al-muʿāmalāt). It aims to create innovative financial solutions that achieve economic efficiency and risk-sharing, while avoiding riba (interest), gharar (excessive uncertainty), and maysir (speculation/gambling).

The 2008 global financial crisis was a significant milestone marking the failure of the conventional financial system, which was dominated by speculative practices, excessive leverage, and financial innovation devoid of ethics. The destructive impact of the crisis spurred discourse on the need for a more just financial system based on moral values. In this context, the Islamic financial system emerged as a promising alternative because it is rooted in Shariah principles that reject riba (interest), gharar (excessive uncertainty), and maysir (gambling), while upholding justice ('adl) and balance (mīzān) in transactions.

Nevertheless, the emergence of modern Islamic financial institutions since the 1970s has sparked serious debate regarding their originality and integrity. Many Shariah banking products are criticized for merely mimicking conventional models with slight modifications to appear Shariah-compliant, rather than truly reflecting Shariah objectives (Shariah-based).

Amidst this criticism, Samir Alamad, a practitioner and academic in the field of Islamic finance in the UK, authored the book Financial Innovation and Engineering in Islamic Finance to offer a scholarly and practical approach to the issue. In this work, Alamad starts from the premise that Shariah financial innovation is not just a technical activity, but also a social, ethical, and spiritual process guided by maqāṣid al-sharīʻah (the objectives of Shariah), such as the protection of wealth (ḥifẓ al-māl), distributive justice, and social welfare. He combines conventional innovation theories—such as Schumpeterian theory and innovation orientation theory—with classical and contemporary Islamic economic thought.

Through this approach, the book seeks to answer several fundamental questions:

a. How can the process of financial innovation be conducted without deviating from Shariah principles?
b. What is the role of financial engineering in shaping Islamic financial products that are innovative yet remain ethical?
c. How can Islamic financial institutions balance the demands of the modern market with the normative constraints of religion?

The book also emphasizes the importance of the Shariah Governance Framework as a foundation for every product innovation. Without established oversight and methodology, Islamic financial innovation risks falling into the trap of imitation, which ultimately dilutes Islamic values. Thus, Financial Innovation and Engineering in Islamic Finance not only stresses the urgency of innovation but also restores the moral and spiritual essence to modern financial practice.

RESULTS AND DISCUSSION

Alamad (2017) adopts a multidisciplinary approach that blends economic theory, technological innovation, and Islamic philosophy. He introduces the concept of a religious orientation toward innovation, where religious orientation serves as both a boundary and a guide throughout the entire innovation process. This orientation includes:

a. Ethics and social values: emphasizing transparency, justice, and risk-sharing.
b. Shariah institutions: positioning the Shariah Supervisory Board as the primary director.
c. Financial engineering processes: applying usul al-fiqh (principles of Islamic jurisprudence) in the design of new instruments.
d. Empirical evaluation: assessing products through documentation and case studies.

This framework aims to build an innovation process oriented by maqāṣid and encourages Islamic financial institutions to play an active role in sustainable socio-economic development.

The book consists of 12 chapters covering the history, theory, and practice of Islamic financial innovation:

a. Chapters 1–3: Explain the context, definitions, and conceptual foundations of Shariah banking and differentiate between conventional and Shariah innovation.
b. Chapters 4–5: Analyze the historical development of Islamic financial innovation in eight phases, from the time of the Prophet Muhammad (PBUH) to the modern era.
c. Chapter 6: Outlines conventional innovation theories and their negative impacts, such as the 2008 crisis resulting from excessive innovation without ethics.
d. Chapter 7: Offers a theory of Islamic financial innovation based on the values of tawhid (monotheism), khilafah (stewardship), and social responsibility.
e. Chapters 8–11: Analyze financial products such as futures, options, and sukuk using a fiqh muamalah approach and propose re-engineering to make them Shariah-compliant.
f. Chapter 12: Presents a case study of the "Takaful Student Finance" innovation as a solution for riba-free education financing.

Alamad traces the history of Islamic financial innovation through eight phases, from the formative period (622–661 AD) to the modern revival post-1970. Early innovations like mudarabah, murabahah, and waqf demonstrated the flexibility of Islamic law in supporting economic activity. However, in the modern era, reliance on capitalist models raised concerns about "deviation" from Islamic principles.

Conventional financial innovation often leads to crises due to pro-innovation bias and weak regulation. Complex derivative products, such as futures and options, illustrate how innovation without ethical boundaries can threaten systemic stability.

The author introduces the Islamic School of Financial Innovation, which emphasizes the values of tawhid (unity), khilafah (stewardship), and mas'uliyyah (responsibility). The principles of moderation (i'tidal), economic efficiency, and social justice form the philosophical basis of Shariah innovation.

Through case studies, the book evaluates various instruments like futures, options, and sukuk from a fiqh muamalah perspective. Alamad proposes re-engineering models to make these contracts Shariah-compliant, for example, using the concepts of khiyār al-shart and takaful. One of its practical contributions is the design of "Takaful Student Finance," an education financing product based on mutual guarantee as an alternative to interest-based loans.

CONCLUSION

The book Financial Innovation and Engineering in Islamic Finance asserts that true Islamic financial innovation is one that blends economic creativity with moral and social integrity. Legitimate innovation from an Islamic perspective is not measured solely by its ability to generate profit, but also by its contribution to the public good (maslahah ʻāmmah). By combining and structuring the contracts, Islamic finance can replicate many conventional financial outcomes (e.g., project finance, risk hedging, liquidity management) while maintaining compliance.

Samir Alamad successfully demonstrates that Shariah is not an obstacle to innovation, but rather an ethical and normative framework that guides the direction of innovation to ensure it remains just and sustainable. Thus, Islamic financial innovation has the potential to become a more stable and inclusive global financial model compared to the interest-based capitalist system.

Theoretically, this book expands the horizons of financial innovation studies by introducing the religious innovation orientation as a new paradigm. Practically, this work provides guidance for Islamic financial institutions to: (1) Develop new products based on maqāṣid al-sharīʻah; (2) Enforce a transparent and participatory Shariah governance system; and (3) Align economic goals with social and spiritual values.

For academics, this book opens new research avenues regarding the integration of innovation theory and Islamic law. For practitioners, it provides a practical guide for designing financial products that are innovative, ethical, and Shariah-compliant. Finally, Alamad affirms that the future of Islamic finance lies in its ability to innovate without losing its Shariah identity (As-Salafiyah et al., 2023). Islamic finance is not just a technical alternative, but a civilizational offering of an economy that is just and humanity-oriented.

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