Indonesian Journal of Islamic Economic Law
Vol 3, No 2(2026), pp. 159-182
DOI: https://doi.org/10.23917/ijoel. v3i2.16390

Developing A *Sharia*-Compliant Hybrid Hedging Framework for Managing Exchange Rate and Inflation Risks

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Submission Track:
Received: 24-02-2026
Final Revision: 23-06-2026
Available Online: 24-06-2026

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Abstract. This study examines the design of *Aqad Murakkab* and *Wa'ad* as *Sharia*-compliant hedging mechanisms to safeguard asset value amid exchange rate volatility and inflationary pressures. Utilising a conceptual and normative methodology, the analysis investigates the relationships among hybrid contractual arrangements, commitment-based transactions, exchange rate risk management, inflation risk, and the preservation of economic value. The findings indicate that *Aqad Murakkab* functions as a constitutional framework connecting present commitments to future economic obligations, while *Wa'ad* provides exchange-rate certainty through a commitment mechanism for upcoming foreign-exchange obligations. Both mechanisms contribute to asset value protection by addressing exchange rate risk, identified as the primary transmission channel between contractual design and value preservation. Furthermore, inflation risk intensifies the need for protection, as rising prices may reduce assets' ability to meet anticipated future requirements. A key distinction emerges between traditional hedging and the DSN-MUI approach: traditional hedging focuses on direct protection against expected price increases, whereas *Sharia* hedging, as specified in DSN-MUI Fatwa No. 96 of 2015, emphasises exchange rate risk management as the principal *Sharia*-compliant strategy for protecting asset value. This study proposes a *Sharia* asset value protection framework that integrates contractual, monetary, and value-preservation components.

Keywords: *Aqad Murakkab*; *Wa'ad*; *Asset Value Protection*; *Exchange Risk*; *Inflation*

1 Introduction

The increasing integration of global financial markets has heightened banking institutions' exposure to exchange rate volatility and persistent inflationary pressures.[1] As a result, hedging has evolved from a discretionary financial practice to a strategic necessity for preserving economic value and ensuring financial stability. [2] In the context of Islamic banking, hedging is intrinsically linked to the normative foundations of Shariah, which emphasise wealth preservation (ḥifẓ al-māl), legal certainty, and the prohibition of gharar (excessive uncertainty) and maysir (speculation). [3] Therefore, Islamic hedging aims not only to protect financial positions against adverse market movements but also to ensure that risk-management mechanisms align with the ethical and legal objectives of Islamic finance.[4] Despite the increasing importance of risk mitigation, a substantial gap persists between the normative ideals of Islamic hedging and its practical implementation. Exchange rate fluctuations and inflation risks are increasingly affecting Islamic banking operations, particularly in cross-border transactions, trade financing, investment activities, and liquidity management. [5]

While instruments such as Wa'ad-based arrangements, spot ṣarf transactions, and murakkab (hybrid) contracts have received recognition through fatwas and regulatory frameworks, their application remains fragmented and primarily transactional. Current mechanisms predominantly address exchange rate exposure, whereas the broader challenges of preserving real asset value against inflation and ensuring institutional liquidity resilience have received limited attention. [6] This situation highlights a research gap regarding the development of a comprehensive Sharia-compliant hedging framework that can simultaneously address exchange rate risk, inflation risk, and systemic resilience. [7] Previous research has examined Islamic hedging from multiple perspectives, including fiqh al-muʿāmalāt, DSN-MUI fatwas, AAOIFI standards, and the operationalization of Islamic forward agreements structured through Wa'ad mechanisms. [8] These studies generally find that Sharia-compliant hedging instruments are permissible when they avoid speculative elements and are linked to genuine economic needs. [9] However, the literature predominantly focuses on contractual validity, legal compliance, and the distinction between permissible risk management and prohibited speculation.

Consequently, limited attention has been devoted to integrating hedging mechanisms with inflation protection, real-value preservation, liquidity backstop arrangements, and broader financial-system stability.[10] The literature, therefore, lacks a holistic framework that connects contractual design, exchange rate management, inflation mitigation, and institutional resilience within Islamic banking. [11] In light of these considerations, the focus research question of this study is *How can a Sharia-compliant hybrid hedging framework, based on murakkab contracts and Wa'ad structures, be developed to manage exchange-rate and inflation risk while preserving asset value and strengthening institutional resilience in Islamic banking* ? This question arises from the need to move beyond a narrow contractual understanding of hedging toward a more integrated framework that addresses contemporary economic uncertainties faced by Islamic financial institutions. [12]

[1] A M El Tiby, *Islamic Banking: How to Manage Risk and Improve Profitability*, *Islamic Banking: How to Manage Risk and Improve Profitability*, 2011, https://doi.org/10.1002/9781118266922; H Şimşek, S Bayindir, and M Ustaoğlu, "Dual Banking Systems' Dynamics and a Brief Development History of Islamic Finance in Select Emerging Islamic Economies," in *Balancing Islamic and Conventional Banking for Economic Growth: Empirical Evidence from Emerging Economies*, 2017, 9–26, https://doi.org/10.1007/978-3-319-59554-2_2; C M Henry and R Wilson, *The Politics of Islamic Finance*, *The Politics of Islamic Finance*, 2019.

[2] A M El Tiby, *Islamic Banking: How to Manage Risk and Improve Profitability*, *Islamic Banking: How to Manage Risk and Improve Profitability*, 2011, https://doi.org/10.1002/9781118266922; H Şimşek, S Bayindir, and M Ustaoğlu, "Dual Banking Systems' Dynamics and a Brief Development History of Islamic Finance in Select Emerging Islamic Economies," in *Balancing Islamic and Conventional Banking for Economic Growth: Empirical Evidence from Emerging Economies*, 2017, 9–26, https://doi.org/10.1007/978-3-319-59554-2_2; C M Henry and R Wilson, *The Politics of Islamic Finance*, *The Politics of Islamic Finance*, 2019.

[3] A M El Tiby, *Islamic Banking: How to Manage Risk and Improve Profitability*, *Islamic Banking: How to Manage Risk and Improve Profitability*, 2011, https://doi.org/10.1002/9781118266922; H Şimşek, S Bayindir, and M Ustaoğlu, "Dual Banking Systems' Dynamics and a Brief Development History of Islamic Finance in Select Emerging Islamic Economies," in *Balancing Islamic and Conventional Banking for Economic Growth: Empirical Evidence from Emerging Economies*, 2017, 9–26, https://doi.org/10.1007/978-3-319-59554-2_2; C M Henry and R Wilson, *The Politics of Islamic Finance*, *The Politics of Islamic Finance*, 2019.

[4] A M El Tiby, *Islamic Banking: How to Manage Risk and Improve Profitability*, *Islamic Banking: How to Manage Risk and Improve Profitability*, 2011, https://doi.org/10.1002/9781118266922; H Şimşek, S Bayindir, and M Ustaoğlu, "Dual Banking Systems' Dynamics and a Brief Development History of Islamic Finance in Select Emerging Islamic Economies," in *Balancing Islamic and Conventional Banking for Economic Growth: Empirical Evidence from Emerging Economies*, 2017, 9–26, https://doi.org/10.1007/978-3-319-59554-2_2; C M Henry and R Wilson, *The Politics of Islamic Finance*, *The Politics of Islamic Finance*, 2019.

[5] A M El Tiby, *Islamic Banking: How to Manage Risk and Improve Profitability*, *Islamic Banking: How to Manage Risk and Improve Profitability*, 2011, https://doi.org/10.1002/9781118266922; H Şimşek, S Bayindir, and M Ustaoğlu, "Dual Banking Systems' Dynamics and a Brief Development History of Islamic Finance in Select Emerging Islamic Economies," in *Balancing Islamic and Conventional Banking for Economic Growth: Empirical Evidence from Emerging Economies*, 2017, 9–26, https://doi.org/10.1007/978-3-319-59554-2_2; C M Henry and R Wilson, *The Politics of Islamic Finance*, *The Politics of Islamic Finance*, 2019.

[6] A M El Tiby, *Islamic Banking: How to Manage Risk and Improve Profitability*, *Islamic Banking: How to Manage Risk and Improve Profitability*, 2011, https://doi.org/10.1002/9781118266922; H Şimşek, S Bayindir, and M Ustaoğlu, "Dual Banking Systems' Dynamics and a Brief Development History of Islamic Finance in Select Emerging Islamic Economies," in *Balancing Islamic and Conventional Banking for Economic Growth: Empirical Evidence from Emerging Economies*, 2017, 9–26,

https://doi.org/10.1007/978-3-319-59554-2_2; C M Henry and R Wilson, *The Politics of Islamic Finance*, *The Politics of Islamic Finance*, 2019.

[7] Abdelrhman ElSheimy, "Towards a Genuine Islamic Profit Rate Swap: A Murābaḥah–Wakālah Hybrid Model for Sharīʿah-Compliant Hedging," *International Journal of Islamic Finance and Sustainable Development* 18, no. 1 (March 2026), https://doi.org/10.55188/ijifsd.v18i1.1290.

[8] Martin Rainer, "The Concept of Value : Towards a Consistent Valuation Method for Islamic Financial Engineering," *ISRA International Journal of Islamic Finance* 5, no. 2 (December 2013): 53–81, https://doi.org/10.12816/0002769.

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[11] Mohyi Aldin Abu Al Houl et al., "The Risks of Financial Derivatives and Alternatives from the Viewpoint of Islamic Economics," *International Journal of Professional Business Review* 8, no. 4 (April 5, 2023): e01213, https://doi.org/10.26668/businessreview/2023.v8i4.1213; Azie Farhani Badrol Hisham and Maheran Mohd Jaffar, "Salam Contract With Credit Risk Model By Partial Differential Equation Approach," *Jurnal Teknologi* 78, no. 11 (October 2016), https://doi.org/10.11113/.v78.7295; Shaamirova, Othman, and Tursunov, "A Shari'ah -Compliant Credit Default Swap Model for Enhancing Risk Management in the Sukuk Market."

[12] Azie Farhani Badrol Hisham and Maheran Mohd Jaffar, "A Review on Mathematical Methods of Conventional and Islamic Derivatives," 2014, 308–15, https://doi.org/10.1063/1.4903600; N Nordin et al., "The Islamic Ethical Principles in Commodity Derivatives Contracts," *Journal of Legal, Ethical and Regulatory Issues* 22, no. Special Issue 1 (2019): 1–5.

2 Literature Review

The literature on risk management demonstrates that hedging practices have developed as rational responses to exchange rate volatility, inflation, information asymmetry, and agency costs in the modern financial system.[13] Conventional hedging theory posits that derivative instruments can reduce cash flow risk and enhance firm value.[14] However, from the perspective of Islamic economics, these mechanisms are contentious because most derivative instruments involve elements of gharar and maysir. Therefore, it is necessary to develop a Sharia-compliant hedging model that effectively manages risk while adhering to Sharia principles.

Within this context, the concept of ḥifẓ al-māl in the maqāṣid al-sharīʿah provides the normative foundation for asset value protection (AVP).[15] The literature identifies the protection of wealth as a primary objective that legitimises risk-mitigation efforts. Nevertheless, prior research has emphasized normative justifications for wealth protection, detailing how Sharia-compliant instruments can operationalise asset protection against inflation risks.[16] This gap underscores the necessity of linking asset protection with systematic risk management mechanisms.

Previous research indicates that Aqad Murakkab (Hybrid Contract) and Wa'ad constitute the primary foundations of Sharia-compliant hedging design.[17] Aqad Murakkab refers to a combination of contracts that secures future economic needs based on present agreements, while Wa'ad serves as a commitment to execute a transaction in the future under specified conditions.[18] Previous research generally identifies a causal relationship between Aqad Murakkab and Asset Value Protection, as the contract structure is intended to safeguard the economic value of assets.

Similarly, the relationship between Wa'ad and Asset Value Protection is also causal, since the certainty of future transactions supports the asset's capacity to fulfil planned economic needs.[19] Previous research also suggests that the relationship between Aqad Murakkab and Asset Value Protection is indirect, mediated by the Management of Exchange Rate Risk.[20] Aqad Murakkab provides a contractual mechanism for managing exchange rate exposure prior to the actual transaction.[21] Therefore, the relationship between Aqad Murakkab and Managing Exchange Rate Risk is causal, as is the relationship between Managing Exchange Rate Risk and Asset Value Protection, since exchange rate stability is essential for maintaining an asset's economic function.

The role of Wa'ad in the literature reveals a pattern that is relatively similar. Wa'ad provides certainty regarding the exchange rate to be used when the transaction is executed in the future.[22] This certainty reduces the impact of exchange rate volatility on the financial position of an institution or company.[23]

Therefore, the relationship between Wa'ad and Managing Exchange Rate Risk is causal. Furthermore, the ability to control exchange rate risk strengthens asset value protection; thus, the relationship between Managing Exchange Rate Risk and Asset Value Protection also remains causal. The literature does not indicate a symmetrical or reciprocal relationship, as the direction of influence moves from contractual instruments towards risk management, and then towards asset protection. Meanwhile, inflation risk emerges as a factor influencing the effectiveness of asset protection. Both Islamic monetary literature and empirical research on inflation indicate that sustained price rises can reduce purchasing power and the economic function of assets.

[13] Solikin et al.

[14] Trang Kim and Quang Nguyen, "Non-Financial Firms Hedging Risks in East Asia: The Link Between Financial Derivatives Use, Firm Value and Exposures to Country Risks," in *Handbook of Energy Finance* (WORLD SCIENTIFIC, 2020), 595–650, https://doi.org/10.1142/9789813278387_0025.

[15] Ulm and Hambuckers, "Do Interest Rate Differentials Drive the Volatility of Exchange Rates? Evidence from an Extended Stochastic Volatility Model."

[16] Z Wei et al., "Asymmetric and Nonlinear Effects of Macroprudential Policy Instruments on Bank Stability: New Empirical Evidence from 70 Global Economies," *Applied Economics Letters*, 2025, https://doi.org/10.1080/13504851.2025.2536717.

[17] Ruzita Abdul-Rahim, Adilah Abd Wahab, and Mohammad Hudaib, "The Effects of Foreign Currency Exposure and Sharī'ah-Compliant Status on Financial Hedging Strategy," *International Journal of Islamic and Middle Eastern Finance and Management* 16, no. 2 (March 2023): 323–42, https://doi.org/10.1108/IMEFM-08-2021-0352.

[18] Abdul-Rahim, A. Wahab, and Yusoff, "Impact of Shariah -Compliant Status on Firms' Decision to Practice Forex Hedging."

[19] Azie Farhani Badrol Hisham and Maheran Mohd Jaffar, "A Review on Mathematical Methods of Conventional and Islamic Derivatives," 2014, 308–15, https://doi.org/10.1063/1.4903600; N Nordin et al., "The Islamic Ethical Principles in Commodity Derivatives Contracts," *Journal of Legal, Ethical and Regulatory Issues* 22, no. Special Issue 1 (2019): 1–5.

[20] N.A.Md. Arif et al., "The Impact of Interest Rate Changes on the Islamic Foreign Exchange Forward in the Malaysian Derivative Market," *Jurnal Pengurusan* 56 (2019); N F M Razif, S Mohamad, and N N A Rahman, "Permissibility of Hedging in Islamic Finance," *Middle East Journal of Scientific Research* 12, no. 2 (2012): 155–59, https://doi.org/10.5829/idosi.mejsr.2012.12.2.1679; Azlin Alisa Ahmad and Mustafa Afifi Ab Halim, "The Concept of Hedging in Islamic Financial Transactions," *Asian Social Science* 10, no. 8 (March 2014), https://doi.org/10.5539/ass.v10n8p42.

[21] N.A.Md. Arif et al., "The Impact of Interest Rate Changes on the Islamic Foreign Exchange Forward in the Malaysian Derivative Market," *Jurnal Pengurusan* 56 (2019); N F M Razif, S Mohamad, and N N A Rahman, "Permissibility of Hedging in Islamic Finance," *Middle East Journal of Scientific Research* 12, no. 2 (2012): 155–59, https://doi.org/10.5829/idosi.mejsr.2012.12.2.1679; Azlin Alisa Ahmad and Mustafa Afifi Ab Halim, "The Concept of Hedging in Islamic Financial Transactions," *Asian Social Science* 10, no. 8 (March 2014), https://doi.org/10.5539/ass.v10n8p42.

[22] Azlin Alisa Ahmad, Salmy Edawati Yaacob, and Mat Noor Mat Zain, "The Use of Wa'Dan in Islamic Contract FX Forward: Weighting between Maslahah and Mafsadah," *Asian Social Science* 10, no. 22 (October 2014), https://doi.org/10.5539/ass.v10n22p332.

[23] Thea Vinnicombe, "AAOIFI Reporting Standards: Measuring Compliance," *Advances in Accounting* 26, no. 1 (June 2010): 55–65, https://doi.org/10.1016/j.adiac.2010.02.009.

Within this framework, the relationship between Inflation Risk and Asset Value Protection is better understood as a moderating causal relationship, the higher the inflationary pressure, the greater the need for value-protection mechanisms.[24] In other words, inflation does not directly create asset protection, but it reinforces the urgency of using Aqad Murakkab, Wa'ad, and exchange rate risk management.[25]

Furthermore, a review of the literature reveals a significant research gap. Most studies examine Aqad Murakkab, Wa'ad and Shariah-compliant hedging from the perspective of legal compliance and the validity of contracts, whilst research on the integration of managing exchange rate risk, inflation risk and asset value protection remains very limited.[26] Consequently, the research question that arises is: how can Aqad Murakkab and Wa'ad be designed as a Sharia-compliant hedging framework capable of managing exchange-rate and inflation risk to achieve sustainable Asset Value Protection? Based on this gap, this study argues that the relationships between the variables form an integrated causal chain between *aqad* Murakkab and Wa'ad influence the management of exchange rate risk. The management of exchange rate risk strengthens asset value protection. Inflation risk increases the need for and relevance of such value protection mechanisms.

3 Method

This study employs the qualitative doctrinal conceptual research design, combined with normative juridical and institutional analysis, to construct an integrated hybrid hedging model for Islamic banking in Indonesia.[27] The This research synthesizes risk management theory and conventional hedging theory, which regard derivative-based hedging as a rational response to volatility and financial distress costs, with Islamic jurisprudential principles grounded in *maqāṣid al-sharīʿah*, particularly *ḥifẓ al-māl*, to evaluate the legitimacy and structural limitations of existing *Sharia*-compliant instruments such as waʿad-based forward arrangements and *ṣharfʿ* transactions. The study also incorporates monetary theory and inflation dynamics to contextualize hedging within broader macroeconomic instability, as well as Asset-Liability Management (ALMA) theory to assess currency mismatch and liquidity exposure in Islamic banks.[28] It subsequently formulates a hybrid model that integrates murakkab contracts, real asset anchoring, and liquidity backstop mechanisms. [29]

4 Result and Discussion

4.1 *Sharia* Hedging: Conventional View

Based on relevant data, hybrid contracts function as an institutional mechanism that allows future economic needs to be secured from the present. [30] The structure of these hybrid contracts is not intended to profit from price fluctuations, but rather to ensure that assets or needs to be used in the future remain available at a predictable value [31]. The relationship between hybrid contracts and asset value protection is causal, as the existence of this contractual structure serves as an instrument that directly ensures the value of future needs remains preserved despite changes in market conditions.[32]

The role of hybrid contracts in protecting asset value operates through foreign exchange risk management as an intermediary mechanism. Cross-border business activities expose businesses to exchange rate uncertainty between when funds are

[24] Misbah Khan et al., "How Do Exchange Rate and Oil Price Volatility Shape Pakistan's Stock Market?," *Research in International Business and Finance* 76 (April 2025): 102796, https://doi.org/10.1016/j.ribaf.2025.102796.

[25] Abdullahi D. Ahmed and Hayat Khan, "Impact and Sources of Exchange Rate Exchange Rate Volatility: The Case of Sub-Saharan African Countries," in *Encyclopedia of Monetary Policy, Financial Markets and Banking* (Elsevier, 2025), 404–26, https://doi.org/10.1016/B978-0-44-313776-1.00068-4.

[26] Solikin M. Juhro, Reza Y. Siregar, and Budi Trisnanto, "Exchange Rate Policy and Capital Flow Management," in *Central Bank Policy Mix: Issues, Challenges, and Policy Responses* (Singapore: Springer Nature Singapore, 2022), 51–72, https://doi.org/10.1007/978-981-16-6827-2_4.

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[29] S Aldeia, "The Legal Research Methodology as a Method for Researching in Business Area: A Case Study Applied to Gymnasiums," *Proceedings of the European Conference on Research Methods in Business and Management Studies*, 2024, https://doi.org/10.34190/ecrm.23.1.2545.

[30] Dong, Kouvelis, and Su, "Operational Hedging Strategies and Competitive Exposure to Exchange Rates."

[31] A. Wahab, Abdul-Rahim, and Janor, "Impact of Foreign Exchange Exposure and Shariah-Compliant Status on Malaysian Firms' Hedging Practice."

[32] T Hudima et al., "Stability Without Consensus: Legal Approaches To Stablecoins In The Eu, Uk, Singapore And Japan," *Financial and Credit Activity: Problems of Theory and Practice* 3, no. 62 (2025): 577–88, https://doi.org/10.55643/fcaptp.3.62.2025.4745.

received and when obligations are paid in foreign currency.[33] Hybrid contracts enable transaction arrangements that link current conditions to future foreign currency needs. The relationship between hybrid contracts and foreign exchange risk management is also causal, as the contractual structure serves to control exposure to exchange rate fluctuations before the transaction takes place.[34]

Foreign exchange risk management contributes directly to asset value protection. When exchange rate uncertainty is reduced, the real value of assets set aside to meet future obligations becomes more stable.[35] For example, when organizing Umrah trips, payment requirements in dollars or riyals can be estimated more accurately, ensuring that the funds collected do not lose purchasing power due to exchange rate changes. The relationship between exchange rate risk management and asset value protection also exhibits a causal pattern, as exchange rate stability is a determining factor in an asset's ability to maintain its function in the future.[36]

Inflation risk emerges as a factor influencing the effectiveness of asset value protection. Data show that hedging strategies are not only aimed at addressing exchange rate fluctuations but also at preserving an asset's ability to meet real needs whose value continues to rise.[37] Purchasing building materials at current prices or converting funds into gold for educational needs are forms of protection against future price increases. Inflation is a variable that influences the relationship between risk management and asset protection: the higher the rate of price increases, the greater the need for value-preservation mechanisms.[38]

The interplay of these variables forms an integrated causal pathway. Hybrid contracts provide a mechanism for controlling economic exposure; this control is achieved through exchange rate risk management, while exchange rate stability reinforces an asset's ability to retain its utility over time. Inflation risk heightens the urgency of such protection because rising prices can reduce an asset's ability to meet planned needs.[39] These findings indicate that asset value protection is not merely the result of asset ownership but rather the result of a combination of appropriate contractual arrangements, effective exchange rate management, and anticipation of price increases.[40]

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[33] ElSheimy, "Towards a Genuine Islamic Profit Rate Swap: A Murābaḥah–Wakālah Hybrid Model for Sharīʿah-Compliant Hedging."

[34] ElSheimy.

[35] Trichilli et al., "Hedging Islamic Assets with the Blockchain Halal Index: A Regime-switching Model."

[36] Faruq, "Islamic Banking Sharia Compliance on Currency Transactions."

[37] Ahmed and Khan, "Impact and Sources of Exchange Rate Exchange Rate Volatility: The Case of Sub-Saharan African Countries."

[38] Dinh Trung Nguyen, "Geopolitical Risks and Crypto Exchange Rate Premium: Implications for Capital Flight," *Finance Research Letters* 85 (November 2025): 108287, https://doi.org/10.1016/j.frl.2025.108287.

[39] V Belikoff and V Blazsek, "A Systematisation of Legal-Regulatory Risks Related to Central Bank Digital Currencies: A Comparative Analysis of the US, the UK and China," *Law and Financial Markets Review* 18, no. 2 (2025): 73–101, https://doi.org/10.1080/17521440.2025.2526326.

[40] Nguyen, "Geopolitical Risks and Crypto Exchange Rate Premium: Implications for Capital Flight."

Meanwhile, a *Wa'ad* serves as a commitment instrument that links future transactional needs to current market conditions. Through a promise to conduct a foreign exchange transaction at a future date at a predetermined exchange rate, businesses gain certainty about foreign currency needs that do not yet need to be realized.[41] Therefore, the relationship between *Wa'ad* and asset value protection is causal, as the existence of this commitment ensures that the assets held remain relevant for fulfilling future economic obligations.[42]

Furthermore, the primary function of *Wa'ad* is to manage exchange rate risk. In cross-border transactions, exchange rate uncertainty can lead to significant cost discrepancies between when funds are received and when obligations are paid. *Wa'ad* provides certainty about the exchange rate to be used when the transaction is executed in the future [43]. Thus, the relationship between *Wa'ad* and exchange rate risk management is causal, as this commitment directly mitigates the impact of exchange rate fluctuations on a business's financial position.[44]

The exchange rate risk management achieved through *Wa'ad* subsequently contributes to the protection of asset value. When exchange rates are forecast and controlled in advance, available assets do not have to bear the additional burden of a weakening domestic currency. For businesses with payment obligations in foreign currency, exchange rate certainty ensures that accumulated assets retain sufficient capacity to meet those obligations. Therefore, the relationship between foreign exchange risk management and asset value protection is also causal, as the effectiveness of asset protection is heavily influenced by the ability to control exchange rate volatility.

Furthermore, the findings show that inflation risk continues to influence the need for *Wa'ad*. Although *Wa'ad* is specifically designed to manage exchange rate uncertainty, its ultimate goal remains to preserve the economic value of assets for future use.[45] When the prices of goods and services, or operational costs, rise due to inflation, exchange rate protection becomes increasingly important because currency depreciation and price increases can occur simultaneously. Therefore, inflation reinforces the relevance of using *Wa'ad* in value-preservation strategies.[46]

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[41] Kasri and Zainalabiddin, "Breach Of Wa'd And Its Compensation Payment: A Critical Analysis Of Islamic Profit Rate Swap."

[42] Kasri and Zainalabiddin.

[43] Alisa Ahmad, Edawati Yaacob, and Noor Mat Zain, "The Use of Wa'Dan in Islamic Contract FX Forward: Weighting between Maslahah and Mafsadah."

[44] Alisa Ahmad, Edawati Yaacob, and Noor Mat Zain.

[45] Alisa Ahmad, Edawati Yaacob, and Noor Mat Zain.

[46] Dong, Kouvelis, and Su, "Operational Hedging Strategies and Competitive Exposure to Exchange Rates."

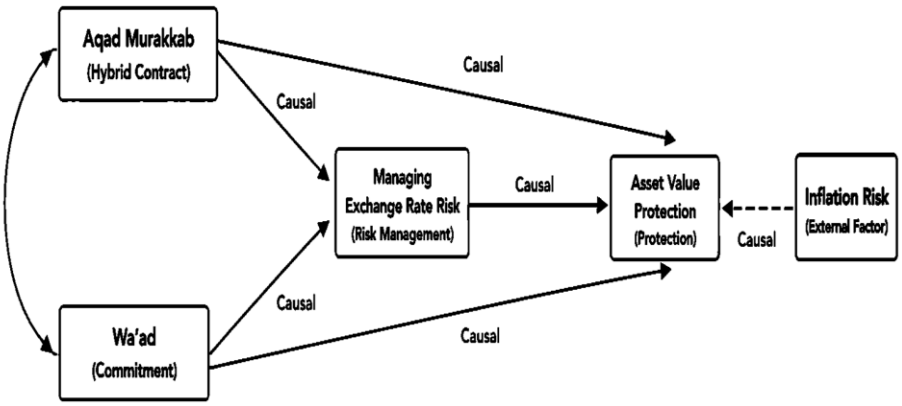

Fig. 1. Traditional Hedging Design

Based on these overall relationships, it can be understood that *Wa'ad* forms a relatively clear causal chain. Commitments to future transactions generate certainty regarding the exchange rate; this certainty strengthens an asset's ability to retain its value; and this ability becomes increasingly important when the economy faces inflationary pressures.[47] In other words, *Wa'ad* not only serves as a means of mitigating exchange rate risk but also acts as an instrument that supports the sustainability of an asset's economic value in the face of future uncertainty. This finding confirms that asset value protection is achieved through a gradual process that begins with a valid *Sharia*-compliant commitment, continues with exchange rate risk management, and culminates in the preservation of an asset's ability to meet planned economic needs.[48]

[47] Trichilli et al., "Hedging Islamic Assets with the Blockchain Halal Index: A Regime-switching Model."

[48] Razif, Mohamad, and Rahman, "Permissibility of Hedging in Islamic Finance."

4.2 *Sharia* Hedging: DSN MUI Perspective

Based on MUI DSN Fatwa No. 96 of 2015, it can be understood that the concept of an *Aqad Murakkab* (hybrid contract) where the object protected in the contract as a *Sharia* hedging contract is not merely money, but the asset's ability to meet real future needs, such as the need to build a house, education costs, or cross-border business needs is established [49]. Thus, the focus of the traditional *Aqad Murakkab* is on asset value protection that is, preserving an asset's economic utility so that it remains capable of fulfilling its intended purpose despite changes in prices or market conditions.[50]

DSN-MUI Fatwa No. 96 of 2015 provides a specific distinction: the murakkab contract is not designed solely to protect against rising commodity prices, as in the concept of traditional hedging, but rather to reduce exposure to exchange rate risk arising from a genuine need for foreign currency.[51] In the DSN-MUI Fatwa, exchange rate risk management is actually the entry point that ultimately results in asset value protection.[52]

Another distinction between traditional hedging strategies and hedging under DSN-MUI Fatwa No. 96 of 2015 is that an *Aqad Murakkab* is understood as a combination of several contractual mechanisms that allow future needs to be secured now by locking in the economic value of an asset.[53]

The DSN-MUI Fatwa defines an *Aqad Murakkab* as a combination of a spot transaction (al-sharf) and *mua'wa'adah* (mutual agreement) to conduct a subsequent spot transaction in the future at a previously agreed-upon amount, currency, and exchange rate.[54] The murakkab design outlined in the fatwa is more operational and regulatory in nature compared to the conceptual asset protection framework found in traditional hedging designs.[55]

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[49] DSN MUI, "Fatwa Dewan Syariah Nasional No. 96/DSN-MUI/IV/2015 Tentang Transaksi Lindung Nilai Syariah (Al-Tahawwuth Al-Islami/Islamic Hedging) Atas Nilai Tukar." (2015).

[50] DSN MUI, "Fatwa Dewan Syariah Nasional No. 28/DSN-MUI/III/2002 Tentang Jual Beli Mata Uang (Al-Sharf)" (2002).

[51] MUI, Fatwa Dewan Syariah Nasional No. 96/DSN-MUI/IV/2015 tentang transaksi lindung nilai syariah (al-tahawwuth al-islami/islamic hedging) atas nilai tukar.

[52] MUI.

[53] MUI.

[54] MUI.

[55] ElSheimy, "Towards a Genuine Islamic Profit Rate Swap: A Murābaḥah–Wakālah Hybrid Model for Sharīʿah-Compliant Hedging."

Table 1. Traditional and Sharia Hedging Design

Traditional Value Protection Design (Hybrid Contract)	DSN–MUI Fatwa No. 96 of 2015 (Shariah Hedging)
Protect the value of assets or future needs from price changes (including inflation).	Mitigate exchange rate risk arising from genuine needs for foreign currency to achieve asset value protection.
Combination of various mechanisms flexible according to needs.	Combination of spot transaction (al-sharf) + muwa'adah to conduct future spot transaction at agreed amount, currency, exchange rate, and time.
Asset protection is the starting point; risk management is an instrument.	Exchange rate risk management is the entry point; asset protection is the final consequence.
General Sharia principles of hedging (traditional practice).	• Fatwa DSN–MUI No. 28 of 2002 (Currency Trading/al-Sharf) • Fatwa DSN–MUI No. 96 of 2015 (Shariah Hedging)
Based on economic needs to preserve future economic value.	• Only for genuine needs (al-hajah al-haqiqiyyah) • Not for speculation or profit from exchange rate fluctuation • Not transferable and full commitment at maturity
Broader: protect against inflation and price changes of commodities and assets.	Limited to exchange rate risk related to: asset–liability imbalance in foreign currency and obligations from Shariah-compliant trade, investment, export–import, Hajj, and Umrah.
Flexible; not specifically tied to spot requirement.	Must comply with al-sharf principles: spot transaction (at-taqabudh) with current rate; settlement max within 3 working days ('urf).
May use forward-like protection based on market practice.	Forward, swap, and option are not allowed; use muwa'adah + phased spot transactions (no maisir, no gharar).
Asset value is preserved to meet future needs.	Exchange rate risk is mitigated in accordance with Shariah, so asset value remains protected to meet future obligations.

The relationship between managing exchange rate risk and asset value protection in traditional hedging is grounded in economic logic. This is because when exchange rate uncertainty is controlled, the real value of assets set aside to meet future obligations becomes more stable.[56] The DSN-MUI fatwa imposes stricter normative restrictions. Exchange rate risk management is permitted only when there is a genuine need (al-hajah al-haqiqiyyah) and must not be conducted for speculative purposes or to profit from exchange rate fluctuations.[57]This distinction indicates that asset protection, according to the DSN-MUI fatwas, must always be based on genuine need, not on trading motives or risk transfer.

[56] DSN MUI, "Fatwa Dewan Syariah Nasional No. 80/DSN-MUI/III/2011 Tentang Penerapan Prinsip Syariah Dalam Mekanisme Perdagangan Efek Bersifat Ekuitas Di Pasar Reguler Bursa Efek" (2011).

[57] MUI, Fatwa Dewan Syariah Nasional No. 96/DSN-MUI/IV/2015 tentang transaksi lindung nilai syariah (al-tahawwuth al-islami/islamic hedging) atas nilai tukar.; MUI, Fatwa Dewan Syariah Nasional No. 80/DSN-MUI/III/2011 tentang penerapan prinsip syariah dalam mekanisme perdagangan efek bersifat ekuitas di pasar reguler bursa efek; MUI, Fatwa Dewan Syariah Nasional No. 28/DSN-MUI/III/2002 tentang jual beli mata uang (al-sharf).

4.3 Discussion

This research findings demonstrate that *Aqad Murakkab* and *Wa'ad* function not only as contractual instruments but also as institutional mechanisms that facilitate Asset Value Protection by managing Exchange Rate Risk.[58] These results extend prior scholarship, which typically conceptualizes hedging exclusively as a tool for mitigating exchange rate volatility. Existing literature characterizes exchange rate risk as arising from disparities in interest rates, inflation, monetary shocks, and global market instability, all of which influence international trade and investment. Nevertheless, previous studies have not addressed how the structure of *Sharia* contracts functions as a causal mechanism connecting risk mitigation to asset value protection.[59]

Additionally, the findings suggest that traditional hedging designs prioritize protecting future needs as a means of safeguarding asset value. In this framework, *Aqad Murakkab* is structured to ensure that future economic requirements are met despite price or inflation fluctuations. Here, Asset Value Protection constitutes the primary objective, with Managing Exchange Rate Risk (M) functioning as a secondary, supportive instrument.[60] This approach is seldom addressed in contemporary hedging literature, which predominantly emphasizes exchange rate stabilization and market risk reduction [61].

In contrast, analysis based on DSN-MUI Fatwa No. 96 of 2015 reveals an alternative theoretical framework. Within *Sharia*-compliant structures, Managing Exchange Rate Risk serves as the primary mechanism that ultimately leads to Asset Value Protection. Accordingly, the causal sequence is *Aqad Murakkab*, Managing Exchange Rate Risk, Asset Value Protection [62]. This finding introduces a theoretical distinction: in the *Sharia* system, asset protection is achieved indirectly through the management of exchange rate exposure, which is constrained by genuine need (al-hajah al-haqiqiyyah).[63]

From a risk management theory perspective, these findings broaden the conceptualization of hedging, which has traditionally been shaped by conventional

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[58] A S A Ditta and D Setiawan, "Risk and Sustainability of Banking Sector Companies in Indonesia," *Global Business and Finance Review* 29, no. 11 (2024): 101–14, https://doi.org/10.17549/gbfr.2024.29.11.101.

[59] Dusuki, "Shari'ah Parameters on the Islamic Foreign Exchange Swap as a Hedging Mechanism in Islamic Finance."

[60] ElSheimy, "Towards a Genuine Islamic Profit Rate Swap: A Murābaḥah–Wakālah Hybrid Model for Sharīʿah-Compliant Hedging."

[61] M Dziamulych et al., "Introduction of Nsfr Ratio in the Activities of Commercial Banks in Ukraine," *Universal Journal of Accounting and Finance* 9, no. 6 (2021): 1544–50, https://doi.org/10.13189/ujaf.2021.090631.

[62] MUI, Fatwa Dewan Syariah Nasional No. 96/DSN-MUI/IV/2015 tentang transaksi lindung nilai syariah (al-tahawwuth al-islami/islamic hedging) atas nilai tukar.; MUI, Fatwa Dewan Syariah Nasional No. 80/DSN-MUI/III/2011 tentang penerapan prinsip syariah dalam mekanisme perdagangan efek bersifat ekuitas di pasar reguler bursa efek; MUI, Fatwa Dewan Syariah Nasional No. 28/DSN-MUI/III/2002 tentang jual beli mata uang (al-sharf).

[63] MUI, Fatwa Dewan Syariah Nasional No. 96/DSN-MUI/IV/2015 tentang transaksi lindung nilai syariah (al-tahawwuth al-islami/islamic hedging) atas nilai tukar.

financial paradigms.[64] The literature asserts that hedging is essential for minimizing the adverse effects of exchange rate volatility on investments, trade, and foreign currency liabilities. However, the present study demonstrates that, within the *Sharia* framework, risk mitigation is intended not only to reduce market uncertainty but also to preserve the economic utility of assets. Consequently, the function of hedging shifts from a focus on risk reduction to an emphasis on preserving asset utility.[65]

A further theoretical innovation emerges in *Wa'ad's* role. Prior research typically characterizes *Wa'ad* as a unilateral promise employed in structuring Islamic FX Forwards, Islamic Profit Rate Swaps, and other *Sharia*h-compliant derivative instruments.[66] The predominant focus has been on ensuring *Sharia* compliance and avoiding *gharar*, *riba*, and *maisir*. In contrast, the present findings suggest that *Wa'ad* fulfills a broader function by serving as a mechanism that links future economic needs to the certainty of current exchange rates, thereby facilitating protection for ting future asset protection.[67]

Accordingly, *Wa'ad* should be understood not solely as a legal or contractual instrument but as a mechanism that generates certainty. Within this model, the exchange rate certainty established by *Wa'ad* acts as a causal factor that enhances an asset's capacity to preserve its utility.[68] The identified causal relationship is *Wa'ad*, Managing Exchange Rate Risk, Asset Value Protection. This structural relationship has not been explicitly articulated in existing literature on Islamic Forward Agreements, which has traditionally prioritized legal compliance over the economic functions of assets.[69]

The research findings indicate that Inflation Risk occupies a distinct position among the variables. Existing literature identifies inflation as a primary driver of exchange rate volatility and diminished purchasing power.[70] However, the present study demonstrates that inflation does not directly facilitate asset protection; rather, it

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[64] Rohmadi Rohmadi et al., "Optimizing Prenuptial Agreements for Asset Protection: A Maqashid Sharia Based Approach," *Al-Istinbath: Jurnal Hukum Islam* 9, no. 2 (September 2024): 411–34, https://doi.org/10.29240/jhi.v9i2.11064.

[65] M Cian, "The Notion of Crypto-Asset in the MiCAR Perspective: From Financial Instrument to Token, and Back Again," *Osservatorio Del Diritto Civile e Commerciale* 11 (2022): 59–78, https://doi.org/10.4478/106700.

[66] Kasri and Zainalabiddin, "Breach Of Wa'd And Its Compensation Payment: A Critical Analysis Of Islamic Profit Rate Swap."

[67] Dong, Kouvelis, and Su, "Operational Hedging Strategies and Competitive Exposure to Exchange Rates."

[68] Ditta and Setiawan, "Risk and Sustainability of Banking Sector Companies in Indonesia"; Dusuki, "Shari'ah Parameters on the Islamic Foreign Exchange Swap as a Hedging Mechanism in Islamic Finance."

[69] MUI, Fatwa Dewan Syariah Nasional No. 96/DSN-MUI/IV/2015 tentang transaksi lindung nilai syariah (al-tahawwuth al-islami/islamic hedging) atas nilai tukar.; MUI, Fatwa Dewan Syariah Nasional No. 80/DSN-MUI/III/2011 tentang penerapan prinsip syariah dalam mekanisme perdagangan efek bersifat ekuitas di pasar reguler bursa efek; MUI, Fatwa Dewan Syariah Nasional No. 28/DSN-MUI/III/2002 tentang jual beli mata uang (al-sharf).

[70] Ahmed and Khan, "Impact and Sources of Exchange Rate Exchange Rate Volatility: The Case of Sub-Saharan African Countries."

heightens the need for protective mechanisms. Thus, Inflation functions as a contextual factor that intensifies the relationship between Managing Exchange Rate Risk and Asset Value Protection.[71]

Theoretically, these findings advance the existing theory of *Sharia*-compliant hedging, which has traditionally focused on exchange rate protection. Previous literature generally conceptualizes Islamic hedging as a mechanism for mitigating exchange rate fluctuation risk in accordance with *Sharia* principles.[72] In contrast, the current research identifies the primary objective of *Sharia*-compliant hedging as preserving an asset's capacity to meet planned economic needs, rather than merely stabilizing exchange rates. Therefore, the exchange rate is positioned as a tool for maintaining the asset's function rather than as an ultimate goal.[73]

A further novel contribution is the identification of the Dual Protection Theory. Traditional hedging strategies address two concurrent threats: fluctuations in commodity prices and inflation [74]. In contrast, the DSN-MUI perspective centers protection on exchange rate risks associated with actual foreign-currency liabilities or receivables.[75] This finding signifies a shift from general value preservation to exchange-rate-based value preservation. This distinction underscores that *Sharia* hedging theory targets a more specific object of protection than traditional hedging frameworks.[76]

Additionally, this study introduces a theoretical model not previously identified in the Integrated *Sharia* Asset Protection Model.[77] This model proposes that asset protection arises not solely from asset ownership or market risk mitigation, but from the causal interaction among *Aqad Murakkab*, *Wa'ad*, Managing Exchange Rate Risk, and Inflation Risk.[78] Consequently, asset value protection is achieved through the integration of *Sharia*-compliant contractual structures, exchange-rate certainty, and proactive management of inflationary pressures.[79]

The principal theoretical implication of this study is the establishment of a new paradigm: Asset Value Protection is achieved through structured *Sharia* mechanisms

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[71] Keefe and Shadmani, "Examining the Asymmetric Monetary Policy Response to Foreign Exchange Market Conditions in Emerging and Developing Economies."

[72] Trichilli et al., "Hedging Islamic Assets with the Blockchain Halal Index: A Regime-switching Model."

[73] International Monetary fund, "Systemic Liquidity Risk: Improving the Resilience of Financial Institutions and Markets," *Global Financial Stability Report Sovereigns*, no. October (2010): 57–83.

[74] N Oefele, D G Baur, and L A Smales, "The Effect of Currency Risk on Crypto Asset Utilization in Türkiye," *Emerging Markets Review* 65 (2025), https://doi.org/10.1016/j.ememar.2025.101264.

[75] MUI, Fatwa Dewan Syariah Nasional No. 96/DSN-MUI/IV/2015 tentang transaksi lindung nilai syariah (al-tahawwuth al-islami/islamic hedging) atas nilai tukar.

[76] MUI.

[77] Rohmadi et al., "Optimizing Prenuptial Agreements for Asset Protection: A Maqashid Sharia Based Approach."

[78] Rohmadi et al.

[79] Trichilli et al., "Hedging Islamic Assets with the Blockchain Halal Index: A Regime-switching Model."

rather than as a secondary outcome of hedging activities.[80] Whereas previous literature has primarily depicted hedging as a risk mitigation tool, the present findings indicate that, within a *Sharia* framework, *Aqad Murakkab* and *Wa'ad* form a causal sequence culminating in Managing Exchange Rate Risk, which in turn preserves the asset's capacity to meet future economic needs in the context of Inflation Risk.[81] The primary innovation of this study is the redefinition of hedging theory from exchange rate protection to *Sharia* Asset Value Protection Theory, which places the preservation of an asset's economic function at the core of *Sharia*-compliant hedging mechanisms.[82]

5 Conclusion

This study concludes that *Sharia* hedging functions not only as a mechanism for exchange-rate protection but also as a comprehensive value-preservation framework that maintains the economic utility of assets for future needs. Within this framework, *Aqad Murakkab* and *Wa'ad* serve as *Sharia*-compliant contractual instruments, enabling economic actors to manage exchange-rate risk and safeguard asset value. Unlike traditional hedging, which primarily seeks to preserve purchasing power against inflation and commodity price fluctuations, the DSN-MUI model emphasizes exchange rate risk mitigation as the central institutional mechanism for asset protection. Consequently, asset value protection is realized through a causal sequence that begins with a valid contractual arrangement, continues with exchange rate stabilization, and ultimately preserves the asset's economic function. Theoretically, this research advances the development of a *Sharia* Asset Value Protection Theory by extending conventional hedging theory beyond exchange rate stabilization to include the preservation of an asset's capacity to fulfil planned economic needs. The findings also establish an integrated causal model linking *Aqad Murakkab*, *Wa'ad*, exchange-rate risk management, inflation risk, and asset-value protection. Practically, these findings provide guidance to Islamic financial institutions, Hajj and Umrah operators, exporters, importers, and investors in formulating *Sharia*-compliant hedging strategies that align with DSN-MUI Fatwa No. 96 of 2015 and are based on genuine economic needs rather than speculative motives. The principal limitation of this research is its conceptual and normative orientation. The proposed causal relationships have not been empirically validated using institutional, banking, or cross-border transaction data, which restricts the generalizability of the findings across economic sectors and jurisdictions.

[80] Razif, Mohamad, and Rahman, "Permissibility of Hedging in Islamic Finance."
[81] Dzhagityan, "Macroprudential Policy in Post-Crisis Banking Regulation."
[82] MUI, Fatwa Dewan Syariah Nasional No. 80/DSN-MUI/III/2011 tentang penerapan prinsip syariah dalam mekanisme perdagangan efek bersifat ekuitas di pasar reguler bursa efek.

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