

REMODELLING MUSHARAKAH MUTANAQISHAH CONCEPT: CASE HOME EQUITY REFINANCING

Oleh

Hardiansyah¹, Septiano Abdillah Baysonni², Wirman³, Ade Wirman⁴, Ade Ananto Terminanto⁵

- *1,2University of Paramadina
- ³University of Singaperbangsa Karawang
- ⁴University of Al Azhar Indonesia
- ⁵UIN Syarif Hidayatullah

Email: *1 hardiansyah@paramadina.ac.id

Article History:

Received: 02-02-2025 Revised: 08-02-2025 Accepted: 05-03-2025

Keywords:

Musharakah Mutanaqishoh, Islamic Finance, Home Equity Abstract: This paper aims to remodel musharakah Mutanaqishah to transform your home equity into real wealth without taking on debt and riba-free, compared with the existing Musharakah Mutanaqishah (MMQ) in the Islamic Financial Institution (IFI) model. This study uses secondary data and Islamic literature. We use simulation data to explain the proposed model. The calculation will be based on the risk-adjusted cost of capital for the capital eligible to finance. The results show that this proposed model through Islamic Finance can be an alternative financing method due to its ease and reliability, especially for Islamic fintech, which has a different business model from banking.

INTRODUCTION

One way to fulfill the liquidity of society's money is by borrowing from others. It could be from both individual and institutional sources. Nevertheless, borrowing activity is not the goal of Islamic Economy itself, because it can create debt, which in some circumstances can be a significant burden to a Muslim and cause disgrace. The Islamic economy is concerned with its maqoshid syariah (Solihah, 2021), which endorses more profit and loss sharing, not debt. With the transformation of technology, Islamic finance, through various models, undoubtedly has the opportunity. (IQBAL et al., 2021; Ismamudi et al., 2023; Putri & Akbary, 2021) and the capability (Ayu Effendi & Wahju Widajatun, 2024)to help achieve this goal (Rabbani et al., 2021).

Islamic financial institutions typically use profit-loss sharing (PLS) models, which provide fairer financing alternatives than traditional loan instruments. (Miah & Suzuki, 2020). According to research, PLS arrangements can reduce the risks of outright borrowing and improve Islamic bank stability. (Widarjono & Mardhiyah, 2022) Unlike traditional Islamic banking home equity refinancing, which often requires regular instalments, this method does not require instalments or any payment unless the contract is due. It can result



in mutually advantageous arrangements in which financial institutions and clients foster a more sustainable economic relationship. (Kulmie & Omar, 2024)

This research aims to demonstrate a new Islamic home equity refinancing model, emphasizing its importance in sustaining strong financial stability. Furthermore, equity models can help to democratize housing financing by addressing the disparities that develop when traditional financial banking practices subject individuals to high-interest repayment requirements (Yusof et al., 2023). Notably, emerging Islamic financial technologies will foster fractional homeownership models that aim to improve affordability and accessibility to productive assets for a broader range of society (Yusof et al., 2023).

LITERATURE REVIEW

Surat Edaran Otoritas Jasa Keuangan says that homeowners can only borrow up to 70 percent. (SEOJK No. 13/SEOJK.03/2017, 2017). The Risk-adjusted ratio finance values this condition between 70% and -100 % of the market value. Table 1 shows the calculation based on risks:

Table 1. Finance to Value for collateral-based financing

Kategori	Bobot Risiko	
(2)	(3)	
FTV ≤ 50%	20%	
50% < FTV ≤ 70%	25%	
70% < FTV ≤ 100%	35%	

Source: Exhibit SEOJK No. 13/SEOJK.03/2018

The Islamic Jurisprudence of Home Equity Refinancing with the MMQ Model

The foundation of this Sharia principle allows this MMQ transaction model to be based on some Al quran and hadith, and Islamic scholars, such as :

"Whenever a partner (syarik) purchased another partner's portion/share/hishshah, it is permissible because he purchased others. (Ibn Qudamah in al-Mughni) (Qudamah, 2007)



"It is impermissible if a partner (syarik) sells his portion/share in the building to someone else (not his partner), but it is permissible if he sells to his partners.(Ibn 'Abidin in Rad al-Muhtar 'ala al- Dural-Mukhtar)('Ābidīn & Ḥaṣkafī, 2011).

عذه المُشَارَكَةُ مَشْرُوعَةٌ فِي الشَّرِيْعَةِ لِإعْتِمَادِهَا -كَالْإِجَارَةِ الْمُنْتَهِيَةِ بِالتَّمْلِيْكِ الْمُشَارِكَةُ مَشْرُوعَةٌ فِي الشِّرِكَةِ بِأَنْ يَبِيْعَ لَهُ حِصَّتَهُ فِي الشِّرِكَةِ إِأَنْ يَبِيْعَ لَهُ حِصَّتَهُ فِي الشِّرِكَةِ إِنَّاءٍ وُجُوْدِهَا تُعَدُّ شِرْكَةَ عِنَانٍ، حَيْثُ إِذَا سَدَّدَ لَهُ قِيْمَتَهَا. وَهِيَ فِيْ أَثْنَاءٍ وُجُوْدِهَا تُعَدُّ شِرْكَةَ عِنَانٍ، حَيْثُ يُسَاهِمُ الطَّرَفَانِ بِرَأْسِ الْمَالِ، وَيَقَوِّضُ الْبَنْكُ عَمِيْلَهُ الشَّرِيْكَ بِإِدَارَةِ الْمَشْرُوعِ. وَبَعْدَ انْتِهَاءِ الشِرْكَةِ يَبِيْعُ الْمَصْرَفُ حِصَّتَهُ للشَّرِيْكِ كُلِّيًا أَوْ الْمَشْرُوعِ. وَبَعْدَ انْتِهَاءِ الشِرْكَةِ يَبِيْعُ الْمَصْرَفُ حِصَّتَهُ للشَّرِيْكِ كُلِّيًّا أَوْ الْمَشْرُوعِ. وَبَعْدَ انْتِهَاءِ الشِرْكَةِ يَبِيْعُ الْمَصْرَفُ حِصَّتَهُ للشَّرِيْكِ كُلِّيًّا أَوْ الْمَشْرُقِةِ الشِّرْكَةِ الشِّرْكَةِ الشِّرْكَةِ.
الْمَعْمِلَةُ المَالِية المعاصرة لوهبة الزحيلي ٢٣٦٤-٤٣٤)
(المعاملة المالية المعاصرة لوهبة الزحيلي ٤٣٦٦)

"Musyarakah mutanaqishah is permissible in shariah, since - as Ijarah Muntahiyaah bi-al-Tamlik--based on the promise of the bank to the customer/partners that the Bank will sell a portion of the ownership, if the partner has paid to the Bank its price portion. Upon contracts, Musyarakah mutanaqishah is considered Syirkah 'Inan since both parties contributed wealth, and the Bank delegated it to its customer/partner to manage the business. After completion, the Bank sells all or part of its portion/share to its partner, with the condition that this sale transaction is done distinctly and unrelated to the Partnership Agreement."

Regulation on sharing home equity and its certificate

Based on PP No.24/1997, article 1, section 20, about land registration, (Republik Indonesia, 1997) A land certificate is a document that shows rights as mentioned in UU No.5/1960 Chapter 19 verse (2) section c, which constitutes the basic regulation on Basic Land Registration Law/Pokok-Pokok Agraria ("UUPA") for rights upon land, land management, endowment/wakaf, rights upon flat housing, and any rights stated in the certificate. (Pemerintah Republik Indonesia, 2004).

Referring to Article 31 section (4) of PP 24/1997, it is possible in the land certificate to state more than one person. There is no restriction on how many names should be allowed as the property owner. Moreover, Article 31 section (5) of PP 24/1997 states that the land title or freehold title of common property can be discharged by as many owners as desired. Furthermore, from an explanatory section of Article 31 section (5) PP 24/1997, we can conclude that each property owner has a freehold title with a mention of the portion of



common property. Therefore, if necessary, each party will quickly establish its legal standing.

METHODOLOGY

The method we use in this paper is a qualitative descriptive method, which involves setting and managing secondary data that is documented and then analyzed qualitatively to have a clear view of the problems we discuss. Besides that, we also used dummy data for the calculation simulation to compare the standard MMQ model with the IFI-MMQ proposed model. In this method, we also assume that homeowners had acquired 100 % ownership of the house. So, they can only use the debt or equity approaches. We calculate the investment return using the following equation to formulate the expected return.

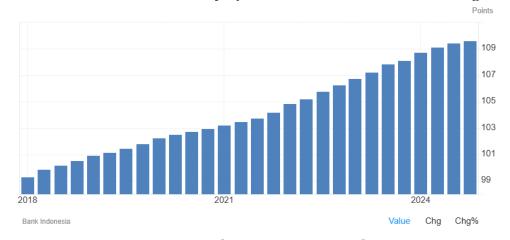
> Total investment return = Rental income + Capital Gain (Loss)

Total Cash if equity is sold = Initial Investment + Total Investment return

Also, simple future value equation: $FV = I * [(1 + R \times T)]$ $PV = FV / (1 + r)^n$

FINDINGS AND DISCUSSION

The bar chart below shows a steady upward trend in Indonesia's Housing Index.



Picture 1. Indonesia Housing Index

Source: Bank Indonesia

Picture 1 above shows the index has increased from below 99 points in 2018 to around 109.65 points by December 2024. This reflects a consistent increase in property prices. indicating growth in the real estate sector, albeit at a moderate pace (Fikri et al., 2023; Ramadhan et al., 2022). YoY (Year-on-Year) growth of property prices is 1.39%, slightly lower than the previous month (1.46%), indicating a deceleration in price growth. The Housing Index rose from 109.44 to 109.65, confirming a positive but marginal monthly increase. This modest improvement indicates a market with steady prices. The moderate expansion rate may indicate that the market is approaching equilibrium rather than beginning an overheating phase caused by speculative demand. (Survati & Rizgiana, 2024). Residential Property Prices mirror the YoY growth rate, reaffirming a slightly slowing yet stable real estate market. These studies demonstrated the impact of structural demand factors, such as population growth and rising labor earnings, on the long-term sustainability



of incremental price increases.

MMQ refinancing: Simulation Proposed remodelling

Simulation with this model starts with the customer undergoing several qualifications, such as: If the customer is considered qualified, as pre-approval, IFI will make a provisional offer of 5-10 % of the current value to purchase a fraction of the customer's home. Then, customers will be asked to complete a full application and provide documentation for IF's underwriting team.

a. Appraiser home Visit (time: 5-8 days)

The term of home appraisal in Sharia, Taqwim al-urudh, plays a critical role in ensuring that asset valuations are aligned with Sharia principles. An asset valued with a particular currency agreed upon by the parties (Hambali & Adhariani, 2023). In this step, customers will choose a time for a licensed and or trusted appraiser, such as KJPP (Konsultan Jasa Penilai Publik), to visit and inspect the customer's tangible assets and intangible points of view, in order to ensure the price is correct or not, by checking the place out. In this step, the customer does not necessarily do cleaning or any rejuvenation activity. This activity, of course, will imply cost and will be charged to customers, typically around (IDR 1,000,000-5,000,000). Once completed, this appraiser's report will be shared, and the appraiser's value is an important component of the final offer. This step is essential because an accurate appraisal ensures that the price determined is justifiable under Sharia law, which emphasizes transaction fairness. (Gani, 2023; Musthafa et al., 2020).

b. Payment transfer. (7-12 days)

After completing all the work, IFI will finalize the offer following the appraisal and receipt of all supporting application documents. Customers will meet with a notary to sign the IFI-Homeowner Agreement. If so, file a Deed of Trust and Memorandum of Option on your property in Local BPN. In the MMQ contract, although the name mentioned in the certificate is on behalf of the customer's name, according to Sharia law, some portion/hishshoh of the asset belongs to IFI. So, both parties must sign an accessory agreement/statement about the mutual partnership and ownership. Once the filings have been confirmed and all documents completed, IFI will electronically transfer the offer funds (minus IFI's processing fee and the escrow fee) to your bank account.

c. Sell the home or repurchase the portion from IFI when the time is right for you, while renting the IF asset's portion (1-10 years)

IFI is paid when customers: i) sell their home, ii) at the end of the term, or iii) during the term, when they choose to buy back, plus renting. Regardless of the timing and master agreement, there is no early buyback penalty. If the customer sells their home within the term, then IFI will be automatically paid from escrow and get the capital gain. If they do not sell, they could buy back IFI's stake during the term at the then-current appraised property value plus rental price. It will be considered prepayment in MMQ if customers prepay faster than the contract's due date; then the customer will only buy back the IF share, without paying the ujrah margin. IFI is paid a fraction of the home's value. This may be due to a lower value than its original investment, or the home has declined significantly.

How it works

The authors did a simulation to see how much a homeowner could get today and how much it would cost. For instance, a customer came with a home value of IDR



300,000,000. Suppose we use the risk-adjusted data from OJK in Figure 1. Since IF shares are on the downside, IFI will impose a Risk Adjustment of up to 20% to offset slight declines in home value and protect its initial investment.

Table 2. Simulation risk-adjusted weighted home value

Category FTV	Risk	weight Risk	x-adjusted
	Adjusted	hon	ne
		Valı	ıe
FTV = 50%</td <td>20 %</td> <td>250</td> <td>,000,000</td>	20 %	250	,000,000
50 FTV 70 %	25 %	240	,000,000
70 < FTV 100 %	35 %	222	,222,222

Source: Author's design

Since we assume that IF will take 20 % of the share, the risk-adjusted home value will become IDR 250,000,000. The expected return (IRR) of home pricing is 20%. Assume an Islamic Financial Institution (IFI) invests IDR 30,000,000 today, with a 5-year contract time to sale or buyback, then we may use the future value formula for simple annual interest:

 $FV = 30,000,000 \times [(1+0,2 \times 5)]$ $FV = 30,000,000 \times [1+1]$ FV = 60,000,000 So expected share = FV/Market Value t_0 = 60,000,000 / 250,000,000 x 100 % = 20 %

In exchange for IDR 30 million for investment today, assume that IFI receives a 20% share in the home's appreciation above the Risk-Adjusted Home Value. The exact share is determined during underwriting. This is only for illustrative purposes and assumes a homeowner with substantial 80 % equity to ease the calculation. The scenario of the market situation based on IDR 250 million home value using the FV formula is as follows:

Table 3. Simulation of Home Value table based on 20-80 % share of home equity

Table 5. Simulation of Home value table based on 20 of 70 share of home equity						
Market Situation	Future	Homeowner	IF	Equality		
	mark	share (80%)	Share	retur		
	et home value		(20%)	n percentage		
	In (IDR)			Rate		
High Growth 40 %	420,000,000	336,000,000	84,000,000	28,6 %		
Average	360,000,000	288,000,000	72,000,000	16,7 %		
Appreciation 20%						
Stagnation 0 %	300,000,000	240,000,000	60,000,000	0 %		
Recession -5 %	285,000,000	228,000,000	57,000,000	-5,2%		

Source: Author's design

Table 3 shows a simulation of future home values based on different market conditions, using an equity-sharing model, the homeowner owns 80% of the home, and 20% is owned by the Islamic Financial Institution (IFI). Based on how the real estate market behaves, the idea is to show how the IFIs' share performs (in profit or loss). This column represents different possible market conditions, which indicate high growth (+40%), average appreciation (+20%), no change (0%), and a recession (-5%). Future Home Market Value



(IDR) is the home's expected value in the future under each market condition. Homeowner Share (80%) represents 80% of the future market value – the portion owned by the homeowner. IFI Share (20%) represents 20% of the future market value – the portion owned by the Islamic finance institution. The Equity Return Percentage Rate shows the gain or loss percentage on the IFI's investment based on future market value.

In this simulation of various market scenarios, we can observe how different conditions affect the Islamic Financial Institution (IFI) returns under an equity-sharing model. In the high-growth scenario, the property value rises significantly by 40%, reaching IDR 420,000,000. As a result, the IFI, holding a 20% stake, receives IDR 84,000,000, earning a substantial return of 28.6%. This demonstrates the benefit of a strong real estate market, where the IFI gains high returns on its investment. In the case of average appreciation at 20%, the property's value increases to IDR 360,000,000, leading the IFI to receive IDR 72,000,000. This results in a 16.7% return—still a favorable outcome, although not as lucrative as the high-growth situation.

However, if the market experiences stagnation, where the property value remains unchanged at IDR 300,000,000, the IFI receives IDR 60,000,000, equal to its initial share value. This results in zero return, indicating neither profit nor loss for the IFI. Finally, during a recession, the property value declines by 5% to IDR 285,000,000. The IFI's 20% share amounts to IDR 57,000,000 in this case, leading to a -5.2% return. This scenario highlights the downside risk, where the IFI incurs a financial loss due to declining market conditions. Overall, these scenarios illustrate how the IFI's profit or loss is directly tied to the real estate market's performance, aligning with the risk-sharing principles of Islamic finance.

Notes that during the recession period scenario, the customer will repay IFI less than what was paid to the customer in the first place, because they share in the losses. Gradual buyback Incentives offer flexible options for the gradual buyback of shares over time rather than a lump-sum settlement at the end. This reduces final-period pressure and spreads out risk. The most anticipated risks that might appear in this contract are:

- 1. Default Risk entails a situation where customers may choose not to fulfill their buyback obligations or opt not to sell the property at the contract's expiration. In Islamic finance, the expectation is that both parties, due to their partnership nature, are responsible for operational outcomes, thereby placing IFIs in a vulnerable position should a client default on these terms (Mardhiyaturrositaningsih, 2022).
- 2. The asset is damaged, increasing maintenance costs, especially if the contract states that the maintenance cost is borne by the sharik/client. Damage or deterioration can thus transform a profitable venture into a liability, necessitating stringent maintenance protocols to mitigate such risks (Zhu et al., 2021).
- 3. Surrender occurs when the customer surrenders to pay in the middle of the contract and will not sell the asset. This causes the IFI to recalculate the profit and return the share to the customer (Endri et al., 2022). This scenario causes earnings to rebalance, forcing the IFI to refund the portion to the consumer, further complicating the financial picture.
- 4. Fluctuations in financial markets cause market risk. It can further burden client repayment capacity, particularly in nations undergoing political instability or economic downturns. It will also influence the assets of the syirkah purchased with foreign currency (Baroroh, 2023).



At the end of the contract (5 years), customers must choose whether to sell the property and repay the share to partners or buy back the shares from their partners, without any rent adjustments. This differs from the common MMQ, so it remodels the MMQ contract.

Mitigation for this approach necessitates that each participant establish a reserve or takaful-based mutual risk fund to absorb potential losses in unfavorable circumstances (such as property depreciation or default), rather than spreading risk across a pool of investments individually. (Jiang & Martek, 2024; Sallemi & Zouari, 2024) Mandatory property insurance also requires homeowners to insure their property against damage or mortality, with IFI as the beneficiary. (Imani & Hikmah, 2022). This protects both parties in the event of a calamity or significant repairs. Regular monitoring and maintenance audits must also be arranged to conduct periodic inspections and report on the property's status. This ensures that maintenance standards are met while also protecting asset value.

CONCLUSIONS

The authors conclude that an important assumption must be established to implement this model. Though it will ease the homeowner's repayment, the underlying asset must possess a market value that tends to appreciate over time. If the asset's market value decreases, the loss must be proportionally borne by both parties involved in the agreement. Moreover, should any party wish to sell their ownership share, the first right of refusal must be granted to the existing partner within the contractual agreement. This ensures the partnership's continuity and safeguards the asset-backed model's integrity. The central logic behind this model is that both benefits and risks are shared, which aligns with the principle of risk-sharing commonly emphasized in ethical finance.

RECOMMENDATIONS

This proposed business model differs fundamentally from traditional Islamic Financial Institution instruments. Upon acquiring the asset, it concurrently becomes part of one's equity, enabling its securitization through equity-backed mechanisms. If liquidity is needed, the owner may unlock their equity by selling shares of the asset, effectively receiving a lump-sum payment today in exchange for sharing the asset's future appreciation. Uniquely, this model is not structured as debt and, therefore, incurs no monthly repayment obligations, positioning it as a partnership rather than a loan. The original owner may also repurchase equity shares based on the prevailing market value. This model is potentially applicable not only to housing, but also to capital assets such as enterprises and gold, provided there are solid assumptions of value appreciation.

REFERENCES

- [1] Ayu Effendi, K., & Wahju Widajatun, V. (2024). Growth of Islamic Fintech in Indonesia. *Journal of Economics, Finance and Management Studies*, 07(06), 3620–3631. https://doi.org/10.47191/jefms/v7-i6-53
- [2] Baroroh, H. (2023). Activity Diversification, Performance, And Profitability In Islamic Banking. *Jurnal Ilmiah Ekonomi Islam*, 9(2), 1920. https://doi.org/10.29040/jiei.v9i2.8098
- [3] Fikri, A. A. H. S., Mustofa, M., Sholeh, M., & Nikensari, S. I. (2023). The Analysis of





- Residential Property Price Bubble and Sharia Bank Financing Using MIDAS Regression Model. International *Finance* and Banking, 10(1),20. https://doi.org/10.5296/ifb.v10i1.20893
- Gani, A. A. (2023). Transformation from Conventional Economics to Sharia Economics: A Conceptual Analysis. *Endless: International Journal of Future Studies*, 6(3), 44–57. https://doi.org/10.54783/endlessjournal.v6i3.199
- Hambali, A., & Adhariani, D. (2023). Sustainability performance at stake during the [5] COVID-19 pandemic? Evidence from Sharia-compliant companies in emerging markets. of Islamic Accounting and Business Research. https://doi.org/10.1108/JIABR-01-2022-0014
- 'Ābidīn, M. A. U. I., & Haskafī, M. A. (2011). Hashiyat ibn 'Abidin: radd al-muhtar 'ala al-[6] Durr al-mukhtar. Dar al-Ma'rifah. https://books.google.co.id/books?id=F7ZvswEACAAJ
- [7] Imani, A. A., & Hikmah, Y. (2022). Experience Study: Effect of Underwriting Methods on Mortality Rate for Life Insurance Product At Pt. ABC (2015-2020 Period). BAREKENG: Ilmu Matematika Dan Terapan, 16(1), 031-040. https://doi.org/10.30598/barekengvol16iss1pp031-040
- [8] IQBAL, M., NADYA, P., & SARİPUDİN, S. (2021). Islamic Fintech Growth Prospects in Accelerating MSMEs Growth: Evidence in Indonesia. International Journal of Islamic Economics and Finance Studies, 126-140. https://doi.org/10.25272/ijisef.857488
- [9] Ismamudi, I., Alcoriza, G. B., Marzuki, M., & Bani, M. (2023). Islamic Fintech and Financial Inclusion: Innovations for Sustainable Economic Empowerment. DEAL: International Iournal of **Economics** and Business. 1(01), https://doi.org/10.37366/deal.v1i01.3303
- [10] Jiang, W., & Martek, I. (2024). Strategies for managing the political risk of investing in infrastructure projects in developing countries. Engineering, Construction and Architectural Management, 31(10), 4079-4098. https://doi.org/10.1108/ECAM-12-2021-1072
- [11] Kulmie, D. A., & Omar, M. M. (2024). The impact of participatory Islamic finance on Shari'ah banks' profitability. Asian Economic and Financial Review, 14(7), 482-496. https://doi.org/10.55493/5002.v14i7.5083
- [12] Mardhiyaturrositaningsih. (2022). Financing Risk in Islamic Banking Before and During the Covid-19 Pandemic. Jurnal Ekonomi Syariah, Akuntansi Dan Perbankan (JESKaPe), 6(2), 303-316. https://doi.org/10.52490/jeskape.v6i2.936
- [13] Miah, M. D., & Suzuki, Y. (2020). Murabaha syndrome of Islamic banks: a paradox or product of the system? *Journal of Islamic Accounting and Business Research*, 11(7), 1363-1378. https://doi.org/10.1108/JIABR-05-2018-0067
- [14] Musthafa, T. F., Triyuwono, I., & Adib, N. (2020). Application of Asset Revaluation By the Public Assessment Office: a Reflection of Sharia Accounting, Shari'Ah Enterprise Theory. *International Journal of Economics, Business and Accounting Research (IJEBAR)*, 4(03), 16-26. https://doi.org/10.29040/ijebar.v4i03.1281
- [15] Pemerintah Republik Indonesia. (2004). Undang-Undang Republik Indonesia Nomor 5 Tahun 1960 Tentang Peraturan Dasar Pokok-Pokok Agraria. Undang-Undang No.5 Tahun 1960, 1, 1-5.
- [16] Putri, V. A., & Akbary, N. M. M. (2021). Islamic Fintech and Indonesian MSMEs during



- the Pandemic. *Sebelas Maret Business Review*, 6(2), 111. https://doi.org/10.20961/smbr.v6i2.56063
- [17] Qudamah, A. A. A. I. (2007). *Al Mughni*. Dar Arlum Al Kutub. https://books.google.co.id/books?id=0-jAoAEACAAJ
- [18] Rabbani, M. R., Bashar, A., Nawaz, N., Karim, S., Ali, M., Rahiman, H. U., & Alam, M. S. (2021). Exploring the Role of Islamic Fintech in Combating the Aftershocks of COVID-19: The Open Social Innovation of the Islamic Financial System. *Journal of Open Innovation Technology Market and Complexity*, 7(2), 136. https://doi.org/10.3390/joitmc7020136
- [19] Ramadhan, F., Setiawan, I., & Marwansyah, M. (2022). *Property Industry and Subsidized Housing Respond to Macroeconomic Factors in Indonesia*. https://doi.org/10.4108/eai.27-7-2021.2316843
- [20] Republik Indonesia. (1997). PP No. 24 Tahun 1997 tentang Pendaftaran Tanah. *Icassp*, 21(3), 295–316.
- [21] Sallemi, N., & Zouari, G. (2024). Effect of external corporate factors on takaful performance. *Asian Journal of Accounting Research*, 9(3), 217–228. https://doi.org/10.1108/AJAR-10-2023-0336
- [22] SEOJK No. 13/SEOJK.03/2017. (2017). Surat Edaran Otoritas Jasa Keuangan No 13/SEOJK.03/2017 tentang Penerapan Tata Kelola Bagi Bank Umum. *Otoritas Jasa Keuangan*, 31.
- [23] Solihah. (2021). Maqashid Sharia in Islamic Economics and Finance Research. *Journal of Islamic Economic Literatures*, 2(1). https://doi.org/10.58968/jiel.v2i1.31
- [24] Suryati, S., & Rizqiana, Z. D. (2024). Detection and forecasting of housing price bubbles in Indonesia, Malaysia, and Singapore. *Indonesian Journal of Islamic Economics Research*, *5*(2), 122–136. https://doi.org/10.18326/ijier.v5i2.9783
- [25] Widarjono, A., & Mardhiyah, Z. (2022). Profit-Loss Sharing Financing and Stability of Indonesian Islamic Banking. *International Journal of Islamic Business and Economics* (IJIBEC), 6(1), 1–16. https://doi.org/10.28918/ijibec.v6i1.4196
- [26] Zhu, Z., Kong, L., Aisaiti, G., Song, M., & Mi, Z. (2021). Pricing contract design of a multi-supplier, multi-retailer supply chain in a hybrid electricity market. *Industrial Management & Data Systems*, 121(7), 1522–1551. https://doi.org/10.1108/IMDS-09-2020-0543
- [27] Yusof, R. M., Zainuddin, Z., Musaddad, H. A., Harun, S. L., & Rahim, M. A. A. A. (2023). Democratizing Islamic home financing and reimagining the fractional homeownership model: a conceptual framework via big data and blockchain technology. Journal of Islamic Accounting and Business Research, 16(2), 273-304. https://doi.org/10.1108/jiabr-02-2022-0033.