Journal of Universal Community Empowerment Provision

Vol. 5, Issue 2, 2025

Page 60-67

DOI: https://doi.org/10.55885/jucep.v5i2.595

Implementation of Principles, Innovations, and Challenges in the Development of Islamic Finance in Indonesia

Sahid Wahid¹, Abdul Wahid Haddade¹, Abdul Syatar¹

¹Postgraduate Program of Alauddin State Islamic University Makassar, Indonesia Corresponding Author: sahidwahid099@gmail.com

Abstract. Islamic finance is an alternative economic system that is growing rapidly in Indonesia, based on Islamic principles such as the prohibition of usury, fairness in transactions, transparency, and social responsibility. This paper examines the main principles of the Islamic financial system, including the prohibition of usury and gharar, as well as the application of ethical and moral values in financial activities. In addition, this article also discusses various innovative Islamic financial products such as sukuk, microfinance, and Islamic insurance, which are designed to meet the needs of the community while still upholding Islamic principles. Despite significant growth, this industry still faces a number of challenges, including limited regulations that support innovation, low public literacy, tight competition with conventional systems, and a lack of competent human resources. Through a descriptive-analytical approach, this study shows that consistent application of Islamic principles, adaptive regulatory support, and increasing human resource capacity are the keys to strengthening and sustaining the Islamic financial system in Indonesia. This research is expected to be an academic contribution to the development of more inclusive and sustainable Islamic economic theory and practice.

Keywords: Islamic Finance, Product Innovation, Regulation

Received: February 10, 2025 Received in Revised: March 13, Accepted: April 26, 2025

2025

INTRODUCTION

The Islamic finance industry in Indonesia has become increasingly significant as a response to the growing demand for ethical, inclusive, and religion-compliant financial systems. Amidst global concerns regarding financial inequality, speculative practices, and the socioeconomic repercussions of conventional finance, Islamic finance has emerged as an alternative paradigm that integrates faith-based principles with economic functionality. This growth is not merely a reflection of demographic trends in a Muslim-majority nation, but a broader manifestation of a societal shift toward finance that aligns with spiritual, ethical, and social justice considerations (Yulitasari et al., 2024). Islamic finance, therefore, should not be understood solely as a religious obligation, but as a comprehensive response to structural economic issues such as financial exclusion, systemic inequity, and short-termism that affect Indonesia's socio-economic landscape.

Conceptually, Islamic finance rests on a framework deeply rooted in Shariah, emphasizing justice ('adl), mutual consent (ridha), transparency, and the avoidance of exploitative elements such as riba (usury), gharar (uncertainty), and maysir (gambling/speculation). These prohibitions are not simply theological prohibitions, but reflect a critical economic philosophy

ISSN: 2776-1142 (online) ISSN: 2776-1134 (print)
Copyright © 2025, Journal of Universal Community Empowerment Provision, Under the license CC BY-SA 4.0

that challenges extractive financial models and encourages real economic activity supported by risk-sharing mechanisms. For instance, the principle of profit-and-loss sharing as seen in mudharabah and musharakah contracts requires financial institutions to engage in the outcomes of productive ventures, rather than simply transferring risk to borrowers (Muttaqin, 2024; Pangestu, 2023). The legal codification of these principles in national frameworks, such as Law No. 21 of 2008 on Islamic Banking, demonstrates the Indonesian government's commitment to institutionalizing Islamic economic values. However, the translation from normative doctrine to operational practice remains uneven, due to regulatory, educational, and infrastructural challenges that persist in the industry.

Against this backdrop, Indonesia has introduced a variety of Shariah-compliant financial instruments to meet the diverse financial needs of its population. Innovations such as sukuk (Islamic bonds), Shariah microfinance, and takaful (Islamic insurance) are not only tools of compliance but also mechanisms to promote economic empowerment, financial inclusion, and ethical investment. These products aim to facilitate access to finance for underserved communities, particularly micro, small, and medium-sized enterprises (MSMEs), which form the backbone of the Indonesian economy. However, despite their promise, the adoption and impact of these instruments are constrained by several systemic issues: rigid or outdated regulatory frameworks, limited public literacy on Shariah finance, lack of financial product diversity, and a shortage of human capital equipped with both technical and religious competence (Norrahman, 2023; Wartoyo, 2021). These limitations reduce the sector's competitiveness, particularly when juxtaposed with the more mature and flexible conventional financial system.

Moreover, the rapid digitalization of financial services has introduced both opportunities and risks for Islamic finance in Indonesia. On one hand, financial technologies (fintech) offer potential to expand outreach, reduce operational costs, and tailor products to individual needs. On the other hand, the absence of a robust Shariah-compliant regulatory framework for fintech-based services raises concerns about Shariah adherence, consumer protection, and institutional trust. There is a critical need to bridge the gap between innovation and Islamic legal principles in order to ensure that technological advancement does not compromise religious and ethical commitments. As Razak (2023) notes, without agile and context-sensitive regulation, innovation may remain stifled or, worse, drift from Islamic legal foundations.

Given these tensions between principle and practice, regulation and innovation, ethics and competition this study aims to provide a comprehensive descriptive-analytical review of the development of Islamic finance in Indonesia. It focuses on three central dimensions: the operationalization of Islamic financial principles, the emergence and performance of innovative Shariah-based financial products, and the regulatory and human capital challenges that shape the sector's trajectory. By critically examining the interaction between normative ideals and institutional realities, this research seeks to contribute to the broader discourse on how Islamic finance can evolve into a more sustainable, equitable, and context-responsive system. Ultimately, the paper underscores the importance of aligning spiritual and ethical foundations with policy design and market mechanisms in the quest for a more just financial order.

METHODS

This study adopts a qualitative research approach with a descriptive-analytical design, aimed at providing an in-depth exploration of the principles, innovations, and institutional challenges in the development of Islamic finance in Indonesia. The qualitative paradigm is particularly suitable for this research, as it facilitates interpretive analysis of non-numeric data such as legal texts, policy documents, religious doctrines, and scholarly literature. The focus is not on statistical generalization but on conceptual understanding and normative evaluation. To guide the investigation, the study employs two complementary analytical lenses: the normative approach and the theoretical approach. The normative approach is used to examine Islamic financial principles as derived from foundational sources such as the Qur'an, Hadith, and classical fiqh literature, as well as national legislation such as Law No. 21 of 2008 on Islamic Banking. This

approach allows the researcher to evaluate how well the existing legal and institutional frameworks align with the ethical and jurisprudential requirements of Islamic economics. Meanwhile, the theoretical approach is used to analyze the institutional development, product innovation, and regulatory dynamics of Islamic finance in Indonesia. Concepts from Islamic economic theory such as risk-sharing, asset-backed finance, and maqāṣid al-sharī'ah (the higher objectives of Islamic law) serve as analytical tools for understanding how Islamic financial institutions operate in practice and how they respond to modern economic and technological challenges. Data for this research were obtained through an extensive review of secondary sources, including peer-reviewed journal articles, government policy papers, Islamic finance regulatory guidelines, and reports from institutions such as the National Sharia Council (DSN-MUI), the Financial Services Authority (OJK), and Bank Indonesia. The collected materials were subjected to qualitative content analysis, in which key themes such as regulatory barriers, public literacy, ethical investment, and institutional capacity were identified and critically interpreted within the context of Indonesia's financial and socio-religious environment.

RESULTS AND DISCUSSION

Sharia Principles in Economics

Prohibition of Usury

The prohibition of usury is one of the main pillars of Islamic finance (Pusvisasari et al., 2023). Usury, which literally means additional or interest, is strictly prohibited in Islam because it is considered a form of exploitation that is detrimental to one party. Align with research from Afifah & Khotimah (2023), in the context of finance, usury can be interpreted as taking advantage of a loan that exceeds the principal amount borrowed. The practice of taking or giving additional in financial transactions that are not based on the principles of justice and reciprocal balance (Semmawi, 2010). In the context of the Islamic financial system, this prohibition is not only a religious moral teaching, but has also been normatively accommodated in the national legal framework through the Islamic Banking Law. Usury is seen as contradicting the values of justice because it involves unilateral profit without any real contribution to the risk or work in the transaction (Muttaqin, 2024).

The prohibition of usury in the Islamic banking system is not only limited to the direct prohibition of interest, but also includes structural aspects in determining profits from financing and investment activities. In the framework of Islamic economics, the profit obtained from a transaction must reflect real participation in bearing the risk and responsibility that is commensurate among the parties involved. This is different from the conventional system which relies on fixed interest without considering productive contributions. Therefore, Islamic financial institutions are required to establish a profit-sharing scheme that is in line with the principles of justice and proportionality as mandated in the principles of Islamic economics (Ismiati, 2025).

Thus, the prohibition of usury is not only a formal legal provision, but reflects the basic values in Islamic economics that emphasize justice, sustainability, and inclusiveness. In Islamic banking practices, a complete understanding of this concept is essential to ensure the operational conformity of financial institutions with Islamic principles and Islamic ethical values (Kasim & Bukido, 2018).

Principle of Justice and Balance

According to Wijandari (2024), the principle of justice and balance is a key pillar in the formulation and development of Islamic financial products. Islam demands that every transaction be based on the principle of justice, so that no party experiences losses or inequality in economic relations. This value is deeply rooted in the teachings of the Qur'an, which explicitly calls for the enforcement of justice in all aspects of life, including in financial activities. The verse that emphasizes this is Surah Al-Ma'idah verse 8, which calls on believers to be upholders of justice for the sake of Allah. Therefore, the principle of justice not only functions as an ethical guideline, but also becomes a normative basis in the legal structure of figh muamalah. This is reflected in

the Islamic Banking Law, which emphasizes the application of a risk and profit sharing system. This principle emphasizes the importance of proportional and fair risk distribution among all parties involved in an economic transaction, so that an equal relationship is created and does not harm either party. As well as the distribution of profits in line with the contributions and responsibilities of each party (Haikal et al., 2024). This aims to create a more inclusive, fair, and sustainable economic system.

Principles of Ethics and Morality

The principles of ethics and morality in Islamic finance serve as a foundation for creating a financial system that not only prioritizes profit, but also pays attention to moral and social aspects. In Islam, every action must be based on high ethical values, including honesty, responsibility, and concern for others. According to Permana & Nisa (2024), this principle is reflected in various teachings of the Qur'an and Hadith which emphasize the importance of behaving well in every transaction. For example, prohibitions can include investments in the alcohol, gambling, and weapons industries, which are considered to violate Islamic moral values and can have a negative impact on society. In its implementation, Islamic financial institutions are required to apply high standards in the investment decision-making process. This commitment includes the obligation to not only consider the financial profit aspect alone, but also to prioritize the allocation of funds to sectors that have a positive impact on social welfare and environmental sustainability (Mika, 2024). This approach is in line with the principle of moral and social responsibility inherent in the Islamic economic system. Development and maintenance of ethical and responsible investment policies, as well as active involvement in supervision and control to ensure that every investment made complies with the principles of Islamic economics and Islamic moral values.

Prohibition of Gharar

Gharar refers to unclear or ambiguous transactions, which can lead to injustice and disputes between the parties involved (Affero & Mustofa, 2024). In the context of Islamic finance, transactions involving gharar are not permitted because they can pose unacceptable risks in Islam. Overall, the principle of prohibition of gharar serves as a guide in creating Islamic financial products that are not only in accordance with the Shari'a, but also provide certainty and fairness to all parties involved. By minimizing the element of uncertainty, the Islamic finance industry can build a strong reputation and attract more customers who are looking for ethical and transparent financial solutions.

Innovative Islamic Finance Products

The implementation of fiqh principles in Islamic financial products is a crucial step to ensure that all products offered are in accordance with Islamic law (Putri & Ansori, 2024). This process involves an in-depth analysis of every aspect of the product, from the structure of the contract to the risks involved. With the presence of supervisory institutions such as the National Sharia Council (DSN) and the Indonesian Ulema Council (MUI), Islamic financial institutions can ensure that every product offered has gone through a strict verification process. One example of the implementation of fiqh principles is in Islamic financing products based on the murabahah contract (Lathif, 2013). In this product, Islamic banks buy goods desired by customers and sell them at an agreed price, without any usury elements. Sukuk is a sharia financial instrument that has grown rapidly in Indonesia in recent years. This Sukuk not only functions as a fundraising tool, but also as an investment instrument that is in accordance with Islamic principles (Rahman et al., 2021).

Before the presence of sukuk instruments, both in the form of states and corporations, financing mechanisms were generally carried out through the issuance of bonds or Government Debt Securities (SUN) based on conventional systems. The limited availability of sharia-compliant instruments has encouraged the birth of sukuk as an alternative financing that is free from usury (Affandi et al., 2024). Over time, the existence of sukuk has shown significant development,

marked by increasing investor interest since its initial issuance, which was greeted with high enthusiasm as a form of response to the need for financial instruments that are in accordance with Islamic principles. In this context, sukuk can be viewed as a representation of ownership of the underlying assets, which provide returns to its holders according to the performance of the assets. Sharia Microfinance is one of the innovative sharia financial products that has great potential in empowering the community, especially among micro, small, and medium enterprises (MSMEs). Sharia microfinance is present as a solution to meet the capital needs of MSMEs who often have difficulty getting access to financing from conventional financial institutions.

One successful example of sharia microfinance in Indonesia is the financing program implemented by BMT (Baitul Maal wa Tamwil). BMT has succeeded in providing financing to thousands of MSMEs by implementing sharia principles, such as murabahah and mudharabah. With this financing model, business actors can access capital at a lower cost compared to conventional loans, and avoid usury which is prohibited in sharia. This not only helps MSME actors to develop their businesses, but also improves the welfare of society as a whole. Sharia insurance is a financial product that is increasingly popular in Indonesia, along with increasing public awareness of the importance of risk protection. One form of innovation in sharia insurance is the development of micro insurance products, which are aimed at low-income communities. This product offers protection with affordable premiums, so that it can be accessed by more people.

Challenges in Developing Innovative Islamic Financial Products

Government Regulations and Policies

The development of Islamic financial products in Indonesia cannot be separated from existing government regulations and policies (Firman, 2019). The government has an important role in creating a legal framework that supports the growth of this industry. However, existing regulations are often considered inadequate and do not fully support innovation. For example, Law Number 21 of 2008 concerning Islamic Banking provides a legal basis for the operation of Islamic banks, but aspects related to innovation in Islamic financial products have not been fully regulated. Regulations that are too strict can hinder the creativity of industry players in creating new products. For example, in the development of Islamic fintech, many business actors are hampered by inflexible provisions. According to Razak (2023), existing regulations need to be evaluated and adjusted in order to provide space for innovation without sacrificing Islamic principles. The importance of collaboration between the government, regulators, and industry players also cannot be ignored. With constructive dialogue, more adaptive regulations can be produced, so that they can encourage the growth of innovative Islamic financial products. On the other hand, regulatory challenges also include the need for harmonization between Islamic and conventional regulations.

Public Perception

Public perception of Islamic financial products is one of the main challenges in its development (Tuzuhro & Rozaini, 2023). Although Indonesia is the country with the largest Muslim population in the world, many people still have a lack of understanding of Islamic financial products. One of the factors that influences public perception is the lack of clear and accurate information about these products. Many people still think that Islamic financial products are only for certain groups, even though these products are designed for all levels of society. For example, Islamic microfinance products aimed at small and medium enterprises (SMEs) are not yet widely known by the public, even though they have great potential to empower the local economy.

Competition with Conventional Financial Products

According to Norrahman (2023), competition between Islamic and conventional financial products is a significant challenge in the development of innovative Islamic financial products. Conventional financial products have been around longer and have advantages in terms of brand

awareness and market penetration. One of the factors that makes conventional products more attractive to the public is the ease of access and variety of products offered. Many conventional banks already have an established system and offer a variety of products that suit the needs of the community, such as loans, savings, and investments. On the other hand, Islamic financial products are often considered limited in terms of choice and features, which can make people reluctant to switch.

Human Resource Limitations

The limited number of competent human resources (HR) in the Islamic financial industry is a significant challenge in developing innovative Islamic financial products. Although the demand for Islamic financial products is increasing, the number of workers who have a deep understanding of Islamic principles and finance is still limited. This limitation can hinder innovation because untrained workers may not be able to develop products that are in accordance with Islamic principles. In addition, a lack of understanding of regulations and best practices in the Islamic financial industry can lead to errors in product development, which in turn can harm the reputation of Islamic financial institutions. To overcome this challenge, there needs to be a training and education program that is more focused on developing HR in the Islamic financial sector. Islamic financial institutions can collaborate with universities and educational institutions to develop curricula that are in line with industry needs.

CONCLUSION

The development of Islamic finance in Indonesia is rooted in the basic principles of Islam, which include the prohibition of usury, justice, ethics, and the prohibition of gharar. These principles are not only normative-religious in nature, but have also been adopted in the framework of positive law, as stated in the Islamic Banking Law. The prohibition of usury emphasizes the importance of fair and exploitation-free transactions, while the principles of justice and balance demand a proportional distribution of risks and profits. In addition, the dimensions of ethics and morality in Islamic economics strengthen the role of finance as a social instrument, not merely a means of capital accumulation, by avoiding investment in sectors that are detrimental to society. The implementation of these principles has resulted in a variety of innovative Islamic financial products such as sukuk, microfinance, and Islamic insurance. Innovation in Islamic-based financial products not only offers an alternative to the conventional system, but also expands financial inclusion, especially among MSMEs and low-income communities. However, the development of this product still faces a number of significant challenges, including limited adaptive regulations, low public literacy in Islamic finance, tight competition with conventional products, and a lack of human resources who understand both Islamic principles and modern financial practices. To answer these challenges, synergy is needed between the government, financial institutions, regulators, and educational institutions in creating an ecosystem that supports the sustainable growth of Islamic finance. With a holistic approach and orientation towards Islamic values, the Islamic finance industry has great potential to become the foundation of a fairer, more ethical, and more inclusive economic system in Indonesia.

REFERENCES

- Affandi, F., Harahap, I., & Nawawi, Z. M. (2024). Islamic banking and sukuk as alternative financing sources in development. *Jurnal Syarikah: Jurnal Ekonomi Islam*, 10(1), 137-147. https://doi.org/10.30997/jsei.v10i1.11597
- Affero, M. I., & Mustofa, I. (2024). Dinamika Konsep Gharar dalam Transaksi Keuangan Perspektif Ulama Fikih Klasik. *Ma'mal: Jurnal Laboratorium Syariah dan Hukum*, *5*(5), 477-497. https://doi.org/10.15642/mal.v5i5.383
- Afifah, Y., & Khotimah, K. (2023). Menggali Konsep Riba Dan Implikasinya Dalam Pertumbuhan Perekonomian Umat. *Jurnal Ilmiah Ekonomi Dan Manajemen*, 1(2), 151-161. https://doi.org/10.61722/jiem.v1i2.94

ISSN: 2776-1142 (online) ISSN: 2776-1134 (print)
Copyright © 2025, Journal of Universal Community Empowerment Provision, Under the license CC BY-SA 4.0

- Firman, R. N. (2019). Laju Percepatan Perkembangan Perbankan Syariah Melalui Penerapan Tata Kelola Syariah. *Journal of Sharia Economics*, 1(2), 165-182. https://doi.org/10.35896/jse.v1i2.75
- Haikal, M., Akbar, K., & Efendi, S. (2024). Prinsip-Prinsip Hukum Ekonomi Syariah Dalam Undang-Undang Perbankan Syariah. *MAQASIDI: Jurnal Syariah Dan Hukum*, 26-39. https://doi.org/10.47498/maqasidi.v4i1.2988
- Ismiati, B. (2025). Implementation of Maqâshid Al-Shari'ah in The Profit Distribution System of Islamic Banking in Indonesia. *Citizen: Jurnal Ilmiah Multidisiplin Indonesia*, *5*(3), 735-746. https://doi.org/10.53866/jimi.v5i3.841
- Kasim, S. R., & Bukido, R. (2018). Urgensi Hukum Kepatuhan Syariah Dalam Perbankan Syariah Di Indonesia. *Potret Pemikiran*, 22(2). http://dx.doi.org/10.30984/pp.v22i2.781
- Kelibia, M. U., Mardiansyah, H., & Utama, L. (2025). Penerapan Asas Personalitas Keislaman dalam Proses Penyelesaian Sengketa Perbankan Syariah Pasca Putusan Mahkamah Konstitusi Nomor 93/PUU-X/2012. *Jurnal Kolaboratif Sains*, 8(4), 1971-1977. https://doi.org/10.56338/jks.v8i4.7318
- Lathif, A. A. (2013). Konsep dan aplikasi akad murabahah pada perbankan syariah di Indonesia. *AHKAM: Jurnal Ilmu Syariah*, 12(2). http://dx.doi.org/10.15408/ajis.v12i1.967
- Mika, F. (2024). *Investasi Sosial Corporate Social Responsibility Menurut Perspektif Social Return on Investment (SROI): Suatu Strategi Analisis Konten* (Doctoral dissertation, Universitas Hasanuddin).
- Muttaqin, M. Z. (2024). Implementasi E-Money Dalam Perspektif Hukum Ekonomi Syariah: Analisis Prinsip Dan Kepatuhan Syariah. *Innovative: Journal Of Social Science Research*, 4(5), 6371-6380. https://doi.org/10.31004/innovative.v4i5.15747
- Norrahman, R. A. (2023). Peran Fintech Dalam Transformasi Sektor Keuangan Syariah. *JIBEMA: Jurnal Ilmu Bisnis, Ekonomi, Manajemen, dan Akuntansi*, 1(2), 101-126. https://doi.org/10.62421/jibema.v1i2.11
- Pangestu, D. A. (2023). *Penggunaan teknologi blockchain dalam transaksi keuangan syari'ah* (Doctoral dissertation, Universitas Islam Indonesia).
- Permana, Y., & Nisa, F. L. (2024). Konsep Keadilan Dalam Perspektif Ekonomi Islam. *Jurnal Ekonomi Syariah Darussalam*, 5(2), 80-94. https://doi.org/10.30739/jesdar.v5i2.3072
- Pusvisasari, L., Bisri, H., & Suntana, I. (2023). Analisis Filosofi dan Teori Hukum Ekonomi Syariah dalam Konteks Perbankan Syariah. *Jurnal Ekonomi Utama*, 2(3), 269-277. https://doi.org/10.55903/juria.v2i3.125
- Putri, L., & Ansori, M. (2024). Implementasi Indeks Maqashid Syariah dalam Penilaian Kinerja Operasional di BMT Alhikmah Semesta. *Jurnal Masharif Al-Syariah: Jurnal Ekonomi Dan Perbankan Syariah*, 9(4). https://doi.org/10.30651/jms.v9i4.23199
- Rahman, M. I. F., Nurwahidin, N., & Adnan, N. (2021). Analisis Model Cash Waqf Linked Sukuk (CWLS) Sebagai Instrumen Pembiayaan Pemulihan Dampak Pandemi Covid-19: An Analysis of Cash Waqf Linked Sukuk (CWLS) Model as a Financing Instrument for Economic Recovery from Covid-19 Pandemic Impact. *Jurnal Bimas Islam*, 14(1), 77-102. https://doi.org/10.37302/jbi.v14i1.343
- Razak, A. (2023). Reformulasi Pemimpin Usia Muda Sebagai Calon Presiden dan Wakil Presiden: Tinjauan Ius Constituendum. *Risalah Hukum*, 19(2), 61-75. https://doi.org/10.30872/risalah.v19i2.1339
- Semmawi, R. (2010). Urgensi Akad Dalam Hukum Ekonomi Islam. *Jurnal Ilmiah Al-Syir'ah*, 8(2). http://dx.doi.org/10.30984/as.v8i2.23
- ISSN: 2776-1142 (online) ISSN: 2776-1134 (print)
 Copyright © 2025, Journal of Universal Community Empowerment Provision, Under the license CC BY-SA 4.0

- Tuzuhro, F., & Rozaini, N. (2023). Perkembangan Perbankan Syariah Diindonesia. *PEKA*, *11*(2), 78-87. https://doi.org/10.25299/peka.2023.vol11(2).15010
- Wartoyo, W. (2021). Akselerasi Petumbuhan Ekonomi Syariah Dalam Konteks Politik Ekonomi Di Indonesia. *PROFIT: Jurnal Kajian Ekonomi dan Perbankan Syariah*, 5(2). https://doi.org/10.33650/profit.v5i2.3269
- Wijandari, A. (2024). Memahami Makna Maqashid Syariah dalam Merancang Tujuan Laporan Keuangan. *Jurnal Pajak dan Bisnis (Journal of Tax and Business)*, 5(1), 27-34. https://doi.org/10.55336/jpb.v5i1.143
- Yulitasari, L., Putri, M. E., & Madnasir, M. (2024). Paradigma ekonomi Islam dan perkembangan ekonomi umat di Indonesia. *Perbanas Journal of Islamic Economics and Business*, 4(1), 14-23. https://doi.org/10.56174/pjieb.v4i1.212