

## Navigating Stock Analysis with Artificial Intelligence: An Islamic Economic Approach to Mitigate *Gharar* and *Maysir*

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### ABSTRAK

#### Kata kunci:

Kecerdasan Buatan,  
Analisis Saham,  
Ekonomi Islam,  
*Gharar*, *Masyir*.

Meningkatnya minat masyarakat Indonesia terhadap investasi saham, khususnya saham syariah, mendorong kebutuhan akan analisis yang cermat dan sesuai dengan prinsip Islam. Di sisi lain, perkembangan teknologi Artificial Intelligence (AI) menawarkan potensi besar dalam analisis pasar modal, namun kurangnya penelitian mendalam menimbulkan pertanyaan tentang kesesuaianya dengan prinsip syariah. Penelitian ini menggunakan metodologi deskriptif kualitatif dengan pendekatan tinjauan pustaka, mengumpulkan data dari berbagai sumber sekunder seperti artikel jurnal, buku, dan publikasi online yang relevan. Penelitian ini bertujuan untuk: (1) mengkaji analisis saham dari perspektif ekonomi Islam, (2) menganalisis peran AI sebagai alat analisis saham, dan (3) mengeksplorasi perspektif ekonomi Islam terhadap analisis saham berbasis AI. Hasil penelitian menunjukkan bahwa AI berpotensi meningkatkan efisiensi dan akurasi dalam menganalisis saham syariah. Namun, investor wajib mengidentifikasi dengan cermat dan memahami karakteristik AI yang digunakan untuk mencegah praktik *gharar* (ketidakpastian) dan *maysir* (spekulasi berlebihan). Penelitian ini penting dalam konteks multidisiplin karena menjembatani perkembangan teknologi terkini dengan prinsip-prinsip ekonomi Islam, memberikan panduan etis dan praktis bagi investor Muslim di era digital.

### ABSTRACT

#### Keywords:

Artificial Intelligence,  
Stock Analysis,  
Islamic Economic,  
*Gharar*, *Masyir*.

The increasing interest of Indonesian people in stock investment, especially sharia stocks, drives the need for careful analysis in accordance with Islamic principles. On the other hand, the development of Artificial Intelligence (AI) technology offers great potential in capital market analysis, but the lack of in-depth research raises questions about its suitability with sharia principles. This study uses a qualitative descriptive methodology with a literature review approach, collecting data from various secondary sources such as journal articles, books, and relevant online publications. This study aims to: (1) examine stock analysis from an Islamic economic perspective, (2) analyze the role of AI as a stock analysis tool, and (3) explore the Islamic economic perspective on AI-based stock analysis. The results indicate that AI has the potential to improve the efficiency and accuracy of Islamic stock analysis. However, investors must carefully identify and understand the characteristics of the AI used to prevent the practices of *gharar* (uncertainty) and *maysir* (excessive speculation). This study is important in a multidisciplinary context because it bridges the latest technological developments with the principles of Islamic economics, providing ethical and practical guidance for Muslim investors in the digital era.



## **Introduction**

Stock trading achievement on the Indonesia Stock Exchange) has recorded positive achievements in recent years. Based on the most recent data available at the time of this research, throughout 2024, trading data began to increase compared to the end of the previous year, with the Average Daily Transaction Value at the market position of IDR 12.9 trillion (Amrin, 2024). The data show a daily transaction volume of 19.9 billion shares and a daily transaction frequency of 1.13 million (Tonce, 2025).

*Table 1. IHSG Highest Records in 2020-2024*

<b>Year</b>	<b>Highest Record</b>	<b>Date</b>	<b>Market Cap (IDR Trillion)</b>
2020	6,325.410	January 2020	7,310
2021	6,723.390	December 2021	8,261
2022	7,318.390	April 2022	9,435
2023	7,302.470	September 2023	10,789
2024	7,905.390	September 19, 2024	13,475

*Source: IDX Statistics (2024)*

2024 was also the year when the Composite Stock Price Index (IHSG) reached a record high, at 7,905.390 on September 19, 2024, and the market capitalization reached a record high of IDR 13,475 trillion on the same day (Ramadhani, 2025). This shows an increase in public enthusiasm for investing in the Indonesian capital market.

Likewise, the presence of the sharia capital market can accommodate the needs of Muslims in Indonesia who want to carry out capital market investments based on sharia principles. Research by Widiyanti and Sari indicates that the sharia capital market has a positive impact on the development of the Indonesian capital market and can attract investors seeking halal investments (Widiyanti & Sari, 2019). In addition, the Islamic capital market helps promote economic growth in accordance with Islamic law. For the Indonesia Stock Exchange (BEI), the world's largest sharia capital market capacity lies in Indonesia. The causal factor is that Indonesia's population is very large, and of the total population, 86.7% are Muslims (Muhammad, 2024). This growth certainly has an impact on the economic development of a region such as in West Nusa Tenggara, when Islamic tourism was developed, the economic growth of the region without the mining sector in 2016 had reached a growth of 5.72%, then in 2017 it grew by 1.72% to 7.10%, and in 2018, despite the earthquake, the figure continued to grow to 7.23% (Pelu et al., 2020).

The high potential of the sharia capital market in Indonesia is proven by the sharia financial industry in Indonesia, which recorded positive developments with total assets reaching IDR 2,742.28 trillion as of August 2024, showing an annual growth of 12.91%, which includes contributions from sharia banking, the sharia non-bank financial industry, and the sharia capital market. The Indonesian sharia capital market has very bright prospects, with stable growth, continued government support, and active community participation, making it a major force in the Indonesian economy (Yuniarto, 2024).

However, the complexity of stock analysis and the need for quick, accurate decision-making pose significant challenges for investors. For investors, the analysis of returns and risks is a key factor in making investment decisions. Research conducted by Akbar shows that the greater the difference between expected returns and actual returns, the greater the risk (Chania et al., 2021). This shows that investors cannot be careless in their decision-making and must be able to identify profitable investment opportunities and manage risks effectively. This challenge has led to the emergence of more sophisticated analytical tools, including Artificial Intelligence (AI).

The digital revolution, driven by increasingly sophisticated technology, enables Artificial Intelligence (AI) to analyze stocks in greater depth. The ability to process and analyze large volumes of data in depth can yield more accurate insights into market trends and investor behavior, enabling more informed decision-making (Fery Fadly, 2021). In addition, AI is central to many investment strategies. AI has proven its ability to analyze stock market data at an incredible scale, process and understand trends, and make predictions that can benefit investors (Ratu AI, 2024).

Then the question arises: how can AI be used to analyze stocks, and what is Islamic economics' perspective on it? So far, studies on the use of AI in stock analysis have focused solely on its performance in helping investors predict market movements. AI offers the potential to improve the efficiency and accuracy of stock analysis, but it is important to ensure that its use does not conflict with Islamic principles. The use of AI has the potential for *gharar* (uncertainty), *maysir* (gambling), and non-*Sharia* practices if not properly regulated.

Therefore, this study aims to: (1) examine stock analysis from an Islamic economic perspective, (2) analyze the role of AI as a stock analysis tool, and (3) explore the Islamic economic perspective on AI-based stock analysis. This study will answer the following research questions: What are the principles of stock analysis in Islamic economics? What is

the role of AI in stock analysis? What is the Islamic economic perspective on the use of AI in stock analysis?

This study is important in a multidisciplinary context because it bridges the latest technological developments (AI) with the principles of Islamic economics, providing ethical and practical guidance for Muslim investors in the digital era.

## **Method**

This study uses a qualitative descriptive research methodology with a library approach to collect data. The literature search was conducted systematically across various academic databases, including Google Scholar, DOAJ, and Garuda, to identify relevant sources on Islamic stock analysis, Artificial Intelligence in finance, and Islamic economic principles.

The literature selection criteria include: (1) relevance to the research topic, (2) publication in reputable journals or by recognized publishers, (3) publication within the last 10 years (2014-2024) for technological aspects and classical sources for Islamic jurisprudence, and (4) availability in Indonesian, English, or Arabic languages. Secondary sources collected include journal articles, books, and articles published on websites related to the issues being studied.

The data analysis process involves several stages: (1) reading and understanding the collected literature, (2) categorizing information based on the research questions, (3) identifying patterns and themes across sources, (4) synthesizing findings from multiple sources, and (5) drawing conclusions based on the synthesis. This method is holistic, analyzing the interrelation between technological developments and religious principles. This qualitative approach supports multidisciplinary research by integrating perspectives from Islamic studies, finance, and technology, which is essential for understanding the complex interplay between AI and Islamic economic principles.

## **Results**

### **Principles of Stock Analysis in Islamic Economics**

Investment is highly recommended in Islam, as evidenced by the Prophet Muhammad SAW, who was an investor, partner, and businessperson. Investment is a recommended economic activity. With investment, it will create a multiplier effect, freeing various fields of work and

business from idle assets, so these assets do not circulate only among the rich and can be distributed more widely (Pardiansyah, 2017).

Although Islam strongly recommends investment, it does not mean that all fields are permitted. In Islam, there are rules that impose limitations on activities, namely *halal* and *haram*, to be followed. The goal is to prevent humans from engaging in activities that endanger society (Aziz, 2010). Investment in Islamic economics involves capital in projects that align with the principles of Islamic law and economic and ethical principles in Islam. These principles are derived from legal sources, including the *Qur'an*, *hadith*, and scholars' *ijtihad* (Rahmawati, 2024).

Sharia-compliant stock trading has been regulated in the DSN MUI No. 80/DSN-MUI/III/2011, Concerning the Application of Sharia Principles in the Mechanism of Equity-Based Securities Trading in the Regular Market of the Stock Exchange (Indonesia, 2011). The law of conducting buying and selling in the capital market is permitted based on the fatwa of the DSN MUI No: 40/DSN-MUI/X/2003 Concerning the Capital Market and General Guidelines for the Implementation of Sharia Principles in the Capital Market Sector.

There are several aspects that should not be present in transactions and make transactions in the capital market *haram*, namely danger, ambiguity, usury, gambling, *risywah*, sin, injustice, *taghrir*, *ghisysy*, *tanajusy/najsy*, *ihtikar*, *bai' al-ma'dum*, *talaqqi al-rukban*, *ghabn*, and *tadlis* (Indonesia, 2003). Sharia investment has several main principles, including the prohibition of usury, *gharar*, and *maysir*, and the requirement of full social and ethical responsibility (Sunaryono et al., 2024).

Not all investment products available in the capital market align with Islamic economic principles. So, sharia screening is needed. The purpose of Sharia screening is to ensure that a stock meets all Sharia requirements. In general, there are two stages in the screening process: evaluating the company's activities, products, and industries, and calculating several financial ratios and comparing them with benchmarks (Omar, 2012). The quantitative criteria, based on Regulation Kep208/BL/2012, state that the total interest-based debt-to-total assets ratio is no more than 45 percent, and the total interest income and other non-*halal* income-to-total business income and other income ratio is no more than 10 percent.

Technical analysis is very important for investors. The important thing about technical analysis is that stock-buying and selling transactions minimize risk and manage it,

avoiding *gharar* and *maysir*, which are clearly prohibited and violate Sharia principles in securities trading (Insancemerlang, 2022). Although technical analysis does not guarantee truth or profit, it is an effort to avoid *gharar* and *maysir*, and it differs from speculation, which has a significant negative impact (Miftachul Ulum Kefi, 2020).

Although technical analysis does not guarantee truth or profit, it is an effort to avoid *gharar* and *maysir* and differs from speculation, which has a significant negative impact. This is in line with one of the rules in *Al-Qa'idah Al-Fiqhiyyah*: "If there are two conflicting mafasadats, then the one which has the greatest mafsatad is taken into account by carrying out the lighter mafsatad" (Irfan, 2017, p. 172). Therefore, technical analysis is consistent with the above branch rule, which holds that technical analysis can ward off far greater harm than speculation (Miftachul Ulum Kefi, 2020, pp. 7–9).

In the Islamic capital market, several transactions are prohibited by Sharia; the first is *Tadlis*, the act of hiding information. The second is *Taghrir*, an attempt to influence people with false offers. The third is *Ikhtikar*, hoarding products with the aim of reselling them at a higher price. The fourth is *Ghishsh*, a seller who hides his defects. And the fifth is *Ghabn Fahish*, which is an imbalance between two goods exchanged in a contract (Akbar & Robi'in, 2022).

### **AI As a Stock Analysis Tool**

The use of Artificial Intelligence (AI) has revolutionized various aspects of human life in recent years, including in finance, where this research is integrated into stock analysis. The ability of AI technology to process data quickly, make accurate predictions, and automate previously time-consuming processes can streamline portfolio management (Tiwari, 2023).

AI is also used to assess and manage risk by identifying potential hazards more accurately and quickly. Proactive risk mitigation strategies can be implemented by leveraging AI's ability to develop learning algorithms that detect patterns and anomalies in large datasets (Hastuti & Rahmawanti, 2024). This machine learning technique enables AI to predict prices, giving investors an early warning before price changes occurs.

The success of AI in predicting prices is also due to the integration of multiple data sources. These data sources include historical approaches to analyzing stock prices and market trends, current trading conditions, and news sentiment that affects stock prices. AI

also uses neural networks that allow it to learn from large amounts of data and identify patterns (Blackburn, 2024).

The use of AI has also evolved significantly in recent years, transforming stock trading through robo-trading (McFarland, 2025). Robo trading is an automated trading system that buys and sells shares in the capital market, thereby improving trading efficiency and speed. Robo trading is an automated technology system that uses artificial intelligence and machine learning algorithms to analyze historical and real-time market data, identify stock trading opportunities, and execute buy and sell orders on behalf of investors.

In Indonesia, on September 2, 2022, the government, through the Commodity Futures Trading Supervisory Agency (Bappebti), issued regulations regarding robo trading. With this regulation, robo-trading activities in Indonesia no longer face a legal vacuum (Admin Klik Legal, 2022). There are three aspects in the rules regarding robo trading: (1) principles that must be met by robo trading in the Bappebti Online Licensing policy, (2) robo trading specifications with algorithm transparency, and (3) rules regarding the criteria for robo trading developers (Dewi, 2022).

*First*, the principles that must be met by robo trading under the Bappebti Online Licensing policy, such as that it must be used by registered futures brokers and not for illegal activities under the guise of investment. Later, supervision and evaluation of legal business actors who use robo-trading will be conducted. *Second*, Robo-trading specifications with algorithmic transparency. In addition, the variables can be input based on customer needs and bug fees and developed by companies that are legally and ethically sound. *Third*, Rules regarding the criteria for robo-trading developers include obtaining legal authorization from official Indonesian authorities, providing education on trading systems, providing periodic algorithm updates, providing after-sales services, and not promising consistent profits.

There are many robo-trading options available; therefore, the researcher provides several examples of bot trading and their shortcomings (Algobot, 2024). *First*, *Algobot*, which is designed to be fully autonomous and can run market analysis around the clock. With this capability, *Algobot* can automatically enter and exit trades based on your risk parameters. For example, take-profit and stop-loss levels will be determined based on the user's risk profile. Not only that, but *Algobot* also supports semi-automatic and manual trading for those who want more control over the bot. However, this bot has drawbacks where profits are not guaranteed, and there is no free trial.

*Second, SignalStack* is the most beginner-friendly trading bot. The bot will capture trading alerts from signal providers like *TradingView* and place orders accordingly. However, this bot is paid depending on the number of signals desired. *Third, Tickeron* offers two AI bot options. The first option offers real-time signals and provides comprehensive statistics to help traders make informed decisions. The second option is the "Virtual Account," which lets you use money management tools to adjust fund allocations across trades. Don't forget the feature to access backtesting statistics, profit-to-drawdown ratio, and volatility for each bot type. Although it sounds promising, this bot has a drawback: it is expensive, depending on the trading strategy we choose, so not all features can be accessed.

On the other hand, artificial intelligence provides an alternative for investors to manage their portfolios based on criteria such as age, goals, and risk profiles, and is called a robo-advisor. Robo advisors are used for financial management, including portfolio diversification, automated risk management, and access to real-time market analysis. The advantage for investors using robo advisors is lower costs compared to traditional investment management services (Alam & Achjari, 2024).

Not only limited to robo trading and robo advisor, artificial intelligence-based chatbots such as ChatGPT are also said to be able to predict stock price movements by analyzing news headlines and issues related to the world's financial markets. Research by Hansen and Kanzinnik found that ChatGPT is closest to humans in determining whether the US central bank's statement is hawkish or dovish (Hansen & Kazinnik, 2023).

Even research by Hansen and Kanzinnik shows that *ChatGPT* is closest to humans at predicting whether the US central bank's statement is *hawkish* (tightening monetary policy, such as raising interest rates) or *dovish* (loosening monetary policy, such as lowering interest rates). *ChatGPT* can even explain the classification of the Fed's policy statement in a way like the central bank's own analysts. According to the article, *ChatGPT* is said to be able to beat Google's commonly used model, *BERT*, and dictionary-based classification. An example of its use is when there is a news headline "*Rimini Street Fined USD630,000 in Case Against Oracle*," and instruct *ChatGPT* to analyze whether this is good or bad for *Oracle*, *ChatGPT* explains that it is positive because the penalty has the potential to increase investor confidence in Oracle's ability to protect its intellectual property and increase demand for its products and services (Hansen & Kazinnik, 2023, pp. 12–17).

## Discussion

### Islamic Economic Views on Stock Analysis Based On AI

Based on the findings presented in the Results section, this discussion analyzes the Islamic economic perspective on the use of AI in stock analysis, integrating the principles of sharia investment with AI's capabilities and limitations.

As a religion that is *Shalih wa likulli Zaman wa Makan*, Islam will not limit how technology develops. On the contrary, Islam supports the development of technology because Muslims must have the characteristics of scientists, namely being critical (QS. Al-Isra 17: 36), open to accepting the truth from wherever the knowledge comes (QS. Az-Zumar 39: 18) and always using their minds to think critically (QS. Yunus 10: 10). This leads to a necessity for every Muslim to be able to excel in the field of Science and Technology (Herwisyah, 2024).

Regarding the use of AI in stock analysis from an Islamic perspective, the basis of every muamalah transaction is that the original law is permissible if the mechanism is acceptable to common sense and meets the requirements of sharia. This is based on the rules of the *Al-Qa'idah Al-Fiqhiyyah*: "The original law of a muamalah contract is that the meaning of the contract can be accepted by common sense, unless the sharia has determined various limitations as being ta'abbudi (subject to sharia provisions)" (As-Sam'ani, 1998).

In *nushush al-syari'ah* (fiqh texts), scholars agree that in the provisions of the valid conditions for buying and selling, it is mandatory to fulfill the requirements of *aqil* (rational), *baligh* (reaching the age of sufficient age), and *hurriyah* (free and has the freedom to dispose of property). Based on this, share traders who use artificial intelligence, provided they meet these criteria, are still permitted (Nurkholis, 2009).

### Practical Guidelines for Sharia-Compliant AI Usage in Stock Analysis:

First, investors must understand the AI system being used. The use of *aqil* in analyzing stocks with AI reflects an investor's ability to understand and weigh the information they use. From a *fiqh* perspective, artificial intelligence serves as a transmitter of information, so investors still need to study and understand in depth what AI conveys (Aulia, 2019).

Second, AI should be used as a tool, not as a substitute for human judgment. Although artificial intelligence can provide answers based on embedded formulas, humans have the independent thought that AI lacks. Humans can make moral judgments, whereas

AI cannot. Moral responsibility is always related to humans who have knowledge and consciousness (Herwinskyah, 2024).

Third, investors must ensure transparency in AI algorithms. The Indonesian government, through Bappebti, has mandated algorithmic transparency for robo trading, aligning with Islamic principles of avoiding *gharar*. Investors should only use AI tools from companies that provide clear information about how their algorithms work.

Fourth, avoid AI systems that promise guaranteed profits. Such promises are indicative of potential *maysir* practices and are not in line with Islamic principles.

In the context of the Indonesian financial market, Muslim investors face specific challenges, including the need to ensure that AI tools screen for sharia-compliant stocks only, the importance of using AI from platforms that have obtained proper licensing from OJK and Bappebti, and the necessity of continuous learning about both AI technology and Islamic finance principles. The use of robo trading and robo advisors is not an unlawful act because it is merely a tool that makes it easier for investors to make investment decisions. It may be considered unlawful if robo trading is vulnerable to market manipulation, is marketed with promises of guaranteed profits, and the company organizing its investment fund collection business lacks proper permits (Julistiyan, 2022).

## **Conclusion**

This study has examined stock analysis from an Islamic economic perspective, analyzed the role of AI as a stock analysis tool, and explored the Islamic economic perspective on AI-based stock analysis. Sharia investment has several main principles, including the prohibition of usury, *gharar*, and *maysir*, and investing with full social and ethical responsibility so that the investment not only generates financial profits but also provides broad social benefits.

AI has evolved significantly, introducing robo-trading and robo-advisors that use machine-learning algorithms to analyze historical and real-time market data, identify trading opportunities, and execute buy and sell orders on investors' behalf. These tools can improve efficiency and accuracy in stock analysis while providing portfolio diversification, automatic risk management, and access to real-time market analysis.

From an Islamic economic perspective, the use of AI in stock analysis is permissible as long as investors: (1) understand the characteristics of the AI being used to avoid *jahalah* (ignorance) that leads to *gharar*, (2) maintain human judgment as the final decision-maker, (3)

ensure the AI tools used have proper regulatory approval and algorithm transparency, and (4) avoid AI systems that promise guaranteed profits which would constitute *maysir*.

Based on these conclusions, the researcher recommends that: (1) the government, through Bappebti, needs to strengthen regulations related to robo trading and robo advisors with a focus on algorithm transparency, investor education, and strict supervision to prevent misuse leading to *gharar* and *maysir* practices; (2) there needs to be collaboration between relevant authorities, robo trading and robo advisor platforms, and fatwa institutions to develop practical and ethical guidelines for sharia investors in utilizing AI; and (3) AI development must consider all applicable ethical standards, noting that AI is only allowed to be used as an aid and not to take over human judgment and work completely. In the end, technology is intended to improve the quality of life, not to lower it for a human being.

## References

Admin Klik Legal. (2022). Sah! Aktivitas Robot Trading Jadi Legal di Indonesia, Ini Poin Pentingnya. [Kliklegal.Com](https://www.kliklegal.com).

Admin RHB Trade Smart. (2023). Penggunaan Robo-Advisor Dalam Investasi Saham, Seberapa Efektif? [Rhbtradesmart.Co.Id](https://www.rhbtradesmart.co.id).

Admin Syariah Saham. (2022). Fatwa DSN MUI Nomor 80: Pahami Sebelum Transaksi Saham. [Syariahsaham.Id](https://www.syariahsaham.id).

Ahmed, S., Bu, Z., & Ye, X. (2023). Illiquidity, R&D Investment, and Stock Returns. *Journal of Money, Credit and Banking*, 1–39.

Akbar, A., & Robi'in, M. (2022). Prinsip Dasar dan Batasan-Batasan dalam Aktivitas Ekonomi Islam. *DIES: Journal Of Dalwa Islamic Economic Studies*, 1(2), 120–133.

Alam, A. F., & Achjari, D. (2024). Analisis Keberlanjutan Penggunaan Robo Advisor di Indonesia. *ABIS: Accounting and Business Information Systems*, 12(2), 27–39.

Algobot. (2024). 10 Bot Perdagangan Saham Teratas tahun 2025: Ulasan & Perbandingan Mendalam. [ALGOBOT.COM](https://www.algobot.com).

Almagribi, A. (2023). Fatwa DSN MUI No. 40 tentang Pasar Modal dan Pedoman Umum Penerapan Prinsip Syariah di Bidang Pasar Modal. [Santrinabawi.Id](https://www.santrinabawi.id).

Amrin, I. (2024). Sukses Tutup Tahun 2024, Pertumbuhan Positif Mendorong Kepercayaan Pasar Modal Indonesia. Infopublik.Id.

Ardiansyah, M., Qizam, I., & Qoyum, A. (2017). Telaah kritis model screening saham syariah menuju pasar tunggal ASEAN. *IJTIHAD Jurnal Wacana Hukum Islam Dan Kemanusiaan*, 16(2), 197–216.

As-Sam'ani, M. (1998). *Qawâthi'l Adillat fil Ushûl*.

Aulia, R. (2019). Analisis Penerapan Mekanisme Berinvestasi Saham Di Pasar Sekunder Dengan Sharia Online Trading System. Universitas Islam Negeri Raden Intan Lampung.

Aziz, A. (2010). *Manajemen Investasi Syariah*. Alfabeta.

bareksa. (2021). Robo Advisor pertama di Indonesia yang mendapatkan izin penasihat investasi dari OJK. Bareksa.Com.

Blackburn, E. (2024). AI Stock Price Prediction: Forecasting Market Trends. Cryptsy.Com.

Chania, M. F., Sara, O., & Sadalia, I. (2021). Analisis Risk dan Return Investasi pada Ethereum dan Saham LQ45. *Studi Ilmu Manajemen Dan Organisasi*, 2(2), 139–150.

Dewi, I. R. (2022). Siap-siap! Bappebti Beri Sinyal Ada Robot Trading Legal di RI. Cnbc Indonesia.

Fernando, A. (2023). ChatGPT Bisa Prediksi Gerak Saham dari Judul Berita, Investor Harus Apa? Idx Channel.

Fery Fadly. (2021). Dinamika Pasar Modal di Era Digital: Peluang dan Tantangan. Ojk.Go.Id, 1–12.

Gonzales, R., & Hargreaves, C. (2022). How can we use artificial intelligence for stock recommendation and risk management? A proposed decision support system. *International Journal of Information Management Data Insights*, 2(2), 1–8.

Hana, K. F. (2018). Dialektika Hukum Trading Saham Syariah di Bursa Efek Indonesia. *TAWAZUN: Journal of Sharia Economic Law*, 1(2), 148–160.

Hansen, A. L., & Kazinnik, S. (2023). Can ChatGPT Decipher Fedspeak. Available at SSRN.

Hastuti, P. P., & Rahmawanti, I. P. (2024). Kecerdasan Buatan dalam Berinvestasi: Evolusi, Keuntungan, dan Kesulitan Etis dalam Industri Keuangan. Paper Universitas Kristen Satya Wacana.

Herwinskyah. (2024). Kajian Teoritis: Artificial Intelligence (AI) Dalam Pandangan Islam Dan Etikanya. *Jurnal Salam Institute Islamic Studies*, 1, 24–30.

Indonesia. (2003). Fatwa DSN MUI No. 40/Dsn-Mui/X/2003 On Capital Market And General Guidelines Application Of Sharia Principles In The Capital Market Field.

Indonesia. (2011). Fatwa DSN MUI No. 80/DSN-MUI/III/2011 on the Application of Sharia Principles in the Equity Securities Trading Mechanism in the Regular Market of the Stock Exchange.

Indonesia, D. of P. F. (2009). Decree of the Chairman of the Capital Market and Financial Institutions Supervisory Agency No. Kep-412/BL/2009.

Indonesia, D. P. of F. (2012). Decree of the Chairman of the Capital Market and Financial Institutions Supervisory Agency Number: Kep-208/BL/2012.

Insancemerlang, S. M. (2022). Analisa Teknikal Dalam Menentukan Sinyal Jual Dan Sinyal Beli Pada Saham Yang Terdaftar Di Jakarta Islamic Index. Universitas Islam Negeri Walisongo Semarang.

Irawan Prabowo, D. (2022). Analisis Persepsi Generasi Z Terhadap Sukuk, Saham Syariah, dan Reksadana Syariah Sebagai Pilihan Instrumen. *Jurnal Indonesia Sosial Sains*, 3(8), 1205–1214.

Irfan, A. (2017). 99 Kaidah Fiqh Muamalah Kulliyah. UIN Maliki Press.

Julistiyan, R. (2022). Investasi Saham Syariah Di Pasar Sekunder Dengan Robot Trading (Analisis Hukum PT. Indo Premier Sekuritas). UIN Syarif Hidayatullah Jakarta.

Kasanah, H. R. (2018). Analisis Perbandingan Return dan Risk Saham Syariah dengan Saham Konvensional. *Jurnal Administrasi Bisnis (JAB)*, 58(2), 26–29.

Masyrafina, I. (2022). OJK Sebut Kerugian Masyarakat Akibat Investasi Bodong Capai Rp 117,5 Triliun. *Ekonomi.Republika.Co.Id*.

McFarland, A. (2025). 10 Bot Perdagangan Saham AI Terbaik (Januari 2025). *Unite.Ai*.

Miftachul Ulum Kefi. (2020). Analisa Teknikal Dalam Jual Beli Saham. *Journal of Islamic Business Law*, 4(4), 1–11.

Muhammad, N. (2024). Jumlah Penduduk Indonesia Berdasarkan Agama (Semester I 2024). Databoks.

Mumpuni, M., & Darmawan, H. (2017). *Panduan Berinvestasi Saham Bagi Pemula* (12th ed.). E-Book PT. Solusi Finansialku Indonesia.

Nasution, H. (1986). *Akal dan Wahyu dalam Islam*. UI Press.

Nurkholis, N. (2009). Tinjauan hukum Islam terhadap jual beli ayam tiren. IAIN Walisongo.

Omar, M. A. (2012). *Fundamentals of Islamic Money and Capital Markets*. Wiley.

Pardiansyah, E. (2017). Investasi dalam Perspektif Ekonomi Islam: Pendekatan Teoritis dan Empiris. *Ecomonica: Jurnal Ekonomi Islam*, 8(2), 337–373.

Pazo, I. (2023). 12 Best AI Stock Trading Bots. Morningdough.Com.

Pelu, I. E. A., Kurniawan, R., & Akbar, W. (2020). Developing Sharia Tourism in Fostering Regional Economic Growth (Study on Sharia Tourism at West Nusa Tenggara). *Heritage of Nusantara: International Journal of Religious Literature and Heritage*, 9(1), 115–142.

Rahmawati, N. (2024). *Manajemen Investasi Syariah*. CV. Sanabil.

Ramadhani, P. (2025). Kilas Balik IHSG dan Pasar Modal Indonesia Sepanjang 2024. Liputan6.Com.

Ratu AI. (2024). Penggunaan AI dalam Prediksi Pasar Saham. Ratu.Ai.

Rokhmah, Yana, P. R., Hernadi, N. A., Rachmawati, F., Irwanto, & Hayam, N. P. (2024). *Metode Penelitian Kualitatif Teori, Metode, dan Praktik*. Penerbit Widina.

Sulistianti, R. (2025). 7 Aplikasi Investasi Terbaik dari OJK, yang Aman dan Terpercaya! Inilah.Com.

Sunaryono, S., Sepriano, S., & Uzma, I. (2024). *Investasi Syariah Terpadu: Strategi dan Peluang Saham Tanpa Riba*. PT. Sonpedia Publishing Indonesia.

Tiwari, R. (2023). The Application of AI and Machine Learning in the Financial Industry and its Effects on Risk Management and Fraud Detection. *International Journal of Scientific Research In Engineering And Management*, 7(1), 1–12.

Tonce, D. (2025). Dirut BEI Optimistis Transaksi Bursa Lebih Moncer pada 2025. *Market.Bisnis.Com*.

Widiyanti, M., & Sari, N. (2019). Kajian Pasar Modal Syariah Dalam Mempengaruhi Pertumbuhan Ekonomi di Indonesia. *Ekonomikawan: Jurnal Ilmu Ekonomi Dan Studi Pembangunan*, 19(1), 21–30.

Yuniarto, I. (2024). Kuatnya Pasar Modal Syariah Indonesia. *Idx Channel*.