E-COMMERCE MARKET SATURATION IN INDONESIA: THE DYNAMICS OF PRICE COMPETITION FROM ISLAMIC ECONOMIC PERSPECTIVE

Rianto Anugerah Wicaksono

Program Studi Ekonomi Syariah, Fakultas Ekonomi dan Bisnis Islam Universitas Islam Negeri Sunan Ampel Surabaya, Indonesia

Program Studi Doktor Ilmu Ekonomi Islam, Fakultas Ekonomi dan Bisnis, Universitas Airlangga,

Indonesia

Email: riantoanugerah@uinsa.ac.id

Abstrak

Pertumbuhan pesat sektor e-commerce Indonesia telah memicu kejenuhan pasar, yang didorong oleh peningkatan jumlah penjual, kemajuan teknologi, dan sensitivitas harga konsumen. Penelitian ini bertujuan untuk menganalisis dinamika kejenuhan pasar dan persaingan harga, dengan fokus pada implikasinya bagi penjual dan konsumen. Dengan menggunakan pendekatan kualitatif, penelitian ini mengintegrasikan analisis tematik dan diagram kausal-loop untuk mengungkap hubungan antara kekuatan pasar dan dampaknya. Temuan penelitian mengungkapkan bahwa hambatan masuk yang rendah dan transparansi harga yang tinggi mengintensifkan persaingan harga, mengurangi profitabilitas, dan mendorong praktik yang tidak Konsumen, yang semakin sensitif terhadap harga, memprioritaskan berkelanjutan. keterjangkauan daripada kualitas, sehingga menciptakan lingkaran umpan balik negatif yang memperburuk kejenuhan. Dari perspektif ekonomi Islam, dinamika ini melanggar prinsip keadilan (al-adl) dan keseimbangan (al-mizan), yang menekankan perlunya praktik bisnis yang etis dan persaingan yang adil. Penelitian ini menggarisbawahi pentingnya strategi inovatif dan intervensi kebijakan untuk menciptakan ekosistem e-commerce yang lebih adil dan berkelanjutan yang selaras dengan prinsip-prinsip Islam.

Kata Kunci: Kejenuhan Pasar E-commerce, Persaingan Harga Dinamis, Sensitivitas Harga Konsumen, Prinsip Ekonomi Islam, Praktik Bisnis Berkelanjutan

Abstract

The rapid growth of Indonesia's e-commerce sector has triggered market saturation, driven by increasing sellers, technological advancements, and consumer price sensitivity. This study aims to analyze the dynamics of market saturation and price competition, focusing on their implications for sellers and consumers. Employing a qualitative approach, the research integrates thematic analysis and causal-loop diagrams to uncover the relationships between market forces and their effects. Findings reveal that low entry barriers and high price transparency intensify price competition, reducing profitability and driving unsustainable practices. Consumers, increasingly price-sensitive, prioritize affordability over quality, creating a negative feedback loop that exacerbates saturation. From an Islamic economic perspective, these dynamics violate the principles of justice (al-adl) and balance (al-mizan), emphasizing the need for ethical business practices and equitable competition. This research underscores the importance of innovative strategies and policy interventions to create a fairer and more sustainable e-commerce ecosystem aligned with Islamic principles.

Keywords: E-commerce Market Saturation, Dynamic Price Competition, Consumer Price Sensitivity, Islamic Economics Principles, Sustainable Business Practices

1. Introduction

The rapid growth of e-commerce has created vast opportunities for businesses to expand their market reach. However, this growth has also led to challenges, particularly market saturation caused by intensifying competition. The rapid growth of the global e-commerce market has resulted in increasing competition in different regions, including India and China (Huang et al., 2015; Kumar & Ayodeji, 2021; Saini & Kumar, 2020).

In India, the growth of the e-commerce sector has resulted in numerous online retailers competing for market share, visibility, and brand recognition (Kumar & Ayodeji, 2021; Saini & Kumar, 2020). Meanwhile, in China, the dominance of major e-commerce platforms has sparked excessive and, at times, cutthroat competition, which has caused resource wastage and fairness concerns (Huang et al., 2015). This highlights the business challenges in managing competitive pressures while maintaining sustainable growth and fairness in the e-commerce industry.

There is a consensus that higher customer loyalty tends to reduce price sensitivity. Loyal customers are often less sensitive to price changes because of their relationship and trust in the brand (Lin & Ku, 2015; Ramirez & Goldsmith, 2009; Umashankar et al., 2017; Yoon & Tran, 2011). However, in e-commerce nowadays, customer loyalty has significantly declined and price sensitivity has increased. Customers increasingly choose sellers based on the lowest prices rather than quality or added value (Fransiscus, 2022; Kristanto et al., 2022; Tjiptodjojo & Setyawan, 2015). Customer expectations in e-commerce have become more diverse, including fast delivery, promotions, and personalized services, making it difficult for sellers to compete without sacrificing profit margins (Bakharev et al., 2023; Cihan et al., 2017; Datta & Bose, 2024; Tong et al., 2022; Xing-hong et al., 2019).

Sellers often engage in price wars to attract customers, resulting in a downward spiral that reduces profitability. The e-commerce marketplace has become an arena where competitive value is frequently measured solely by price, rather than product quality or sustainability. From an Islamic perspective, the principles of justice and balance (al-adl wa al-mizan) are central to economic activities. However, the dynamics of price competition in e-commerce often violate these principles, such as through dumping practices or labor exploitation (Ali Mohamed & Baig, 2012; Muslimin & Etika, 2020; Shah et al., 2021). The rapid development of e-commerce has significantly altered labor market structures, influencing labor supply and demand (Zatonatska & Fedirko, 2019). Price competition in e-commerce often leads to lower product prices, which increase productivity and profits for firms (Lindgren et al., 2024). However, the impact on wages is mixed. Some studies suggest that increased competition can lead to higher labor salaries due to improved productivity, and others indicate that the relationship between competition and labor wages is not straightforward and can vary depending on market conditions and labor market institutions (Z. Chen & Zhao, 2014; Griffith et al., 2007; Lindgren et al., 2024). The diverse expectations of customers can be examined through the concept of *maslahah* (public benefit), which helps to discern the genuine needs of society. This perspective ensures that business practices align with societal well-being, focusing on providing value that serves the common good.

E-commerce market saturation also affects small business actors and disrupts the broader economic ecosystem. This study is crucial to understanding how the dynamics of price competition and customer expectations can be managed fairly and sustainably, in alignment with Islamic economics principles. The research objectives are to analyze the factors contributing to e-commerce market saturation, including price competition and customer expectations, and to propose solutions based on Islamic economics to create a fairer, more sustainable, and inclusive e-commerce ecosystem.

2. Literature Review

Market Saturation and Price Sensitivity

Market saturation occurs when a market is no longer generating new demand for a product due to a high level of competition and widespread product availability. This phenomenon has several causes and consequences, particularly in digital markets. Market saturation in e-commerce is driven by several factors. Technological advancements, including widespread digitization and internet accessibility, have lowered barriers to entry, leading to increased competition (Krämer & Kalka, 2016). Additionally, digital markets offer high price transparency, enabling consumers to easily compare products and prices, which intensifies competition and contributes to saturation (Lakhal & H'Mida, 2005; Oprescu & Eleodor, 2014). Overproduction in certain markets, particularly closed ones, can also exacerbate this issue. It leads to excessive supply, and in some cases, rising investment profitability may create price bubbles, further complicating market dynamics (Girdzijauskas et al., 2011).

Market saturation in e-commerce has several consequences. It increases price sensitivity among consumers, as digital platforms make price comparisons easy and reduce search costs (Lakhal & H'Mida, 2005; Srinivasan et al., 2013). Saturation also triggers price wars, where sellers aggressively lower prices, as seen in industries like online book sales, leading to more frequent purchases and larger basket sizes for specific customer segments (Srinivasan et al., 2013). Market saturation can lead to higher market concentration, with dominant firms leveraging anti-competitive practices to solidify their power (Chiou et al., 2020; Simchi-Levi & Wu, 2018). To address these challenges, businesses often adopt dynamic pricing models, adjusting prices based on demand and customer profiles (Krämer & Kalka, 2016; Simchi-Levi & Wu, 2018).

The increasing price sensitivity in e-commerce is largely influenced by consumer behavior (Krämer & Kalka, 2016). The availability of online tools such as search engines and price comparison platforms allows consumers to easily identify the best deals, making them more sensitive to price changes (Krämer & Kalka, 2016). Research indicates that price elasticity of demand often differs between online and offline markets, with online markets showing lower elasticity due to the accessibility of substitute products (X. L. Zhang & Demirkan, 2021). For instance, in the e-book market, demand has become more price inelastic over time, shaped by consumers' reference prices and personal experiences (Lee & Lee, 2013).

Labor Market and E-commerce

E-commerce has significantly influenced labor markets and employment. In developing economies, its adoption has positively impacted employment levels. For example, firms in Chile that adopted e-commerce saw increased total employment and a higher demand for both high and medium-skilled labor (Pérez-Trujillo et al., 2024). Similarly, in Colombia, a 1% rise in e-commerce penetration resulted in a 0.2% increase in demand for skilled workers without negatively affecting unskilled labor (Trujillo & Aleán–Romero, 2024). In Indonesia, e-commerce growth served as an employment buffer during the COVID-19 pandemic, although it did not fully mitigate its negative impacts on employment and earnings (Ridhwan et al., 2023).

E-commerce has influenced wages and skill composition by increasing the demand for skilled labor. For example, in Colombia, the adoption of e-commerce and related ICTs demonstrated a strong complementarity with skilled workers, favoring them and leading to potential wage increases in higher-skilled roles (Trujillo & Aleán–Romero, 2024). However, the impact on earnings is mixed. In Indonesia, while e-commerce provided employment opportunities during the pandemic, it simultaneously reduced workers' earnings, highlighting the complexity of its effects on labor markets and wage dynamics (Ridhwan et al., 2023).

The growth of e-commerce has significantly impacted working conditions, particularly emphasizing the need for digital skill development. Policymakers are encouraged to invest in workforce training to help workers adapt to the demands of the digital economy and remain competitive (Trujillo & Aleán–Romero, 2024). Additionally, e-commerce has improved the income of rural households and micro-enterprises by lowering information search and transportation costs, facilitating market integration, and boosting related industries (S. Chen et al., 2024; W. Li & He, 2024). However, these benefits are more substantial for those with higher levels of human capital and better infrastructure, creating disparities in economic gains (W. Li & He, 2024; Liu et al., 2021).

The rise of e-commerce presents challenges and considerations that need attention. One significant issue is the digital divide, where individuals with better access to technology and higher education benefit more, potentially exacerbating existing inequalities (W. Li & He, 2024; Liu et al., 2021). To address this, effective e-commerce policies must include complementary measures such as promoting internet-related skills and providing financial support. These interventions are essential to ensure that the benefits of e-commerce are distributed more broadly and equitably across different societal groups (S. Chen et al., 2024).

Islamic Economics and E-commerce

Islamic principles such as *al-adl* (justice) play a critical role in shaping modern economic systems, particularly in promoting fair distribution of wealth and addressing income inequality. Economic justice, rooted in Islamic teachings, ensures that economic benefits are shared equitably across society, fostering social welfare (Alizadeh Emamzadeh, 2020; Shaukat et al., 2024). Corporate ethics, including honesty, trustworthiness, and fairness, are emphasized to maintain justice in transactions (Kahf, 2019; Shaukat et al., 2024). Additionally, Islamic finance supports risk-sharing and profit-sharing mechanisms, aligning with justice by ensuring all parties equitably share risks and rewards, contributing to a fairer economic environment (Cattelan, 2017; Shabbir et al., 2016).

Islamic principles of *al-mizan* (balance) emphasize maintaining equilibrium in economic activities by promoting a balance between equity and debt while avoiding excessive speculation. This approach ensures that economic activities foster social harmony and stability (Güney, 2024; Shabbir et al., 2016). Additionally, Islamic economic thought supports free trade with minimal government interference, encouraging entrepreneurship and innovation to create an efficient market system (Smolo, 2024). The principles of Islamic finance, such as prohibiting *riba* (usury) and promoting asset-backed financing, contribute to sustainable economic development by grounding financial activities in real economic transactions, fostering long-term stability and balance in the economy (Rakhmanov et al., 2024; Rethel, 2011).

In the context of e-commerce, Islamic principles provide a framework for promoting ethical and fair business practices. These principles encourage transparent pricing, honest advertising, and the fair treatment of customers, which are essential for building trust and ensuring justice in online transactions (Thalib et al., 2020).

Additionally, Islamic teachings discourage exploitative pricing and monopolistic behavior, advocating for fair competition and pricing strategies that reflect the true value of goods and services. By adhering to these guidelines, businesses can create a balanced and equitable e-commerce market environment (Hanif, 2019; Thalib et al., 2020).

Maslahah (Public Benefit)

The concept of *maslahah* emphasizes consumer protection by ensuring that business practices prioritize societal and individual well-being. This is achieved through adherence to ethical standards that prevent exploitation and harm (Al-Daghistani, 2022; Lobah, 2016). Islamic financial institutions are guided to align their operations with Shari'ah principles, which mandate fairness, transparency, and honesty in dealings (El-Essa et al., 2024; Salma Sairally, 2013). Moreover, *maslahah* ensures that products and services address consumer needs responsibly, avoiding harm and fulfilling the broader objectives of *maqasid al-Shari'ah* (the higher objectives of Islamic law) in promoting welfare and justice (Hassan, 2024; Kayadibi, 2019).

The concept of *maslahah* supports fair competition by advocating for justice and equity in economic activities. It promotes the creation of a level playing field, ensuring that businesses can compete without engaging in unethical practices (Al-Daghistani, 2022; Wazin & Suryanto, 2023). Additionally, the principles of *maqasid al-Shari'ah* emphasize economic justice, which includes preventing monopolies and protecting all market participants from unfair disadvantages (Kayadibi, 2019; Riwanto & Suryaningsih, 2022). Ethical business practices derived from *maslahah* discourage deceit and fraud, fostering a competitive environment that benefits all stakeholders (Al-Daghistani, 2022; Lobah, 2016).

The concept of *maslahah* is closely linked to ethical business practices, emphasizing righteousness (adab) and moral conduct in economic activities (Al-Daghistani, 2022). Islamic business ethics, informed by *maslahah*, require businesses to operate with integrity, honesty, and social responsibility, in line with Shari'ah principles. These principles promote ethical behavior and discourage harmful practices (Raimi et al., 2024; Wazin & Suryanto, 2023). By integrating *maslahah* into business practices, economic activities can contribute to the welfare of society, aligning with the goals of sustainable development and social justice (Choudhury et al., 2020; Hassan, 2024).

The concept of *maslahah* is applied in business and economics through frameworks that measure both financial and non-financial performance, ensuring that businesses contribute to societal welfare (Firdaus, 2021). It is also used to develop policies and strategies that align business operations with ethical standards, promoting long-term sustainability and social welfare (Ali et al., 2024; Salma Sairally, 2013). By focusing on the common good, *maslahah* guides businesses in making decisions that benefit society, such as investing in community development and ensuring fair labor practices (Salma Sairally, 2013; Suartini & Syafrizal, 2021).

Customer Expectations in E-commerce

Fast delivery plays a crucial role in shaping consumer behavior and influencing pricing strategies in e-commerce. Consumers tend to develop higher satisfaction and loyalty when they receive prompt services, leading to greater customer engagement and positive attitudes towards retailers (W. Y. Li et al., 2016). Delivery times and fees are key factors that impact consumer decisions, as consumers' willingness to pay for delivery and their privacy concerns are influenced by sociodemographic factors (Dias et

al., 2022). Additionally, risks such as stockouts and consumers' strategic responses to delivery times can further affect pricing decisions (Wang & Hu, 2023).

Personalized pricing has a significant impact on consumer behavior in e-commerce. While it can enhance customer satisfaction and loyalty, it also raises concerns about privacy and perceived fairness. High privacy concerns can reduce repurchase intentions, while personalized pricing (whether perceived positively or negatively) can lead to strategic purchasing behaviors (Hufnagel et al., 2022; Victor et al., 2021). E-tailers use personalized pricing strategies based on individual or group behaviors, which influence consumer trust and satisfaction. However, if customers perceive these prices as unfair, it may harm loyalty and encourage more strategic buying behaviors (Hufnagel et al., 2022; Victor et al., 2021).

Promotions, particularly price promotions, have a significant influence on consumer behavior. They can create switching costs, reducing the likelihood of consumers turning to competitors during stockouts (Peinkofer et al., 2015). In the short term, promotions boost customer engagement and encourage purchases, but in the long term, they can lead to strategic behaviors, such as waiting for discounts (D. J. Zhang et al., 2020). Pricing strategies using dynamic promotions attract customers by offering discounts, which can increase sales and draw new buyers, but also encourage behaviors like adding products to the cart in anticipation of future discounts (Julian et al., 2024; D. J. Zhang et al., 2020).

3. Research Methodology

This research will use a qualitative approach to explore the dynamics of ecommerce competition, customer expectations, and the integration of Islamic economic principles. Interviews will be conducted with e-commerce business owners, stakeholders, and consumers to gain insights into price competition, customer loyalty, and ethical practices. This research also uses case study analysis to understand how businesses address market saturation while adhering to the principles of *al-adl* (justice) and *al-mizan* (balance). Data will be analyzed using thematic analysis to identify patterns and insights.

Thematic analysis will be used to identify key themes from the qualitative data. To enhance this process, a causal-loop diagram will be employed to visualize the relationships and feedback loops among factors such as price competition, customer expectations, and market saturation. This diagram will help illustrate the interactions and dynamics of these factors, offering a deeper understanding of the complex ecommerce environment and how it aligns with the principles of Islamic economics.

4. Result and Discussion Market Saturation

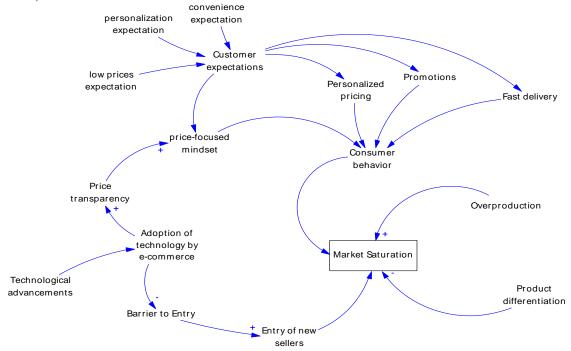
Based on Krämer & Kalka (2016), Technological advancements have lowered entry barriers and increased market penetration, allowing more players to enter the market and contributing to saturation (Krämer & Kalka, 2016; Lakhal & H'Mida, 2005). The adoption of technology by e-commerce platforms acts as an intermediary variable that enhances price transparency and facilitates the entry of new sellers. The number of new sellers in Indonesian e-commerce has skyrocketed since 2018. Data for 2022 shows that e-commerce sellers in Indonesia reached 2,995,986 or growth at 4,46% (Badan Pusat Statistik, 2023). Based on the results of our interviews with sellers who have started selling on e-commerce since 2015-2016, they have experienced price competition since the presence of Shopee e-commerce. Shopee, which offers price transparency and

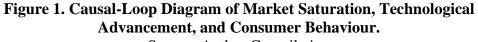
makes it easy to start selling on its platform, has resulted in many new users and new sellers joining the platform. By leveraging tools such as AI, big data analytics, and digital infrastructure, e-commerce platforms provide consumers with real-time price comparisons and reduce the operational challenges faced by new market entrants (Krämer & Kalka, 2016; Lakhal & H'Mida, 2005; Oprescu & Eleodor, 2014). High price transparency in digital markets enables consumers to compare prices, intensifying competition and accelerating market saturation easily (Lakhal & H'Mida, 2005). The entry of new sellers, driven by digitalization and reduced operational barriers, has further increased competition and contributed to market saturation (Oprescu & Eleodor, 2014).

In our research through interviews with sellers who had started selling on ecommerce before the COVID-19 pandemic (before 2020), market saturation was felt after the pandemic ended, namely at the end of 2021, which was marked by the existence of government regulations regarding Large-Scale Social Restrictions (PSBB). Sellers who enjoyed peak sales during the pandemic (2020-2021) experienced a gradual decline in sales. Another significant factor that worsens market saturation is overproduction and the lack of product differentiation. Manufacturers and suppliers who still expect an increase in sales will continue to increase their production based on historical sales data in 2020 and 2021. Statistical data in 2022 shows that 36.84% of business actors mentioned lack of capital as the main obstacle. Additionally, 35.26% reported a lack of demand for goods and services, which could indicate market saturation where demand cannot keep up with the increase in the number of sellers (Badan Pusat Statistik, 2023). In closed or already saturated markets, overproduction leads to an oversupply of goods, making it increasingly difficult for businesses to sell their products without aggressive discounting or price reductions. This reduces profit margins and intensifies competition among sellers, further saturating the market (Girdzijauskas et al., 2011). The lack of product differentiation exacerbates this problem. When products lack unique features or value propositions, consumers tend to prioritize price over quality or brand loyalty. This price-focused consumer behavior increases pressure on sellers to compete solely on pricing, aggravating the negative effects of market saturation (Simchi-Levi & Wu, 2018).

E-commerce platforms that accommodate high price transparency, promotions, personalized pricing, and fast delivery significantly impact consumer behavior. High price transparency enables consumers to easily compare prices across multiple sellers, fostering a price-focused mindset and encouraging consumers to seek out the best deals available (Lakhal & H'Mida, 2005; Srinivasan et al., 2013). Several e-commerce users that we gathered in a discussion group agreed that e-commerce often provides suggestions for cheaper products. Some of them said that e-commerce often displays products that are similar to the products they have saved in their wish list and shopping cart on their homepage. Promotions, such as discounts and limited-time offers, further influence consumer engagement, driving higher purchase frequency in the short term while also encouraging strategic behaviors like delaying purchases in anticipation of future discounts (Julian et al., 2024; Peinkofer et al., 2015). The majority of users in the group discussion also often postpone purchases to wait for certain promotional times.

In the discussion group that we conducted with several users, we also compared several of their accounts on one of the platforms. As a result, several accounts present the same product display at different prices. This difference is caused by giving different promotions to each account. Personalized pricing, where prices are adjusted based on individual data, increases consumer satisfaction by offering tailored deals but can also lead to concerns over fairness and privacy (Hufnagel et al., 2022; Victor et al., 2021). Fast delivery services play a crucial role in enhancing consumer satisfaction and loyalty by meeting the demand for speed and convenience, though this can raise expectations for increasingly rapid service over time (Dias et al., 2022; Wang & Hu, 2023). By integrating these variables, e-commerce platforms significantly influence consumer decision-making, engagement, and long-term purchasing behavior. The majority of user transactions in Indonesia use the Cash on Delivery (COD) method at 82.26%, indicating customer preferences for ease of payment without prioritizing brand loyalty. Most deliveries (77.23%) were made on the island of Java. A lack of market diversification can exacerbate local saturation, making competition even fiercer. This is in line with the phenomenon of aggressive price competition (Badan Pusat Statistik, 2023).



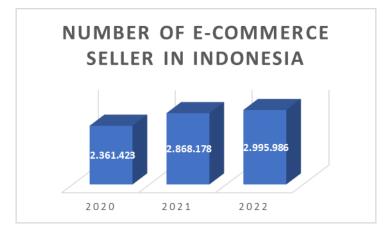


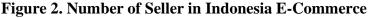
Source: Author Compilation

Price Competition Dynamics and Role of Price Sensitivity

Market saturation could significantly impact price competition through various mechanisms. Firstly, the increased number of sellers in a saturated market arises due to the lowering of entry barriers, driven by technological advancements and digitalization. This influx of sellers intensifies competition as they vie for customer attention and sales (Krämer & Kalka, 2016; Oprescu & Eleodor, 2014). The growth in the number of sellers in Indonesian e-commerce increased by 21.46% in 2021 (Figure 2). In 2021, as confirmed by several sellers in our interviews, it is a year where market saturation is increasingly felt. Secondly, high levels of price transparency in digital markets enable consumers to compare prices across sellers easily. This creates intense price-focused competition, as sellers are pressured to continually reduce prices to remain competitive

(Krämer & Kalka, 2016; Lakhal & H'Mida, 2005). It has been confirmed that in 2021, sellers in e-commerce are starting to have difficulty selling their products and are starting to lower the selling prices of their products to remain competitive. The intense competition often leads to price wars, where sellers aggressively lower prices in an attempt to capture market share. This creates a downward spiral that reduces profitability and shifts competitive strategies away from innovation and quality enhancement (Huang et al., 2015; Saini & Kumar, 2020). Data shows that as many as 95.17% of e-commerce businesses use instant messaging for sales. The high dependence on this media indicates a lack of differentiation in marketing strategies and limited market access which can exacerbate saturation (Badan Pusat Statistik, 2023). A lack of product differentiation in saturated markets exacerbates price competition. When products appear similar in features and quality, price becomes the primary competitive tool, further aggravating the effects of market saturation (Simchi-Levi & Wu, 2018).





Source: Statistik E-Commerce 2023 – Badan Pusat Statisitk Indonesia

The relationship between price competition and price sensitivity is bidirectional and mutually reinforcing. Intense price competition forces sellers to continually lower their prices to attract customers. This consistent reduction in prices creates an expectation among consumers that prices will remain competitive and low. As a result, consumers become increasingly price-sensitive, focusing more on price comparisons and often prioritizing the cheapest options, regardless of product quality or additional services offered (Krämer & Kalka, 2016; Srinivasan et al., 2013). Conversely, heightened price sensitivity among consumers drives sellers to compete more aggressively on price. When consumers prioritize price over other factors such as brand or quality, sellers are compelled to engage in price wars, further exacerbating competition in the market (Lakhal & H'Mida, 2005).

Market saturation plays a critical role in amplifying the relationship between price competition and price sensitivity. In a saturated market, the influx of numerous sellers intensifies competition as they vie for consumer attention by lowering prices. This heightened competition fosters consumer expectations of consistently low prices, further increasing their sensitivity to price variations. With a plethora of options available, consumers focus heavily on price comparisons, prioritizing affordability over other factors such as quality or brand loyalty. In turn, this heightened price sensitivity compels sellers to engage in more aggressive pricing strategies, including frequent discounts and promotions, to remain competitive. This dynamic creates a negative feedback loop, where market saturation exacerbates price competition, which then fuels greater price sensitivity, perpetuating the cycle. Over time, this loop reduces profitability for sellers and increases reliance on unsustainable practices like price wars and heavy discounting, potentially undermining the long-term stability of the market (Julian et al., 2024; Krämer & Kalka, 2016; Lakhal & H'Mida, 2005; Peinkofer et al., 2015).

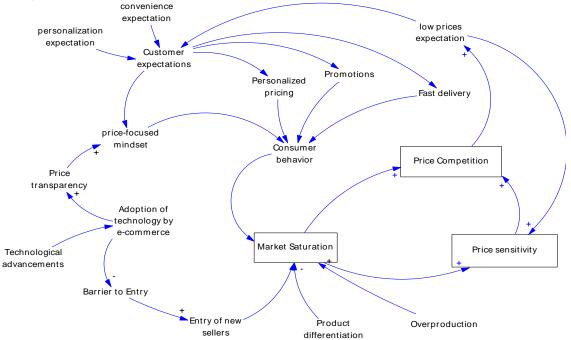


Figure 3. Causal-Loop Diagram of Market Saturation, Price Competition, and Price Sensitivity.

Source: Author Compilation

The negative impacts of market saturation

Market saturation drives an increase in the number of sellers competing in the market, leading to increasingly aggressive competition, particularly in terms of pricing. Sellers often engage in price wars to attract consumers, resulting in reduced profit margins and a reliance on unsustainable discount strategies (Krämer & Kalka, 2016; Saini & Kumar, 2020). As more players compete in a saturated market, the ability of sellers to generate significant profits diminishes. Continuous price reductions make it especially difficult for sellers, particularly small businesses, to survive in the market (Huang et al., 2015). Market saturation often benefits large players with the resources to endure price wars. Consequently, the market becomes increasingly concentrated, and dominant companies can exploit their position by implementing anti-competitive practices, such as market monopolization or price dumping (Chiou et al., 2020).

Table 1. Negative impact on Market Saturation and Frice Competition.					
No.	Negative Impact	Explanation	Related to	References	
1	Intensified Price	An influx of sellers in saturated	Market	Krämer & Kalka,	
	Competition	markets leads to aggressive	Saturation	2016; Saini &	
		competition on price.		Kumar, 2020	
2	Decline in Profit	Continuous price reductions	Market	Huang et al.,	
	Margins	shrink profitability, making it	Saturation,	2015; Krämer &	

Table 1. Negative Impact on Market Saturation and Price Competition.

No.	Negative Impact	Explanation	Related to	References
		harder for sellers to survive.	Price	Kalka, 2016
			Competition	
3	Price Wars	Intense competition results in	Market	Lakhal &
		destructive price wars that	Saturation,	H'Mida, 2005;
		destabilize markets.	Price	Saini & Kumar,
			Competition	2020
4	Reduced Product	Sellers compromise product	Market	Simchi-Levi &
	Quality	quality to cut costs and stay	Saturation,	Wu, 2018
		competitive on price.	Price	
			Competition	
5	Unhealthy	Consumers delay purchases to	Market	Julian et al.,
	Consumer	wait for discounts, creating	Saturation	2024; Peinkofer
	Behavior	revenue instability for sellers.		et al., 2015
6	Unsustainable	Continuous discounting forces	Price	Julian et al.,
	Business	sellers into pricing strategies	Competition	2024; Peinkofer
	Practices	that risk long-term viability.		et al., 2015
7	Lack of	Sellers prioritize short-term	Market	Huang et al.,
	Innovation	pricing strategies over long-term	Saturation,	2015
		product differentiation or	Price	
		innovation.	Competition	
8	Market	Larger players dominate, forcing	Market	Chiou et al., 2020
	Concentration	smaller sellers out of the market,	Saturation	
	and Dominance	reducing market diversity.		~ · · · · ·
9	Consumer	Price-sensitive consumers	Price	Srinivasan et al.,
	Behavior Shift	prioritize cost over quality or	Competition	2013; Krämer &
		brand loyalty.		Kalka, 2016
10	Labor	To reduce costs, sellers cut	Market	Ridhwan et al.,
	Exploitation	wages or benefits, leading to	Saturation,	2023
		unfair labor practices.	Price	
			Competition	

Source: Author Compilation

In highly saturated markets, consumers become more price-sensitive and tend to overlook other aspects, such as product quality or sustainability. This forces sellers to compromise on quality to lower costs, which can reduce overall product standards in the market (Simchi-Levi & Wu, 2018). Market saturation also influences consumer behavior, with consumers often delaying purchases to wait for larger discounts or promotions, creating uncertainty in sellers' revenue streams (Julian et al., 2024; Peinkofer et al., 2015). In their efforts to compete on price, market players often neglect innovation or product differentiation, hindering the development of new products or improved services in the market (Huang et al., 2015). Reduced profitability forces some sellers to cut costs, including labor expenses. This can lead to unfair practices, such as low wages or poor working conditions, particularly in the manufacturing or logistics sectors (Ridhwan et al., 2023). Small sellers are often the most affected by market saturation. They lack sufficient resources to compete with larger players in terms of price or promotions, ultimately forcing them out of the market (Oprescu & Eleodor, 2014).

12 Jurnal Ekonomika dan Bisnis Islam Volume 8 Nomor 1, Tahun 2025

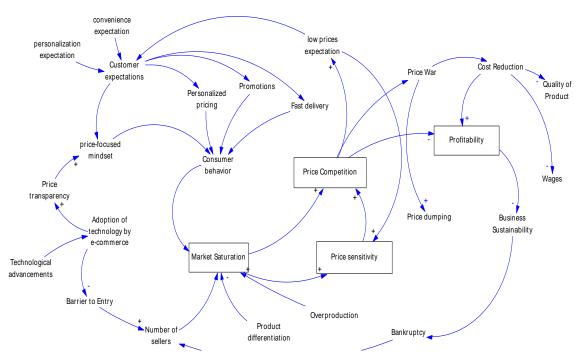


Figure 4. Comprehensive Causal-Loop Diagram of Market Saturation and Price Competition.

Source: Author Compilation

Islamic Economic Perspective on Market Saturation and Dynamic Price Competition

In the Islamic economic perspective, phenomena such as market saturation and intense price competition can be evaluated through fundamental principles like justice (*al-adl*), balance (*al-mizan*), and the objective of *maslahah* (public benefit) within the framework of *maqasid al-shari'ah*. Market saturation, which leads to an influx of sellers and aggressive price competition, undermines the principle of justice by creating an unequal playing field. Large players with substantial resources are often able to dominate the market, driving out smaller competitors. This concentration of market power violates the notion of distributive justice in Islamic economics, where opportunities and benefits should be equitably shared among all market participants. Furthermore, price competition in saturated markets frequently results in practices that compromise quality in favor of lower prices, which disrupts the balance (*al-mizan*) in economic activities. The focus on price alone often disregards other critical aspects, such as the sustainability of products and ethical practices in production. This imbalance not only reduces the overall standard of goods in the market but also encourages exploitative practices, such as underpaying workers or cutting corners in production.

From the perspective of *maslahah*, market saturation and price competition fail to serve the public good. These conditions harm consumers by prioritizing affordability over quality, harming producers by eroding profit margins and stifling innovation. They also create a detrimental cycle where small businesses struggle to survive amidst cutthroat competition, which are crucial for economic diversity and stability. Price wars and excessive discounting also encourage consumer behaviours driven by impulsiveness and wastefulness, contradicting the ethical values of moderation and accountability emphasized in Islamic teachings. From the perspective of Islamic economics, addressing the challenges posed by market saturation and price competition requires the implementation of solutions grounded in the principles of justice (*al-adl*), balance (*al-mizan*), and public benefit (*maslahah*). To uphold justice, market regulators must ensure a fair and competitive environment by curbing anti-competitive practices such as monopolies and price dumping. This can be achieved through policies that support small and medium enterprises (SMEs), enabling them to compete fairly with larger players and promoting equitable distribution of economic opportunities.

The principle of balance necessitates those businesses move beyond competing solely on price and focus on product differentiation, innovation, and ethical practices. Sellers should be encouraged to offer value that aligns with both consumer needs and sustainability goals. This ensures a balanced marketplace where the emphasis is not only on affordability but also on quality, ethical production, and long-term benefits. In line with maslahah, Islamic economics advocates for protecting both consumers and producers. For consumers, transparency in pricing and truthful advertising should be enforced to prevent exploitation and build trust. For producers, measures such as fair wages and ethical labor practices should be emphasized to create a stable and equitable economic ecosystem. Additionally, fostering a culture of moderation (wasatiyyah) among consumers is crucial to curb excessive consumption and promote mindful purchasing behavior, aligning with Islamic values of sustainability and accountability. Ultimately, the Islamic economic framework calls for a holistic approach that integrates ethical principles, regulatory oversight, and community well-being. By prioritizing justice, balance, and public benefit, these solutions aim to create a market that is fair, sustainable, and aligned with the higher objectives (magasid al-shari'ah) of Islamic economics.

5. Conclusion

E-commerce market saturation in Indonesia has led to intensified price competition, significantly impacting both sellers and consumers. The increase in sellers due to low entry barriers, supported by technological advancements, has created a highly competitive market environment. This has compelled sellers to lower prices aggressively, leading to reduced profit margins and fostering unsustainable business practices. Moreover, the lack of product differentiation has shifted consumer behavior to prioritize price over quality or brand loyalty, further amplifying market competition and price sensitivity. These dynamics are particularly detrimental to small businesses, which often struggle to survive amidst competition from larger players. In an Islamic economic context, the principles of justice (*al-adl*), balance (*al-mizan*), and public benefit (*maslahah*) highlight the challenges of such a saturated market. Justice demands equitable opportunities for all market participants, while balance emphasizes sustainable practices beyond aggressive pricing. These principles advocate for ethical business conduct and the prevention of monopolistic tendencies, promoting long-term market stability and inclusivity.

Future research should explore innovative pricing strategies and product differentiation methods to mitigate the adverse effects of market saturation. Policymakers must focus on developing regulatory frameworks to curb anti-competitive practices and support small businesses through incentives and infrastructure improvements. Furthermore, e-commerce platforms should promote ethical and

sustainable practices aligned with Islamic economic principles, such as transparent pricing and fair competition, to foster a more equitable and resilient market.

6. References

- Al-Daghistani, S. (2022). Beyond Maşlahah: Adab and Islamic Economic Thought. *American Journal of Islam and Society*, 39(3–4), 57–86. https://doi.org/10.35632/ajis.v39i3-4.2988
- Ali Mohamed, A. A., & Baig, F. B. S. (2012). Treatment of migrant workers: The Islamic perspective. Australian Journal of Basic and Applied Sciences, 6(11), 97–105. https://www.scopus.com/inward/record.uri?eid=2-s2.0-84871760181&partnerID=40&md5=75aabc2a3e9b70cd4e4ea5601d2cc48a
- Ali, S. A. M., Hassan, R., & Othman, A. A. (2024). Al-Musharakah-Led Islamic Sustainable Finance. In *Islamic Finance and Sustainable Development: A Global Framework for Achieving Sustainable Impact Finance* (pp. 148–161). https://doi.org/10.4324/9781003468653-17
- Alizadeh Emamzadeh, M. R. (2020). Analysis of economic convergence of Islamic justice in selected Islamic countries. *Journal of Economic Structures*, 9(1). https://doi.org/10.1186/s40008-020-00191-8
- Badan Pusat Statistik. (2023). Statistik E-Commerce 2022/2023. *Badan Pusat Statistik*, 27. https://www.bps.go.id/
- Bakharev, V., Karmanova, A., Nikiforova, Z., Pokrovskaya, L., & Shevchuk, E. (2023). Last Mile Delivery Transformation as a Method to Improve Customer Experience in Post-COVID-19 Russia and the World. *Lecture Notes in Networks and Systems*, 574 LNNS, 2005–2015. https://doi.org/10.1007/978-3-031-21432-5_219
- Cattelan, V. (2017). L'economia islamica: Alternativa apparente o reale? Oriente Moderno, 97(2), 270–290. https://doi.org/10.1163/22138617-12340155
- Chen, S., Liu, W., Song, H., & Zhang, Q. (2024). Government-led e-commerce expansion project and rural household income: Evidence and mechanisms. *Economic Inquiry*, 62(1), 150–174. https://doi.org/10.1111/ecin.13167
- Chen, Z., & Zhao, B. (2014). Unemployment and product market competition in a Cournot model with efficiency wages. *Canadian Journal of Economics*, 47(2), 555–579. https://doi.org/10.1111/caje.12081
- Chiou, L., Kafali, E. N., & Rysman, M. (2020). Internet use, competition, and geographical rescoping in Yellow Pages advertising. *Information Economics and Policy*, 52. https://doi.org/10.1016/j.infoecopol.2020.100867
- Choudhury, M. A., Pratiwi, A., Hossain, M. S., & Adenan, F. (2020). A Relational Well-Being (Maslaha) Index of Gender Development in Socio-Economic Development Sustainability. In *Economic Empowerment of Women in the Islamic World:* Theory and Practice (pp. 167–190). https://doi.org/10.1142/9789811212154 0009
- Cihan, C., Krisztina, P., & Akos, V. (2017). Try not to be late! The importance of delivery service in online shopping. *Organizations and Markets in Emerging Economies*, 8(2), 177–192. https://doi.org/10.15388/omee.2017.8.2.14186
- Datta, J., & Bose, S. (2024). A Study on the Growth Prospects of Q Commerce and Its Role Play in eCommerce Business in Present-Day India. In *Sustainability in Marketing Practice: Strategies for Industry* 4.0 (pp. 155–168). https://doi.org/10.1201/9781032668123-13

- Dias, E. G., de Oliveira, L. K., & Isler, C. A. (2022). Assessing the effects of delivery attributes on e-shopping consumer behaviour. *Sustainability (Switzerland)*, *14*(1). https://doi.org/10.3390/su14010013
- El-Essa, M., Weshah, S., & Nofal, M. (2024). Understanding the Practices and Challenges of Sustainability Reporting in Islamic Banking. In *Contributions to Management Science: Vol. Part F2529* (pp. 75–85). https://doi.org/10.1007/978-3-031-48770-5_8
- Firdaus, A. (2021). Determination of organisational essential needs as the basis for developing a maşlahah-based performance measurement. *ISRA International Journal of Islamic Finance*, 13(2), 229–250. https://doi.org/10.1108/IJIF-11-2017-0041
- Fransiscus, R. (2022). E-commerce is Paralyzing Distribution Contracts in Indonesia. *Global Legal Review*, 2(2), 91. https://doi.org/10.19166/glr.v2i2.5222
- Girdzijauskas, S., Mialik, A., Jociute, E., & Zujyte, N. (2011). Modeling the economic saturation. *Lecture Notes in Business Information Processing*, 97 LNBIP, 178–183. https://doi.org/10.1007/978-3-642-25370-6_18
- Griffith, R., Harrison, R., & Macartney, G. (2007). Product market reforms, labour market institutions and unemployment. *Economic Journal*, *117*(519), C142–C166. https://doi.org/10.1111/j.1468-0297.2007.02039.x
- Güney, N. (2024). Maqāsid al-Sharīʻa in Islamic Finance: A Critical Analysis of Modern Discourses. *Religions*, 15(1). https://doi.org/10.3390/rel15010114
- Hanif, M. (2019). Islamic mortgages: principles and practice. *International Journal of Emerging Markets*, 14(5), 967–987. https://doi.org/10.1108/IJOEM-02-2018-0088
- Hassan, R. (2024). Islamic Sustainable Finance Paradigm. In *Islamic Sustainable Finance: Policy, Risk and Regulation* (pp. 5–14). https://doi.org/10.4324/9781003395447-3
- Huang, Y., Liu, J., Zhu, R., Jiang, L., & Song, L. (2015). The research of e-commerce enterprises' price game: Empirical studies in China. Advances in Intelligent Systems and Computing, 362, 511–520. https://doi.org/10.1007/978-3-662-47241-5_43
- Hufnagel, G., Schwaiger, M., & Weritz, L. (2022). Seeking the perfect price: Consumer responses to personalized price discrimination in e-commerce. *Journal of Business Research*, *143*, 346–365. https://doi.org/10.1016/j.jbusres.2021.10.002
- Julian, A., Maheswar, C., Ramyadevi, R., Murali Dhar, M. S., & Selvi, S. (2024). Analysis and Estimation of Discounts on Product Prices in E-Commerce Sites. Proceedings - International Conference on Computing, Power, and Communication Technologies, IC2PCT 2024, 759–762. https://doi.org/10.1109/IC2PCT60090.2024.10486475
- Kahf, M. (2019). Islamic economics' methodology and Fiqh. In *Methodology of Islamic Economics: Problems and Solutions* (pp. 161–180). https://doi.org/10.4324/9780429320804-7
- Kayadibi, S. (2019). The State as an Essential Value Darūriyyāt of The Maqāşid al-Sharī'ah. *Ahkam: Jurnal Ilmu Syariah*, 19(1), 1–18. https://doi.org/10.15408/ajis.v19i1.6256
- Krämer, A., & Kalka, R. (2016). How digital disruption changes pricing strategies and price models. In *Phantom Ex Machina: Digital Disruption's Role in Business Model Transformation* (pp. 87–103). https://doi.org/10.1007/978-3-319-44468-0_6

- Kristanto, F. H., Wimanda Rahma, H., & Nahrowi, M. (2022). Factors Affecting E-Commerce Customer Loyalty In Indonesia. *Jurnal Syntax Transformation*, 3(09), 1150–1164. https://doi.org/10.46799/jst.v3i09.613
- Kumar, V., & Ayodeji, O. G. (2021). Determinants of the success of online retail in India. International Journal of Business Information Systems, 37(2), 246–262. https://doi.org/10.1504/IJBIS.2021.115373
- Lakhal, S. Y., & H'Mida, S. (2005). A pricing model for a new product sold over the internet. *International Journal of Internet Marketing and Advertising*, 2(1–2), 56–77. https://doi.org/10.1504/ijima.2005.007504
- Lee, E., & Lee, B. (2013). Changing price elasticity of digital goods: Empirical study from the e-book industry. *International Conference on Information Systems (ICIS* 2013): Reshaping Society Through Information Systems Design, 1, 721–736. https://www.scopus.com/inward/record.uri?eid=2-s2.0-84897727558&partnerID=40&md5=e7e48980f9f397c63cccd61bc0d5aa29
- Li, W., & He, W. (2024). Revenue-increasing effect of rural e-commerce: A perspective of farmers' market integration and employment growth. *Economic Analysis and*

Policy, *81*, 482–493. https://doi.org/10.1016/j.eap.2023.12.015

- Li, W. Y., Choi, T. M., & Chow, P. S. (2016). Fast fashion retail operations services: An empirical study from consumer perspectives. In *Service Supply Chain Systems:* A Systems Engineering Approach (pp. 139–151). https://doi.org/10.1201/b20894-17
- Lin, W. B., & Ku, T. Y. (2015). The influences of service quality of online order and electronic word of mouth on price sensitivity using loyalty as a mediating variable. *International Journal of Electronic Business*, 12(3), 215–241. https://doi.org/10.1504/IJEB.2015.071391
- Lindgren, C., Li, Y., & Rudholm, N. (2024). Why do firms compete on price comparison websites? The impact on productivity, profits, and wages. *International Review of Retail, Distribution and Consumer Research*, 34(1), 1–13. https://doi.org/10.1080/09593969.2022.2070773
- Liu, M., Min, S., Ma, W., & Liu, T. (2021). The adoption and impact of E-commerce in rural China: Application of an endogenous switching regression model. *Journal of Rural Studies*, 83, 106–116. https://doi.org/10.1016/j.jrurstud.2021.02.021
- Lobah, J. (2016). The Islamic Principle of Maslaha as Practical Wisdom for Human Development. In *CSR*, *Sustainability*, *Ethics and Governance* (pp. 145–151). https://doi.org/10.1007/978-3-319-28287-9_11
- Muslimin, J. M., & Etika, N. (2020). Wages in the Theoretical Perspectives and Islam. *Al-'Adalah*, 17(2), 335–358. https://doi.org/10.24042/adalah.v17i2.6577
- Oprescu, G., & Eleodor, D. (2014). The impact of the digital economy's development on competition. *Quality - Access to Success*, 15, 9–20. https://www.scopus.com/inward/record.uri?eid=2-s2.0-

84907256925&partnerID=40&md5=90fb0cff89df337b959f45fe4523db36

- Peinkofer, S. T., Esper, T. L., Smith, R. J., & Williams, B. D. (2015). Assessing the Impact of Price Promotions on Consumer Response to Online Stockouts. *Journal* of Business Logistics, 36(3), 260–272. https://doi.org/10.1111/jbl.12095
- Pérez-Trujillo, M., Torrejón, C. A., & Calderón, M. L. (2024). Is E-commerce an opportunity for boosting employment in developing countries? a study for the Chilean case. Asia-Pacific Journal of Regional Science, 8(4), 1077–1110.

https://doi.org/10.1007/s41685-024-00356-4

- Raimi, L., Abdur-Rauf, I. A., & Olaide Raimi, B. (2024). Interdependence of halal entrepreneurship and Islamic finance for creating a strong halal ecosystem. *Journal* of *Islamic Marketing*. https://doi.org/10.1108/JIMA-05-2023-0162
- Rakhmanov, A., Thommandru, A., & Tillaboev, S. (2024). Historical Trajectories and Modern Dynamics of Islamic Financial Law in Central Asia. *International Journal* of Legal Information. https://doi.org/10.1017/jli.2024.15
- Ramirez, E., & Goldsmith, R. (2009). Some antecedents of price sensitivity. Journal of Marketing Theory and Practice, 17(3), 199–214. https://doi.org/10.2753/MTP1069-6679170301
- Rethel, L. (2011). Whose legitimacy? Islamic finance and the global financial order. *Review of International Political Economy*, 18(1), 75–98. https://doi.org/10.1080/09692290902983999
- Ridhwan, M. M., Suryahadi, A., Rezki, J. F., & Andariesta, D. T. (2023). The impact of COVID-19 on the labour market and the role of E-commerce development in developing countries: Evidence from Indonesia. *Journal of the Asia Pacific Economy*. https://doi.org/10.1080/13547860.2023.2195710
- Riwanto, A., & Suryaningsih, S. (2022). Realizing Welfare State and Social Justice: A Perspective on Islamic Law. *Volksgeist: Jurnal Ilmu Hukum Dan Konstitusi*, 5(1), 41–51. https://doi.org/10.24090/volksgeist.v5i1.6430
- Saini, J. S., & Kumar, N. (2020). Issues pertaining to growth of digital economy: An arduous challenge before CCI. *Journal of Public Affairs*, 20(4). https://doi.org/10.1002/pa.2301
- Salma Sairally, B. (2013). Evaluating the corporate social performance of Islamic financial institutions: an empirical study. *International Journal of Islamic and Middle Eastern Finance and Management*, 6(3), 238–260. https://doi.org/10.1108/IMEFM-02-2013-0026
- Shabbir, M. S., Ghazi, M. S., & Akhtar, T. (2016). The relationship between traditional as well as modern modes of financial instruments for international market through Islamic finance. *Journal of Internet Banking and Commerce*, 21(1). https://api.elsevier.com/content/abstract/scopus_id/84963783813
- Shah, H. A. R., Hasan, B. M. M., Ahmad, H. M., & Ali, N. M. (2021). Modern Slavery and Forced Labour: An Overview of International Law, the Malaysian Law and Islamic Law Perspectives. *Ahkam: Jurnal Ilmu Syariah*, 21(2), 239–256. https://doi.org/10.15408/ajis.v21i2.22543
- Shaukat, M., Shafique, B., & Madbouly, A. (2024). Islamic Framework for Behavioral and Socio-Economic Justice. In *Islamic Finance in the Modern Era: Digitalization, FinTech and Social Finance* (pp. 52–78). https://doi.org/10.4324/9781003366751-5
- Simchi-Levi, D., & Wu, M. X. (2018). Powering retailers' digitization through analytics and automation. *International Journal of Production Research*, 56(1–2), 809–816. https://doi.org/10.1080/00207543.2017.1404161
- Smolo, E. (2024). Islam and free trade: The contributions of muslim scholars to modern economic theories. In *The Future of Islamic Finance: From Shari'ah Law to Fintech* (pp. 49–64). https://doi.org/10.1108/978-1-83549-906-120241004
- Srinivasan, R., Prasad, V. A., & Shrisha, S. (2013). The impact of technology on the buying behaviour in an online retail environment in India. 2013 Proceedings of

PICMET 2013: Technology Management in the IT-Driven Services, 569–575. https://www.scopus.com/inward/record.uri?eid=2-s2.0-

84890826946&partnerID=40&md5=bf13410a3e7e1c350df4606201b7ba5d

- Suartini, & Syafrizal. (2021). Al-Ghazālī On Social Welfare: In Search of its Relevance in the Context of Village Owned Enterprise. *Al-Risalah: Forum Kajian Hukum Dan Sosial Kemasyarakatan*, 21(1), 83–95. https://doi.org/10.30631/alrisalah.v21i1.647
- Thalib, P., Sabrie, H. Y., & Kurniawan, F. (2020). Islamic law principles in islamic business activity. *International Journal of Innovation, Creativity and Change*, 13(5), 378–387. https://api.elsevier.com/content/abstract/scopus_id/85086848848
- Tjiptodjojo, K. I., & Setyawan, S. (2015). Price Sensitivity: Consumer Behavior and Decision Making Process. *The 4th IBSM 2015 International Conference on Business, Management and Accounting*, 153–161.
- Tong, T., Xu, X., Yan, N., & Xu, J. (2022). Impact of different platform promotions on online sales and conversion rate: The role of business model and product line length. *Decision Support Systems*, 156. https://doi.org/10.1016/j.dss.2022.113746
- Trujillo, M. P., & Aleán–Romero, A. (2024). The impact of ICT and e-commerce on employment in Colombia. *Electronic Commerce Research and Applications*, 65. https://doi.org/10.1016/j.elerap.2024.101378
- Umashankar, N., Bhagwat, Y., & Kumar, V. (2017). Do loyal customers really pay more for services? *Journal of the Academy of Marketing Science*, *45*(6), 807–826. https://doi.org/10.1007/s11747-016-0491-8
- Victor, V., Nathan, R. J., & Fekete-Farkas, M. (2021). Consumer response towards personalised pricing strategies in online marketing. *International Journal of Technology Marketing*, 15(2–3), 223–265. https://doi.org/10.1504/IJTMKT.2021.118215
- Wang, J., & Hu, W. (2023). Study on Dynamic Pricing of Perishable Goods Based on Consumer Strategic Behavior in Two Purchasing Environments. Smart Innovation, Systems and Technologies, 358, 279–292. https://doi.org/10.1007/978-981-99-3416-4_23
- Wazin, & Suryanto, T. (2023). Constructing Islamic Law and Islamic Business Ethics for a Sustainable Halal Industry Economy. *Manchester Journal of Transnational Islamic Law and Practice*, 19(3), 212–223. https://www.scopus.com/inward/record.uri?eid=2-s2.0-%5107481622 % partnerID 40 % md5 240516 heg16702056(2h5246hb545240)

85197481623&partnerID=40&md5=3d051aba31679395a62b53d6bb5d53d0

- Xing-hong, Q., Qiang, S., & Zhi-sheng, H. (2019). Competitive and cooperative strategies for online shopping logistics service supply chain considering customer expectations and quality cost. *Journal of Industrial Engineering and Engineering Management*, 33(3), 136–146. https://doi.org/10.13587/j.cnki.jieem.2019.03.016
- Yoon, K., & Tran, T. V. (2011). Revisiting the relationship between consumer loyalty and price sensitivity: The moderating role of deal-proneness. *Journal of Marketing Theory and Practice*, 19(3), 293–306. https://doi.org/10.2753/MTP1069-6679190303
- Zatonatska, T., & Fedirko, O. (2019). Modeling of the E-Commerce Impact on the Employment in EU. 2019 IEEE International Conference on Advanced Trends in Information Theory, ATIT 2019 - Proceedings, 304–308. https://doi.org/10.1109/ATIT49449.2019.9030427

- Zhang, D. J., Dai, H., Dong, L., Qi, F., Zhang, N., Liu, X., Liu, Z., & Yang, J. (2020). The long-term and spillover effects of price promotions on retailing platforms: Evidence from a large randomized experiment on alibaba. *Management Science*, 66(6), 2589–2609. https://doi.org/10.1287/mnsc.2019.3316
- Zhang, X. L., & Demirkan, H. (2021). Between online and offline markets: A structural estimation of consumer demand. *Information and Management*, 58(4). https://doi.org/10.1016/j.im.2021.103467