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Halal Meat Consumption in East Java: The Role of Employement, Manufacturing, and MSME Income

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Abstract

The substantial Muslim population in East Java generates significant demand for halal meat products. Manufacturers and Micro, Small, and Medium Enterprises (MSMEs) play a pivotal role in shaping the region's total halal meat production. This study investigates the influence of the number of workers, manufacturing operating income, and seasonal income of halal meat MSMEs on halal meat consumption in East Java province, Indonesia. Secondary data were collected from seven cities across the province over the period 2003–2022, using a purposive sampling technique. The data were analyzed using a static panel regression model via EViews version 12. The findings reveal that only the variable representing total manufacturing income in the halal meat sector has a statistically significant partial effect on overall halal meat consumption in the selected cities. This suggests that manufacturing enterprises possess distinct advantages over MSMEs in contributing to consumption levels. Conversely, the number of workers in the halal meat sector does not exhibit a significant influence on total meat consumption.

Keywords: Consumption; Economic Activity; Halal meat; Manufacturing Income, MSMEs

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Introduction

Indonesia is home to the largest Muslim population in the world, not the second largest. Religious self-identity and moral obligations strongly influence the intention to consume halal food in Indonesia. These factors drive consumers to prefer halal-certified products (Susanty et al., 2022). Despite the high demand, there are challenges in maintaining the halal status of meat throughout the supply chain. Issues such as product fraud, accidental contamination, and the presence of residues require a robust traceability mechanism. There is a need to raise consumer awareness about the importance of halal certification. Many consumers assume that all products are halal by default, which is not always the case. Efforts to educate consumers about the importance of halal certification and the potential risks of non-certified products are essential (Lestari et al., 2023).

East Java is one of the most populous provinces in Indonesia, which also has a large Muslim population. The large number of Muslim consumers in East Java represents a large market for halal meat products (Adirestuty et al., 2025; Timur et al., 2023). This drives the need for large-scale production, efficient supply chains, and strong distribution networks to meet demand (Vanany et al., 2020). The high demand for halal meat creates significant economic opportunities for businesses involved in farming, slaughtering, processing, distribution, and retail in East Java. It also drives investment in halal-related industries and infrastructure (Silalahi et al., 2022).

Table 1. Average Consumption of Several Food Commodities per Capita, 2007-2024

Commodity	Unit	2019	2020	2021	2022	2024
Fresh fish and shrimp	kg	0.34	0.33	0.35	0.37	0.36
Canned fish and shrimp	ounce	0.43	0.41	0.42	0.42	0.41
Beef	kg	0.01	0.01	0.01	0.01	0.01
Broiler chicken	kg	0.12	0.13	0.14	0.15	0.15
Chicken eggs	kg	2.14	2.19	2.28	2.34	2.19
Duck eggs	grain	0.04	0.03	0.03	0.14	0.15

Source: BPS (2024)

Manufacturers and Small and Medium Enterprises (SMEs) play a critical role in shaping the overall production of halal meat. Owing to their access to advanced technology, established infrastructure, and abundant resources, manufacturers are

capable of operating on a large scale (Adirestuty et al., 2025). Their ability to process substantial volumes of meat efficiently contributes significantly to the halal meat supply chain. Furthermore, manufacturers benefit from economies of scale, which enable them to reduce production costs and offer more competitively priced products to consumers (Qader et al., 2023), thereby enhancing their market advantage. In contrast, SMEs often demonstrate greater flexibility and responsiveness to local market needs and consumer preferences. They are well-positioned to serve niche markets by offering specialized halal meat products (Shara et al., 2019). Many SMEs also utilize traditional processing methods, which may appeal to consumers seeking artisanal or culturally authentic halal meat options. While SMEs may lack the scale of manufacturers, their contribution to employment generation and local economic development remains significant (Nakyinsige et al., 2012).

Human labor also plays an essential role in the operations of both manufacturers and MSMEs. Without a reliable and skilled workforce, these enterprises cannot function effectively. Different roles across the halal meat supply chain require varying levels of education and expertise. Therefore, both manufacturers and MSMEs must ensure they employ personnel capable of upholding halal standards, preventing contamination with non-halal substances, and maintaining meat quality throughout the supply chain (Zakik et al., 2022). In light of these considerations, this study aims to examine the impact of the number of workers, manufacturing income, and seasonal income of halal meat MSMEs on the level of halal meat consumption in East Java as reflected in the trends presented in Table 1.

Literature Review

Theoretical Basis for Halal Meat Consumption

Before formulating hypotheses regarding the influence of each independent variable on the dependent variable, this study considered three theoretical frameworks as potential foundations: supply and demand theory, the consumer behavior model, and Islamic economic theory. These theories were evaluated and compared based on specific criteria, including their primary focus, key variables, explanatory mechanisms, and analytical objectives. A comparative assessment of these three frameworks was conducted to determine the most appropriate theoretical lens for understanding the factors influencing halal meat consumption. The following table 2 section presents a concise comparison of the three theories.

Table 2. Comparison between the three theories for halal meat research

Analysis Criteria	Theory of Demand & Supply	Consumer Behavior Model	Sharia Economic Theory
Main Focus	The interaction between buyers and sellers at the market level to determine equilibrium prices and quantities (Dwita & Sadana, 2021)	The decision-making process by individuals or groups of consumers (Yudha et al., 2024)	Conforming economic activities with Islamic principles and values to achieve welfare (maslahah) (Wijayanti et al., 2020)
Key Variables	Price, Quantity Supplied, Quantity Demanded (Ab Talib, 2017)	Perception, Motivation, Attitude, Social Norms, Income, and Preferences (eg: "halal") (Arifin et al., 2024)	Justice ('Adl), Public Interest (Maslahah), Prohibition of Usury & Gharar, Guarantee of Halal & Thayyib (Usman et al., 2024)
Explanation of the Influence of the Number of Workers	Directly: An increase in the number of workers increases production capacity, which increases supply, then lowers prices, and ultimately increases the quantity consumed (Mahmood & Arshed, 2024)	Indirectly: Increased supply impacts product availability and prices influence individual consumer decisions and choices (Handriana et al., 2021)	As a Prerequisite: A sufficient number of competent workers is seen as a requirement to ensure that the production process follows Sharia principles and fulfills the market demand (Fauzi et al., 2024)
Purpose of Analysis	Predicting changes in price and quantity in the market because of a shift in the supply curve (due to a change in the number of workers) (Annabi & Ibidapo-Obe, 2017)	Understanding why and how consumers respond to changes in the price and availability of halal meat in the market (Zakik et al., 2022)	Evaluate whether the entire industrial value chain (from upstream to downstream) has been running following ethics and sharia rules (Siddiq et al., 2020)
Compatibility for This Case	Very Fitting. Provides the clearest and most direct mechanistic explanation.	Complement. Explains the psychological and sociological aspects of the demand side.	Contextual. Provides a philosophical and ethical basis for why this market exists and should be regulated.

Urgency of Halal Meat Supply

The rapid growth of the global Muslim population has led to a substantial increase in the demand for halal products, particularly meat. This trend is further reinforced by rising consumer awareness and a growing preference for Sharia-compliant goods, supported by increasing income levels and upward social mobility. To accommodate the projected surge in demand, a long-term strategy is essential, one that focuses on expanding both production and distribution capacity. Meeting the demand for halal meat is intrinsically linked to the availability of high-quality and sustainable livestock resources. Beyond its economic significance, the halal industry also contributes to social welfare and the empowerment of Muslim communities. The integration of modern technologies has accelerated innovation across the halal meat supply chain, from production and processing to distribution, making the industry more efficient, scalable, and trustworthy. However, halal meat differs significantly from conventional meat due to its religious requirements. Therefore, the establishment of globally recognized standards and consistent certification mechanisms is vital to ensuring the integrity of halal products and facilitating international trade. Halal certification must not only satisfy religious requirements but also align with food safety and public health standards. As such, the implementation of international halal certification and the harmonization of standards across countries are crucial for minimizing trade barriers and ensuring product reliability across borders.

According to the State of the Global Islamic Economy Report (2023), Indonesia has the world's second-largest Muslim population and records an average meat consumption rate of approximately 11.6 kg per capita per year (across all meat types), with nearly all meat consumed being halal. The increasing demand for halal meat in Indonesia stems from both religious obligations and the continuous growth of its Muslim population (Suprayogi et al., 2024). When compared to high-income Muslim-majority countries such as the United Arab Emirates, Indonesia exhibits an even greater demand for halal meat, driven largely by population size rather than income levels (Arifin et al., 2024). Despite this demand, domestic halal meat supply remains insufficient, prompting the government to import premium beef and buffalo meat to meet market needs (Hanifasari et al., 2024). The following table 3 section presents a comparative analysis of halal meat demand, regulatory frameworks, and key challenges across four Organization of Islamic Cooperation (OIC) member countries, Indonesia and Malaysia (as middle-income nations), the UAE (as a high-income country), and Sudan (as a low-income country).

Table 3. Halal meat consumption, regulation, and challenges in each Islamic country

Country	Halal Meat Consumption (Volume & Value)	Halal Regulation & Certification	Challenges / Market Forces
Indonesia	The market is huge with significant consumption of halal meat, driven by the massive Muslim population and increasing purchasing power (Hanifasari et al., 2024)	Supervision and certification are carried out by MUI and BPJPH; currently undergoing standard harmonization (new halal logo as of 2023) (Fuseini et al., 2021)	Challenges in improving supply chain quality and international recognition of halal certification (Zaki et al., 2024)
Malaysia	The halal market is mature with high consumption volumes, as well as an important role as an export hub for halal products (Azam et al., 2024)	JAKIM as a halal certification authority that is recognized globally (Muflih & Juliana, 2021)	Strength in the global reputation of halal certification, but must compete in the tight international market (Badruldin et al., 2012)
UAE	High halal consumption, supported by Muslim and expatriate populations; becoming a large import market for premium halal products (Halimi et al., 2022)	Having halal certification standards with strict supervision, in line with global market needs (Fuseini et al., 2021)	Dependence on imports and international market dynamics demand innovation in the distribution chain (Jaiyeoba et al., 2019)
Sudan	Halal meat consumption is quite significant at the regional level with a focus on local and surrounding market needs (Chambers, 2010)	Halal certification and regulation systems are generally run locally based on community needs (Chowdhury et al., 2024)	Challenges in infrastructure and investment, but has strength in regional market potential that is not yet maximized (Ahmed et al., 2025)

Number of Workers on Halal Meat Consumption

A substantial workforce in the meat processing sector has the potential to increase production capacity, thereby boosting the overall supply of meat. An expanded supply can contribute to lower market prices, making meat more affordable and accessible to consumers, which in turn may stimulate higher consumption levels (Ryandono et al., 2020). Conversely, labor shortages have been shown to negatively affect meat production, often resulting in supply constraints and elevated retail prices. For instance, a labor shock in the broiler supply chain led

to significant supply disruptions and an average retail price increase of 11.11% (Masudin et al., 2020).

These findings highlight the importance of a stable and sufficient labor force in maintaining optimal production levels and ensuring price stability. Larger meat processing facilities typically offer higher wages due to their ability to leverage economies of scale, making them more attractive to workers and enabling them to expand their production capacity (Qader et al., 2023). Moreover, such facilities incur lower fixed costs per unit of output, enhancing operational efficiency and supporting more stable or reduced meat prices (Zaki et al., 2024). Based on this rationale, the following hypothesis figure 1 is proposed:

H_1 : The number of workers in the halal meat sector has a significant effect on the total consumption of halal meat in society.

Total Revenue of Halal Meat Manufacturing and Its Influence on Halal Meat Consumption

Higher revenues enable manufacturers to reinvest in improving the quality and consistency of halal meat products. This includes the standardization of halal certification processes, adoption of advanced packaging and processing technologies, and adherence to rigorous production standards. Such enhancements can boost consumer confidence, thereby increasing demand. Moreover, substantial profits allow manufacturers to allocate resources toward research and development, leading to the creation of innovative halal-certified products, such as processed or value-added meat offerings, which can help expand market reach and attract new consumer segments. In addition, strong financial performance allows manufacturers to offer more competitive pricing strategies, which is particularly effective in stimulating demand among price-sensitive consumers. Competitive pricing, coupled with high product quality and reliable halal assurance, positions manufacturers favorably in the growing halal meat market. Based on this rationale, the following hypothesis figure 1 is proposed:

H_2: The total revenue of the halal meat manufacturing sector significantly affects overall halal meat consumption in society.

Total of Annual Income of Halal Meat Processing MSMEs and Its Impact on Halal Meat Consumption

According to Masudin et al. (2020), higher revenues enable Micro, Small, and Medium Enterprises (MSMEs) to invest in improving product quality, thereby

enhancing customer satisfaction and potentially increasing market demand. Profitable MSMEs are better positioned to implement and sustain quality management systems, which are crucial for maintaining product consistency, strengthening competitiveness, and expanding market share—both domestically and internationally.

A structured quality management approach allows MSMEs to enhance their operational processes, product standards, and service delivery, resulting in greater customer satisfaction and a stronger market reputation (Wijayanti, 2020). Moreover, MSMEs with sufficient financial resources can utilize business intelligence tools to make data-driven decisions aligned with market trends and evolving consumer preferences. This strategic alignment enables them to tailor offerings more effectively, leading to increased consumer satisfaction and higher demand (Ryandono et al., 2019). By prioritizing quality and innovation, profitable MSMEs can successfully differentiate themselves from competitors, an essential factor in attracting and retaining a loyal customer base, which in turn sustains long-term consumption growth (Qosim, 2022). Based on these considerations, the following hypothesis figure 1 is proposed:

H_3: The total seasonal income of halal meat processing MSMEs significantly affects halal meat consumption in the community.

Figure 1. Variable model
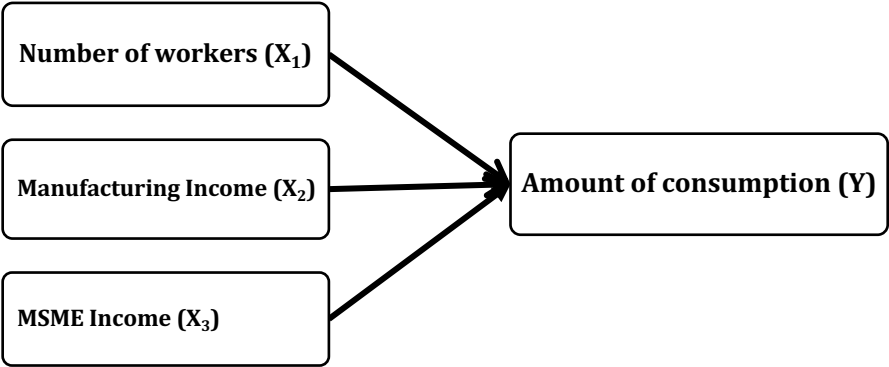
Methods

Data Collection

This study employs a quantitative research approach using secondary data as the primary source. The data consist of statistical records on halal meat, obtained from the Ministry of Trade of the Republic of Indonesia. The dataset covers a period from 2003 to 2022 and includes information from seven selected cities in East Java. The choice of these seven cities, Surabaya, Sidoarjo, Gresik, Malang, Probolinggo, Nganjuk, and Jombang, was based on several key considerations. East Java is one of Indonesia's most populous and economically dynamic provinces, with a significant Muslim population that drives strong demand for halal products. The province has seen continuous growth in its halal meat industry, supported by widespread market distribution and a progressively structured halal certification framework (Mutmainah & Romadhon, 2023). Additionally, East Java is recognized as one of the country's major livestock production centers, supplying both domestic markets and export demands. These characteristics make it a strategically relevant location for examining halal meat policy and market development.

The collected data were first organized into tables and tabulated to identify any missing or incomplete entries, which were subsequently excluded from the analysis. Data selection was conducted using a purposive sampling method based on specific inclusion criteria: (1) data recognized and validated by the Halal Product Assurance Organizing Agency (BPJPH), (2) data involving halal meat manufacturing activities, and (3) exclusion of any transactions or sources containing elements of haram. This careful selection ensures the relevance and validity of the data used in the study, which is evidenced by the details presented in Table 4.

Table 4. Types of data used

Variables	Unit	Information	Reference
Number of workers (X_1)	Soul	Number of workers in both informal and non-formal sectors in the halal meat industry	(Ayyub et al., 2013)
Manufacturing income (X_2)	Billion IDR	Net income of manufacturers processing halal meat	(Hanifasari et al., 2024)

Variables	Unit	Information	Reference
MSME Income (X_3)	Billion IDR	Seasonal income of MSMEs selling halal processed meat	(Sri Ernawati & Iwan Koerniawan, 2023)
Amount of consumption (Y)	Ton	Amount of halal meat consumption in a city/year	(Masudin et al., 2020)

Data Analysis Techniques

This study employs a static panel data analysis method, utilizing the EViews 12 Student Version as the analytical tool. Prior to conducting the main analysis, the dataset was assessed for normality using a descriptive statistical test, specifically examining kurtosis and skewness values to evaluate the distribution of the data. The model selection process involved three key statistical tests. First, the Chow test was conducted to determine whether the Common Effect Model (CEM) or the Fixed Effect Model (FEM) would be more appropriate. Second, the Hausman test was applied to assess whether the Random Effect Model (REM) or FEM was a better fit for the data. Third, the Lagrange Multiplier (LM) test was used to decide between the CEM and REM approaches. These sequential tests ensured that the most suitable panel data model was selected for further analysis.

Once the appropriate model was identified, the panel regression was performed to examine both the partial (individual) and simultaneous (overall) effects of the independent variables (X) on the dependent variable (Y). The t-test was used to assess the significance of each independent variable individually, while the F-test evaluated the collective impact of all independent variables on halal meat consumption. Additionally, the R-squared (R^2) value was examined to measure the explanatory power of the model and determine how much of the variation in the dependent variable could be accounted for by the variables included in the study. To complement the quantitative analysis, this study also incorporates a literature review to contextualize the findings, identify challenges, and discuss the implications of the relationships between the independent variables and halal meat consumption based on the selected panel data model.

Result and Discussions

Table 5 indicates that the skewness values for all variables are below 0.05. In the context of panel data analysis using EViews, a skewness range between -0.5 and 0.5 is generally considered acceptable, suggesting that the data are approximately symmetrically distributed. A symmetric distribution minimizes the

risk of bias in statistical estimations and enhances the reliability of regression results. Additionally, the kurtosis values for all variables are below 3.5, which is indicative of a relatively normal distribution (Stawarz et al., 2021). Kurtosis measures the "tailedness" of a probability distribution. A value of 3 corresponds to a perfectly normal distribution, while values above 3 suggest the presence of heavier tails, implying a greater likelihood of extreme or outlier values. Although financial datasets often exhibit kurtosis values exceeding 3 due to volatility and non-normality (Su, 2010), the results in this study suggest that the data conform reasonably well to the assumptions of normality, thereby supporting the validity of subsequent statistical analyses.

Table 5. Results of descriptive analysis

Statistic	Y	X_1	X_2	X_3
Mean	17.30	12.67	228.63	171.53
Median	17.25	12.63	225.00	180.00
Maximum	18.50	13.25	244.63	277.50
Minimum	16.50	12.25	216.00	114.00
Std. Deviation	0.58	0.28	8.54	42.57
Skewness	0.29	0.23	0.25	0.47
Kurtosis	1.90	2.17	2.03	2.52
Jarque-Bera	5.32	3.05	4.07	3.79
Probability	0.07	0.22	0.13	0.15
Sum	1418.63	1039.13	18748.00	14065.63
Sum Sq. Dev.	27.25	6.33	5908.37	146815.40
Observations	82.00	82.00	82.00	82.00

Building on the analysis of data distribution, Table 5 shows that the probability score from the Chow test is greater than 0.05. This result indicates that the Common Effect Model (CEM) is not appropriate for the sample data used in this study. Consequently, the data must be further tested using either the Random Effect Model (REM) or the Fixed Effect Model (FEM) to determine the most suitable panel data approach.

Table 6. Chow Test

Effects Test	Statistic	d.f.	Prob.
Cross-section F	12.45051	(3, 75)	1.08E-06

Following the Chow test results shown in Table 6, which indicate significant differences between the Common Effect Model (CEM) and the Fixed Effect Model (FEM), the Hausman test is conducted to determine whether FEM or the Random Effect Model (REM) is more appropriate. Table 7 presents the results of the Hausman test, which shows a probability value of 3.84E-05—less than the 0.05 threshold. This indicates that the Fixed Effect Model (FEM) is the more suitable model for analyzing the panel data in this study. According to standard panel data selection criteria, a p-value below 0.05 in the Hausman test supports the use of FEM, while a value above 0.05 would suggest using REM.

Table 7. Haussman test

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	23.1064	3	3.84E-05

To further validate the model choice, Table 8 displays the results of the Breusch-Pagan Lagrange Multiplier (LM) test, which produces a probability value of less than 0.05. This suggests that either FEM or REM is more appropriate than the Common Effect Model (CEM). When considered alongside the Hausman test results, this further supports the selection of the Fixed Effect Model (FEM) as the best fit for this panel dataset.

Table 8. Breusch-Pagan test

Test Hypothesis	Cross-section	Time	Both
Breusch-Pagan	13.27 (0.0003)	4.59 (0.0321)	17.86 (0.0000)
Honda	3.64 (0.0001)	-2.14 (0.9840)	1.06 (0.1445)
King-Wu	3.64 (0.0001)	-2.14 (0.9840)	2.62 (0.0044)
Standardized Honda	5.86 (0.0000)	-2.10 (0.9819)	-2.56 (0.9948)
Standardized King-Wu	5.86 (0.0000)	-2.10 (0.9819)	0.70 (0.2415)
Gourieroux et al.	--	--	13.27 (0.0005)

In addition, Table 9 indicates that the R-square value exceeds 0.75, suggesting that approximately 75% of the variation in the dependent variable can be explained by the independent variables included in the model. The remaining 25%

is attributable to factors not captured within the scope of this study. An R-square value greater than 0.75 reflects strong explanatory power. Moreover, the F-statistic value is less than 0.05, confirming the overall significance of the regression model. As illustrated in Table 9, only variable X_2, representing the operational income of halal meat manufacturing, has a statistically significant impact on the total halal meat consumption within the community. In contrast, variable X_3 displays an extremely small coefficient (0.000346) and an insignificant p-value (greater than 0.05), indicating a negligible effect on the dependent variable. This finding implies that the annual income of MSMEs operating in the halal meat sector exerts minimal influence on total halal meat consumption across the seven cities of East Java. Furthermore, Table 9 reinforces this conclusion by demonstrating that the p-value for X_2 is below 0.05, confirming its significant and positive partial effect on variable Y. In addition, Table 9 shows that the F-statistic value is also below 0.05, suggesting that the three independent variables collectively exert a statistically significant and positive influence on the dependent variable.

Table 9. Partial and simultaneous influence tests

Category	Details			
Model Specification	Panel EGLS (Cross-section random effects), Swamy and Arora estimator			
Dependent Variable	Y			
Sample Period	2000–2020			
Periods Included	21			
Cross-sections Included	4			
Total Panel Observations	82 (Unbalanced)			
Effect Specification				
Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
X_1	0.56	0.32	1.79	0.08
X_2	0.04	0.01	4.22	0.00
X_3	0.00	0.00	0.44	0.66
C (Constant)	0.67	1.10	0.33	0.74
Weighted Statistics				
R-squared	0.76	Mean dependent var		17.30
Adjusted R-squared	0.75	S.D. dependent var		0.58
S.E. of regression	0.29	Sum squared residuals		6.45

F-statistic	83.79	
Prob(F-statistic)	0	
Unweighted Statistics		
R-squared		0.76
Mean dependent var		17.30
Sum squared residuals		6.45

This finding aligns with the study by Umberger (2007), who emphasized that the relationship between meat production and consumer demand is complex and influenced by multiple interrelated factors. Producers' profitability in the meat industry is closely linked to fluctuations in consumer demand. For instance, the U.S. beef industry witnessed a significant decline in demand between 1979 and 1998, which adversely affected producers' profit margins. In response, the industry invested in enhancing beef quality, production efficiency, and food safety measures to recapture market share and improve profitability. Moreover, technological advancements—particularly in automation and artificial intelligence—have transformed meat production processes by increasing operational efficiency, improving product quality, and minimizing environmental impact. These innovations offer a strategic pathway to sustaining profitability while addressing growing concerns related to sustainability. As noted by Mardiyah et al. (2021), the integration of automation and AI has revolutionized meat production systems, enabling more streamlined operations, higher quality outputs, and reduced ecological footprints.

The number of workers, represented by variable X_1, does not significantly influence halal meat consumption in East Java, likely because consumption patterns are more strongly shaped by cultural norms, dietary habits, and individual preferences than by employment figures. For instance, if the population demonstrates a preference for alternative protein sources such as fish or chicken over beef, the number of workers in the halal meat sector becomes a less relevant factor. Moreover, halal meat consumption tends to correlate more closely with household income and purchasing power. Even if the number of workers increases, their influence on consumption remains minimal if their income levels are low or if they opt for more affordable sources of protein. This observation is supported by Fuseini et al. (2021), who noted that economic factors and food preferences often override supply-side considerations in determining consumption patterns.

Similarly, the income of MSMEs engaged in the halal meat sector (X_2) appears to exert only a weak influence on overall halal meat consumption in East Java. This may be attributed to the fact that many halal MSMEs in the region continue to operate on a small scale with limited distribution capacity. If their market penetration remains narrow, increases in income do not necessarily translate into wider or higher consumption levels. Laila et al. (2022) found that the development of halal MSMEs in East Java remains in its early stages, with many enterprises lacking formal halal certification and effective business management systems. These limitations constrain their ability to contribute meaningfully to regional consumption trends, regardless of income growth. This is consistent with the dynamics outlined in Table 10, which highlights how fluctuations in profit—particularly among producers—can either stimulate or suppress halal meat consumption, depending on how profits are managed and reinvested.

Table 10. Impact of increasing/decreasing manufacturing profits on halal meat consumption

Increase Profit		Profit Decrease
Positive	Negative	
Producers can invest in improving meat quality leading to higher consumer satisfaction and potentially increasing demand.	If manufacturers prioritize profit margins over consumer affordability, price increases can reduce demand, especially among price-sensitive consumers.	Lower profits could lead to reduced investment in quality, innovation, and marketing, potentially impacting consumer demand. Producers are forced to raise prices to maintain profitability, potentially reducing demand.
Profits can fund research and development of new meat products that have the potential to expand markets and attract new consumers.	Producers may prioritize profits over maintaining or improving meat quality standards, leading to decreased consumer confidence and reduced demand.	Falling profits could lead to reduced meat production, potentially impacting supply and driving up prices further.
Increased profits can allow producers to offer more competitive prices and stimulate demand, especially among price-sensitive consumers.	Leading to unethical practices or exploitation in the supply chain, which damages consumer trust and reputation.	To cut costs, manufacturers may sacrifice quality standards, leading to decreased consumer satisfaction and trust.
Profits can be used to improve		

Increase Profit	Profit Decrease
the meat supply chain, ensuring consistent quality, availability, and safety of meat products, which can increase consumer trust and loyalty.	
Increased profits can support effective marketing campaigns to educate consumers about the benefits of meat consumption and build brand loyalty.	

In addition to fluctuations in profit margins, several other key factors contribute to the profitability of halal meat manufacturing, as detailed in Table 11. One of the key challenges lies in the complexity of halal meat processing itself. Each type of meat, depending on the animal source, possesses unique characteristics and requires specific considerations to ensure compliance with halal standards. These variations necessitate meticulous attention to sourcing, slaughtering practices, and processing methods to maintain religious and ethical integrity. Additionally, supply chain costs must be carefully managed, as the procurement and processing of different meat types often involve varying operational expenses. Not all meat sources incur the same costs, and disparities in logistics, certification, and quality control further complicate the cost structure. Thus, maintaining profitability in halal meat production requires not only market responsiveness but also strategic management of diverse operational variables.

Table 11. Challenges of halal meat processing in manufacturing

Challenge	Beef	Fish	Chicken
Source and Traceability	Ensuring livestock comes from halal-certified farms and is slaughtered according to Islamic rites (Zabiha). Potential problems with imported beef and verifying its halal status (Fuseini et al., 2017)	Determining the halal status of certain seafood (e.g. shellfish) based on various interpretations of Islam. Maintaining cold chain integrity throughout the supply chain (Irnawati et al., 2023)	Ensure broiler farms comply with halal standards (feed, living conditions, handling). Concerns about growth hormones and antibiotics used in poultry farming (Susanty et al., 2024)

Challenge	Beef	Fish	Chicken
Slaughter/Processing	The need for certified Muslim slaughterers trained in the Zabiha technique (Siswara et al., 2022)	Maintain cleanliness and prevent contamination during processing. Ensure proper handling and preservation to maintain freshness and quality (Morand-Fehr et al., 2011)	Slaughtering large numbers of animals requires an efficient process while adhering to halal guidelines. Ensuring proper stunning methods are used (if applicable) and adhering to halal standards (Govindaiah et al., 2023)
Certification & Audit	Obtain and maintain halal certification from a recognized Indonesian halal certification body (e.g., LPPOM MUI). Periodic internal and external audits to ensure continued compliance with halal standards (Mahbubi & Uchiyama, 2020)	Obtain halal certification for certain processing facilities and products. Ensure traceability and documentation for audit purposes (Llorente-Rodriguez et al., 2024)	Obtain and maintain halal certification for farms, slaughterhouses, and processing facilities. Regular audits to ensure compliance with halal standards throughout the supply chain (Anggraini et al., 2024)
Logistics & Distribution	Maintaining cold chain integrity during transport and storage to prevent spoilage and maintain halal integrity. Ensuring separation of halal and non-halal products during transport and storage (Al-Mahmood, 2023)	Maintaining the integrity of the cold chain from catch to consumer to ensure freshness and prevent histamine formation (Nurilmala et al., 2022)	Maintaining cold chain integrity during transportation and storage. Efficient distribution network to reach wide consumer demand (Ismoyowati, 2015)
Special Context of Indonesian	High domestic demand for beef requires large-scale production and an efficient supply chain (Hidayati et al., 2023)	Ensuring sustainable fishing practices and addressing the problem of overfishing (Herianingrum et al., 2024)	Requires large-scale and efficient production: consumer price sensitivity and the need to maintain competitive prices (Akbar et al., 2022)

Table 12 illustrates that the manufacturing profit variable has a significant impact on the total meat consumption within the community, whereas the seasonal income of MSMEs engaged in selling halal processed meat does not exhibit a meaningful influence. This finding aligns with the study by (Hanifasari et al., 2024), which highlights the intense competition between large-scale producers and small and medium-sized enterprises (SMEs) in the halal meat market. Large producers tend to dominate the industry due to their capacity to meet high-volume demand while consistently upholding stringent production and quality standards. In contrast, many SMEs struggle to compete on scale, efficiency, and distribution reach, which may explain their limited influence on overall consumption patterns.

Table 12. Manufactures vs SMEs in the halal meat sector

Feature	Manufacturing	SMEs
Production Volume (Qader et al., 2023)	High-volume mass production	Batch production, often at lower volumes
Economies of Scale (Ayyub et al., 2013)	Significant economies of scale, resulting in lower costs per unit	Limited economies of scale, potentially increasing costs per unit
Product Range (Othman et al., nd)	Often focus on standard and common products	More likely to offer diverse, specialty, or specialized products (e.g., organic, premium cuts, traditional processed)
Target Market (Asfia et al., 2021)	Wide market reach, targeting mass consumers	Often target specific consumer segments, local markets, or niche markets (e.g., ethnic communities, health-conscious consumers)
Distribution Network (Riaz & Riaz, 2024)	Extensive distribution network, including supermarkets, hypermarkets, and export markets	More localized distribution, often through local markets, butchers, or direct sales
Marketing & Branding (Vanany et al., 2019)	Significant investment in marketing and branding, building strong brand recognition	Marketing budgets are limited, often relying on word of mouth or local advertising.
Technology & Innovation (Zainalabidin et al., 2019)	Investing in advanced technology and R&D for efficient production and product development	May have limited access to advanced technology, relying on traditional methods or adapting existing equipment
Quality Control & Standardization (Asfia et al., 2021)	Strong quality control systems and adherence to strict standards, ensuring consistent product quality and halal compliance.	Quality control can vary depending on resources and expertise but often emphasizes personal relationships with

		suppliers and customers.
Pricing Strategy (Apriandi & Agustin, 2021)	Competitive pricing due to economies of scale	May have higher prices due to higher costs per unit or focus on premium products.
Flexibility & Adaptability (Beik & Aprianti, 2016)	Less flexible and slow to adapt to changes in market demand	More flexible and adaptable to local market needs and consumer preferences
Access to Capital (Akinlo & Okunlola, 2021)	Easier access to financing and investment	May face challenges in accessing financing and investment
Compliance with Regulations (Derasit et al., 2020)	Well-equipped to handle complex regulatory requirements and halal certification processes	May face challenges in navigating complex regulations and certification processes due to limited resources.
Competition Strategy (Shafaei & Mohamed, 2015)	Compete on price, volume, and brand recognition	Compete on product differentiation, quality, local connections, and personalized service
Impact on Total Market Supply (Susanty et al., 2022)	The major contributor to overall market supply due to high production volumes	Contribute significantly to local and niche markets, adding diversity to the overall market supply.

Conclusion

Based on the findings presented above, it can be concluded that the total income of halal meat sector manufacturing significantly and partially influences the overall consumption of halal meat in the seven cities of East Java province, Indonesia. This is likely due to the competitive advantages held by manufacturing firms over MSMEs in terms of production capacity, market reach, and adherence to quality standards. In contrast, the number of workers in the halal meat sector does not appear to significantly affect total meat consumption. The intense competition between large-scale manufacturers and MSMEs in the halal meat market underscores the dominance of major producers, who are better equipped to meet large-scale demand while maintaining consistent quality and halal certification standards.

This study is limited by its geographical scope, as the data is restricted to seven cities in East Java, which constrains the generalizability of the findings and limits their applicability to broader Muslim contexts or other countries. Future research should investigate the underlying reasons why the seasonal income of MSMEs engaged in selling raw or processed halal meat does not significantly influence

community consumption patterns. This line of inquiry is essential, given the important role MSMEs play in local employment and economic development. Moreover, subsequent studies could benefit from incorporating dynamic panel data methods and addressing potential endogeneity issues to gain a more comprehensive understanding of the short- and long-term effects within the halal meat supply and demand framework.

BIBLIOGRAPHY

Ab Talib, M. S. (2017). Motivations and benefits of halal food safety certification. *Journal of Islamic Marketing*, *8*(4), 605–624. https://doi.org/10.1108/JIMA-08-2015-0063

Adirestuty, F., Ratnasari, R. T., Wardhana, A. K., Miraj, D. A., & Battour, M. (2025). Gastronomy of Religious Tourism: Overview and Future Research Agenda. *GeoJournal of Tourism and Geosites*, *58*(1), 188–199. https://doi.org/10.30892/gtg.58116-1401

Ahmed, A. O., Abdalla, A. M., & Ali, A. M. (2025). Investigating the impact of soft TQM practices on employees' organizational commitment in governmental Sudanese petroleum organizations. *International Journal of Quality & Reliability Management*. https://doi.org/10.1108/IJQRM-04-2024-0113

Akbar, A., Aini Rakhmawati, N., & Vanany, I. (2022). Halal Blockchain Application for a Chicken Slaughtering Factory. *International Journal on Food System Dynamics*, *13*(3), 321–334. https://doi.org/10.18461/ijfsd.v13i3.C6

Akinlo, T., & Okunlola, C. O. (2021). Trade openness, institutions and economic growth in Sub-Saharan Africa. *Jurnal Perspektif Pembiayaan Dan Pembangunan Daerah*, *8*(6), 541–560. https://doi.org/10.22437/ppd.v8i6.10653

Al-Mahmood, O. A. (2023). Food safety and sanitation practices survey in very small halal and non-halal beef slaughterhouses in the United States. *Iraqi Journal of Veterinary Sciences*, *37*(1), 1–7. https://doi.org/10.33899/ijvs.2022.133219.2191

Anggraini, W., S. Ciptono, W., Lusiantoro, L., & K.Tjahjono, H. (2024). Adoption of Analytic Network Process to Strengthen Halal Integrity in Broiler Chicken Supply Chain. *International Journal of the Analytic Hierarchy Process*, *16*(1). https://doi.org/10.13033/ijahp.v16i1.1194

Annabi, C. A., & Ibidapo-Obe, O. O. (2017). Halal certification organizations in the United Kingdom. *Journal of Islamic Marketing*, *8*(1), 107–126. https://doi.org/10.1108/JIMA-06-2015-0045

Apriandi, D. W., & Agustin, N. (2021). The Effect of Halal Certification and Price Perception on Purcashing Decision (Survey of Ms Glow Skincare Consumers in Subang Regency. *Islamic Economic, Accounting and Management Journal*, *3*(1), h. 20-47. http://ojs.stiesa.ac.id/index.php/tsarwatica/article/view/938

Arifin, S., Zaki, I., Ryandono, M. N. H., Zulaikha, S., Hendratmi, A., Rani, L. N., Bayuny, A. F. R., & Wijayanti, I. (2024). Penguatan Kesejahteraan Masyarakat melalui Pelatihan Ternak, Manajemen Keuangan, dan Koperasi Syariah. *Jurnal Ilmiah Pengabdian Dan Inovasi*, *3*(2), 103–124. https://doi.org/10.57248/jilpi.v3i2.514

Asfia, N., Usman, M., & Munir, S. (2021). Sustainable supply chain performance of Indonesia's halal meat industry: intermediating role of global technical standards (gts) in the framework of quality function deployment (qfd) model. *Ilkogretim Online*, *20*(4). https://doi.org/10.17051/ilkonline.2021.04.188

Ayyub, R. M., Rana, A., Bagi, A. R. A., & Thomaly, A. A. Al. (2013). Exploring future markets for Pakistani halal meat export. *International Journal of Social Entrepreneurship and Innovation*, *2*(1), 11. https://doi.org/10.1504/IJSEI.2013.052757

Azam, M. S. E., Ahmad, A. N., & Jaiyeoba, H. B. (2024). Ranking and rating halal-certified restaurants in Malaysia: an application of AHP. *Journal of Islamic Marketing*, *15*(7), 1743–1765. https://doi.org/10.1108/JIMA-02-2023-0041

Badruldin, B., Mohamed, Z., Sharifuddin, J., Rezai, G., Mahir Abdullah, A., Abd Latif, I., & Ghazali Mohayidin, M. (2012). Clients' perception towards JAKIM service quality in Halal certification. *Journal of Islamic Marketing*, *3*(1), 59–71. https://doi.org/10.1108/17590831211206590

Beik, I. S., & Aprianti, W. N. (2016). Analisis Faktor-Faktor yang Memengaruhi Pembiayaan Bank Syariah untuk Sektor Pertanian di Indonesia. *Jurnal Agro Ekonomi*, *31*(1), 19. https://doi.org/10.21082/jae.v31n1.2013.19-36

Chambers, C. G. (2010). Multi-Culti Nancy Mitfords and Halal Novelists: The Politics of Marketing Muslim Writers in the UK. *Textus: English Studies in Italy*, *23*(2), 389–404. https://doi.org/10.1400/164868

Chowdhury, M. A. F., Abdullah, M., & Sulong, Z. (2024). Examining the impact of Halal tourism industry sustainability on stock returns. *Tourism Economics*, 13548166241265820. https://doi.org/10.1177/13548166241265820

Derasit, Z., Shariff, S. S. R., Hamid, N. A. A., Sarwani, N., & Shaharuddin, W. N. S. (2020). Exploratory factor analysis in determining consumer awareness toward halal cosmetics. *Malaysian Journal of Consumer and Family Economics*, *24*(S2), 46–59.

Dwita, F., & Sadana, S. M. S. (2021). Human Resource and Supply Chain Strategy to Improve Company Performance Through Organizational Capability in Pt Pos Indonesia. *Airlangga Journal of Innovation Management*, *2*(2), 154. https://doi.org/10.20473/ajim.v2i2.29903

Marwini, M., Ryandono, M. N. H., Wardhana, A. K., Ali, M. M., & Dja'akum, C. S.

Fauzi, Q., Ulfah, U., Wijayanti, I., Wardhana, A. K., & Niroula, B. (2024). Upholding Islamic business ethics: Enhancing passenger service satisfaction in bus transportation. *Al-Uqud: Journal of Islamic Economics*, *8*(2), 287–301. https://doi.org/10.26740/al-uqud.v8n2.p287-301

Fuseini, A., Hadley, P., & Knowles, T. (2021). Halal food marketing: an evaluation of UK halal standards. *Journal of Islamic Marketing*, *12*(5), 977–991. https://doi.org/10.1108/JIMA-02-2020-0037

Fuseini, A., Wotton, S. B., Knowles, T. G., & Hadley, P. J. (2017). Halal Meat Fraud and Safety Issues in the UK: a Review in the Context of the European Union. *Food Ethics*, *1*(2), 127–142. https://doi.org/10.1007/s41055-017-0009-1

Govindaiah, P. M., Maheswarappa, N. B., Banerjee, R., Mishra, B. P., Manohar, B. B., & Dasoju, S. (2023). Traditional halal meat production without stunning versus commercial slaughter with electrical stunning of slow-growing broiler chicken: impact on meat quality and proteome changes. *Poultry Science*, *102*(11), 103033. https://doi.org/10.1016/j.psj.2023.103033

Halimi, F. F., Gabarre, S., Rahi, S., Al-Gasawneh, J. A., & Ngah, A. H. (2022). Modelling Muslims' revisit intention of non-halal certified restaurants in Malaysia. *Journal of Islamic Marketing*, *13*(11), 2437–2461. https://doi.org/10.1108/JIMA-01-2021-0014

Handriana, T., Yulianti, P., Kurniawati, M., Arina, N. A., Aisyah, R. A., Ayu Aryani, M. G., & Wandira, R. K. (2021). Purchase behavior of millennial female generation on Halal cosmetic products. *Journal of Islamic Marketing*, *12*(7), 1295–1315. https://doi.org/10.1108/JIMA-11-2019-0235

Hanifasari, D., Masudin, I., Zulfikarijah, F., Rumijati, A., & Restuputri, D. P. (2024). Millennial generation awareness of halal supply chain knowledge toward purchase intention for halal meat products: empirical evidence in Indonesia. *Journal of Islamic Marketing*, *15*(7), 1847–1885. https://doi.org/10.1108/JIMA-01-2023-0012

Herianingrum, S., Alan Nur, M., Rusgianto, S., Hapsari, M. I., Huseyin, E., Firmansyah, F., & Febriyanti, A. R. (2024). Gravity model of trade approach: what drives Indonesia's seafood export and its halal market potency in OIC (Organization of Islamic Cooperation) countries. *Journal of Islamic Marketing*, *15*(8), 2016–2035. https://doi.org/10.1108/JIMA-07-2023-0226

Hidayati, J., Vamelia, R., Hammami, J., & Endri, E. (2023). Transparent distribution system design of halal beef supply chain. *Uncertain Supply Chain Management*, *11*(1), 31–40. https://doi.org/10.5267/j.uscm.2022.12.003

Irnawati, I., Windarsih, A., Indrianingsih, A. W., Apriyana, W., Ratnawati, Y. A., Hazairin Nadia, L. O. M., & Rohman, A. (2023). Rapid detection of tuna fish oil adulteration using FTIR-ATR spectroscopy and chemometrics for halal authentication.

Journal of Applied Pharmaceutical Science, *13*(4), 231–239. https://doi.org/10.7324/JAPS.2023.120270

Ismoyowati, D. (2015). Halal Food Marketing: A Case Study on Consumer Behavior of Chicken-based Processed Food Consumption in Central Part of Java, Indonesia. *Agriculture and Agricultural Science Procedia*, *3*, 169–172. https://doi.org/10.1016/j.aaspro.2015.01.033

Jaiyeoba, H. B., Abdullah, M. A., & Dzuljastri, A. R. (2019). Halal certification mark, brand quality, and awareness. *Journal of Islamic Marketing*, *11*(6), 1657–1670. https://doi.org/10.1108/JIMA-07-2019-0155

Laila, N., Ratnasari, R. T., Ismail, S., Mohd Hidzir, P. A., & Mahphoth, M. H. (2023). The intention of small and medium enterprises' owners to participate in waqf: the case of Malaysia and Indonesia. *International Journal of Islamic and Middle Eastern Finance and Management*, *16*(3), 429–447. https://doi.org/10.1108/IMEFM-01-2022-0014

Lestari, F., Kurniawan, R., Arifin, J., Yasir, M., Muhammad Saleh, M., & Akbarizan. (2023). An integrated framework for the measurement of halal good manufacturing practices on the case of SMEs in the food sector. *Journal of Islamic Marketing*, *14*(1), 82–105. https://doi.org/10.1108/JIMA-04-2021-0105

Llorente-Rodriguez, L., Morales-Muñiz, A., & Roselló-Izquierdo, E. (2024). Halal and Makruk : Muslim archaeological fish assemblages as cultural identifiers in the Iberian Middle Ages? *International Journal of Osteoarchaeology*, *34*(4), e3307. https://doi.org/10.1002/oa.3307

Mahbubi, A., & Uchiyama, T. (2020). Assessing the Sustainability of the Indonesian Halal Beef Supply Chain. *International Journal on Food System Dynamics*, *11*(5), 468–481. https://doi.org/10.18461/ijfsd.v11i5.68

Mahmood, T., & Arshed, N. (2024). On improving the adoption of Bai' Salam by Islamic banks of Pakistan: an interpretive phenomenological analysis. *Journal of Islamic Accounting and Business Research*, *15*(7), 1134–1155. https://doi.org/10.1108/JIABR-10-2022-0261

Mardiyah, R., Ismail, A. U., Khairani, D., Durachman, Y., Rosyadi, T., & Masruroh, S. U. (2021). Conceptual Framework on Halal Meat Traceability to Support Indonesian Halal Assurance System (HAS 23000) using Blockchain Technology. *2021 9th International Conference on Cyber and IT Service Management (CITSM)*, 1–4. https://doi.org/10.1109/CITSM52892.2021.9588953

Masudin, I., Jie, F., & Widayat, N. A. (2020). Impact of halal supplier service quality and staff readiness to adopt halal technology on halal logistics performance: a study of Indonesian halal meat supply chain. *International Journal of Agile Systems and Management*, *13*(3), 315. https://doi.org/10.1504/IJASM.2020.109258

Marwini, M., Ryandono, M. N. H., Wardhana, A. K., Ali, M. M., & Dja'akum, C. S.

Morand-Fehr, P., Araba, A., Bas, P., & El Aich, A. (2011). Effects of feeding system and diet on body lipid composition of young goats. In *Goat Meat Production and Quality* (pp. 337–354). CABI Publishing. https://doi.org/10.1079/9781845938499.0337

Muflih, M., & Juliana, J. (2021). Halal-labeled food shopping behavior: the role of spirituality, image, trust, and satisfaction. *Journal of Islamic Marketing*, *12*(8), 1603–1618. https://doi.org/10.1108/JIMA-10-2019-0200

Mutmainah, & Romadhon, M. R. (2023). Influence of Halal Lifestyle, Islamic Branding, and Social Media Marketing on Muslim Fashion Purchasing Decisions. *Airlangga Journal of Innovation Management*, *4*(2), 158–171. https://doi.org/10.20473/ajim.v4i2.49714

Nakyinsige, K., Man, Y. B. C., & Sazili, A. Q. (2012). Halal authenticity issues in meat and meat products. *Meat Science*, *91*(3), 207–214. https://doi.org/10.1016/j.meatsci.2012.02.015

Nurilmala, M., Suryamarevita, H., Husein Hizbullah, H., Jacoeb, A. M., & Ochiai, Y. (2022). Fish skin as a biomaterial for halal collagen and gelatin. *Saudi Journal of Biological Sciences*, *29*(2), 1100–1110. https://doi.org/10.1016/j.sjbs.2021.09.056

Othman, P., Sungkar, I., & Sabri Wan Hussin, W. (2009). Malaysia as an International Halal Food Hub: Competitiveness and Potential of Meat-based Industries. *Asean Economic Bulletin*, *26*(3), AE26-3F. https://doi.org/10.1355/AE26-3F

Qader, G., Shahid, Z. A., Junaid, M., Shaikh, I. M., & Qureshi, M. A. (2023). The role of diffusion of innovation theory towards the adoption of halal meat supply chain. *Journal of Islamic Marketing*, *14*(5), 1211–1228. https://doi.org/10.1108/JIMA-01-2021-0032

Qosim, N. (2022). Peran Ushul Fikih dalam Metodologi Ilmu Ekonomi Islam. *JIESP Journal of Islamic Economics Studies and Practices*, *1*(1), 89–97. https://doi.org/10.54180/jiesp.2022.1.1.89-97

Riaz, M. N., & Riaz, N. M. (2024). Requirements for Halal Food Production. In *Encyclopedia of Food Safety* (pp. 588–598). Elsevier. https://doi.org/10.1016/B978-0-12-822521-9.00003-4

Ryandono, M. N. H., Permatasari, S. A., & Wijayanti, I. (2019). Business Behavior in an Islamic Perspective: Case Study of Muslim Woman Entrepreneurs in Ikatan Wanita Pengusaha Indonesia (IWAPI). *12th International Conference on Business and Management Research (ICBMR 2018)*, 154–159. https://doi.org/10.2991/icbmr-18.2019.26

Ryandono, M. N. H., Wijayanti, I., & Kusuma, K. A. (2020). Determinants of Investment In Islamic Crowdfunding. *Muqtasid: Jurnal Ekonomi Dan Perbankan Syariah*, *11*(1), 70–87. https://doi.org/10.18326/muqtasid.v11i1.70-87

Shafaei, F., & Mohamed, B. (2015). Malaysia's Branding as an Islamic Tourism Hub: An Assessment. *Malaysia Journal of Society and Space*, *11*(1), 97–106. https://www.researchgate.net/publication/282854273_Malaysia's_branding_as_an_Islamic_tourism_hub_An_assessment

Shara, Y., Muda, I., & Rujiman, R. (2019). Role of Organizational Commitment to the Factor of Performance of Regional Financial Management. *Proceedings of the 1st Aceh Global Conference (AGC 2018)*, 411–415. https://doi.org/10.2991/agc-18.2019.63

Siddiq, I., Juliana, J., & Adirestuty, F. (2020). Shariapreneur Interest : Analysis Of Sharia Business Knowledge and Motivation (Studies On Students Of The Islamic Economics Study Program Bandung City Universities. *Review of Islamic Economics and Finance*, *3*(2), 80–90. https://doi.org/10.17509/rief.v3i2.30399

Silalahi, S. A. F., Fachrurazi, F., & Fahham, A. M. (2022). Factors affecting intention to adopt halal practices: case study of Indonesian small and medium enterprises. *Journal of Islamic Marketing*, *13*(6), 1244–1263. https://doi.org/10.1108/JIMA-05-2020-0152

Siswara, H. N., Erwanto, Y., & Suryanto, E. (2022). Study of Meat Species Adulteration in Indonesian Commercial Beef Meatballs Related to Halal Law Implementation. *Frontiers in Sustainable Food Systems*, *6*, 882031. https://doi.org/10.3389/fsufs.2022.882031

Sri Ernawati, & Iwan Koerniawan. (2023). Pengaruh Label Halal dan Kesadaran Halal Terhadap Minat Pembelian Konsumen pada Produk UMKM di Kota Bima. *E-Bisnis : Jurnal Ilmiah Ekonomi Dan Bisnis*, *16*(1), 207–215. https://doi.org/10.51903/e-bisnis.v16i1.1185

State of the Global Islamic Economy Report. (2023). State of the Global Islamic Economy Report. In *DinarStandard*.

Stawarz, N., Sander, N., & Sulak, H. (2021). Internal migration and housing costs—A panel analysis for Germany. *Population, Space and Place*, *27*(4), 1–12. https://doi.org/10.1002/psp.2412

Su, L. D. (2010). Ownership structure, corporate diversification and capital structure. *Management Decision*, *48*(2), 314–339. https://doi.org/10.1108/00251741011022644

Suprayogi, N., Fianto, B. A., Febriyanti, A. R., Sukmaningrum, P. S., Filianti, D., & Wijayanti, I. (2024). Pemberdayaan Masyarakat Pesisir di Desa Kwanyar Barat, Bangkalan, Madura: Perspektif Keberlanjutan Lingkungan, Kesehatan, dan Ekonomi Digital. *Jurnal Terapan Abdimas*, *10*(1), 1–10. https://doi.org/10.25273/jta.v10i1.20012

Susanty, A., Puspitasari, N. B., Jati, S., & Selvina, O. (2022). Impact of internal and external factors on halal logistics implementation. *Journal of Islamic Marketing*, *13*(5), 1143–1170. https://doi.org/10.1108/JIMA-09-2020-0293

Marwini, M., Ryandono, M. N. H., Wardhana, A. K., Ali, M. M., & Dja'akum, C. S.

Susanty, A., Puspitasari, N. B., Rosyada, Z. F., Pratama, M. A., & Kurniawan, E. (2024). Design of blockchain-based halal traceability system applications for halal chicken meat-based food supply chain. *International Journal of Information Technology*, *16*(3), 1449–1473. https://doi.org/10.1007/s41870-023-01650-8

Timur, Y. P., Battour, M., Ratnasari, R. T., & Zulaikha, S. (2023). What Drives Consumers in Using Digital Apps to Visit Halal Tourism in East Java? Optimization Strategy From Utaut2 Perspective. *Jurnal Ekonomi Dan Bisnis Islam (Journal of Islamic Economics and Business)*, *9*(1), 190–215. https://doi.org/10.20473/jebis.v9i1.44569

Umberger, W. J. (2007). *Beef quality, beef demand, and consumer preferences.*

Usman, H., Projo, N. W. K., Chairy, C., & Haque, M. G. (2024). The role of trust and perceived risk on Muslim behavior in buying halal-certified food. *Journal of Islamic Marketing*, *15*(7), 1902–1921. https://doi.org/10.1108/JIMA-09-2021-0303

Vanany, I., Maarif, G. A., & Soon, J. M. (2019). Application of multi-based quality function deployment (QFD) model to improve halal meat industry. *Journal of Islamic Marketing*, *10*(1), 97–124. https://doi.org/10.1108/JIMA-10-2017-0119

Vanany, I., Soon, J. M., Maryani, A., & Wibawa, B. M. (2020). Determinants of halal-food consumption in Indonesia. *Journal of Islamic Marketing*, *11*(2), 507–521. https://doi.org/10.1108/JIMA-09-2018-0177

Wijayanti, I. (n.d.). Analisis Penerapan Qawaid Fiqiyyah Terhadap Kebijakan Belanja Pegawai Pemerintah Dalam Pelaksanaan APBN Di Indonesia. *BOOK-5: EKONOMI ISLAM*, 941.

Wijayanti, I., Herianingrum, S., & Ryandono, M. N. H. (2020). Islamic crowdfunding mechanism to answer renewable energy investment challenge in Indonesia. *Test Engineering and Management*, *83*, 3596–3605.

Yudha, A. T. R. C., Huda, N., Maksum, M., Sherawali, S., & Wijayanti, I. (2024). The Moderating Effect of Religiosity on Fashion Uniqueness and Consciousness in Halal Fashion Purchase. *Indonesian Journal of Halal Research*, *6*(2), 70–83. https://doi.org/10.15575/ijhar.v6i2.34614

Zainalabidin, F. A., Hassan, F. M., Zin, N. S. M., Azmi, W. N. W., & Ismail, M. I. (2019). Halal System in Meat Industries. *Malaysian Journal of Halal Research*, *2*(1), 1–5. https://doi.org/10.2478/mjhr-2019-0001

Zaki, I., Herianingrum, S., Hapsari, M. I., Bayuny, A. F. R., & Wijayanti, I. (2024). Diversifikasi Pengolahan Frozen Nugget, Pengemasan dan Pemasaran Google Bisnis. *JILPI: Jurnal Ilmiah Pengabdian Dan Inovasi*, *2*(3), 651–660. https://doi.org/10.57248/jilpi.v2i3.367

Zakik, Z., Kamil, A., Prasetyo, A. S., Ryandono, M. N. H., & Wijayanti, I. (2022). Economic development on Madura Island through halal tourism: A business feasibility study. *Al-Uqud : Journal of Islamic Economics*, *6*(2), 289–303. https://doi.org/10.26740/aluqud.v6n2.p289-303