

Sharia Compliance and Economic Resilience of Women-Led SMEs in Madura Indonesia

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Abstract

This study examines the impact of Sharia compliance on the economic resilience of women-led micro and small enterprises (MSEs) in Madura, Indonesia. Sharia principles, which emphasize the prohibition of *riba* (interest), *gharar* (ambiguity), *maysir* (gambling), and unethical activities, along with fairness and risk-sharing, align closely with the cultural and religious values of Madura. Using a mixed-methods approach, quantitative data were gathered through surveys from 100 women entrepreneurs, and qualitative insights were obtained through in-depth interviews with 20 selected participants. The results indicate that adherence to Sharia compliance positively and significantly enhances financial stability, facilitates ethical investment diversification, and fosters community trust. This alignment with Islamic principles not only strengthens the economic resilience of businesses but also contributes to broader social well-being. The findings suggest that Sharia compliance serves as a strategic foundation for sustainable development in culturally rooted economies like Madura. Future research is encouraged to explore this model in other sectors and regions to expand its applicability.

Keywords: Economic Resilience, Sharia Compliance, Women Entrepreneurs, Madura.

1. Introduction

Madura faces notable socio-economic challenges, with four of its regencies — Sampang, Bangkalan, Sumenep, and Pamekasan—being among the highest contributors to East Java's poverty rates, which range from 13.85% to 21.76% (Hakim, 2024). In

times of poverty and crisis, the Micro, Small, and Medium Enterprises (MSME) sector has proven to be resilient in facing such challenges (Baghel, 2023; Tambunan, 2022). In rural areas, women typically have low levels of education, and not all women have access to higher education (Boserup, 1989; Jayaweera, 1997). The Human Development Index (HDI) report for Bangkalan, one of the four provinces in Madura, in 2022 highlights a stark disparity in educational attainment. While the average expected years of schooling for residents in Bangkalan is 11.91 years, the actual average years of schooling is only 5.97 years—barely equivalent to completing primary school (Yahya, 2023). This low level of education contributes to the difficulty of finding work (Brush and Cooper, 2012; Nurlatifah, Saefuddin, and Suwarsinah, 2022; Shiratina et al., 2020). In East Java, as of August 2023, 6.73 million women aged 15 and above have opted out of the labor market, with 75.10% (5.05 million) primarily engaged in household tasks such as cooking and cleaning. This trend is most pronounced among women in their productive years (ages 25–49), reflecting societal norms that prioritize domestic responsibilities as their main role. Notably, 46.17% of these women have an education level of elementary school or below, limiting their opportunities for workforce participation (Badan Pusat Statistik, 2024).

Issues with income, rising living expenses, and insufficient income from husbands to meet daily needs create a crisis in family economic resilience, which can weaken the family's overall economic stability (Bridges and Disney, 2010; Neppl, Senia, and Donnellan, 2016; Shadieva, 2022). Weakening economic resilience can have negative impacts, such as divorce (Burstein, 2007; Smock, Manning, and Gupta, 1999), domestic violence (Adelman, 2004; Bowlus and Seitz, 2006), debt from paying for children's education (Bridges and Disney, 2010; Kempson, McKay, and Willitts, 2004), inadequate housing (McLanahan, 1985), and difficulties in financing family health insurance (Consequences of Uninsurance, 2002; Feinberg et al., 2002). Therefore, many women are starting to work to help meet their family's needs (Lutfianah and Herawati, 2023; Widodo, 2012). Typically, the businesses they establish are related to the trade and processing industry sectors, such as food stalls, food processing, small industry, and small shops. Many of these small and micro businesses are operated from home, so they do not hinder women's roles as housewives (Bergmann, 1981).

The existence of MSMEs can make a positive contribution to the economy and also serve as a solution to alleviating economic and social problems. Madura is one of the regions in East Java Province whose economy is supported by the MSME sector (Qomaro, 2023), with the number of MSMEs in each district as follows: Bangkalan Regency has 166,768 MSMEs with labor absorption of 210,003; Sampang Regency has 195,215 MSMEs with labor absorption of 264,569; Pamekasan Regency has 195,554 MSMEs with labor absorption of 257,481; and Sumenep Regency has 269,005 MSMEs with labor absorption of 486,196 (Fajrin Purnomo, 2019). According to the Director General of Agro-Industry (2022), the food and beverage industry grew by 3.75% in the first quarter of 2022, which was higher compared to the first quarter of 2021, which saw a growth of 2.45%. Minister of Industry Agus Gumiwang Kartasasmita revealed that from January to June 2022, food and beverage industry exports reached \$21.3 billion, an increase of nine percent compared to the same period in 2021, which reached \$19.5 billion.

Women often have a dual role as business owners and family managers (Renzulli, Aldrich, and Moody, 2000). They contribute to the diversification of family income by

running their businesses (Boyd, Sliter, and Chatfield, 2016). This income diversification can help families become more resilient to unexpected economic changes (Bell, 1974). Women's businesses can also be a source of economic empowerment for themselves and their families. Through their businesses, women can develop skills, increase access to economic resources, and take an active role in managing family finances (Duflo, 2012). Women often have a special concern for family welfare. Businesses run by women may prioritize aspects such as education, health, and family welfare in their policies (Byrne, Fattoum, and Diaz Garcia, 2019). This can create a better environment for the growth and development of family members. Women entrepreneurs in Madura often run businesses from their homes to reduce operational costs and allow them to continue caring for their families while managing the business. This home-based business model can support the family's economic resilience without the need to leave the house (Dhamayanti, 2022). Some female entrepreneurs may be more concerned about environmental sustainability. They may choose environmentally friendly businesses, such as organic farming or processing natural products, to create added value in their business and support the sustainability of the surrounding environment (Meinzen-Dick, Kovarik, and Quisumbing, 2014). Businesses run by women can make a significant contribution to Madura's local economy (Maulina, 2014). This can create additional jobs, support the local economy, and improve the welfare of the surrounding community.

Research highlights the vital role of women entrepreneurs in strengthening family economic resilience, with examples such as the cake-making community in Kue Rungkut, where women empower themselves and their environment to improve family income, acting as partners and agents of change (Alie and Elanda, 2020). Similarly, hand-drawn batik entrepreneurs in Grililoyo not only secure family livelihoods but also contribute to tourism, education, and regional prosperity (Nursaid, 2016). However, these studies focus on specific industries and regions, leaving a gap in understanding the influence of Sharia-compliant business practices on women-led enterprises in culturally and religiously rich areas like Madura. This research addresses this gap by examining how Sharia compliance enhances the economic resilience of women entrepreneurs, providing a new perspective on their role in fostering sustainable family and community development.

So far, there has been little research examining the Sharia compliance of MSEs in running their businesses. In fact, the majority of MSEs in Madura are Muslim, so it is not surprising that business owners operate their enterprises based on Sharia business principles (Nasrulloh, 2022). Sharia compliance refers to the application of Islamic principles, rules, and traditions in financial transactions and other related business practices. The culture of compliance involves the values, behaviors, and actions that support adherence to applicable regulations. Consistent compliance has established Sharia as the framework for institutional systems in resource allocation, management, production, capital market activation, and wealth distribution (Adi, Sisiawan, and 'Ilmi, 2022). Compliance means following a specification, standard, or law that has been clearly regulated, usually issued by an institution or organization with authority in a particular field (Ribadu and Wan Ab. Rahman, 2019).

This research aims to explore the economic resilience of families of female SMEs in Madura in terms of home ownership, family per capita income, adequacy of family income, ability to finance children's education, sustainability of children's education, family savings, and family health insurance, and then correlate these factors with the practice of

Sharia compliance in business operations. Sharia compliance influences the economic resilience of female business owners. Family resilience is defined as the ability of a family to recover and survive crises and difficulties (Adhariani, 2022). Meeting physical and psychosocial needs is an approach that can be used to measure family resilience. Referring to this definition, family economic resilience is the condition and ability that allows families to recover from economic problems and challenges. Economic resilience is not only about how families can afford to survive economic downturns but also about how they can increase family income (Lutfi, 2020).

2. Methods

The research method used in this study is a mixed-methods approach. The strategy employed for this research is the Sequential Explanatory Design. The explanatory sequential strategy involves collecting and analyzing quantitative data in the first stage, followed by the collection and analysis of qualitative data, which is built upon the initial quantitative results. In this design, more weight or priority is given to the quantitative data (Sugiono, 2010, Sugiono, 2012). In the first stage, data were collected through a survey via a questionnaire to obtain quantitative data related to Sharia compliance and economic resilience among micro-entrepreneurs in the food and beverage sector in Madura. The quantitative data were then followed by in-depth interviews with 20 informants, based on their willingness to participate in the interviews.

The approach used in this research is the Partial Least Squares (PLS) approach, which is a component-based or variant-based Structural Equation Modeling (SEM) technique. This approach was used to analyze quantitative data related to Sharia compliance and economic resilience among micro-entrepreneurs in the food and beverage sector in Madura. A phenomenological approach was used to obtain qualitative data by conducting interviews and observations with informants who were micro-entrepreneurs in the food and beverage sector in Madura.

The core subjects of the research are women who run their businesses. The core research subjects were selected based on data from the Department of Industry and Trade in Madura regarding micro-business actors. The subjects of this research are female micro-entrepreneurs in Madura. Respondent sampling was carried out using purposive sampling, a technique used to determine the research sample based on specific considerations to make the data more representative (Sugiono, 2010). The number of samples used in this research was calculated using the Slovin formula with a margin of error of 10% (Wijaya, 2013). Using the Slovin formula, the calculation results show that the desired sample size is approximately 99.904, rounded up to 100. The respondents in this study represent the total population of micro-entrepreneurs in the food and beverage sector in Madura, with sample details as follows:

Table 1. Respondents

Regency	Micro Industry	Respondents	%
Bangkalan	240262	22	22.20%
Sampang	220318	20	20.36%
Pamekasan	238300	22	22.03%
Sumenep	382973	36	35.41%
Total	1081853	100	100%

Source: Processed by Author

Meanwhile, the informants in this study were selected based on the willingness of individuals involved in early marriage to be interviewed. The informants in this research represented four districts in Madura. There were four informants from each of Pamekasan, Sampang, and Bangkalan regencies, while Sumenep Regency had a greater number of informants, with eight participants. In total, 20 informants were interviewed. The Sharia Compliance variables in this study are adapted from Sana N. Maswadeh (2014) and measured using a set of indicators based on a Likert scale ranging from "Strongly Disagree" (STS) to "Strongly Agree" (SS). These indicators include ensuring that products and services are free from interest (riba), ambiguity or speculation (gharar), and elements of gambling (maysir). The variables also emphasize avoiding prohibited elements, limiting specific types of activities that may be non-compliant with Islamic principles, and promoting risk-sharing practices. Additionally, the indicators address the importance of materiality, focusing on real economic transactions, and considering fairness in business dealings. Together, these aspects are designed to assess the extent to which businesses adhere to Sharia principles, which can significantly impact their economic resilience and social acceptance (Maswadeh, 2014).

The Economic Security variables are designed to measure the financial stability and well-being of families, using indicators assessed on a Likert scale ranging from "Strongly Disagree" (STS) to "Strongly Agree" (SS). These indicators cover various dimensions, including home ownership as a measure of family residence stability, and family income, evaluated through per capita earnings and the adequacy of overall family income. Another critical dimension is the ability to finance children's education, both in terms of current financial capability and the sustainability of educational opportunities over time. Finally, family security is assessed through the presence of savings and health insurance coverage, both of which are essential for ensuring long-term economic stability (KEMENPPPA, 2016). These indicators provide a comprehensive framework for understanding how economic security is managed and maintained among the families of women-led micro and small enterprises in Madura.

The method used to process the data is Structural Equation Modeling (SEM) with a Partial Least Squares (PLS) approach. Structural Equation Modeling (SEM) is a combination of two inseparable statistical methods: factor analysis and regression. The use of the Partial Least Squares (PLS) approach in this research is due to its ability to analyze both reflective and formative measurement models. This allows for the detection of not only causal relationships (whether partial or simultaneous) among variables but also for determining which components contribute to the formation of constructs (Fernandes, 2017). The data analysis technique used for analyzing qualitative data is the Miles and Huberman interactive analysis technique (Miles and Huberman, 1994). The activities in the analysis consist of data condensation, data display, and conclusion drawing/verification.

3. Results and Discussion

3.1. Results

The subjects in this research were analyzed through various aspects, such as age, type of business, location, monthly net profit, education, training received, marital status, and number of children. A total of 5 respondents were under 25 years old, indicating that there are relatively young female business owners who have adopted Sharia principles in their businesses. The majority of respondents were between 25 and 40 years old, suggesting that this age group made a significant contribution to the research. Most respondents had a high school education, indicating that female entrepreneurs with this level of education dominate the sample. Several respondents had higher educational backgrounds, including Bachelor's and Master's degrees. The majority of respondents were married, indicating that female entrepreneurs who implement Sharia compliance in their businesses are often married. The number of children among respondents varied, with the majority having 1 to 3 children. This reflects the differences in family responsibilities that female entrepreneurs must balance when running their businesses.

The majority of respondents, 61 out of a total of 100, were involved in the food and beverage business, suggesting that the majority of Sharia-compliant female entrepreneurs operate in this sector. Other respondents were engaged in the retail, beauty, transportation, and smaller sectors. The majority of respondents reported a monthly net profit ranging from Rp. 1,000,001 to Rp. 2,000,000, indicating that most have relatively stable business performance. Some respondents reported profits outside this range, both lower and higher. Respondents had attended various types of training, including digital business, financial management, and halal certification. This suggests that they are committed to improving their knowledge and skills in managing businesses in accordance with Sharia principles.

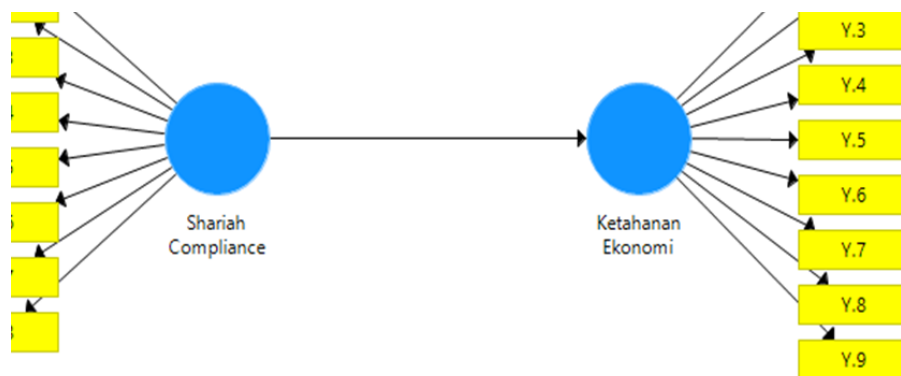


Figure 1. Pathway Diagram

The image above is a path diagram constructed and tested using the PLS algorithm in Smart-PLS 3 software. The testing, using the SEM-PLS approach, aims to identify the factors that most influence Economic Resilience. The diagram above shows that the overall path values contained in the load factor are ≥ 0.70 . Therefore, it can be concluded that all constructs in the research indicators meet the requirements and can proceed to the next test.

The Outer Model's validity test for convergent validity is evaluated through the factor loading values, as presented in Table 2. High factor loading values indicate that

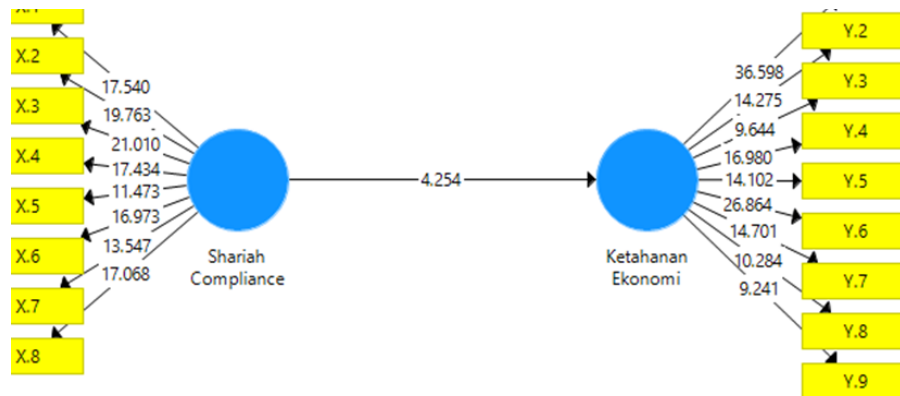


Figure 2. Smart-PLS Output Result Path Diagram

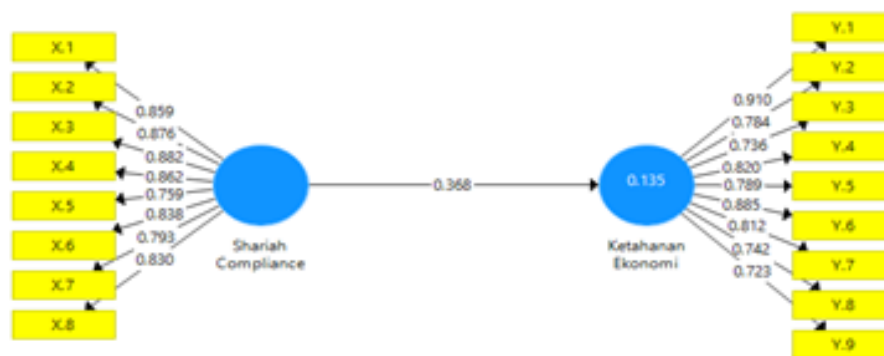


Figure 3. Path Diagram Output of Smart-PLS Bootstrapping Analysis Results

each indicator effectively represents the associated construct, confirming strong convergent validity. This suggests that the items within each variable are well-correlated, ensuring that the constructs are accurately measured and providing confidence in the reliability of the research instruments used. Such validity is essential for drawing meaningful and robust conclusions from the data.

Table 2. Factor Loading Value

Variable	Indicator	Loading Factor	Information
Sharia Compliance (X)	X.1	0.859	Valid
	X.2	0.876	Valid
	X.3	0.882	Valid
	X.4	0.862	Valid
	X.5	0.759	Valid
	X.6	0.838	Valid
	X.7	0.793	Valid
	X.8	0.830	Valid
Economic Resilience (Y)	Y.1	0.910	Valid
	Y.2	0.784	Valid
	Y.3	0.736	Valid
	Y.4	0.820	Valid
	Y.5	0.789	Valid
	Y.6	0.885	Valid
	Y.7	0.812	Valid

Y.8	0.742	Valid
Y.9	0.723	Valid

Based on the SmartPLS analysis results in the table above, it can be concluded that the loading factor value for each construct in the study is ≥ 0.70 . Therefore, it can be concluded that all the indicators in the research are valid and suitable for use, allowing the next test to proceed. Additionally, convergent validity can also be assessed by the AVE value. The table of AVE values is as follows:

Table 3. Average Variance Extracted (AVE) Value

Variable	Average Variance Extracted (AVE)	Information
Sharia Compliance (X)	0.703	Valid
Economic Resilience (Y)	0.644	Valid

From the Average Variance Extracted (AVE) value table, it can be concluded that each construct or variable, both Sharia Compliance (X) and Economic Resilience (Y), has an AVE value ≥ 0.50 . This indicates that all constructs or variables in the research exhibit good convergent validity. Discriminant validity is assessed using the cross-loading values shown in Table 4. These values indicate how well each indicator differentiates between constructs, confirming that each item loads higher on its designated construct compared to others. High cross-loading values for indicators within their respective constructs suggest strong discriminant validity, demonstrating that the constructs are distinct and measured accurately. This ensures that the model can reliably differentiate between different variables, adding rigor to the overall analysis.

Table 4. Cross Loading Value

Indicator	Economic Resilience	Sharia Compliance
X.1	0.296	0.859
X.2	0.316	0.876
X.3	0.307	0.882
X.4	0.328	0.862
X.5	0.213	0.759
X.6	0.381	0.838
X.7	0.293	0.793
X.8	0.290	0.830
Y.1	0.910	0.297
Y.2	0.784	0.351
Y.3	0.736	0.258
Y.4	0.820	0.371
Y.5	0.789	0.335
Y.6	0.885	0.294
Y.7	0.812	0.245
Y.8	0.742	0.216
Y.9	0.723	0.196

Cross-loading is measured based on the correlation coefficient value of each indicator within the construct, which must be higher than the correlation coefficient values with indicators from other constructs. From the cross-loading table above, it can be concluded that the correlation coefficient values for each construct indicator are higher than

the values for other constructs. This indicates that all indicators within the constructs are valid and demonstrate good discriminant validity. Discriminant validity can also be assessed using the Fornell-Larcker criteria. The Fornell-Larcker Criteria table below shows that each construct in the research is valid and has good discriminant validity, as each construct's squared AVE value is greater than the correlation value with other constructs.

Table 5. Mark fornell-larcker criteria

Indicator	Economic Resilience	Sharia Compliance
Economic Resilience	0.802	
Sharia Compliance	0.368	0.838

The reliability of the constructs was evaluated using composite reliability and Cronbach's Alpha values, as presented in Table 6. Both metrics exceeded the recommended thresholds, indicating strong internal consistency among the items within each construct. High composite reliability values confirm that the indicators consistently represent the underlying constructs, while Cronbach's Alpha values support the stability and reliability of the measurements. These results affirm the robustness of the research model and the reliability of the data collected.

Table 6. Composite Reliability and Cronbach's Alpha values

Indicator	Economic Resilience	Sharia Compliance
Variable	Composite Reliability	Cronbach's Alpha
Economic Resilience	0.844	0.723
Sharia Compliance	0.937	0.899

Judging from the table of composite reliability and Cronbach's Alpha values above, it can be concluded that Sharia Compliance (X) and Economic Resilience (Y) are reliable because the composite reliability and Cronbach's Alpha values of the seven constructs are ≥ 0.70 . The R-square values presented in Table 7 reflect the explanatory power of the research model. These values indicate the proportion of variance in the dependent variables that can be explained by the independent variables. Higher R-square values demonstrate a strong predictive ability of the model, suggesting that the constructs in this study effectively account for variations in economic resilience and related outcomes. This provides evidence of the model's relevance and strength in capturing key relationships.

Table 7. R-square value

	R- Square	R-Square Adjusted
Economic Resilience	0.135	0.128

From the R-Square value table, it can be concluded that the contribution of the Sharia Compliance (X) variable in influencing Economic Resilience (Y) is 0.128, or 12.8%. The remaining 87.2% is influenced by other variables outside the research. The effect of the Sharia Compliance variable (X) on Economic Resilience (Y) falls into the weak category, as the R-square value of 0.128 is less than 0.25. The Q-square values shown in Table 8 provide insights into the model's predictive relevance. These values help determine how well the model can predict future outcomes or observations. A Q-square value greater than zero indicates that the model has good predictive capability, suggesting

that the constructs used effectively contribute to forecasting the dependent variables. This strengthens the reliability and applicability of the research findings.

Table 8. Q-square value

Variable	Q-Square (Q^2)
Economic Resilience	0.077

From the Q-square value table above, it can be concluded that the Sharia Compliance variable (X) has predictive relevance for the Economic Resilience variable (Y). The Q^2 value is 0.077, which is less than 0.15, so it can be concluded that the predictive relevance is small. The model fit values presented in Table 9 provide critical insights into the goodness of fit of the statistical model under consideration. Goodness of fit measures how well the proposed model aligns with the observed data, reflecting the model's accuracy and predictive power. Strong fit indices indicate a robust model capable of explaining the data patterns effectively, while poor fit values suggest potential issues, such as model mis-specification or unaccounted variance. Interpreting these fit values is essential for determining the model's validity, guiding improvements, and ensuring reliable conclusions are drawn from the analysis.

Table 9. Model Fit Value

	Estimated Model	Information
SRMR	0.087	Marginal Fit
NFI	0.657	Marginal Fit

Judging from the table of model fit values above, the SRMR value of 0.087 falls between 0.08 and 0.12. Therefore, it can be concluded that the model in this research is classified as having a marginal fit. Additionally, the NFI value of 0.657, which is less than 0.90, suggests that the model is also classified as having a marginal fit. Based on these values, it can be concluded that the model's fit is acceptable but marginal.

Table 10 presents the values from hypothesis testing, which are a crucial component of statistical analysis for determining the validity of proposed hypotheses. Hypothesis testing involves evaluating whether the observed data provides sufficient evidence to reject a null hypothesis in favor of an alternative hypothesis. The results in this table offer insights into the statistical significance of the tested relationships, aiding researchers in drawing conclusions and making data-driven decisions. Significant values indicate strong evidence against the null hypothesis, while non-significant values suggest that the observed results may be due to random chance, requiring further scrutiny.

Table 10. Hypothesis Test Value

Variable	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T statistic (—O/STDEV—)	P Values
Sharia Compliance (X) - Economic Resilience (Y)	0.368	0.417	0.089	4,129	0,000

Judging from the table above, it can be concluded that the relationship between Sharia Compliance and Economic Resilience is positive, as the original sample value is

0.368. The relationship between Sharia Compliance and Economic Resilience has a T-statistic value of 4.129 (which is greater than 1.96) and a P-value of 0.000 (which is less than 0.05). Therefore, it can be concluded that H_0 can be accepted and H_a rejected. From this explanation, it can be stated that Sharia Compliance has a positive and significant relationship with Economic Resilience.

3.2. Discussion

This scientific article outlines the role of Sharia compliance as an important aspect in strengthening the business resilience of women entrepreneurs in Madura. The findings support the theoretical background, demonstrating how Islamic economic principles contribute to sustainable business practices, as stated by Kalkavan, Dinçer, and Yüksel, 2021, Javed (2024), Bismi (2024), and several previous researchers (Iqbal et al., 2024; Kalkavan, Dinçer, and Yüksel, 2021; Khalidin, 2024). This philosophy is based on prohibiting interest (riba), uncertainty (gharar), and gambling (maysir), which helps create a fairer environment for transactions that benefit businesses and society as a whole. This research provides solid quantitative evidence that Sharia-compliance principles have a positive and significant impact on both the health of financial management and the stability (as opposed to volatility) associated with these enterprises. This supports the work of Afrizal (2017), which suggests that Islamic ethics develop social mutual trust and build sound network systems (Afrizal, 2017). In addition, qualitative data indicates that female entrepreneurs who comply with Sharia receive more support from society, as well as a longer-lasting business in Madura. This observation aligns with Menne (2017), as the basic Sharia principles of honesty and transparency enhance consumer confidence, increase market reputation, and ultimately offer a competitive advantage (Menne, 2017).

According to Umul Nur'aini (2022), ethical and Sharia-compliant investments are beneficial because diversification, one of the key investment practices recommended in both Islamic and conventional finance literature serves as a strategy for prudent risk management. Businesses achieve more financial security by investing in ethical industries like agriculture or halal food production. As previously depicted by Nur'aini, we support the claim suggesting that the notions of risk-sharing and ethical investment, inherent in Islamic finance, are essential for economic resilience (Nur'aini, 2022). This paper synthesizes these insights within the broader Islamic economic paradigms that emphasize community benefit, equitable income distribution, and collective well-being. This empirical evidence aligns with the analysis by Seniawski (2000), who emphasized the benefits of Sharia-compliant financial practices, such as risk reduction, which mitigates risks normally associated with the existing interest-based borrowing structure (Seniawski, 2000). By avoiding financial obligations involving riba, these businesses gain more financial flexibility, experience less stress, and maintain sustainability even during economic recessions.

This study also contributes to expanding the field of family economic resilience by going beyond simply surviving financial shocks and instead focusing on implementing strategies for managing resources towards education, health care, and general well-being. Adhariani (2022) presents an alternative view, suggesting that Sharia compliance naturally complements this comprehensive perspective (Adhariani, 2022). The results of this study suggest that cultural and religious aspects could expand existing theories on economic resilience. This means that economic resilience during a pandemic in regions such

as Madura, for example, should be studied from a Sharia-compliance perspective, as it aligns with Islamic values and the teachings of the Qur'an and Sunnah. We highlight this lens of ethical governance, community partnerships, and sustainable financial strategies as an alternative path for theoretical development within resilience research. At a practical level, the research suggests that policymakers and financial institutions must be aware of their cultural and religious premises. Sharia-compliant financial products and Islamic finance training are two examples of ways to help women entrepreneurs in the region grow, as they contribute to more equitable growth. Well-respected studies reinforce the insight that integrating local values into economic policy provides greater benefits to both society and the economy (Betteley and Valler, 1999; Fainstein and Markusen, 1992; Jørgensen, 2012).

While this study provides valuable insights, it is important to acknowledge its limitations. The sample is restricted to women entrepreneurs in the food and beverage sector in Madura, meaning the findings may not fully reflect the broader landscape of micro and small enterprises in other industries or regions. Additionally, focusing exclusively on female entrepreneurs limits the generalizability of the results, as the dynamics of Sharia compliance and economic resilience may differ for male entrepreneurs, who may have different socio-economic roles and access to resources. Future research could expand to include a more diverse sample across genders and sectors, offering a more comprehensive understanding of the impact of Sharia compliance. Moreover, longitudinal studies could provide deeper insights into the long-term effects of Sharia-based practices, while exploring how Sharia principles intersect with technological advancements could open new avenues for fostering resilience and economic empowerment in the digital age.

4. Conclusions

This study confirms that the research instruments possess internal consistency and validity in their analysis results. The CP1 value, which represents all indicators with a high latent factor loading value ≥ 0.6 (good), affirms the strong validity. Additionally, the fact that all composite reliability and Cronbach's Alpha values for each construct exceed the desired benchmark levels confirms that the selected measurement tools are reliable. The study found that as Sharia Compliance (X) increases, Economic Security (Y) has a positive and significant effect. These findings highlight that Sharia practices can strengthen the resilience of micro and small businesses in Madura. Maintaining business operations in accordance with Sharia provides businesses not only with a moral foundation that complements the cultural context but also with the resilience needed to withstand economic challenges. This orientation embodies Madura's Islamic culture and identity, which is essential for establishing an ecosystem that supports a conducive environment for an independent and sustainable economy. Islamic business practices in Madura are not just an economic movement, but also a cultural statement that enhances confidence and fosters solidarity. The role of stakeholders—from local government and Sharia-compliant financial institutions to MSE associations, community organizations, NGOs, and educational institutions—is crucial in this regard. They play an important role in spreading Sharia teachings and strengthening micro and small businesses. This research indicates that Sharia compliance is a strategic foundation for sustainable economic growth in Madura. Ultimately, the benefits transcend individual businesses and contribute

to the social and economic health of the community. That said, the scope of this research could be expanded. Future research could extend beyond the food and beverage sector to achieve broader generalization across sectors. Longitudinal studies could also provide insights into the long-term effects of Sharia compliance on economic stability. Research on the potential to develop a Sharia-compliant economic system that incorporates technological and innovation advantages will also open new possibilities for the future development of technology in a Sharia-compliant manner. This paper demonstrates how Sharia compliance plays a significant role in strengthening economic resilience, providing evidence that emphasizes cultural and ethical values in business. As Madura continues to navigate economic complexities, embracing Sharia principles could serve as a sustainable and culturally resonant pathway for growth and development, benefiting not only business actors but also the community as a whole.

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