
Islamic Cooperative Financing as a Driver of Traditional Market Traders' Income: Evidence from Beringharjo Market, Yogyakarta

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Abstract

Islamic cooperative financing plays an important role in supporting financial inclusion and the sustainability of micro-enterprises, particularly traditional market traders with limited access to formal financing. This study examines the effect of Islamic cooperative financing on the income of traditional market traders in Beringharjo Market, Yogyakarta. A quantitative approach was employed using simple linear regression analysis with SPSS. The results show that Islamic cooperative financing has a positive and significant effect on traders' income, with a regression coefficient of 0.853 and a significance value of 0.000. Thus, the research hypothesis is supported. The coefficient of determination shows an R Square value of 0.785, indicating that Islamic cooperative financing explains 78.5% of the variation in traders' income, while the remaining 21.5% is explained by other factors outside the research model. These findings demonstrate that Islamic cooperative financing can serve as an important instrument for strengthening traders' productive capacity and income. The study contributes empirical evidence to the literature on Islamic microfinance and provides practical implications for Islamic cooperatives and policymakers to expand productive financing while strengthening financial literacy and business assistance for traditional market traders.

Keywords: Islamic Cooperative Financing; Islamic Microfinance; Traditional Market Traders; Traders' Income; Financial Inclusion.

INTRODUCTION

Micro, Small, and Medium Enterprises (MSMEs) have become one of the primary drivers of Indonesia's economic development by contributing significantly to employment creation, poverty reduction, and regional economic resilience. Traditional markets constitute an important component of the MSME ecosystem because they accommodate millions of small traders whose businesses depend heavily on access to working capital. Nevertheless, limited access to formal financial institutions remains one of the major constraints faced by traditional market vendors, particularly those operating at the micro-enterprise level. Consequently, financing constraints often hinder business expansion and income improvement among market traders.

Financial inclusion has therefore become a strategic policy in Indonesia to improve the welfare and competitiveness of MSMEs. According to Ninglasari et al. (2024), expanding Islamic financing distribution is positively associated with improvements in financial inclusion among Indonesian MSMEs, indicating that greater access to Sharia-compliant financing can stimulate business development and economic participation. Islamic cooperatives (*Koperasi Simpan Pinjam dan Pembiayaan Syariah*—KSPPS), commonly known as *Baitul Maal wa Tamwil* (BMT), have emerged as important Islamic microfinance institutions that provide productive financing for micro-entrepreneurs excluded from conventional banking services. Unlike conventional financial institutions, Islamic cooperatives emphasize profit-sharing, fairness, ethical financing, and community empowerment, making them particularly relevant for supporting small-scale businesses. Nugroho et al. (2021) argue that Islamic cooperatives significantly improve MSMEs' access to productive capital and strengthen their business sustainability.

Several recent studies have demonstrated that Islamic cooperative financing contributes not only to financial inclusion but also to business development through capital assistance, financial mentoring, and entrepreneurial guidance. Permanasari and Muhlis (2024), for example, reported that BMT financing improved traders' business turnover, inventory stability, and business continuity among traditional market vendors in Gresik. Similarly, Sobana et al. (2024) found that strengthening Islamic financial literacy and inclusion through Islamic cooperatives enhanced the capacity of MSMEs to utilize Sharia-compliant financing more effectively.

Despite these encouraging findings, empirical evidence regarding the direct relationship between Islamic cooperative financing and traders' income remains inconclusive. Previous studies have largely focused on financial inclusion, institutional performance, or MSMEs in general, while relatively limited attention has been devoted to traditional market vendors operating in major urban traditional markets. Moreover, most previous studies employed qualitative approaches emphasizing institutional roles rather than quantitatively examining whether financing significantly increases traders' income. These inconsistencies indicate the existence of an empirical gap that requires further investigation.

Beringharjo Market in Yogyakarta represents one of Indonesia's largest and oldest traditional markets, accommodating thousands of micro-scale traders engaged in various commercial activities. As a major cultural and economic landmark, the sustainability of businesses operating within Beringharjo Market contributes not only to household welfare but also to regional economic development. Access to Islamic cooperative financing is therefore expected to strengthen traders' working capital, improve business performance, and ultimately increase their income.

The novelty of this study lies in three aspects. First, unlike previous studies focusing on general MSMEs, this study specifically investigates traditional market vendors receiving financing from Islamic cooperatives. Second, this study provides quantitative evidence regarding the effect of Islamic cooperative financing on traders' income. Third, this study enriches the literature on Islamic financial inclusion by providing empirical evidence from Beringharjo Market, one of Indonesia's most important traditional marketplaces. Based on the research gap and practical importance of Islamic cooperative financing, this study aims to examine the effect of Islamic cooperative financing on the income of traditional market vendors in Beringharjo Market, Yogyakarta. The findings are expected to contribute to the literature on Islamic microfinance while providing practical recommendations for Islamic cooperatives and policymakers in strengthening financial inclusion and supporting sustainable regional economic development.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

2.1. Islamic Cooperative Financing

Islamic cooperative financing has become one of the essential instruments for promoting financial inclusion among micro, small, and medium enterprises (MSMEs), particularly for entrepreneurs who encounter barriers in accessing formal banking institutions. Islamic cooperatives, commonly operating as Koperasi Simpan Pinjam dan Pembiayaan Syariah (KSPPS) or Baitul Maal wa Tamwil (BMT), provide financing based on Sharia principles through contracts such as murabahah, mudharabah, and musyarakah. These financing schemes emphasize justice, risk-sharing, and partnership rather than interest-based transactions.

Early studies argued that Islamic microfinance institutions were established not only to provide financial services but also to alleviate poverty, promote entrepreneurship, and empower low-income communities (Obaidullah & Khan, 2008; Ahmed, 2002). Likewise, Wulandari and Kassim (2016) found that BMTs contribute to financial inclusion by providing capital, training, and mentoring for micro-enterprises, particularly for borrowers who are unable to meet collateral requirements.

More recent studies have strengthened this evidence. Ashfahany and Aini (2021) reported that financing provided by BMT generates positive economic impacts by increasing MSMEs' income potential while simultaneously improving borrowers' psychological well-being and business confidence. Furthermore, Rohman et al. (2021), through a systematic review of Islamic microfinance literature, concluded that Islamic

microfinance has increasingly contributed to poverty alleviation, sustainability, financial inclusion, and digital innovation, highlighting its strategic role in supporting sustainable economic development.

Recent thematic reviews also indicate that Islamic cooperatives have evolved beyond their traditional financing function. Contemporary Islamic cooperatives increasingly integrate digital technology, governance improvement, and community empowerment to strengthen their competitiveness and socio-economic impact (Fathi et al., 2025). Similarly, Affandi et al. (2025) emphasized that BMTs have transformed into institutions promoting financial inclusion, productive financing, and local economic empowerment while facing challenges related to governance, human resources, and digital transformation

2.2 Traders' Income

Income is widely recognized as one of the primary indicators of business performance because it reflects the capability of enterprises to generate economic returns from business activities. For traditional market vendors, income depends on various determinants, including working capital, entrepreneurial skills, marketing capability, inventory availability, customer demand, and access to productive financing.

Previous empirical studies consistently suggest that adequate financing enables traders to increase inventory levels, improve product quality, expand business capacity, and maintain operational continuity, which ultimately contributes to higher income. Ashfahany and Aini (2021) demonstrated that Islamic microfinance financing positively influences the economic performance of MSMEs through increased business productivity and income generation.

Similarly, systematic reviews by Trimulato et al. (2025) concluded that productive Sharia financing contributes significantly to MSME development; however, its effectiveness is influenced by financial literacy, product innovation, and institutional support.

2.3 Relationship between Islamic Cooperative Financing and Traders' Income

Financial intermediation theory suggests that improved access to productive capital enables entrepreneurs to invest in business expansion, increase operational efficiency, and generate higher income. Islamic cooperative financing is expected to enhance traders' business performance because it combines financial support with ethical business principles and community empowerment.

Although previous studies generally report positive relationships between Islamic financing and MSME performance, research findings remain inconclusive. Several studies indicate that financing significantly improves business income, while others argue that financing alone is insufficient without managerial capability, financial literacy, and entrepreneurial competence.

Moreover, most previous studies have examined Islamic financing from the perspectives of financial inclusion, institutional performance, or MSMEs in general, whereas empirical studies specifically focusing on traditional market vendors remain limited. Research conducted in traditional markets, particularly Beringharjo Market in Yogyakarta, is still scarce. This contextual gap provides a strong rationale for investigating whether Islamic cooperative financing significantly affects the income of traditional market vendors.

Based on the theoretical framework and previous empirical findings, this study proposes the following hypothesis:

H1: *Islamic cooperative financing has a positive and significant effect on the income of traditional market vendors.*

RESEARCH METHOD

The data collection technique used in the study is a simple linear regression analysis method. In performing a simple linear analysis, this method requires performing a classical assumption test to get good regression results. With data analysis outputs using SPSS. In analyzing a simple linear regression model in order to produce a good estimate, namely with BLUE (*best linear unbiased estimator*) is the fulfillment of the basic assumptions of regression, namely by carrying out a series of classic assumptions used in this study, namely:

The normality test aims to test whether in the regression model, the free variable and the bound variable both have a normal distribution or not. A good regression model is to have normal or near-normal distributions and data.⁹ As is well known, the T test and the F test assume that the residual value follows a normal

distribution. Normality The data is obtained by viewing a histogram graph with the normal curve presented in the SPSS output.

This test is usually used to measure data at ordinal, interval, or ratio scales. If the analysis uses the parametric method, then the normality requirement must be met, i.e. the data comes from a normal distribution. If the data is not normally distributed, or the sample number is small and the data type is nominal or ordinal, then the method used is nonparametric statistics. In this discussion, the *One Sample Kolmogorov-Smirnov test will be used* using a significance level of 0.05. The data is declared to be normally distributed if the significance is greater than 5% or 0.05.

This test aims to test whether there is an inequality in the regression model *variance* from one observation to another. Regression model The Good is homogeneousness or heteroscedasticity does not occur. To detect the presence or absence of heteroscedasticity in this study, it was carried out by graph analysis, namely looking at graphs *scaterr plot*. The detection of the presence or absence of heteroscedasticity can be carried out as follows:

- If there is a certain pattern, such as the dots that exist forming a certain regular pattern, then identify that heteroscedasticity has occurred.
- If there is no clear pattern, as well as scattered points above and below 0 on the y-axis, then heteroscedasticity does not occur.

After conducting a series of classical assumption tests above, the collected data is analyzed by a simple linear regression method. The linear regression equations in this study are as follows:

$Y' = \alpha + bX + e$ Description:

Y' = Market trader's income

X = Financing provided by Sharia Cooperatives

a = Constant (value Y' when $X = 0$) b = Regression coefficient (incremental value or decrease)

RESULT AND DISCUSSION

Discussion

The normality test is used to find out whether the data presented for further analysis is normally distributed or not. A good regression model should be distributed normally or close to normal. If the data is not Normally distributed, or the number of samples is small and the data type is nominal or ordinal, then the method used is non-parametric statistics. In the language, *the One Sample Kolmogorov-Smirnov test will be used* using a significance level of 0.05. The data is declared to be normally distributed if the significance is greater than 5% or 0.05. The results of the data normality test can be seen in the following table:

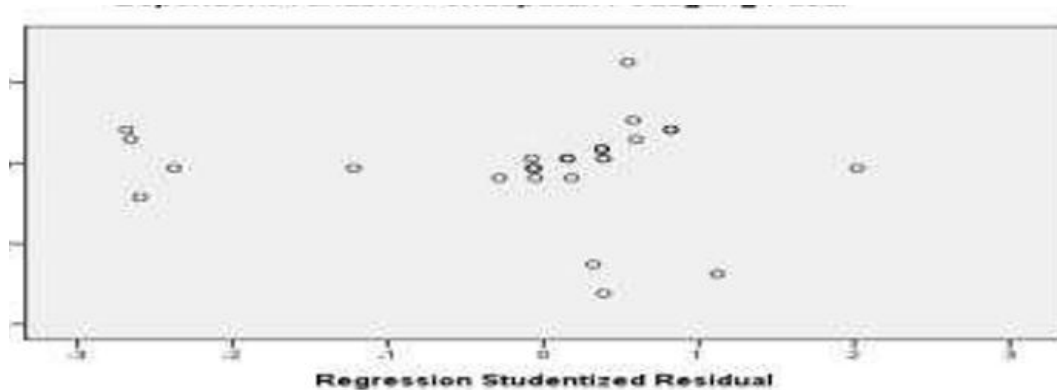
Kolmogorov – Smirnov Normality Test Value for

Uji Kolmogorov-Smirnov	Unstandarize Residual
Nilai Kolmogorov-Smirnov	0,978
Sig	0,278

Source : Data Processing Results, 2026

Based on the output results, the *Kolmogorov – Smirnov* value is significant at $0.290 > 0.05$. Thus, the residual data are normally distributed and the regression model has met the assumption of normality

Heteroscedasticity Test Results



The findings indicate that Islamic cooperative financing has a positive and significant effect on the income of traditional market traders. The regression coefficient of 0.853 indicates that an increase in Islamic cooperative financing is associated with an increase in traders' income. This finding supports the financial intermediation perspective, in which access to productive capital enables micro-entrepreneurs to increase inventory, maintain business operations, and expand their business activities. The result is consistent with Ashfahany and Aini (2021), who found that BMT financing has a positive economic impact on the income potential of SMEs. It is also consistent with Ninglasari et al. (2024), who found a positive relationship between Islamic financing distribution and financial inclusion among Indonesian MSMEs

Based on the image above, it can be seen that the plot is spread randomly and squeezed above and below zero. Therefore, in the regression model formed, it was stated that there was no heteroscedasticity. This simple linear analysis was used to determine the influence of Sharia cooperative financing (X) on the income of traders of the traditional market of the Yogyakarta lemonade junction. The results of the analysis can be seen in the following:

Based on the table obtained the simple regression coefficient of the variable with the help of SPSS obtained

Model	Unstandar dized Coeffici ents		Standardized Coefficie nts	T	Say.
	B	Std. Error	Beta		
(Constanta	3.683				
Pebiayaan		2.12		1.907	.038
	.853	.037	.785	21,186	.000

a simple linear regression equation can be written as follows:

$$Y = 3.683 + 0.853X + 2.12$$

The constant number has a value of 3,683 (positive) stating that if you ignore Sharia Cooperative Financing (X), then the income of Traditional Market traders (Y) is .853, meaning that there is still income of market traders even though the value of Sharia Cooperative financing to Y is zero (0). independent variables. R Square calculation results can be seen in the output of the *Summary Model*. In the *R Square* column, it can be seen how much percentage can be explained by independent variables to other variables. While the rest were influenced by other variables that were not included in the research model.

The relatively high R Square value of 0.785 further indicates that Islamic cooperative financing explains 78.5% of the variation in traders' income. This finding demonstrates the important role of Islamic financing in strengthening the economic capacity of micro-entrepreneurs. Recent evidence supports this relationship. Setiawan et al. (2023) found that Islamic financing for MSMEs contributes to poverty alleviation through economic growth, while Ahyar et al. (2025) emphasized that access to Islamic financing and financial inclusion remain important factors in supporting MSME development. Similarly, Nabhani et al. (2025) reported that Islamic microfinance institutions, including BMTs and BPRS, contribute to MSME development in Indonesia.

However, the results should not be interpreted as indicating that financing is the only determinant of traders' income. The remaining **21.5%** may be explained by other factors, including financial literacy, business experience, managerial capability, business scale, marketing, and business assistance. This is important because financing can generate greater economic benefits when accompanied by adequate knowledge and institutional support. Recent studies also highlight the need to combine financial access with broader business development and inclusion mechanisms. Therefore, Islamic cooperatives should not only provide financing but also strengthen financial literacy, business mentoring, and capacity building. Such an integrated approach can increase the effectiveness of Islamic financing and contribute more sustainably to improving the welfare of traditional market traders and the local economy.

Adjusted R Square Test Results

The coefficient of determination test shows an R Square value of 0.785, indicating that Islamic cooperative financing explains 78.5% of the variation in traditional market traders' income, while the remaining 21.5% is explained by other factors outside the research model. This finding indicates that Islamic cooperative financing has a substantial explanatory contribution to traders' income.

This finding is consistent with previous studies showing that Islamic microfinance and BMT financing can improve the economic performance and income potential of MSMEs. Ashfahany and Aini (2021) found that BMT financing positively affects the economic potential of MSMEs, while more recent studies indicate that Islamic microfinance can contribute to increasing SME income and supporting business sustainability. These findings reinforce the importance of access to Islamic financing as a mechanism for strengthening the economic capacity of micro-entrepreneurs.

However, the remaining 21.5% suggests that traders' income is also influenced by other factors, such as financial literacy, business experience, managerial capability, business scale, marketing, and business assistance. Therefore, Islamic cooperative financing should be accompanied by financial education and business mentoring to maximize its impact. Overall, the results demonstrate that Islamic cooperative financing is an important factor in supporting income improvement and strengthening the economic sustainability of traditional market traders.

CONCLUSION

Based on the findings, Islamic cooperative financing has a positive and significant effect on the income of traditional market traders. The simple linear regression analysis shows a regression coefficient of **0.853** with a significance value of **0.000**, indicating that the hypothesis stating that Islamic cooperative financing has a positive and significant effect on traders' income is supported. The classical assumption tests also demonstrate that the regression model satisfies the normality assumption and does not exhibit heteroscedasticity. These findings indicate that better access to and utilization of Islamic cooperative financing can provide greater opportunities for traders to increase their income and sustain their businesses.

This study contributes empirical evidence to the literature on Islamic financing and financial inclusion, particularly in the context of traditional market traders. The **R Square value of 0.785** indicates that Islamic cooperative financing explains **78.5% of the variation in traders' income**, while the remaining variation is explained by other factors outside the research model. This finding reinforces the role of Islamic cooperatives as financial institutions that can provide access to capital for micro-entrepreneurs who may face limitations in accessing formal financial institutions. Therefore, Islamic cooperative financing serves not only a financial function but also has the potential to become an instrument of community economic empowerment by improving business capacity and traders' income.

For the community, particularly traditional market traders, this study provides practical evidence that Islamic cooperative financing can be utilized as a productive source of capital to increase business scale, maintain inventory availability, and develop business activities. For Islamic cooperatives, the findings provide a basis for expanding access to financing while strengthening financial literacy, business assistance, and entrepreneurial capacity among borrowers. Meanwhile, for governments and policymakers, the findings highlight the importance of strengthening the Islamic financial inclusion ecosystem through policies that facilitate access to financing and support the capacity development of traditional market traders. Ultimately, strengthening Islamic cooperative financing is expected not only to increase individual traders' income but also to contribute to improving community welfare and strengthening the local economy.

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