

Analysing the Determinants of Turnover Growth of Micro, Small, and Medium Enterprises during and after PPKM

Faishol Luthfi^{1*}, M. Iman Taufik², Doni³

^{1,2,3} Department of Islamic Economics, Faculty of Economics and Business, Universitas Negeri Surabaya

Article Info

Paper type:

Research paper

Keywords:

MSME; Murabahah; logistic analysis

Abstract

This study aims to investigate the determinants of turnover in Micro, Small, and Medium Enterprises (MSMEs) during and after The Enforcement of Restrictions on Public Activities (PPKM) due to the Covid-19 pandemic. The research employs two analyses: a comparative analysis using the Wilcoxon test to identify differences in MSME turnover during and after PPKM, and the logistic method to analyze influencing factors. The predictor variables encompass Gender (X1), Education Level (X2), Equity (X3), and Total Murabaha Financing (X4), while the response variable (Y) is MSME turnover growth. The subjects of this study are MSME owners, with a purposive sampling method utilized to gather data from a sample of 300 individuals. The findings revealed that the Equity variable exhibited a positive and significant impact on the Growth of MSME Turnover in both Logistics Models 1 and 2. However, the variables of Gender, Education Level, and Amount of Murabahah Financing did not have a significant effect on MSME Turnover Growth

Article history:

Received:

Revised:

Accepted:

Available online:

*Corresponding author: faishol.luthfi@ekonomi.untan.ac.id

Introduction

The Coronavirus Disease-19 (Covid-19) is an infectious viral disease that leads to severe respiratory complications. The initial case of Covid-19 was detected in Wuhan, China, in November 2019. This disease is caused by a novel virus with a rapid transmission rate, subsequently spreading to various regions worldwide (Ningsih & Mahfudz, 2020). The extensive global transmission eventually reached Indonesia, where the first reported Covid-19 case emerged in March 2020. Since then, the number of positive Covid-19 patients has continuously increased, necessitating the implementation of emergency measures, such as The Enforcement of Restrictions on Public Activities (PPKM), by the government.

The Enforcement of Restrictions on Public Activities (PPKM) was initially implemented from January 11th to January 25th, 2021 in several provinces, including DKI Jakarta, West Java, Banten, Central Java, Yogyakarta, East Java, and Bali. Subsequently, the PPKM policy was progressively extended to cover Java Island, Sumatra Island, Kalimantan Island, Sulawesi Island, and eventually the entire National scale. The objective of these measures was to curb the rampant spread of Covid-19 in Indonesia. As a result of the government's efforts and the perceived reduction in the spread of Covid-19, the PPKM regulations were officially lifted on December 31st, 2022, allowing people to resume their normal activities (Nurul & Agus, 2021).

The Covid-19 pandemic has had a profound impact on both the health and economic sectors (Mofijur et al., 2021; Zhang et al., 2020). In the economic realm, the repercussions have included workforce layoffs (Wahyono, Shandy, Wibowo, & Kustiandi, 2021), escalating food prices (inflation) (Jaworski, 2021), and substantial losses in the tourism sector (Aldao, Blasco, Espallargas, & Rubio, 2021). Additionally, MSMEs and cooperatives have experienced a significant decline in their turnovers (Amri, 2020; Zaazou & Salman Abdou, 2022).

Several factors influence MSME turnover. Hoang, Nahm, & Dobbie (2021) and Nainggolan (2016) have elucidated that gender plays a role in determining MSME income. Men tend to achieve higher incomes, with approximately 2.7 million MSMEs in Surabaya earning above the minimum wage, while the number of male entrepreneurs surpasses that of female entrepreneurs. For instance, in the United States, 14% of men are business owners, compared to only 8% of women. Similarly, in Europe, male entrepreneurs constitute 19% of the total, whereas female entrepreneurs make up 10% (Bengtsson, 2012).

Nevertheless, there are studies suggesting that gender may not significantly impact company performance. For instance, Kalleberg & Leicht (1991) found in a preliminary study that women-owned small firms are not markedly behind men-owned firms in terms of performance. Furthermore, Brush (1992) contends that business performance can be gauged using broader criteria such as employee satisfaction, effectiveness, and social contribution.

In Gunawan's research (2015), it was said that education significantly impacts the performance of MSMEs in UP3HP (Agricultural Product Processing Development Service Unit Programme) in Bengkulu City. However, Nainggolan's study (2016) yielded contrasting results, indicating that the high level of education among MSME owners does not influence the turnover or income earned by the businesses.

The impact of equity on turnover has been extensively examined. According to Kusnawan (2018), equity significantly influences MSME turnover. A greater amount of equity utilized for investment purposes results in higher income obtained from the investment made. Conversely, a relatively small amount of equity leads to lower business income, resulting in a lower return on investment. To optimize profits in the business, there is a need to increase

ICCEIS: INTERNATIONAL COLLABORATION CONFERENCE ON ISLAMIC ECONOMICS

INTERNATIONAL CONFERENCE AND CALL FOR PAPER

investment capital.

The level of *murabaha* financing has a positive impact on the turnover value and customer profits of Small and Medium Enterprises (SMEs). Muaiz (2017), in his study on BMT Al-Ishlah Bobos, revealed that an increase in the value of *murabaha* financing received corresponds to higher SME turnover and customer profit levels. As the value of *murabaha* financing obtained by SMEs increases, the resulting turnover and profit levels also rise accordingly.

Given the aforementioned background, it can be inferred that several determinants are linked to the growth of MSME turnover. These determinants include gender, education level, the amount of equity, and the extent of *murabaha* financing acquired by MSME owners. Consequently, this study was conducted to examine the influencing factors affecting the growth of MSME turnover both during and after the implementation of PPKM.

Literature Review

Production refers to the process of creating new goods or enhancing the value of existing items to meet human needs more effectively. This process encompasses various stages, including storage, distribution, transportation, and other related activities (Miller & Meiners, 2000). Capital serves as a vital resource supporting the production process and can be categorized into two types: equity and financing (Sukoco, 2015). Equity represents internal funds sourced directly from the business owner, which may include savings, donations, grants, and other similar means. Conversely, financing entails external capital acquired from parties outside the company, often obtained through bank financing or other creditors.

In the context of Islam, financing must adhere to specific criteria to be deemed *halal* (permissible) according to *Sharia* principles. These criteria include being free from usury, *maysir* (gambling), *gharar* (uncertainty), and association with *haram* (forbidden) goods. The Quran stated the principles of financing in line with Islamic values, as exemplified in Surah An-Nisa: 29: A literature review is an objective, critical summary of published research literature relevant to a topic under consideration for research. Its purpose is to create familiarity with current thinking and research on a particular topic, and may justify future research into a previously overlooked or understudied area.

يَا أَيُّهَا الَّذِينَ آمَنُوا لَا تَأْكُلُوا أَمْوَالَكُمْ بَيْنَكُمْ بِالْبَاطِلِ إِلَّا أَنْ تَكُونَ تِجَارَةً عَنْ تَرَاضٍ مِّنْكُمْ وَلَا تَقْتُلُوا أَنْفُسَكُمْ إِنَّ اللَّهَ كَانَ بِكُمْ رَحِيمًا ۝٢٩

Meaning: " O believers! Do not devour one another's wealth illegally, but rather trade by mutual consent. And do not kill each other or yourselves. Surely Allah is ever Merciful to you". (Quran, Surah An-Nisa: 29).

This verse conveys that as a believer, a Muslim is obligated to engage in transactions or trade based on mutual consent and fairness, avoiding any form of coercion or unjust practices. Engaging in trade through force, even with payment, is considered *haram* (forbidden) in Islam. Additionally, Allah SWT strictly prohibits the act of taking a life, either one's own or others', except in cases of just cause. Should an unjust killing occur, Allah SWT provides authority to the victim's heir, but it is essential to refrain from exceeding the prescribed limits in seeking retribution. Indeed, divine support is given to uphold justice in such matters.

In Islamic finance, there are various types of financing, such as *murabahah*, *mudharabah*, *musyarakah*, *ijarah*, and others. Among these, *murabahah* stands out as one of the most widely used contracts in Islamic financial institutions (Wijaya & Moro, 2022). It involves a sales transaction where the seller discloses the acquisition price and the agreed profit margin to the buyer (Puspitasari, Hidayat, & Kusmawati, 2020). The payment for such sale and purchase contracts can be made either in cash or through instalments.

Capital, on the other hand, manifests in various forms, including economic capital, human capital, and social capital. Economic capital can be seen in a person's bank account, human capital resides in one's intellectual capabilities, and social capital encompasses the network of relationships among individuals. To attain social capital, individuals must establish meaningful connections with others, allowing for mutual benefits to be derived (Darmayanti & Parwitaningsih, 2010). Nainggolan (2016) highlights that gender significantly influences the income of Micro, Small, and Medium Enterprises (MSMEs). However, contrasting studies suggest that gender may not have a discernible impact on the business. Kalleberg & Leicht (1991) present evidence that women-owned small firms do not significantly lag behind those owned by men. Similarly, Brush (1992) contends that business performance can be evaluated through broader measures, such as employee satisfaction, effectiveness, and social contribution. Theoretical perspectives on gender differences between men and women in entrepreneurship are divided into two approaches: the social network structure approach and the social network resource approach (Klyver & Terjesen, 2007; Lin, 2005).

In the social network structure approach, distinctions are drawn between "strong" and "weak" labor ties. The "strong" labor ties are often associated with men, while the "weak" labor ties are associated with women. This approach suggests that women are perceived to possess limited capacities in business start-ups, networking, and business strategy, leading them to establish micro-enterprises due to their constrained networking and strategic abilities. Furthermore, gender differences in the labor market can significantly affect job performance (Bengtsson, 2012).

Gender differences can indeed have an impact on an individual's productivity level, with men generally exhibiting higher productivity compared to women. Such differences are influenced by various factors attributed to women, including physical limitations while working, a tendency to incorporate emotions in decision-making, and biological factors such as taking leave during childbirth (Amron & Imran, 2009). Moreover, gender factors can play a role in determining an individual's level of participation and productivity in the workplace. It is essential to recognize that labor should not be differentiated based on gender. However, it is commonly observed that men tend to demonstrate higher productivity in roles that require physical strength (Ukkas, 2017).

Education constitutes an essential component of human capital, shaping an individual's ability to generate specific types of goods and services. The quality of education plays a pivotal role in influencing production methods and fostering innovation, thereby enabling businesses to operate with effectiveness and efficiency. The seamless operation of a business, in turn, has a direct impact on its overall performance, as indicated by total sales figures (Gunawan, 2015). This aligns with findings from international research, affirming the intrinsic connection between formal education and labor productivity, as well as entrepreneurship development in Small and Medium Enterprises (SMEs) (Akram, Ganaie, Murchant, & Khan, 2011).

ICCEIS: INTERNATIONAL COLLABORATION CONFERENCE ON ISLAMIC ECONOMICS

INTERNATIONAL CONFERENCE AND CALL FOR PAPER

Turnover refers to the monetary value generated from the sales of specific goods or merchandise during a designated sales period. It is crucial to note that a substantial turnover does not necessarily translate into significant profits. In instances where the turnover falls short of covering the total cost incurred, the resulting profit will be negative. Additionally, the nature of business commodities significantly impacts turnover figures. Consequently, turnover holds greater significance than profit when assessing the overall progress and development of a business (Arinda, 2014).

Methodology

This research adopts a quantitative approach, utilizing Wilcoxon analysis to examine the variations in MSME turnover during and after the PPKM (Enforcement of Restrictions on Community Activities). Additionally, a logistic regression model is employed to assess the impact and establish the relationship between the response variables and predictor variables. The primary data for this study were collected in February 2023. The sample size consists of 300 MSME owners, selected through purposive sampling.

The response variable in this study is the growth of MSME turnover, measured by the difference in MSME turnover before and after the Covid-19 pandemic. The variable is assessed on an ordinal scale, with Y = 1 representing the "Moderately High" category, Y = 2 representing the "High" category, and Y = 3 representing the "Very High" category. The operational definitions of the variables used are as follows:

Table 1. Definition of Operational Variable

Variable	Indicator	Scale
MSME Turnover(Y)	Percentage growth of MSME turnover during and after PPKM	Percentage of MSME turnover growth during and after PPKM Ordinal 1 = < 63% (Moderately High) 2 = 63-115% (High) 3 = > 115% (Very High) Calculation of group frequency distribution using Sturges' rule resulted in 10 categories. But due to the lack of data distribution in several categories, the researcher modified it into 3 categories
Gender (X ₁)	Gender of the respondent	Nominal: 0 = Female 1 = Male
Level of Education (X ₂)	Level of Education of the Respondent	Ordinal: 1= SD/ MI (Elementary Level) 2= SMP/ MTs (Middle School Level) 3= SMA/ SMK/ MA (High School Level) 4= Diploma/ S1/ S2/ S3 (College/ University)
Equity (X ₃)	The amount of equity spend by the respondent for their business	Ratio
The amount of <i>Murabahah</i> financing (X ₄)	The amount of <i>murabahah</i> spend by the respondent for their business	Ratio

Comparison Analysis

The Wilcoxon Signed Ranks Test, a non-parametric statistical analysis, is utilized to compare and evaluate the means of two response samples for significant differences. This test is chosen when dealing with non-normally distributed data (Suwendiyanti & Gantino, 2022). The formula for the Wilcoxon Signed Ranks Test is provided as follows (Ghozali & Castellan, 2002).

$$Z = \frac{\bar{r}_+ - \bar{r}_-}{\sqrt{\frac{\sum r_i^2}{N(N+1)}}} \quad (1)$$

$$\text{Where } \bar{r}_+ = \frac{r(r+1)}{4}, \text{ and } \bar{r}_- = \frac{r(r+1)(2r+1)}{24} \quad (2)$$

Thus, a following formula is obtained:

$$Z = \sqrt{\frac{r(r+1)}{24}} \quad (3)$$

Notes :

- Z : Z score of Wilcoxon Signed Rank Test calculation result
- \bar{r}_+ : Means
- \bar{r}_- : *Varians*
- r_+ : Number of positive ratings
- N : Number of samples

Ordinal Logistic Regression Analysis

Regression Method is a data analysis method employed to assess the relationship between one or more predictor variables (X) and the response variable (Y). The primary objective of this method is to derive a concise and effective model that explains the association between the predictor variables (X) and the ordinal response variable (Y). In the context of ordinal logistic regression, the response variable (Y) is considered ordinal in nature. The logit model serves as the appropriate framework for ordinal logistic regression. The equation of the logit model is expressed as follows (Dwiningtias & Mahmudah, 2019).

$$\text{Logit}[\pi_j] = \log \left[\frac{\pi_j}{1 - \pi_j} \right] = \beta_0 + \beta_1 X \quad (4)$$

With π_j is the probability of the response category $-j$, $\pi_j = [\pi(\pi \leq j)]$ is the cumulative probability of the response category to $-j = \pi_1 + \pi_2 + \dots + \pi_j$ while β_0 is the constant ($j = 1, 2, \dots, k-1$) and $\beta_1 = (\beta_1, \beta_2, \dots, \beta_k)$ is the coefficient parameter used to show the effect of X on the *logit* model π_j for response variable (Y) in the less than or equal to category level j .

$\beta_1 = (\beta_1, \beta_2, \dots, \beta_k)$ is the predictor variable.

The predictor variables in the cumulative *logit* model equation can be continuous, categorical or both, so the form of the equation is converted into an exponential form. The form of the equation will be:

$$\pi_j = [\pi(\pi \geq j)] = \frac{e^{\beta_0 + \beta_1 X}}{1 + e^{\beta_0 + \beta_1 X}} \quad (5)$$

ICCEIS: INTERNATIONAL COLLABORATION CONFERENCE ON ISLAMIC ECONOMICS

INTERNATIONAL CONFERENCE AND CALL FOR PAPER

Logistic regression analysis technique does not necessitate normality and classical assumption tests on the independent variables (Ghozali, 2011). The ordinal logistic regression test follows several stages, which include:

1. Multicollinearity Test
2. Parallel Lines Test
3. Simultaneous Test (-2LogLikelihood)
4. Goodness of Fit Test
5. Coefficient of Model Determination (Pseudo R-Square)
6. Partial Test

Results and Discussion

Description of Results

Table 2 describes the characteristics of respondents in this study.

Table 2. Characteristics of Respondents Based on MSME Turnover Growth, Gender and Level of Education

		<i>Number</i>	<i>Percentage</i>
<i>MSME Turnover Growth</i>	<i>Moderately High</i>	<i>179</i>	<i>59,7%</i>
	<i>High</i>	<i>102</i>	<i>34,0%</i>
	<i>Very High</i>	<i>19</i>	<i>6,3%</i>
<i>Gender</i>	<i>Female</i>	<i>105</i>	<i>35,0%</i>
	<i>Male</i>	<i>195</i>	<i>65,0%</i>
<i>Level of Education</i>	<i>SD/MI</i>	<i>47</i>	<i>15,7%</i>
	<i>SMP/MTs</i>	<i>59</i>	<i>19,7%</i>
	<i>SMA/SMK/MA</i>	<i>143</i>	<i>47,7%</i>
	<i>Diploma/S1/S2/S3</i>	<i>51</i>	<i>17,0%</i>
	<i>Total</i>	<i>300</i>	<i>100,0%</i>

Source: Output, processed

According to the data presented in Table 2, it is evident that respondents exhibiting moderately high turnover growth (< 63%) accounted for 179 individuals, comprising 53.7% of the sample. Those experiencing high turnover growth (63-115%) amounted to 102 respondents, representing 34%. Moreover, individuals with very high turnover growth (> 115%) were 19 in number, making up 6.3% of the sample. In terms of gender distribution, male respondents constituted the majority, with 195 individuals, constituting 65% of the total, while females represented 105 individuals, making up 35%. Regarding the education level of respondents, those with the latest educational attainment of SMA / SMK / MA accounted for the highest number at 143 individuals, making up 47.7% of the sample. Respondents with an educational background of SMP / MTS amounted to 59 individuals, constituting 19.7% of the sample. Additionally, 51 individuals held a Diploma / S1 / S2 / S3 degree, representing 17%, and 47 individuals had an educational background of SD / MI, making up 15.7%.

Table 3 Presents The Characteristics of Respondents Based On Their Own Capital And The Total *Murabah* Financing

	<i>N</i>	<i>Minimum</i>	<i>Maximum</i>	<i>Means</i>
<i>Equity</i>	<i>300</i>	<i>2000000</i>	<i>3500000000</i>	<i>241943333</i>
<i>Amount of <i>Murabah</i> Financing</i>	<i>300</i>	<i>5000000</i>	<i>4500000000</i>	<i>243793333</i>

Source: Output, processed

According to the data presented in Table 3, respondents reported a minimum value of IDR

2,000,000 and a maximum of IDR 3,500,000,000 for their equity. Similarly, the murabaha financing received by respondents displayed variations, with the smallest nominal value recorded at IDR 5,000,000 and the largest at IDR 4,500,000,000. The average amount of equity reported was IDR 241,943,333, whereas for murabaha financing, the average amount was IDR 243,793,333. These figures provide valuable insights into the range and averages of equity and murabaha financing among the respondents.

Comparison Analysis

The Wilcoxon Signed Ranks Test was employed to examine disparities in MSME turnover during and after PPKM. This test is conducted when the data does not follow a normal distribution. Consequently, a Data Normality Test was performed as a prerequisite. The outcomes of the Data Normality Test are detailed in Table 4.3, presenting the results of the Kolmogorov-Smirnov Normality Test.

Table 4. Normality Test (Kolgomorov -Smirnov)

<i>Unstandardized Residual</i>		
<i>N</i>		300
<i>Normal Parameters^{a,b}</i>	<i>Mean</i>	0E-7
	<i>Std. Deviation</i>	20687227.58614358
<i>Most Extreme Differences</i>	<i>Absolute</i>	.279
	<i>Positive</i>	.279
	<i>Negative</i>	-.273
<i>Kolmogorov-Smirnov Z</i>		4.836
<i>Asymp. Sig. (2-tailed)</i>		.000

Source: Output, processed

According to Table 4, the significance value of the Data Normality Test (Asymp. Sig. (2- tailed)) is less than alpha ($0.000 < 0.05$). As a result, it can be inferred that the data is not normally distributed, which justifies proceeding with the Wilcoxon Test. The outcomes of the Wilcoxon Test are elaborated in Table 4.4.

Table 5. Wilcoxon Signed Ranks Test

	<i>Turnover After Pandemic - Turnover During Pandemic</i>
<i>Z</i>	-15.028 ^a
<i>Asymp. Sig. (2-tailed)</i>	.000

Source: Output, processed

Table 5 illustrates that the significance value of the Wilcoxon Signed Ranks Test is 0.000. The significance value is smaller than alpha, which is 0.05. This indicates the presence of a significant difference in MSME turnover during and after PPKM.

Logistic Regression Analysis

A good logistic regression model must be free from multicollinearity assumptions so the first step is to conduct a multicollinearity test.

**ICCEIS: INTERNATIONAL COLLABORATION CONFERENCE
ON ISLAMIC ECONOMICS
INTERNATIONAL CONFERENCE AND CALL FOR PAPER**

Table 6. Multicollinearity Test Results

<i>Model</i>	<i>Collinearity Statistics</i>	
	<i>Tolerance</i>	<i>VIF</i>
<i>(Constant)</i>		
<i>Gender</i>	.938	1.066
<i>Level of Education</i>	.860	1.163
<i>Equity</i>	.656	1.523
<i>Murabahah</i>	.640	1.562

Source: Output, processed

Table 6 presents the outcomes of the Multicollinearity Test. The tolerance values for all predictor variables (Gender, Education level, Equity, and Total Murabaha Financing) are greater than 0.10 (>0.10). Additionally, the VIF values for all predictor variables are below 10.00 (<10.00). Consequently, it can be concluded that there is no multicollinearity among the predictor variables, ensuring the production of a reliable ordinal logistic regression model estimation.

Parallel Lines Test

The Parallel Lines test is a crucial requirement in ordinal logistic regression analysis. This test examines the parameter equation for all categories. The test results are depicted in the table below.

Table 7. Parallel Lines Test

<i>Model</i>	<i>-2 Log Likelihood</i>	<i>Chi-Square</i>	<i>df</i>	<i>Sig.</i>
<i>Null Hypothesis</i>	456.262			
<i>General</i>	452.450 ^b	3.812 ^a	6	.702

Source: Output, processed

The results of the Parallel Lines Test show that the Chi-Square value is 3.812 and the p-value is 0.702 (>0.05), so at the 95% confidence level, each category has the same parameters or the relationship between predictor variables and logit is the same for all logit equations.

Simultaneous Test, Model Fit Test and Coefficient of Determination

The results of the simultaneous test, the fit of the ordinal logistic regression model and the coefficient of determination are shown in the following table:

Table 8. Simultaneous Test, Model Fit Test and Coefficient of Determination

<i>-2Log-Likelihood</i>		<i>Goodness of Fit</i>			<i>Pseudo R-Square</i>	
<i>Model</i>	<i>-2 Log Likelihood</i>	<i>Sig.</i>		<i>Chi-Square</i>	<i>Sig.</i>	<i>Cox and Snell</i>
<i>Intercept Only</i>	478.833		<i>Pearson</i>	497.879	.867	<i>Nagelkerke</i>
<i>Final</i>	456.262	.001	<i>Deviance</i>	427.594	1.000	<i>McFadden</i>
						.072
						.089
						.044

Source: Output, processed

Based on the results of the -2 Log-Likelihood test calculation, incorporating the predictor variables into the model yields a superior model compared to the one containing only intercepts. Specifically, the -2 Log Likelihood with only intercepts produces a value of 478.833, while by including predictor variables, the -2 Log Likelihood decreases to 473.218, indicating a chi-square decrease of 22.571 with a significance level of 0.001 (<0.05). Thus, the model with predictor variables demonstrates higher suitability for predicting the MSME Turnover Growth model.

An effective model is characterized by its ability to fit observational data. The significance value of the Goodness of Fit test greater than 0.05 suggests that the model can successfully predict the observed values (Ghozali, 2006). The Pseudo R-Square provides the coefficient of determination using the R-Square approach across various methods. Among these, the Nagelkerke method yields the highest value, indicating that the predictor variables can explain approximately 8.9% of the variation in the response variable.

Partial Test

Partial Significance Test and Model Interpretation are carried out to determine whether one or more predictor variables have a significant impact on the response variable. Subsequently, a partial significance test is conducted. Model interpretation relies on the odds ratio and is applied to variables that exhibit a significant effect on the response variable. The outcomes of the partial test and odds ratio are presented in the table below.:

Table 9. Parameter Estimation

		<i>Estimate</i>	<i>Std. Error</i>	<i>Wald</i>	<i>df</i>	<i>Sig.</i>
<i>Threshold</i>	<i>[Y = 1.00]</i>	.366	.360	1.032	1	.310
	<i>[Y = 2.00]</i>	2.752	.417	43.478	1	.000
	<i>X3</i>	-2.856E-009	9.084E-010	9.884	1	.002
	<i>X4</i>	6.897E-010	6.484E-010	1.131	1	.287
<i>Location</i>	<i>[X1=.00]</i>	-.110	.257	.183	1	.669
	<i>[X1=1.00]</i>	0 ^a	.	.	0	.
	<i>[X2=1.00]</i>	.727	.451	2.594	1	.107
	<i>[X2=2.00]</i>	.349	.430	.657	1	.418
	<i>[X2=3.00]</i>	.166	.370	.200	1	.655
	<i>[X2=4.00]</i>	0 ^a	.	.	0	.

Source: Output, processed

If the response variable has category i ($i = 1, 2, 3, \dots, j$) then the logistic regression equation formed is category $j-i$. The response variable has three categories so that two equations are formed. Based on the estimated parameter values above, the model equation can be formulated, namely:

ICCEIS: INTERNATIONAL COLLABORATION CONFERENCE ON ISLAMIC ECONOMICS INTERNATIONAL CONFERENCE AND CALL FOR PAPER

$$\begin{aligned} \square_1 &= \frac{\exp(0.366 - 0.110 \square_{1,1} + 0.727 \square_{2,1} + 0.349 \square_{2,2} + 0.166 \square_{2,3} - 2.856 \square_3 + 6.897 \square_4)}{\exp(0.366 - 0.110 \square_{1,1} + 0.727 \square_{2,1} + 0.349 \square_{2,2} + 0.166 \square_{2,3} - 2.856 \square_3 + 6.897 \square_4)} 1 + \\ &= \frac{\exp(2.752 - 0.110 \square_{1,1} + 0.727 \square_{2,1} + 0.349 \square_{2,2} + 0.166 \square_{2,3} - 2.856 \square_3 + 6.897 \square_4)}{\exp(2.752 - 0.110 \square_{1,1} + 0.727 \square_{2,1} + 0.349 \square_{2,2} + 0.166 \square_{2,3} - 2.856 \square_3 + 6.897 \square_4)} 1 + \\ \square_2 & \end{aligned}$$

The significance results show that there is one predictor variable that affects the response variable, namely Equity (X3) (0.002 < 0.05) thus, the model can be written as:

$$\begin{aligned} \square_1 &= \frac{\exp(0.366 - 2.856 \square_3)}{1 + \exp(0.366 - 2.856 \square_3)} = \frac{0.0829}{1.0829} = 0.0765 \\ \square_2 &= \frac{\exp(2.752 - 2.856 \square_3)}{1 + \exp(2.752 - 2.856 \square_3)} = \frac{0.9012}{0.9012} = 0.4740 \end{aligned}$$

In simple terms, the conclusion can be drawn that for every one-unit increase (one rupiah) in own capital, the probability of MSME turnover growth in the "Moderately High" category rises by 0.0765 and in the "High" category by 0.4740. In essence, an increase in the amount of own capital directly contributes to the growth of MSME turnover.

Discussion

Upon conducting the ordinal logistic regression and analyzing the results, several discussions arise concerning the effects of each variable, which are elaborated as follows:

1. The Gender Variable's Effect. The logit functions for both cases indicate that gender does not have a significant effect. This finding contrasts with Nainggolan's (2016) research, which suggests that gender has a significant impact on MSME income. Generally, men tend to have higher productivity levels compared to women, influenced by factors such as physical strength, emotional approach towards work, and biological factors, including the childbirth process (Amron & Imran, 2009). However, this study reveals that gender does not influence the growth of MSME turnover. Instead, turnover growth is primarily determined by working hours and modes of communication. In this study, both men and women have similar working hours and business tenure, as well as comparable communication and trading skills.
2. Educational Level Variable's Effect. The logit functions in this study indicate that the educational level variable has no significant effect. This finding contradicts Gunawan's research (2015), which suggests that the level of education significantly influences the performance of MSMEs, as evidenced by their turnover. However, it aligns with Nainggolan's research (2016), which shows that the educational level of MSME entrepreneurs does not impact the income earned. Though it is important to remember that the study use rural area as its subject which also ontributes to the limited job and business opportunities available. Consequently, the level of education alone may not substantially affect the income earned by MSME entrepreneurs. To establish a more robust relationship between education and income, there should be a diverse range of business options and career pathways for job opportunities in the region. The study was conducted in Central Java, Indonesia, and the results are consistent with the specific research context. On average, the respondents had completed their education up to the high school level. This level of education might not provide sufficient knowledge and skills to effectively manage

and run a successful business.

3. Equity Variable's Effect. The findings from both logit models reveal a significant effect of equity on MSME turnover growth. This outcome underscores the relevance of Production Theory in understanding the dynamics of MSME turnover during the pandemic. Equity plays a vital role as one of the factors of production, and an increase in equity positively influences business productivity. As a result, higher levels of capital investment in the business correspond to greater growth in MSME turnover. These findings are consistent with previous research conducted by Riawan and Kusniawan (2016), which also highlights the significant positive impact of equity on business income in the MSME sector. The study's results provide valuable insights into the importance of sufficient capital resources in driving business performance and growth during challenging periods like the pandemic.
4. Amount of Murabaha Financing Variable's Effect. Both logit functions indicate a non-significant influence of the variable amount of murabaha financing on MSME turnover. This occurs because there are still many MSMEs that lack an understanding of financial management, leading to the consumptive utilization of received murabaha financing, which has limited impact on business outcomes. These results are not in line with Muaiz's research (2017), which demonstrated a significant positive effect of murabaha financing on MSME turnover.

Conclusion

According to the research findings and data analysis, it can be inferred that a specific predictor variable, namely Equity, has a significant influence on the response variable, which is MSME turnover growth. This effect is particularly evident in the "Very Good" and "Excellent" model categories. These results demonstrate the relevance of Production Theory in understanding the growth of MSME turnover amidst the Covid-19 pandemic. As Equity is considered one of the production factors, an increase in this aspect leads to higher business productivity. In essence, higher capital investment in the business positively correlates with increased MSME turnover growth. Results of this study can be utilized as suggestions for devising strategies to promote MSME development by increasing turnover growth. The research indicates that the availability of internal capital significantly influences the turnover growth of MSMEs during and after PPKM. It is recommended that MSME owners exercise better financial management to utilize these funds as additional business capital. While this study offers valuable theoretical and practical insights concerning the determinants of MSME turnover growth during and after PPKM, there are some limitations that open up opportunities for future research. Specifically, the sample used in this study does not fully represent all MSME industries. Therefore, further research could include a more comprehensive and detailed sample that better represents each industry.

Reference

- Akram, S., Ganaie, M. A., Murchant, H., & Khan, M. A. (2011). Impact of Sme Entrepreneur ' S Education on Quality of Doing. SMEDA Research Journal, 11(January).
- Aldao, C., Blasco, D., Espallargas, M. P., & Rubio, S. P. (2021). Modelling the crisis management and impacts of 21st century disruptive events in tourism: the case of the COVID-19 pandemic. 76(4), 929–941. <https://doi.org/10.1108/TR-07-2020-0297>
- Amri, A. (2020). DAMPAK COVID-19 TERHADAP UMKM DI INDONESIA 1 . Latar Belakang Koperasi dan UMKM merupakan jenis usaha yang memiliki peran penting dalam

**ICCEIS: INTERNATIONAL COLLABORATION CONFERENCE
ON ISLAMIC ECONOMICS
INTERNATIONAL CONFERENCE AND CALL FOR PAPER**

peningkatan PDB (Pendapatan Domestik Bruto) satu negara khususnya di Indonesia dengan menghadapi Era Industri 4 . 0 . JURNAL BRAND, 2(1).

Amron, & Imran, T. (2009). Analysis of Factors Influencing the Labor Productivity of Makassar City Cellular Telecommunication Outlets. Nobel Indonesian College of Economics.

Arinda. (2014). ANALISIS PENGARUH MODAL AWAL TERHADAP OMZET USAHA MIKRO DI DRAMAGA, BOGOR. Institut Pertanian Bogor.

Bengtsson, O. (2012). Do Women Have a Less Entrepreneurial Personality ? Ola Bengtsson , Tino Sanandaji and Magnus Johannesson Do Women Have a Less Entrepreneurial Personality ? (944).

Brush, C. G. (1992). Research on Women Business Owners: Past Trends, a New Perspective and Future Directions. Entrepreneurship Theory and Practice, 16(4), 5–30. <https://doi.org/10.1177/104225879201600401>

Darmayanti, T., & Parwitaningsih. (2010). Modal sosial dan modal manusia pada pendidikan jarak jauh di universitas terbuka. Jurnal Pendidikan Terbuka Dan Jarak Jauh, 11(1).

Dwiningtias, Y. D. P., & Mahmudah. (2019). LOGIT ORDINAL REGRESSION ANALYSIS TO IDENTIFY FACTORS AFFECTING THE HUMAN DEVELOPMENT INDEX. Jurnal Biometrika Dan Kependudukan, 8(May 2019), 174–182.

Ghozali, I. (2011). Aplikasi Analisis Multivariate Dengan Program SPSS. Semarang: Badan Penerbit Universitas Diponegoro.

Ghozali, I., & Castellan, N. J. (2002). Statistik Non Parametrik. Semarang: Badan Penerbit Universitas Diponegoro.

Gunawan, R. (2015). ANALISIS FAKTOR-FAKTOR YANG MEMPENGARUHI KINERJA ANGGOTA KELOMPOK USAHA KECIL DAN MIKRO (UKM) BINAAN UP3HP DI KOTA BENGKULU. Ekombis Review, 3(1), 73–81. Retrieved from <https://jurnal.unived.ac.id/index.php/er/article/view/96/88>

Hoang, N., Nahm, D., & Dobbie, M. (2021). Innovation , gender , and labour productivity : Small and medium enterprises in Vietnam. World Development, 146, 105619. <https://doi.org/10.1016/j.worlddev.2021.105619>

Jaworski, K. (2021). Measuring food inflation during the COVID-19 pandemic in real time using online data : a case study of Poland. 123(13), 260–280. <https://doi.org/10.1108/BFJ-06-2020-0532>

Kalleberg, A. L., & Leicht, K. T. (1991). Gender and Organizational Performance: Determinants of Small Business Survival and Success. Academy of Management Journal,

34(1), 136–161. <https://doi.org/10.5465/256305>

Klyver, K., & Terjesen, S. (2007). Entrepreneurial network composition: An analysis across venture development stage and gender. (November). <https://doi.org/10.1108/09649420710836344>

Kusnawan, W. (2018). Pengaruh Equity Dan Kredit Usaha Rakyat (KUR) terhadap Pendapatan Usaha (Studi Pada UMKM di Desa Platihan Kidul Kec . Siman). 19(01), 31–37.

Lin, N. (2005). A network theory of social capital. *The Handbook of Social Capital*, (April), 1– 25.

Miller, R. L., & Meiners, R. E. (2000). *Teori Mikro Ekonomi Intermediate*. Jakarta: PT Raja Grafindo Pesada.

Mofijur, M., Fattah, I. M. R., Alam, M. A., Islam, A. B. M. S., Ong, H. C., Rahman, S. M. A.,... Mahlia, T. M. I. (2021). Impact of COVID-19 on the social, economic, environmental and energy domains: Lessons learnt from a global pandemic. *Sustainable Production and Consumption*, 26(September 2020), 343–359. <https://doi.org/10.1016/j.spc.2020.10.016>

Muaiz, S. (2017). PENGARUH PEMBIAYAAN MURABAHAH TERHADAP OMZET PENJUALAN DAN KEUNTUNGAN NASABAH USAHA KECIL DAN MENENGAH (UKM) DI BAITUL MAAL WAT TAMWIL AL-ISHLAH BOBOS CIREBON. 2(1), 113–132.

Nainggolan, R. (2016). GENDER , LEVEL OF EDUCATION DAN LAMA USAHA SEBAGAI DETERMINAN. *KINERJA*, 20, 1–12.

Ningsih, M. R., & Mahfudz, M. S. (2020). Dampak Pandemi Covid-19 Terhadap Manajemen Industri Perbankan Syariah: Analisis Komparatif. *Point*, 2(1), 1–10. <https://doi.org/10.46918/point.v2i1.576>

Nurul, A. W., & Agus, K. (2021). Pelaksanaan PPKM dalam Penanganan Kasus COVID-19 dan Evaluasinya. Retrieved from Kementerian Keuangan Republik Indonesia website: <https://www.djkn.kemenkeu.go.id/kpknl-semarang/baca-artikel/14314/Pelaksanaan-PPKM-dalam-Penanganan-Kasus-COVID-19-dan-Evaluasinya.html#:~:text=PPKM pertama kali diberlakukan pada,%2C Jawa Timur%2C dan Bali>.

Puspitasari, N., Hidayat, S. E., & Kusmawati, F. (2020). Murabaha as an Islamic Financial Instrument for Agriculture. *Journal of Islamic Financial Studies*, 05(01), 43–53. <https://doi.org/10.12785/jifs/050104>

Sukoco, A. R. F. (2015). PENGELOLAAN MODAL KERJA USAHA MIKRO UNTUK MEMPEROLEH PROFITABILITAS (Studi pada UD. Warna Jaya Periode 2011-2013). *Jurnal Administrasi Bisnis (JAB)*, 22(1), 1–9.

Suwendiyanti, R., & Gantino, R. (2022). Analysis on Ex-Dividend Phenomenon before and During COVID-19 Pandemic in Indonesia (Study on Index IDX High Dividend 20). *East African Scholars Journal of Economics, Business and Management*, 5(1), 1–10.

**ICCEIS: INTERNATIONAL COLLABORATION CONFERENCE
ON ISLAMIC ECONOMICS
INTERNATIONAL CONFERENCE AND CALL FOR PAPER**

<https://doi.org/10.36349/easjebm.2022.v05i01.001>

Ukkas, I. (2017). FAKTOR-FAKTOR YANG MEMPENGARUHI PRODUKTIVITAS TENAGA KERJA INDUSTRI KECILKOTA PALOPO. *Kelola: Journal of Islamic Education Management*, 2(2), 187–198.

Wahyono, H., Shandy, B., Wibowo, A., & Kustiandi, J. (2021). Heliyon Irrationality and economic morality of SMEs ' behavior during the Covid-19 pandemic: lesson from Indonesia. *Heliyon*, 7(June), e07400. <https://doi.org/10.1016/j.heliyon.2021.e07400>

Wijaya, I. F., & Moro, A. (2022). Trustworthiness and Margins in Islamic Small Business Financing: Evidence from Indonesia. *Borsa Istanbul Review*. <https://doi.org/10.1016/j.bir.2022.10.010>

Zaazou, Z. A., & Salman Abdou, D. (2022). Egyptian small and medium sized enterprises' battle against COVID-19 pandemic: March–July 2020. *Journal of Humanities and Applied Social Sciences*, 4(2), 94–112. <https://doi.org/10.1108/jhass-09-2020-0161>

Zhang, Y., Chen, K. Z., & Fan, S. (2020). Impact of COVID-19 on China ' s macroeconomy and agri-food system – an economy-wide multiplier model analysis. 12(3), 387–407. <https://doi.org/10.1108/CAER-04-2020-0063>