

## Determining Factors for Culinary MSME Income in Simpang IV Sipin Subdistrict, Jambi City

Trie Hierdawati<sup>1\*</sup>, Shindi Nadila Putri<sup>2</sup>, Geiskha Erwin<sup>3</sup>, Ahmad Rifqi<sup>4</sup>

<sup>1\*</sup>University of Muhammadiyah Jambi, Jambi, Indonesia

<sup>2</sup>University of Muhammadiyah Jambi, Jambi, Indonesia

<sup>3</sup>Muaro Jambi Islamic Institute, Jambi, Indonesia

<sup>4</sup>Institute of Islamic Religion (IAI) An-Nadwah Kuala Tungkal, Jambi, Indonesia

Correspondence Email: triehierdawati09@gmail.com

### Abstract

*This study aims to analyze the effect of price, business duration, education level, and working hours on the income of Micro, Small, and Medium Enterprises (MSMEs) in the culinary sector located in Simpang IV Sipin Subdistrict, Telanaipura District, Jambi City. The research employed a quantitative approach with a descriptive-associative method. The study population consisted of 324 culinary MSME owners, and using the Slovin formula with a 10% margin of error, 39 respondents were selected as samples. Data were collected through questionnaires and analyzed using multiple linear regression with SPSS program. The results indicate that, simultaneously, price, business duration, education level, and working hours have a positive and significant influence on MSME income ( $F_{count} = 14.336 > F_{table} = 2.64$ ;  $Sig = 0.000$ ). Partially, business duration, education level, and working hours have a positive and significant effect, while price has a positive but insignificant effect on income. The Adjusted R Square value of 0.584 shows that the independent variables explain 58.4% of the variation in MSME income, while the remaining 41.6% is influenced by other factors such as capital, business location, promotion strategy, and product innovation. The study concludes that the increase in culinary MSME income in Jambi City is not primarily driven by pricing strategies but rather by business experience, entrepreneurial education, and effective working hours management. Therefore, human resource capacity building, managerial training, and digital marketing adoption are essential strategies to enhance competitiveness and ensure the sustainable growth of culinary MSMEs.*

**Keywords:** Price, Business Duration, Education Level, Working Hours, Culinary MSMEs

### INTRODUCTION

Indonesia's national development includes various sectors such as social, cultural, political, and economic with the main goal of improving people's welfare [1]. One of the areas that has received great attention is sustainable economic development, which is directed to expand jobs, attract investment, and reduce income gaps between regions. Within this framework, the government seeks to optimize community participation through strengthening productive sectors that can support economic growth at the regional level.

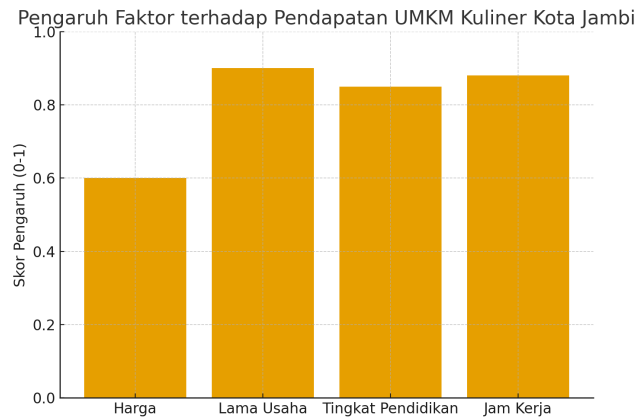
The role of Micro, Small, and Medium Enterprises (MSMEs) has a strategic meaning in the national economy [2]. Based on Law Number 11 of 2020 concerning Job Creation, the government pays special attention to this sector through simplifying the licensing process, expanding access to financing, and implementing digitalization so that business actors are able to compete in the modern economic era and adapt to technological developments.

Jambi City is one of the areas that shows rapid development in the MSME sector. Based on data from the Cooperatives and MSMEs Office in 2022, there are more than 60,000 small and medium business units that contribute to regional economic growth of 5.36 percent, surpassing the national average economic growth of 5.31 percent. However, business actors, especially in the culinary sector, still face a number of obstacles such as rising raw material prices, limited managerial capabilities, and fluctuations in demand that result in income instability.

Phenomena in the field show that culinary MSME actors in Simpang IV Sipin Village, Telanaipura District, experience significant variations in income levels, even though they operate in the same area and market. This village has 324 culinary business units, the largest number in the sub-district. The difference in income is suspected to be caused by factors such as the selling price of the product, length of business operation, level of education, and different working hours for each business actor.

The results of the study show that these four factors affect income at different levels [3]. The factors of length of business, level of education, and working hours were proven to have a positive and significant influence, while the selling price showed a positive but not significant influence. This indicates that the success of culinary MSME actors in Jambi City is more determined by experience and business management capacity than pricing strategies. In addition, the effectiveness of the use of working time is also an important aspect in maintaining the stability of daily operations.

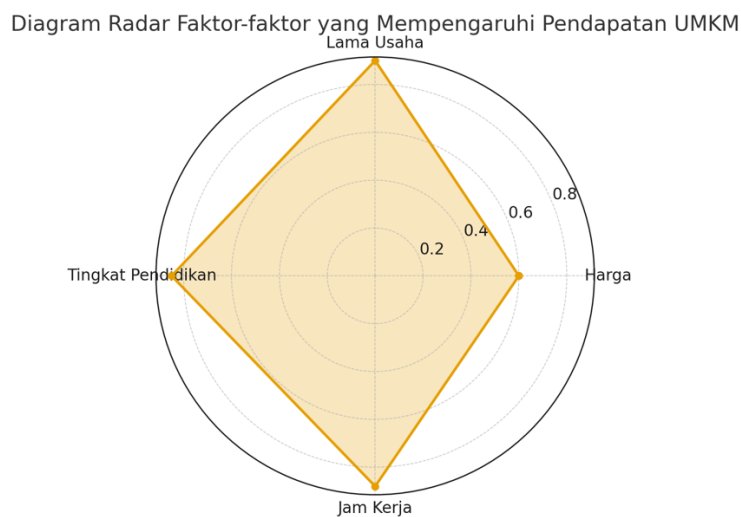
**Figure 1. Bar Chart of Factors Affecting the Income of Culinary MSMEs in Jambi City**



Source: Data processed, 2024

Figure 1 shows a bar graph that shows the comparison of the influence of each factor on the income of culinary MSMEs in Jambi City. The highest influence value was found in the variable length of business (0.90), followed by working hours (0.88) and education level (0.85). Meanwhile, the selling price (0.60) has a lower influence. These findings illustrate that business actors with longer experience and longer operational hours tend to have more efficient work systems and repeat customers, thus being able to generate higher revenue.

**Figure 2. Radar Chart of the Balance of Factors on the Income of Culinary MSMEs in Jambi City**



Source: Data processed, 2024

Figure 2 shows a radar graph that illustrates the balance between factors influencing revenue. The widest field appears to be on the axis of business length and working hours, showing the dominance of these two factors on the financial success of MSME actors. Meanwhile, the level of education also contributes to supporting the ability to innovate and manage businesses, while price is a relatively less important factor because most actors follow market prices.

These results are consistent with observations in the field, where MSME actors who have been operating for more than five years and have longer working hours tend to have regular customers and are able to withstand economic fluctuations. In contrast, new entrants with shorter working hours and low educational backgrounds often have difficulty maintaining turnover stability due to limited marketing strategies and time management [4].

In addition, regional economic conditions also show that the increase in the price of staples such as cooking oil, chili, and chicken meat in the 2022-2023 period has an impact on reducing profit margins by up to 20 percent per month. Most MSME actors with a secondary education background have not optimized digital marketing such as GrabFood, GoFood, or social media, so the revenue potential has not been maximized. With an average of 10–12 hours per day, increased turnover tends to occur at dinner time, which shows the importance of efficiently managing operating hours.

Based on the results of the analysis and the above phenomenon, it can be concluded that increasing the income of culinary MSMEs in Jambi City is not enough only through selling price control, but must be directed to strengthening business experience, increasing entrepreneurial literacy, and effective management of working hours. Therefore, this study recommends that local governments expand managerial training programs, develop digital marketing, and improve operational efficiency to strengthen the competitiveness of culinary MSMEs so that they can survive and develop sustainably.

## **THEORETICAL FOUNDATION**

### **Micro, Small, and Medium Enterprises (MSMEs)**

Micro, Small, and Medium Enterprises (MSMEs) are one of the important pillars in national economic development in various countries, including Indonesia [5]. Its role focuses not only on job creation, but also on income equity and improving people's welfare. MSMEs function as a resilient driver of the people's economy because they are able to adapt to local market conditions and become absorbers of labor in the informal sector. In addition, the contribution of MSMEs to the national Gross Domestic Product (GDP) is also very large, making it a priority in regional and national economic development policies [6].

### **Income**

Income is the financial result received by a person or business entity from economic activities in a certain period of time. Revenue can be interpreted as the total revenue obtained from the sale of goods and services, salaries, wages, and operating profits. For MSME actors, income is the main measure of operational success and an indicator of economic welfare [7].

Stable income reflects the effectiveness of production strategies, cost management, and marketing capabilities of business actors. In addition, the amount of income is influenced by internal factors such as capital, skills, and management, as well as external factors such as market conditions, inflation, and government economic policies [8].

### **Price**

Price is the exchange rate expressed in units of money to acquire goods or services [9]. Price is an important element in the marketing mix because it directly affects consumer revenue and perception of product value. In the culinary MSME sector, pricing must pay attention to the balance between production costs, profit margins, and consumer purchasing power.

### **Long Term of Effort**

The length of business describes the period of time business actors carry out business activities from their establishment to the time the research is conducted. The longer a person runs a business, the higher his skills, experience, and knowledge in managing the business [10]. Such experience plays a critical role in strategic decision-making, operational efficiency, and revenue increase.

### ■ Education Level

Education is a learning process that aims to develop individual intellectual abilities, attitudes, and skills. Education can change a person's mindset and behavior to achieve life progress [11]. In the context of MSMEs, education plays an important role in improving managerial skills, product innovation, and business decision-making.

Higher levels of education often correlate positively with greater income. Business actors with higher education backgrounds tend to have better analytical skills, innovation, and adaptation to market changes [12]. With this knowledge, they can more easily manage their business, take advantage of opportunities, and increase production efficiency.

### METHODOLOGY

This study uses a quantitative approach with a descriptive-associative method, which aims to explain and analyze the relationship between independent variables, namely price, length of business, level of education, and working hours, to dependent variables in the form of income of culinary MSME actors in Simpang IV Sipin Village, Jambi City. The quantitative approach was chosen because it was able to provide statistically measurable results and make it easier for researchers to test hypotheses through numerical data obtained from respondents [13].

The population in this study is all MSME actors in the culinary sector in Simpang IV Sipin Village, which totals 324 business units. Due to limited time and resources, the researcher used the purposive sampling technique, which is the selection of samples based on certain criteria such as business actors who have been operating for at least one year and have a permanent place of business.

The number of samples was determined using the Slovin formula, with an error margin of 10%. Based on this calculation, 39 respondents were obtained who were considered representative to describe the condition of the population. This selection is expected to be able to provide an overview of the characteristics and economic behavior of culinary MSME actors in the research area.

Data analysis was performed quantitatively using multiple linear regression analysis, with the help of SPSS software. This model is used to measure how much influence independent variables have on the income of business actors. To test the validity of the model, several statistical tests were performed, namely: F test (simultaneous) to assess whether all independent variables together have a significant effect on income. A (partial) t-test to see the influence of each variable individually. A determination coefficient ( $R^2$ ) test to find out how much of the proportion of income variation is explained by the variables of price, length of employment, level of education, and hours worked.

## RESULT

### Multiple Regression Analysis

**Table 1. Multiple Regression Analysis Results**

| Type                          | Unstandardized Coefficients |            | Standardized Coefficients |        |       |
|-------------------------------|-----------------------------|------------|---------------------------|--------|-------|
|                               | B                           | Std. Error | Beta                      | t      | Sig.  |
| (Constant)                    | -4.903                      | 2.383      | —                         | -2.057 | 0.047 |
| Price ( $X_1$ )               | 0.121                       | 0.157      | 0.091                     | 0.770  | 0.446 |
| Length of Operation ( $X_2$ ) | 0.509                       | 0.129      | 0.438                     | 3.938  | 0.000 |
| Education Level ( $X_3$ )     | 0.502                       | 0.128      | 0.435                     | 3.936  | 0.000 |
| Working Hours ( $X_4$ )       | 0.329                       | 0.142      | 0.272                     | 2.310  | 0.027 |

a. Dependent Variable: MSME Income (Y)

Source: Data Processed, 2024

Based on the output results of the Coefficients table, the following multiple linear regression equations are obtained:

$$Y = -4.903 + 0.121X_1 + 0.509X_2 + 0.502X_3 + 0.329X_4 + e$$

The constant of -4,903 indicates that if all independent variables (price, length of business, education level, and hours worked) are zero, then MSME income is estimated to have a negative value of 4,903 units (in log units or scales used). This illustrates that without these factors, MSMEs will not generate income.

The price coefficient (0.121) means that every one unit increase in the price score (e.g. perception of pricing) will increase revenue by 0.121, assuming the other variables are fixed. However, the significance value is high (Sig = 0.446 > 0.05), meaning that the price effect is not significant on income.

The coefficient of business duration (0.509) has a significance value of 0.000 < 0.05, so it has a significant effect. This means that the longer the perpetrator runs the business, the greater the income generated.

The coefficient of education level (0.502) is also significant (Sig = 0.000), indicating that the higher the education level of MSME actors, the better their ability to manage their business so that income increases.

The coefficient of working hours (0.329) is significant (Sig = 0.027 < 0.05), indicating that the longer the effective working hours, the higher the potential income obtained.

### F Test (Simultaneous)

**Table 2. Test F Results (Simultaneous)**

| Type       | Sum of Squares | Df | Mean Square | F      | Sig.  |
|------------|----------------|----|-------------|--------|-------|
| Regression | 65.707         | 4  | 16.427      | 14.336 | 0.000 |
| Residual   | 38.959         | 34 | 1.146       |        |       |
| Total      | 104.667        | 38 |             |        |       |

a. Dependent Variable: MSME Income (Y)

Source: Data processed, 2024

Based on the calculation results in Table 2, the value of  $F_{cal} = 14.336$  with significance (Sig.) = 0.000, while the  $F_{table}$  at the significance level of 0.05 ( $\alpha = 5\%$ ) and df (4; 34) is around 2.64. Because  $F_{cal} (14,336) > F_{table} (2.64)$  and Sig. value  $0.000 < 0.05$ , it can be concluded that all independent variables simultaneously have a significant effect on the income of culinary MSMEs.

### T test (Partial)

The t-test is used to determine the influence of each independent variable on MSME income partially. Based on Table 1 Price ( $X_1$ ):  $t = 0.770$  and Sig = 0.446 → insignificant. This means that the variation in selling prices does not have a real impact on increasing income because culinary MSME actors generally follow market prices. Length of Operation ( $X_2$ ):  $t = 3.938$  and Sig = 0.000 → have a significant

- positive effect. The longer the perpetrator runs his business, the greater the experience and customer network he has.

Education Level ( $X_3$ ):  $t = 3,936$  and  $Sig = 0,000 \rightarrow$  had a significant positive effect. Actors with higher education tend to have better analytical and managerial skills. Working Hours ( $X_4$ ):  $t = 2.310$  and  $Sig = 0.027 \rightarrow$  have a significant positive effect. The longer the working time used, the greater the earning opportunities obtained.

### Coefficient of Determination Test ( $R^2$ )

**Table 3. Determination Coefficient Test Results ( $R^2$ )**

| Type | R      | R Square | Adjusted R Square | Std. Error of the Estimate |
|------|--------|----------|-------------------|----------------------------|
| 1    | 0.792a | 0.628    | 0.584             | 1.070                      |

Source: Data processed, 2024

With the value of Adjusted R Square = 0.584, it can be interpreted that the 58.4% variation in the income of culinary MSMEs in Jambi City can be explained by four independent variables tested, namely price, length of business, education level, and working hours. Meanwhile, the remaining 41.6% was explained by other factors outside the research model, such as start-up capital, business location, marketing strategy, product innovation, service quality, and macroeconomic conditions such as inflation and people's purchasing power.

### CONCLUSION

Simultaneously, the variables of price ( $X_1$ ), length of business ( $X_2$ ), education level ( $X_3$ ), and working hours ( $X_4$ ) have a positive and significant effect on the income of culinary MSMEs ( $Y$ ). This is evidenced by the value of  $F_{cal} = 14,336 > F_{tabel} = 2.64$  and  $Sig = 0.000 < 0.05$ , which shows that the four variables together are able to explain the variation in income of business actors. Partially, only three variables had a significant effect on income, namely: Length of business ( $X_2$ ) with values  $t = 3.938$  and  $Sig = 0.000$ , indicating that the longer the business experience, the greater the income obtained.

The level of education ( $X_3$ ) with a value of  $t = 3.936$  and  $Sig = 0.000$ , shows that education plays an important role in improving managerial skills and business

innovation. Working hours ( $X_4$ ) with values  $t = 2.310$  and  $Sig = 0.027$ , indicate that the longer the effective working hours, the higher the revenue generated.

Meanwhile, the price ( $X_1$ ) had no significant effect on revenue ( $t = 0.770$ ,  $Sig = 0.446$ ), which means that pricing is not the main factor in increasing revenue because MSME actors tend to follow the prevailing market price.

### Suggestion

For the next researcher, it is recommended to add other variables that have the potential to affect income, such as capital, business location, product innovation, promotional strategies, or the use of digital platforms, so that the results of the research become more comprehensive and describe the economic factors of MSMEs more comprehensively.

### REFERENCES / BIBLIOGRAPHY

- [1] S. Suhardi and P. Panjaitan, " Analysis of Local Government Strategies and Policies in National Economic Development Planning," *J. Management, Business and Economics.*, vol. 3, no. 1, pp. 42–55, 2025.
- [2] A. Munthe, M. Yarham, and R. Siregar, "The Role of Micro, Small and Medium Enterprises in the Indonesian Economy," *J. Ekon. Business, Management. And Accountant.*, vol. 2, no. 3, pp. 593–614, 2023.
- [3] R. I. Kussoy, E. N. Walewangko, and A. T. Londa, "Analysis of Business Capital Factors, Business Duration, and Education Affecting Traders' Income in the Serasi Market in Kotamobagu," *J. Berk. Science. Efficiency*, vol. 21, no. 2, 2021.
- [4] I. M. Suardana, *MSME Business Growth Strategy: The Role of Innovation in Personality, Sociology, and the Environment*. Seval Literindo Kreasi, 2025.
- [5] C. Yolanda and U. Hasanah, "The role of micro, small and medium enterprises (MSMEs) in Indonesia's economic development," *J. Manaj. And Business*, vol. 2, no. 3, pp. 170–186, 2024.
- [6] A. F. Delfira, P. Yuliarman, and M. Baihaqi, "Analysis of MSME Development Problems on the Economy in Indonesia," *J. Ekon. Business and Management.*, vol. 4, no. 1, pp. 167–180, 2025.
- [7] E. R. N. Rosyid, "The Role of MSMEs in Increasing the Income of the Poor in

- the Independent Village Association, Kweden Hamlet, Kediri Regency," 2023, *IAIN Kediri*.
- [8] H. W. Wibawa, H. M. Ali, and A. B. Paryanti, "Analysis of factors affecting MSME income," *J. Inf. Syst. Applied, man. Account. Res.*, vol. 5, no. 3, pp. 650–660, 2021.
  - [9] S. P. Sari and S. Nurjannah, "Analysis of the Influence of Exchange Rate, Money Supply and BI Rate on Inflation in Indonesia and Its Impact on People's Purchasing Power," *Akt. J. Account. Great.*, vol. 1, no. 1, pp. 21–29, 2023.
  - [10] C. M. C. Mongilala, B. Tewal, and G. M. Sendow, "The Influence of Job Skills, Work Experience and Employability on Employee Performance in Micro, Small and Medium Enterprises in Leilem Village," *J. EMBA J. Ris. Ekon. Management, Business and Accounting.*, vol. 10, no. 3, pp. 861–871, 2022.
  - [11] N. Nasihudin and H. Hariyadin, "Skill development in learning," *J. Educator. Indonesian.*, vol. 2, no. 4, pp. 733–743, 2021.
  - [12] F. Feny, D. Moreno, S. Nabila, M. A. Syumantra, and S. S. Nasution, "Analysis of the Relationship between the Education Level of MSME Actors and Business Success in the East Medan Region," *J. Ilm. Ekon. And Manaj.*, vol. 3, no. 6, pp. 196–208, 2025.
  - [13] R. Dani *et al.*, "Research Design: Theory, Methods, and Implementation," *Independent Publisher of Digits.*, vol. 1, no. 01, 2024.