ANALYSIS OF THE EFFECT OF CAPITAL, LABOR, RAW MATERIALS, LENGTH OF BUSINESS, AND LOCATION ON MSMEs INCOME IN THE FOOD AND BEVERAGES INDUSTRY SECTOR
(A Case Study on Home Industry Assisted by the Cooperatives and MSMEs, East Bekasi Districts)

Sharen Laurencia*1

Faculty of Economics and Business, Universitas Diponegoro, Indonesia

ABSTRACT
East Bekasi District has the most significant number of Micro, Small and Medium Enterprises (MSMEs) accompanied by the Bekasi City Cooperatives and MSMEs Office. The food and beverage sector is the largest group compared to others. MSME faces capital difficulties and sales that have yet to be maximized. However, this kind of business is widely carried out considering the convenience and promising market potential. This study aims to determine the variables of capital, labour, raw materials, length of business, and location on the income of MSME actors assisted by the Cooperatives and MSMEs in Bekasi City research is quantitative research. The population in this study were food and beverage MSMEs assisted by the Bekasi City Cooperatives and MSMEs, as many as 145 MSME actors. The sample used was 60 business actors using a simple random sampling technique. The analytical method used is Ordinary Least Square (OLS) using SPSS. The results of this study indicate a positive and significant effect of capital, labour, raw materials, length of business, and location on the income of MSME actors. Capital is the most influential variable on income. The independent variables jointly affect the income of food and beverage MSME actors by 69.7 per cent.

Keywords: Income, Capital, Labor, Raw Materials, Length of Business, Business Location

*Correspondence: Sharen Laurencia
E-mail: sharenlaurencia689@gmail.com

ARTICLE INFO
Received: June 12th, 2022
Revised: November 21st, 2022
Accepted: November 25th, 2022
Online: December 1st, 2022

*Correspondence: Sharen Laurencia
E-mail: sharenlaurencia689@gmail.com
The economy develops rapidly along with progress in field knowledge and technology. The dynamics of the world economy at the same time raise competition in the world between business actors. This competition is a natural consequence of the community’s efforts to fulfill needs in life. Every member public expected a capable, adaptable mindset to be creative, adaptive, and innovative to meet the needs of life. One way that each individual does to meet their needs is by becoming an entrepreneur. One of the businesses that can choose to be economically independent is to establish Micro, Small, and Medium Enterprises (MSMEs). MSMEs have an essential and strategic role in the national development economy.

The contribution of MSMEs to GDP has become a marker of the importance of MSMEs in development economics in Indonesia. Figure 1 shows that MSMEs’ role is dominant in influencing Indonesia’s economic growth. As seen from its development, every year has experienced an increase, so the empowerment of MSMEs is necessary for efforts to develop the economy in Indonesia. MSMEs continue to contribute to the gross domestic product (GDP) yearly. The contribution of MSMEs to GDP is based on a constant price amount of IDR 7,034.1 trillion in 2019, up 22.9% from the previous year, which amounted to IDR 5,721.1 trillion. In 2020, the contribution of MSMEs to Indonesia’s GDP experienced another increase from a year previously as an enormous 8573.89 trillion.

One area that can be an example of the significant contribution of MSMEs to the community’s economy is Bekasi City. The city, directly adjacent to DKI Jakarta, has advantages in the industrial and trade sectors. MSMEs in Bekasi City are one of the sectors that support the
community’s economy—with a diverse population, eventually creating various business fields and adjusting to the population’s needs. The continued increase in economic growth evidence this.

Bekasi City has a fairly advanced industry. In this place, MSMEs can absorb 410 thousand workers (Government’s Bekasi City, 2018), while the MSME actors are spread across 12 districts in the city known as the City of Patriots. Over time, MSME actors continue to grow and can open jobs for people in Bekasi City. The potential owned by Micro, Small and Medium Enterprises in terms of size and area sector economy handled. So, opportunity growth efforts and new and developed Micro, Small and Medium Enterprises (MSMEs) are one of the hopes in facing this challenge forward and achieving an equal economy in Bekasi city.

Empowerment involves government, government area, world effort, and the Public in a manner thorough and continuous (UU No 20 years 2008). The potency economy, which is significant from the sector MSMEs, demands the government’s role of becoming a companion and pushing the progress sector. In the business world, empowerment could form gift opportunities and facilitate poor groups with capital, technology, information, marketing guarantees, and other businesses to empower the community’s economy (Mardikanto & Soebiato, 2012). The empowerment of MSMEs needs to be conducted with the method grow climate effort, which supports the development of MSMEs and coaching.

Developments in home-based food and beverage MSMEs continue to dominate and are predicted to continue to grow. Businesses in this field are more dominating and easy to turn into business opportunities because they continue to overgrow and are widespread. There is still room for growth in the number of food and beverage MSME actors because this segment has good prospects considering that food and beverages are the primary needs of every human being.

The Office of Cooperatives and MSMEs in Bekasi City assisted as many as 921 home-based food and beverage businesses. East Bekasi District is a sub-district with the most significant number of processed food and beverage MSMEs. Over time, it is predicted that the number of MSME actors will continue to increase. Thus, the role of the Office of Cooperatives and SMEs is needed to assist business actors, especially in the business development process.

<table>
<thead>
<tr>
<th>No</th>
<th>Village</th>
<th>Amount MSME Food Drink</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Margahayu</td>
<td>91</td>
</tr>
<tr>
<td>2</td>
<td>Aren Jaya</td>
<td>15</td>
</tr>
<tr>
<td>3</td>
<td>Bekasi Jaya</td>
<td>16</td>
</tr>
<tr>
<td>4</td>
<td>Durian Jaya</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>145</td>
</tr>
</tbody>
</table>

Source: Department Cooperative and MSMEs City Bekasi (2021)

Based on the results of the pre-survey data, as many as 80% of the Food and Beverage MSME actors in East Bekasi District experienced problems with access to capital. Business actors need better access to capital for their business needs. Business actors do not use additional capital assistance from banks or other financial institutions. The capital they use for business comes from personal capital. MSME actors want to avoid taking risks for fear of being unable to repay the loan. MSME actors also feel they need to receive sufficient education about access to capital through banks and other financial institutions. Thus, business actors do not feel confident about obtaining or applying for capital from financial institutions. So far, MSME actors have received little socialization or information regarding access to capital.
Production theory explains that in every production process, income is affected by capital, labour, raw materials (natural wealth), and technology. This theory also applies in the production of food and beverage SMEs, where production is inseparable from the factors factor. Capital is a necessity complex because it relates to spending decisions in business activities to increase revenue and achieve maximum profit (Nayaka & Kartika, 2018; Maheswara et al., 2016; Putra & Devi, 2020).

The driving factor of a business is labour. According to Utari & Dewi (2014), HR includes leaders of SMEs and the workforce. It is one factor contributing to influencing the performance of MSMEs. Performance MSMEs are significantly determined by HR quality.

Raw materials are an essential factor in the continuity of the production process. The greater the number of raw materials owned, the bigger the possible product generated (Suwartawan & Purbadiharmaja, 2017). According to Utari & Dewi (2014), raw ingredients are needed to carry out the production process within a certain period. In addition, technology combined with financial services helps MSMEs to improve their business performance, and boosted MSMEs have an impact on the regional economy (Mahardhika, 2017).

Factor long effort also is Thing important in influence big its small income. The longer a person does his business, the more strategy he will have to be more mature and precise in managing, producing and marketing their products. Besides, someone who has been doing business longer will have more relationships or customers (Setiaji & Fatuniah, 2018).

Site selection is also an important thing that will affect the size of income. According to Made et al. (2016), location means the place or location, and the location of the business means a physical place. It can be concluded that the selling location is the place of business where somebody gets convenience in transaction sales to buy goods or services.

Policy set to increase the opportunity, ability, and protection of MSMEs still need to be optimal because they need to give protection, business certainty, and adequate facilities to empower MSMEs. Therefore, empowering MSMEs needs to be done by fostering a business climate which supports the development of MSMEs and conducts coaching. The empowerment involves the government, local government, business world, and society as a whole and is continuous (UU No 20 years 2008).

From the description above, it is necessary to research the effect of capital, length of business, raw materials, and location on the income of home-based food and beverage SMEs assisted by cooperatives and SMEs in East Bekasi District, Bekasi City. Based on the explanation above, the questions asked in this study are: (1) How does it influence capital to income MSMEs’ food and drink home?; (2) How does influence power work to income MSMEs’ food and drink home?; (3) How does it influence ingredient raw to income MSMEs food drink home?; (4)How does it influence long efforts to income MSMEs’ food and drink home?; and (5) How does location influence income from MSMEs’ food and drink home?

**Literature Review**

**Production Theory**

Theory production says that activity production is created, produced, and created. This production activity cannot be carried out if there are no materials (factors of production) that enable the production process to be carried out. For that, every production needs power man, natural sources, capital in all shapes, and competence. This production factor includes all the elements that support value-creation efforts or efforts to enlarge the score of goods and services.
Production activities can be described as activities with destination produce outputs, with applied technique production, particularly in processing or processing input. Production could also be understood as a process or activity economy using multiple inputs. The main problem of this production process is how the composition of the factors of production used and, for each factor of production, what is the amount that will be used so that the production process produces maximum profit (Sadono, 2016).

The production function shows the nature of the relationship between the production factors and the resulting production levels. The factors of production are known as inputs, and quantities production is always called output. In theory production, inputs still could outline based on the type or characteristics of the input. In general, inputs in a production system consist of: above: capital or capital (K), labour (L), natural wealth/raw materials (R), and level of technology used (T). The amount of product produced (Q) resulting from the utilization of all factors of production. In this case, a good’s production level depends on the amount of capital, labour, natural wealth, and level of technology. The production function is readable inequality this:

$$Q = f(K, L, R, T)$$ (1)

The mathematical equation above means that an item’s production level depends on capital or capital, power work, natural/material raw, and technology use. The amount of product to be produced requires factors of production that also differ. Besides that, for one level of production, particular could also use a combination of factors production different.

**Income**

Income is the amount of income obtained by the population on the success it works during one period certain, daily, weekly, monthly, or annually after reduced cost production (Sukirno, 2006). Income could also be used to measure a person’s or household’s economic condition. Revenue shows all money or other material from wealth or services obtained by a person or household in economic activity (Winardi in Firdausa & Arianti, 2013). Revenue is the result obtained through business activities because there is a transaction and joint decision between seller and buyer.

Income is money received by a person in the form of salary, wages, rent, flowers, profit, and allowance. In an analysis economy, the term income is used concerning a stream of income within a specified period originating from factors of production such as capital, labour, and natural resources. The income that is obtained for every person is naturally different. It is caused by the different types of professions that he did.

**Research Methods**

The data used in this study are primary data and secondary data. Data The primary data was obtained from interviews with respondents, namely food and MSME actors beverages assisted by the Office of Cooperatives and UMKM East Bekasi District, Bekasi City, using a questionnaire. Secondary data in this study were obtained from the Central Bureau of Statistics (BPS) Indonesia and Bekasi City, the Ministry of Cooperatives and SMEs, the Office of Cooperatives and SMEs City Bekasi, and literature.

**Population and Sample**

The population in this study were all processed home-based food and beverage MSME actors in East Bekasi District who were accompanied by the Bekasi City Cooperative and MSME Office, totalling 145 MSME actors. The sample used in this study using the Slovin formula ob-
Analysis Method

In this study, the analytical tool used is multiple linear regression analysis using the Ordinary Least Square (OLS) method. Relationships between variables are formed using equations as follows:

\[
Y_1 = f(X_1, X_2, X_3, X_4)
\]

\[
Y_2 = \alpha + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \mu
\]

where:
- \(Y\) = Income of MSME actors
- \(\alpha\) = Constant
- \(\beta_1, \beta_2, \beta_3, \beta_4\) = Regression coefficient of the independent variable
- \(\mu\) = Error term (Variable bully)

Results and Discussion

Detection Assumption Classic

Detection Normality

Based on the graph above, it can be concluded that the dots spread around the line and follow the direction of the diagonal line. It shows that the residual value of the data has been normal, and regression models already Fulfill the assumption of normality.
Detection Multicollinearity

Table 2: Results Detection Multicollinearity

<table>
<thead>
<tr>
<th>Model</th>
<th>Tolerance</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital (X1)</td>
<td>0.589</td>
<td>1.699</td>
</tr>
<tr>
<td>Power Work (X2)</td>
<td>0.523</td>
<td>1.913</td>
</tr>
<tr>
<td>Ingredient raw (X3)</td>
<td>0.643</td>
<td>1.556</td>
</tr>
<tr>
<td>Long Effort (X4)</td>
<td>0.598</td>
<td>1.673</td>
</tr>
<tr>
<td>Location Effort (X5)</td>
<td>0.868</td>
<td>1.152</td>
</tr>
</tbody>
</table>

Source: Results though Data SPSS

It can be seen that the tolerance values for all variables are > 0.10 and VIF < 10.00. Thus, it can be concluded that the data in the study did not occur inter-collinearity variable independently.

Detection Heteroscedasticity

Figure 3 shows the points spread randomly over or below zero on the Y-axis. It can be concluded that this did not happen heteroscedasticity in the study.

Multiple Regression Analysis

The results of the multiple regression equation in this study are:

\[ Y = -7.484 + 0.273Capital + 0.304Modal + 0.260RawMaterial + 0.190LengthofBusiness + 0.247Location + \mu \]  

(4)

The coefficient on the capital variable has a positive result on income, namely 0.273, which means that every time there is an increase in capital of 1 unit with an assumption variable other permanent, so will cause an increase in the income of food and beverage MSME actors by 0.273. The coefficient on the labour variable has the same result, positive for income equal to 0.304. It means that every time there is an increase in labour by as much as 1 unit, assuming other variables are fixed, it will cause an increase in the income of food and beverage MSME actors by 0.304. The coefficient on the raw material variable has a positive result on income equal to 0.260. It means that every time there is an increase in raw materials by 1 unit with variable assumptions, other things remain, it will lead to an increase in the income of food and MSME actors drink as big as 0.260.

The coefficient on long variable effort has positive results to income equal to 0.190. It means that every time there is a long increase effort as big 1 unit with assumption variable
other permanent, so will cause an increase in the income of food and beverage MSME actors by 0.190. The coefficient on the business location variable has a positive result on income, which is equal to 0.247 means that the more approach consumers so will cause enhancement in income actor MSMEs food and drink of 0.247.

**Results Testing Hypothesis**

**Test Simultaneous Significance (F-Test)**

Results Test Significance Simultaneous show that F-score is big 28.109. Score F-Count > F-table is 28.109 > 2.38, then Ho is rejected, and Ha is accepted. The results of the calculation as well obtained a significance value of 0.000. It means that the significance value of F is smaller than the level significance of 5% (0.05). It can be concluded that the variable capital, labour, raw materials, time business and business location significantly influence income.

**Test Significance Parameter Individual (t-Test)**

Using a significance level of 5% (0.05), if the significance value is <0.05 and t-count > t-table, Ho is rejected, and Ha is accepted, meaning that the independent variables individually affect the dependent variable and vice versa. If t-count > t-table, the independent variable significantly affects the dependent variable.

The capital variable (X1) has a t-count > t-table value, namely 2.907 > 2.005 and a significance of 0.005 <0.05. Thus Ho is rejected. The labour variable (X2) has a t-count of 2.483 > t table of 2.005 with a sig of 0.016 <0.05, which means Ho is rejected. The raw material variable (X3) t-count > t-table is 2.478 > 2.005 with a sig of 0.016 <0.05 means Ho is rejected. Long business variable (X4) t-count > t-table, i.e. 2.047 > 2.005 and sig 0.046 <0.05, so Ho is rejected. The business location variable (X5) has a value of t-count > t-table, namely 3.334 > 2.005 and a sig of 0.002 <0.05, which means Ho is rejected. Thus, the variables of capital, labour, raw materials, length of business, and location significantly affect income.

**Test Coefficient Determination ($R^2$)**

The test results for the coefficient of determination have a coefficient of determination (adjusted $R^2$) of 0.697, which means that 69.7% of income can be influenced by capital, labour, raw materials, length of business and business location, and the remaining 30.1% of income is influenced by other variables outside the model.

**Discussion**

The results of the regression that has been done show that the coefficient value of the capital variable equal to 0.273 has a positive meaning, which means that the capital variable has a relationship in line with income. If capital increases, income will also increase. Then the results of the t-test show that the calculated t value is 2.907, and the t table is significant at 2.005, which means that the t count value > t table with that significance smaller than the significance level of 5% (0.05), which is 0.005. Therefore, capital takes to effect positive and significant to income and hypothesis, which states that capital has a positive and significant effect on the actor’s income MSMEs food homebrew could be received.

The results of the regression that has been done show that the variable coefficient value workforce of 0.304 has a positive meaning, which means the labour variable has a direct relationship with income. If the workforce increases, then it will increase revenue. When viewed from the results of the t-test shows that the t value is calculated as 2.483 and the t-table of 2.005, which means that the value of t count > t table with a significance which is smaller than level significance 5% (0.05), i.e. as significant 0.016. With thereby power, work takes to effect positive and significant to income and the hypothesis, which states that labour has a positive and significant effect on income actor MSMEs food drink home could be received.
The results of the regression that has been done show that the variable coefficient value raw material of 0.260 has a positive meaning, which means the raw material variable has a direct relationship with income. It means that when raw materials increase, it will increase revenue. The results of the t-test show that the t count value is 2.478 and the t table is 2.005, which means that the t count > t table has a more negligible significance than the 5% (0.05) significance level, which is equal to 0.016. With thereby, ingredient raw takes effect positively and significantly to income. It also means that the hypothesis that states raw materials have an effect positive and significant to income actor MSMEs food drink could be received.

Based on the results of the regression that has been done, it shows the old variable coefficient value effort of 0.190 has a positive meaning, which means that the variable length of business has a connection in the same direction with income. Suppose long effort increases, so income will also increase. Then the results of the t-test show that the value of t count of 2.047 and the t table of 2.005, which means that the value of t count > t table with a significance which is smaller than level significance 5% (0.05), i.e. as significant 0.046. With long effort taking effect positive and significant to income, the hypothesis which states that length of business has a positive effect and significant to income actor MSMEs food drink could be received.

The results of the regression that has been done show that the variable coefficient value business location of 0.247 has a positive meaning, which means the business location variable has a direct relationship with income. When viewed from the results of the t-test shows that the value of the t count is 3.334 and the t table is 2.005, which means that the value of the t count > t table with significantly smaller than the 5% significance level (0.05), i.e. as, significantly 0.002. With thereby, location effort takes to effect positive and significant on income, and the hypothesis states that business location has an effect positive and significant to the income of home-made food and beverage MSME actors could receive.

**Conclusion**

Based on the results study which has conducted, the conclusion is as follows: All independent variables, namely capital (X1), labour (X2), raw materials (X3), long effort (X4), and location (X5), take to effect positive and significant to income (Y) of home food and beverage SMEs assisted by the Cooperative and MSME Office Subdistrict East Bekasi, Bekasi City. The value of R 2 in this study is 0.697, which means that capital, labour, and raw materials can influence 69.7% of income, length of business and location of the business and the rest, as a significant 30.1% of income, is affected variable another outside model. The dominant variable influences the income of food and beverage SMEs home built Service Cooperative and MSMEs Subdistrict Bekasi East, City Bekasi, is the capital.

**References**

Department Cooperative and MSMEs City Bekasi. (2021). *Data Persebaran UMKM Makanan dan Minuman Per-Kelurahan Di Kecamatan Bekasi Timur Tahun 2021* [Data on Distribution of Food and Beverage MSMEs per Village in East Bekasi District in 2021]. https://dkukm.bekasikota.go.id/


