Analysis of Factors Affecting Income of UKM in Medan City

Muthia Ulfah¹, Murni Daulay², Irsad³

¹Posgraduate Students Faculty of Economics and Business, Department of Economics, Universitas Sumatera Utara, Indonesia
²³Postgraduate Lecturer Faculty of Economics and Business, Department of Economics, Universitas Sumatera Utara, Indonesia

Corresponding Author: Muthia Ulfah

ABSTRACT

This study aims to analyze the presence or absence of a significant influence indirectly on wages, capital, and the use of e-commerce on income through sales volume at the UMKM production sector in Medan. The result is: 1) Wages, capital and the use of e-commerce directly have a positive and significant effect on sales volume 2) Wages, capital, e-commerce use and sales volume have a positive and significant effect on UMKM revenue in the trade sector in Medan. 3) Wages, capital and the use of e-commerce indirectly have a significant effect on UMKM revenue in the production sector in Medan through sales volume.

Keywords: Wages, Capital, Use of e-commerce, Sales Volume, Revenue.

INTRODUCTION

The economy in a country or region is inseparable from the economic activities of the community, the economy is formed from several sectors of business activities both in the formal and informal sectors with the hope of getting a decent income to meet the needs of life and the welfare of their family members, and aimed at increasing per capita income. long term (Subandi, 2011: 8). The needs and desires of today's society are increasingly complex along with the progress of a country accompanied by technological developments. Therefore, people are trying their best to pursue to meet their needs and desires. In achieving these needs and desires, various efforts are carried out, such as working in the government sector, private companies, construction workers, farming, trading and other businesses. Everyone tries to work, but only wants income. The higher a person's income, the higher the level of welfare of his family members and the more needs and desires that will be achieved so that members of society today are competing in increasing their level of income.

UKM in the economy of a country have a vital and strategic influence in the development of the structure of the national economy. The industry is currently experiencing very rapid development with very tight competition. Development of various industries is required to be able to develop productivity, efficiency and competitiveness in order to compete in the local market, national and international.

In a study by Van Gils (2007) states that UKM are an important engine to stimulate a country's economic growth. The role of UKM in the Indonesian economy can be seen from:

1. Its position as a major player in economic activity in various sectors
2. Great job provider
3. An important player in the development of local activities and community empowerment
4. Creators of new markets and sources of innovation
5. Contribution in maintaining the balance of payments through export activities.

Since the crisis hit, not all of this important position has been maintained so that the economic recovery has not been optimal (Ministry of Cooperatives, 2010). In relation to economic development in Indonesia, the UKM sector is described as a sector that has an important role, because there are still many Indonesians who have low education and live small business activities in both traditional and modern sectors. These UKM are able to absorb a lot of workforce. The role of these small businesses is a priority part of every planning stage of development managed by the Ministry of Industry and Trade, and the Ministry of Cooperatives and UKM (Kuncoro, 2002). The role of SMEs in encouraging the acceleration of economic growth is very important. The fact is that there is an imbalance between the contribution of UKM in forming added value. The faster growth of UKM compared to large business groups will improve the overall business structure and income distribution (Ikhsan, 2004).

In essence, the government has an obligation to participate in solving the classic things that often hit UKM, namely market access and capital. Overall, there are several things that must be considered in developing UKM business units, including working conditions, business promotion, access to information, access to finance, market access, improvement of product and human quality, availability of business development services, cluster development, business networks, and competition.

The productivity per business unit has indeed increased in line with the category of business scale. micro enterprises only have an average operating income of around Rp. 76 million per year or Rp. 253 thousand per day; small businesses IDR 1.63 billion per year or IDR 5.4 million per day; and medium enterprises Rp. 29.7 billion per year or around Rp. 99 million per day. Meanwhile, the average income of large businesses is around Rp. 941 billion per year or Rp. 3.15 billion per day (assuming 300 days per year). This means that the productivity of large enterprises is 12,394 times greater than that of micro, 583 times of small businesses, and 32 times of medium enterprises.

When compared with the upper limit of turnover criteria, the average turnover of micro businesses is currently only about 25% of the upper limit of turnover of Rp. 300 million; small businesses 65%, and medium enterprises 59%. This seems to imply that the productivity of micro-businesses is still much lower than that of small and medium-sized businesses which makes it generally more fragile and may be easily crushed by competitive pressures. productivity, and resilience in the face of competition. On the other hand, micro-entrepreneurs also need to be open to technological novelty, especially in utilizing various digital solutions that can expand markets while reducing various production costs.

Indonesia as one of the countries with the largest population in ASEAN has given birth to several small and medium enterprises or UKM as a driving force for the Indonesian economy in facing ASEAN competition. The current UKM efforts are deemed very important as a driving force for the Indonesian economy in facing the international competitive market in ASEAN, which has now implemented internet media as a supporting factor both in product marketing, product sales and information services on products being sold.

The use of internet media or often called e-commerce has a positive impact on UKM in introducing their products widely and effectively so that it is felt that they can target consumers with a wider area. The application of e-commerce has begun to be applied by UKM in Indonesia to support their business. E-commerce, which is considered by consumers to be more efficient, can be an effective strategy for UKM to increase their income. Not only limited to product introduction, currently ordering and distributing products is carried
out using e-commerce. The application of e-commerce provides many benefits from both parties, namely consumers and business actors, on the one hand it can save consumers time in shopping, on the other hand it can make it easier for business actors in terms of promotion and fast interaction via online.

One of the factors that can affect a trader's income is capital. Capital is an important factor in a production. The relatively large amount of business capital will allow a sales unit with many types of products and maximize product quality. In that way, the revenue to be obtained will also be even greater through an increased sales volume as well. Business actors can overcome this need for capital through loans at various existing financial institutions.

The wages given to workers also affect the income of UKM entrepreneurs. When the wages given are in accordance with the existing workload and hours, the workforce will work optimally, which in turn encourages them to do work in accordance with the operating standards in the company. This is expected to increase sales volume and the goal of maximizing income is achieved. This appropriate wage will ultimately provide comfort for workers so that they carry out production activities properly and can still maintain the quality of goods in accordance with the standards in the company.

The ease of opening a business makes a lot of business actors in the city of Medan. If examined through the data from the Medan City BPS, the contribution of GDP is still dominated by the trade sector. This can be seen from the number of business actors ranging from street vendors, micro-entrepreneurs, UKM and large business actors. The following will present data on the number of UKM from the production sector, service sector and the culinary sector.

**Hypothesis**

Based on the concepts described, the research hypothesis is formulated as follows:

1. Wages, capital, and e-commerce technology have a direct effect on the sales volume of UKM in the production sector in Medan City.
2. Wages, capital, and e-commerce technology have an indirect effect on income through the sales volume of UKM in the production sector in Medan City.

**MATERIAL AND METHODS**

This research was conducted by using field research methods (field research), namely research that takes a number of samples from the population using a questionnaire as a data collection tool. While the approach used is a quantitative approach, namely research that produces findings obtained using statistical procedures and an approach that emphasizes testing theories or hypotheses through measuring research variables in numbers (quantitative) and the location of research conducted in Medan City.

Population is a generalization area consisting of objects / subjects that have certain qualities and characteristics that are determined by the researcher to study and then draw conclusions. Samples are part of the number and characteristics of the population (Sugiyono, 2011: 81). is a portion of the population whose characteristics are to be investigated, and can represent the entire population so that the number is less than the population. The sampling technique used is purposive sampling (purposive or judgmental sampling), namely sampling based on specific criteria, namely prospective respondents who carry out production activities in the SME sector. Based on data obtained from the Medan City Cooperatives and SME Service, there are 301 business actors in the production sector. So that the number of samples in this study amounted to 100 respondents.
This study uses a structural equation, namely Path Analyze, to analyze the influence of independent variables on dependent variables. If in theory we believe we are dealing with problems related to cause and effect, then use Path Analysis. The aim is to explain the direct and indirect effects of a set of variables, as causal variables, on other variables which are consequential variables (Tugino, 2012). Path analysis is an extension of multiple linear regression analysis. Path analysis is the use of regression analysis to estimate the causal relationship between variables (casual models) that has been previously determined based on theory. The Path Analysis in this study was assisted by the SPSS application program.

Results and Discussion

Normality Test
The normality test is carried out to determine whether or not a data distribution is normal. The normality test compares the data that is owned by the normal distribution which has the same mean and standard deviation with the data under study. The normality test used is the Kolmogorov-Smirnov normality test. If the significance value is greater than 0.05, it can be concluded that the data has normally distributed. The following are the results of the normality test obtained:

Based on this output, it is known that the significance value is 0.067 > 0.05, so it can be concluded that the data tested is normally distributed.

Multicollinearity Test
The multicollinearity test is used to determine whether or not the classic multicollinearity assumption is deviated, namely the existence of a linear relationship between independent variables in the regression model. The prerequisite that must be met in the regression model is the absence of multicollinearity. A regression model is said to be free from multicollinearity problems if it has a VIF value <5 and has a tolerance value above 0.0001. Based on the results of the processed SPSS data, the following results were obtained:

The VIF and tolerance values above indicate that all variables in this study do not experience multicollinearity. This is indicated by the VIF value on all variables which is less than 5 and the tolerance value far exceeds the number 0.0001.

Heteroscedasticity Test
The heteroscedasticity test is used to determine whether or not there are deviations from the classic assumption of heteroscedasticity, namely the inequality of variants of the residuals for all observations in the regression model. The prerequisite
that must be met in the regression model is the absence of heteroscedasticity symptoms. The heteroscedasticity test used is the glacier test, the results are:

<table>
<thead>
<tr>
<th>Table 4.5 Heteroscedasticity Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coefficients*</td>
</tr>
<tr>
<td>Model</td>
</tr>
<tr>
<td>1 (Constant)</td>
</tr>
<tr>
<td>X1</td>
</tr>
<tr>
<td>X2</td>
</tr>
<tr>
<td>X3</td>
</tr>
<tr>
<td>Y1</td>
</tr>
<tr>
<td>a. Dependent Variable: Abs_RES</td>
</tr>
</tbody>
</table>

Source: Processed SPSS Results

Based on the output, it can be seen that in the Sig column, the Sig value of all variables is > 0.05, it can be concluded that there are no symptoms of heteroscedasticity.

Statistical Test of Model Estimation Results
Estimation to determine the effect of the independent variable on the dependent variable was carried out by means of path analysis.

1. Sales Volume Testing Results
The first equation will describe the effect of wages, capital and e-commerce technology on sales volume. The form of the equation is as follows:

\[ Y_1 = py_1x1X_1 + py_1x2X_2 + py_1x3X_3 + e \]

The following is the result of processing sales volume regression data:

<table>
<thead>
<tr>
<th>Table 4.6 Partial Test Results 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coefficients*</td>
</tr>
<tr>
<td>Model</td>
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<tr>
<td>1 (Constant)</td>
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<tr>
<td>X1</td>
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<tr>
<td>X2</td>
</tr>
<tr>
<td>X3</td>
</tr>
<tr>
<td>a. Dependent Variable: Y1</td>
</tr>
</tbody>
</table>

Source: Processed SPSS Results

The results of this data processing can be seen from the multiple regression equation as follows:

\[ Y_1 = 0.111X_1 + 0.05X_2 + 0.006X_3 + e \]

The interpretations are as follows:

a. The coefficient of \( X_1 = 0.111 \) and \( t \) sig = 0.004
This implies that the wage rate has a positive and significant effect on sales volume, the t test results show that the sig value of the wage level is <sig value, namely 0.004 < 0.05.

b. The coefficient of \( X_2 = 0.05 \) and \( t \) sig = 0.042
This implies that the level of capital has a positive and significant effect on sales volume, the results of the t test show that the sig value of the capital level <sig value is 0.042 < 0.05.

c. The coefficient of \( X_3 = 0.006 \) and \( t \) sig = 0.032
This means that the level of e-commerce use has a positive and significant effect on sales volume, the t test results show that the sig value of the level of e-commerce use <sig value is 0.032 < 0.05.

Simultaneous Significance Test (Test F)
The F test is used to show whether all the independent variables included in the model have a joint influence on the dependent variable.
Based on the results of the SPSS processing, there is a probability value of 0.000 < 0.05 so that H1 is accepted. This means that together the variables of wages, capital, and the use of e-commerce have a significant effect on the sales volume variable.

2. Income Testing Results

The first equation will describe the effect of wages, capital and e-commerce technology and sales volume on income. The form of the equation is as follows:

\[ Y_2 = PY_2X_1X_1 + PY_2X_2X_2 + PY_2X_3X_3 + PY_2Y_1Y_1 + e_2 \]

The results of this data processing can be seen from the multiple regression equation as follows:

The results of this data processing can be seen from the multiple regression equation as follows:

\[ Y_2 = 0.296X_1 + 0.353X_2 + 0.220X_3 + 0.293Y_1 + e \]

The interpretations are as follows:

1. The coefficient of \( X_1 = 0.296 \) and \( t \) sig = 0.000
   - This implies that the wage rate has a positive and significant effect on income, the results of the t test show that the sig value of the wage level < sig value, namely 0.000 < 0.05.

2. The coefficient of \( X_2 = 0.353 \) and \( t \) sig = 0.000
   - This implies that the level of capital has a positive and significant effect on income, the results of the t test show that the sig value of the sales level < sig value is 0.000 < 0.05.

3. The coefficient \( X_3 = 0.220 \) and \( t \) sig = 0.005
   - This implies that the level of e-commerce use has a positive and significant effect on income, the results of the t test show that the sig value of the level of e-commerce use> the sig value of 0.000 < 0.05.

4. The coefficient \( Y_1 = 0.293 \) and \( t \) sig = 0.000
   - This implies that sales volume has a positive and significant effect on income, the results of the t test show that the sig value of the sales level < sig value is 0.000 < 0.05.
Based on the results of the SPSS processing, there is a probability value of 0.000 < 0.05 so that H1 is accepted. It means that wages, capital, use of e-commerce and sales volume have a significant effect on income variables.

**Coefficient of Determination**
The determination coefficient in is a measure that describes how much variation in the dependent variable can be explained by variations in the independent variable.

<table>
<thead>
<tr>
<th>Equation 1</th>
<th>Equation 2</th>
</tr>
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<tbody>
<tr>
<td>R</td>
<td>0.706</td>
</tr>
<tr>
<td>R Square</td>
<td>0.511</td>
</tr>
<tr>
<td>Adjusted R Square</td>
<td>0.420</td>
</tr>
</tbody>
</table>

Based on the estimation results of equation 1 above, it shows that the value of R Square is 0.511 which means that the wage variable, capital use of e-commerce is able to explain variations in the sales volume variable by 51.1% and the remaining 48.9% is explained by other variables not included in the estimation model. The estimation results of equation 2 above show that the value of R Square is 0.458, which means that wages, capital for e-commerce use and sales volume are able to explain variations in sales variables by 45.8% and the remaining 54.2% is explained by other variables not included in the estimation model.

The results of the value of the direct effect, the indirect effect and the total effect are as follows:

**Direct Influence**
- The effect of wage variables on sales volume (X1 → Y1) = 0.111
- The effect of the variable capital on sales volume (X2 → Y1) = 0.05
- The influence of the variable use of e-commerce on sales volume (X3 → Y1) = 0.006
- The effect of wage variables on income (X1 → Y2) = 0.296
- The effect of the variable capital on income (X2 → Y2) = 0.353
- The influence of the variable use of e-commerce on income (X3 → Y2) = 0.220
- The effect of the sales volume variable on income (Y1 → Y2) = 0.293

**Indirect Influence**
- The effect of wage variables on income through sales volume (X1 → Y1 → Y2) = (0.111 x 0.293) = 0.032523
- The effect of the variable capital on income through sales volume (X2 → Y1 → Y2) = (0.05 x 0.293) = 0.01465
- The influence of the variable use of e-commerce on revenue through sales volume (X3 → Y1 → Y2) = (0.006 x 0.293) = 0.001758

**Total Effect**
- The effect of wage variables on income through sales volume (X1 → Y1 → Y2) = (0.111 + 0.293) = 0.404
- The effect of the variable capital on income through sales volume (X2 → Y1 → Y2) = (0.05 + 0.293) = 0.343
- The influence of variables using e-commerce on income through sales volume (X3 → Y1 → Y2) = (0.006 + 0.293) = 0.299

From these results, the path coefficient of the indirect effect of variable X1 on variable Y2 is 0.032523; while the coefficient of total effect (total effect) variable X1 on variable Y2 is 0.404. This means that the indirect effect is smaller than the total effect, so it can be concluded that the sales volume has a contribution in influencing the relationship between wages and income.

From these results, the path coefficient of the indirect effect of variable X2 on variable Y2 is 0.01465; while the coefficient of total effect (total effect) variable X1 on variable Y2 is 0.343. This means that the indirect effect is smaller than the total effect, so it can be concluded that sales volume has a contribution in
influencing the relationship between capital and income.

From these results, the path coefficient of the indirect effect of variable X3 on variable Y2 is 0.001758; while the coefficient of total effect (total effect) variable X1 on variable Y2 is 0.299. This means that the indirect effect is smaller than the total effect, so it can be concluded that sales volume has a contribution in influencing the relationship between the use of e-commerce and revenue.

DISCUSSION

Based on the results of the data processing, it is found that the wage variable has a significant effect on income. This is from Triarya Nugraha (2013) that wages have a positive and significant effect on employee income in the embroidery industry in Denpasar City. Johnson Pasaribu (2012) research shows that wage variables have an influence positive and significant impact on the income of tile traders in Badung Regency. Based on this, entrepreneurs provide wage increases to their employees because the level of business productivity has increased and makes a lot of merchandise sold so that the income level of UKM has increased.

The size of the capital of a trading business or UKM is considered important because an increase in business capital, such as an increase in the number of traded goods or products owned by traders, can increase the level of income. Based on the statistical results obtained, the variable capital has a positive effect on the income level of UKM in the trading sector in Medan City. The results of this study are in line with the results of research from Firdaus (2013) which shows that capital has a positive and significant effect on the income of kiosk traders in the Bintoro Demak Market. Vera's research (2012) shows that the variable capital has a positive and significant effect on the income of canang traders in Badung Regency. Based on this, entrepreneurs increase their SME business capital for trading, so that they can increase the income of UKM by each individual or community group is very dependent on ownership of factors.

The use of e-commerce is commonplace in this era of globalization. The effective use of e-commerce can be used as a tool that can increase existing sales. Based on the results of the research obtained, it can be seen that all business actors have used e-commerce technology. Businesses have effectively used e-commerce as a routine in their marketing activities. They have online means such as shoppe, lazada, tokopedia etc. and do marketing in the media so that the media There is a lot of social help in increasing sales. This theory is in accordance with research conducted by Noor Fitria (2014) which states that if a business actor uses e-commerce technology as a merchant, the greater the income earned. From this research, it can be concluded that UKM business actors in the production sector in Medan have not maximally used e-commerce technology. E-commerce technology is only used and has not been able to contribute much to increasing income. UKM units in the production sector in the City This field is not fully online based and still relies on increasing sales and revenue on a conventional basis.

CONCLUSIONS AND RECOMMENDATIONS

CONCLUSIONS

The conclusions in this study are:
1. The variables of capital, wages and the use of e-commerce have a significant effect on the sales volume variable.
2. The variables of capital, wages, and the use of e-commerce indirectly have a significant effect on the variable income through sales volume

RECOMMENDATIONS

The suggestions in this study are:
1. The next researcher should use other variables not included in this study so that the results are more effective, such
as location variables, number of workers, etc.
2. The maximum use of e-commerce as a marketing medium is required in routine context in social media, maximum creativity and strategy in the marketing sector.
3. Business actors should continue to pay attention to the welfare of workers in accordance with the existing performance and working hours, because the more business actors pay attention to the welfare of their workforce, they also improve existing performance so that in the end they can increase income.

REFERENCE

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