Analysis of Determinants of Income Shocks During the Pandemic Period in Deli Serdang Regency, North Sumatra Province

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Abstract
The Covid-19 pandemic that hit Indonesia, especially in Deli Serdang Regency, gave pressure on market participants, in particular MSME traders. Many merchants were affected by impact restrictions consequence of the shortened Covid-19 pandemic time effort and impacted income. Research Objectives This is to analyze the influence of location effort and price sales to shock MSME income in Deli Serdang Regency. In research, this used a questionnaire with a Likert scale as a method of data collection. The research sample is income MSME traders in Deli Serdang Regency, namely 50 income street vendors in Deli Serdang Regency. The data analysis technique used in the study is an analysis of multiple linear regression. Research results This show that location effort and price sell influential and significant to income MSME traders in Deli Serdang Regency.

Keywords: Business Location, Income, MSME, Selling Price.

INTRODUCTION
MSMEs are activity very basic business. Because in fact business small is contributed big strength country’s economy and proven at the time of recession economy in 1985 and 1997. Since the spread Covid-19 outbreak in Indonesia, effort small specifically street vendors are threatened with loss. For example traders of fried foods, coffee entrepreneurs, and also traders small others in need interaction direct, meanwhile consumer no will go out home and will avoid contact physique in a manner direct for reduce deployment.

Table 1. Income Data Before the Covid-19 Pandemic and When Covid-19 Pandemic

<table>
<thead>
<tr>
<th>Income Before Covid-19 Pandemic (Rupiah)</th>
<th>Income Moment Covid-19 Pandemic (Rupiah)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rp. 1,000,000</td>
<td>Rp. 700,000</td>
</tr>
<tr>
<td>Rp. 800,000</td>
<td>Rp. 500,000</td>
</tr>
<tr>
<td>Rp. 900,000</td>
<td>Rp. 600,000</td>
</tr>
<tr>
<td>Rp. 500,000</td>
<td>Rp. 200,000</td>
</tr>
<tr>
<td>Rp. 700,000</td>
<td>Rp. 400,000</td>
</tr>
</tbody>
</table>

Data above was taken from a number of district MSME trader's bottom graves taken from area Sutomo Street, St Tengkuh Raja Muda, Kartini Road, road look up Fachrudin, and Imam Bonjol Street some working people as street vendors. this data is income data per day before the Covid-19 pandemic and time of the Covid-19 pandemic. the data are income data from dirty street vendors in a day selling.

From the data above can be seen that happen decline in Street Vendors in the District bottom a very significant impact caused affected the ongoing Covid-19 pandemic because regulation government for limits mobility outside society house some, traders who before the pandemic got around IDR 1,000,000 since pandemic only get around IDR 700,000. the previous merchant pandemic get around IDR 800,000 since the pandemic only get around 500,000. Traders before the pandemic get around IDR 900,000 since the pandemic only get around IDR 600,000.
The previous merchant pandemic gets around IDR 500,000 since the pandemic only gets around IDR 200,000. The previous merchant pandemic gets around IDR 700,000 since the pandemic only gets around IDR 400,000. This also happened because material raw materials are difficult to obtain and the price also rises and also has an effect on the income of Street Vendors in the District's bottom uncle. The above problems are also experienced by street vendors in the District bottom Uncle Deli Serdang Regency. Based on the background back above, the writer is interested in doing a study with the title “Analysis of determinant shock MSME Income during the Pandemic Period in Deli Serdang Regency, North Sumatra Province”.

RESEARCH METHOD

Research Approaches
The approach in the study uses approach descriptive and approach associative or quantitative. According to (Rusiadi, 2013) research using associative or quantitative is purposeful research to can know the degrees of relationships and patterns/forms influence between two variables or more wherewith studying this so will wake up something working theory.

Data Analysis Methods
As for the method analysis used started with an assumption test classic as follows:
- a. Data Normality Test
- b. Multicollinearity Test
- c. Heteroscedasticity Test
- d. Multiple Linear Regression

Analysis regression double used to know the direction and magnitude influence from variable free to variable bound. kindly math equality can be formulated as follows:

\[ Y = a + b_1x_1 + b_2x_2 + e \]

description:
Y = Income
a = Constant
b = Coefficient Regression
x 1,x 2 = Variable
e = Error term

Multiple linear regression is supported by the Test Goodness of fit which consists from:
1) Test the hypothesis partial (t-test)
2) Test the hypothesis simultaneously (F-test)
3) Determination Test (D-test)

RESULTS AND DISCUSSIONS

Test Data Normality
Data normality test is used For test is regression, variable confused, or variable the rest normally distributed. This a sign that the regression model is good own normal distribution or close to normal. Results of Multiple Linear Regression Data Analysis:

108
Based on the histogram it is known that the study has its own normal distribution as seen from the histogram above with normal distribution, convex, balanced in the center of the can concluded that normal distribution of data.

**Multicollinearity Test**

Multicollinearity test in a study this used to test what the regression model finds a connection between variable independent. The multicollinearity test can be seen in the table below this:

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>Q</th>
<th>Sig.</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Betas</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>2.283</td>
<td>2.481</td>
<td></td>
<td>-.920</td>
<td>.395</td>
</tr>
<tr>
<td>LKUSH</td>
<td>0.06</td>
<td>0.02</td>
<td>1.24</td>
<td>2.780</td>
<td>0.032</td>
</tr>
<tr>
<td>HGJL</td>
<td>0.01</td>
<td>0.02</td>
<td>.347</td>
<td>1.881</td>
<td>0.012</td>
</tr>
</tbody>
</table>

Dependent Variable: PDTN
Source: Processed Data, 2023

See the multicollinearity test table above, can is known that there are two variables that can be seen in the VIF results (location effort and price sell) variable studies this, and there is a mark tolerance for variables with a size smaller. of 10 and exceeds 0.1 so can be said no happen multicollinearity

**Heteroskedasticity Test**

Source: Processed Data, 2023
The scatter plot above shows that the resulting points are not distributed in a manner random, but also form a pattern or trend line certain. The graph above also shows that data distribution is not only around zero. This shows that there is a problem with heteroscedasticity in the regression model.

**Multiple Linear Regression**

The output result of table SPSS coefficient above, equation the regression are:

### Table 3. Multiple Linier Regression

<table>
<thead>
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<td>LKUSH</td>
<td>0.006</td>
<td>0.002</td>
<td>1.124</td>
</tr>
<tr>
<td>HGJL</td>
<td>0.001</td>
<td>0.002</td>
<td>.347</td>
</tr>
</tbody>
</table>

Dependent Variable: PDTN  
Source: Processed Data, 2023

Based on the table above, the results of multiple linear regression is as follows:

\[ Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + e \]

\[ Y = (2.283) + (0.006) X_1 + (0.001) X_2 + e \]

The equation multiple linear regression above can be explained as follows:

1. The value of the constant (\( \alpha \)) has a mark positive of 2.283. Positive sign means showing direct influence between variable business location (\( X_1 \)) and selling price (\( X_2 \)) are independent and variable dependent MSME income. This shows that if all variable independent worth 0 percent or no experience change, then the mark Income is 2.283.

2. Coefficient value regression for variable Business Location (\( X_1 \)) has a mark positive of 0.006. This shows that if the business location experiences a 1% increase, then MSME income will increase by 0.006 with the assumption variable independent other considered constant. A positive sign means showing direct influence between variable independent and variable dependent.

3. Coefficient value regression for the selling price variable (\( X_2 \)) has a mark positive of 0.001. This shows that if the selling price experiences a 1% increase, then income will increase by 0.001 with the assumption variable independent other considered constant. A positive sign means showing direct influence between variable independent and variable dependent.

### T-test (Hypothesis Test Partial)

<table>
<thead>
<tr>
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<th>Standardized Coefficients</th>
<th>Collinearity Statistics</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>B</td>
<td>std. Error</td>
<td>Q</td>
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</tr>
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</table>

Dependent Variable: PDTN  
Source: Processed Data, 2023
1. Variable (Business Location)

Effect of business location on income merchant. T-count 1.937 > t-table 1.289 and positive significant 0.03 <0.05, then Ha is accepted, which states the business location has an effect positive significant on income MSME traders during the Covid-19 pandemic.

2. Variable (Selling Price)

Effect of the selling price on income merchant. T-count 1.881 > t-table 1.289 and positive significant 0.01 <0.05, then Ho is accepted, which states that selling prices have an effect positive significant on income MSME traders during the Covid-19 pandemic.

Discussion Analysis of Multiple Linear Regression Results

1. Effect of Business Location on Income

The results of the Multiple Linear Regression in the variation explained table show that location business is influential and positively significant to income. It is in accordance with the hypothesis that location business has a influence positive significant to income MSME traders during the Covid-19 pandemic. Research results This is in line with the results research conducted by (Rahayu, 2020) which shows that there is an influence significant wide land to income (Y). Also in line with research (Syahputra et al., 2022) states that variable location business influence in a manner partially significant to income. Observation results are supported by research (Sundari, 2017), namely variable location business influence positively on income. This strengthened with results in the field where whole large SMEs choose strategic locations. Business location fully owns strength for make (or destroy) a strategy business. Business location was best chosen by the perpetrator business in the framework to get the expected income. Besides that study previously by Pratiwi (2019) that location business is influential and important to income because if the location business is far from activity public or far from pass over and over again public can influence income business micro. Research results obtain results where variable location business give connection to income. This strengthened with results in the field Where all SMEs choose strategic locations influential significant to income because with the strategic place, land ample parking, easy location accessible and place close to business with a crowd so consumers will be interested in coming, then matter that location business influential to MSME income. The location of the business matters a lot to many consumers who can be worked on.

2. Effect of Selling Price Against Income

The results of the Multiple Linear Regression in the variation explained table shows that the selling price has an effect positively significant to income street vendors during the Covid-19 pandemic. Research results in this are in line with results research conducted by (Aprilia, 2019), and in line with research (Rahayu, 2020) which concluded that in a manner partial selling price variable is influential and positively significant to income. This shows that price sales own influence a partial positive significance on income. This result is in line with the theory that stated that the price sold is a unit monetary or element measurement of others (incl goods and services) that are exchanged to can obtain the right ownership or right to use something goods or services to be influential direct to enhancement profit company.

Determination price sells the right factor important in business for obtaining profit. however, no means the company can produce goods very well however no set price selling right for goods that are produced. Kindly theoretical price sells the only one the elements of the marketing mix that produce reception sales, meanwhile existing elements others only element normal just. This is in accordance with what was said by Tjiptono (Febriantoni, 2019) which stated that in order to be successful in promoting something goods and services, then every company
must set a price and sell it in a manner right. From the conclusion on is known that in something business or something company that can produce output goods or service determination price sell really required.

CONCLUSION

Conclusion
As for the conclusion from the study this is as follows:
1. Research results from the t-test show that location business influential positive significant to MSME income during the pandemic in Deli Serdang Regency, North Sumatra Province.
2. Research results from the t-test show that Selling price matters positively and significantly to MSME income during the pandemic in Deli Serdang Regency, North Sumatra Province.

Recommendations
As for suggestions in the study these are:
1. It's a good trader to add capital little by little in every profit or income monthly for the advance effort and for more expand products they with utilize technology ie business through online media.
2. Should trader can apply for system promotion, not only in times certain just so you can interest customers or consumers to buy a product.
3. For local government in particular the regional government of Deli Serdang Regency is expected can give support to MSME actors to give place for traders so later traders no again sell on the side the way to go endanger for trader nor for pedestrians and users road other.

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