People’s Economic Development Model based on Micro, Small, and Medium Enterprises (MSMEs) during Covid19

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Abstract

The aims of this study are analyzes the MSMEs business cycle based on the types of business in the COVID-19 pandemic, analyzes the supporting aspects in supporting the working system for MSMEs before and during the COVID-19 Pandemic, and analyzes MSMEs immunity. The findings of these three objectives will be used to formulate the MSME-based People’s Economic Development Model. This study used a mixed method with a sequential explanatory model, where the researcher uses quantitative and qualitative methods sequentially. The quantitative method was carried out by analyzing the business cycle to determine the types of business according to the stages: peak, recession, depression or recovery so as to provide an overview of the pattern of MSME development. Result of this study are the MSMEs conditions during the COVID-19 pandemic can be divided into 4 quadrants: quadrant 1 Unable to market and unable to produce; quadrant 2, able produce but unable to market; quadrant 3, unable to produce but able to market; quadrant 4, able to produce and market. The role of stakeholders is divided into five actors, namely academics, business, government, society and mass media. The five actors together have their respective contributions to the development of MSMEs during the pandemic.

INTRODUCTION

Indonesia has experienced two economic crises in the last two decades. In 1998, the economic crisis was triggered by the banking sector crisis which quickly affected the monetary sector and caused hyperinflation resulting in negative economic growth of 13.13%. The economic crisis has led to a crisis of confidence and has given rise to a new political system in Indonesia known as the Reformasi. The political reform and economic recovery for almost five years have successfully driven Indonesia's economic growth to reach 4% in 2002. The government has also begun to carefully regulate policies regarding short-term investments. In the 1998 economic crisis, Micro, Small, and Medium Enterprises (MSMEs) played an important role in the economy because these businesses were better able to withstand the crisis compared to their larger counterparts. MSMEs were the pillars of the national economy because they were able to reduce the increasing rate of unemployment due to the crisis.

The second crisis occurred in 2008, when the global crisis started in the financial sector and caused stock markets around the world to plummet. The unemployment rate that reached double digits due to the crisis had caused the global economy to contract. In the 2008 crisis, Indonesia was one of the countries that was able to survive, and although the economic growth rate was lower than the predicted level, the growth rate was still at 4.26%. This growth overshadowed this crisis so that the economy recovered rapidly. In 2010, just two years after the crisis, Indonesia's economic growth had reached 6.2%.

Towards the end of 2019, a global multidimensional crisis began. The COVID-19 pandemic has caused a domino effect on almost all aspects of life such as health, education, economy, and socio-culture. Research by Nuno Fernandes found that almost all areas of business were affected by this pandemic (Fernandes, 2020) including Indonesia. In 2021, it is estimated that Indonesia's economic conditions will again weaken. The Ministry of Finance stated that in a worse pandemic condition, economic growth is expected to decline to 2.3%, which is much lower than the planned 5.3% in the State Revenue and Expenditure Budget. Furthermore, in the worst pandemic condition, growth is predicted to drop drastically to only 0.4%.

The decline in economic growth is caused primarily by the expense components in the GDP. Household consumption, which is usually the dominant composition in the GDP with 57.85 percent, experiences a negative growth of 5.51%. This implies a decrease in people's purchasing power, causing a decrease in employment. Negative growth also occurs in the investment sector, because the value of Gross Fixed Capital Formation decreased sharply by 8.61% even though this component is also one of the main components in the GDP with 30.61% contribution. The export value, with the proportion of 15.69 percent of the GDP, also decreased by 11.66%. The decline in household consumption, investment, and export value have led to an increase in unemployment, which is caused by layoffs due to business closures. Data from the Ministry of Workforce shows that 1,032,960 workers in the formal sector have been laid off (or put on unpaid leave) and 375,165 workers have had their work contracts terminated permanently. In the informal sector, 314,833 workers have had their contracts terminated (BPS RI 2020).

This study 1) analyzes the MSMEs business cycle based on the types of business in the COVID-19 pandemic, 2) analyzes the supporting aspects in supporting the working system for MSMEs before and during the COVID-19 Pandemic, and 3) analyzes MSMEs immunity. The findings of these three objectives will be used to formulate the MSME-based People's Economic Development Model.

The health crisis due to the COVID-19 pandemic has impacted all sectors, with MSMEs being one of the most affected sectors. The role of MSMEs during this pandemic contradicts their role during the 1998 economic crisis, when they became the saviors of the national economy. In the current crisis, MSMEs are one of the most negatively affected sectors due to the declining households purchasing power. The decline in people's purchasing power is partially caused by the government's policy in the health sector by the implementation of Large-Scale Social Restrictions to protect the citizens from the virus infection. Due to the uncertainty of economic conditions, people have become very careful in spending their money for consumption. Their consumption is limited to basic needs, namely primary needs such as food and health. Furthermore, the problems that will be faced by MSMEs after the pandemic are how to open a business again in new normal conditions and the type of business that will be run. Research by Asmini et al. (2020) on the business cycle found that there were 61 types of businesses that were included in the business cycle category at each stage: 33 types of businesses at the peak stage, 8 types of businesses at the recession stage, 14 types of businesses at
the depression stage, and 6 types of businesses at the expansion stage (Asmini*, I Nyoman Sutama, Wahyu Haryadi 2020; Food Security Information Network 2020; Gray 2020; Nicola et al. 2020). The stages of the business cycle are one of the references in this research.

Bartik (2020), in his report on Labor Market Impacts of COVID-19 On Hourly Workers in Small- And Medium-Sized Businesses: Four Facts from Homebase, stated that based on research results in China, the economic recovery for MSMEs is slower than that for bigger businesses (OECD Secretary General 2020; Ozili and Arun 2020; Pakpahan 2020). Data from China since March 28 shows that the industrial recovery rate has reached 98.6% and that 89.9% of industrial employees have returned to work. In Hubei Province, where the first cases of COVID-19 were found, 95% of employees have returned to work. Meanwhile, for MSMEs, the reopening rate is lower at 76%. As of May 11, the reopening rate of large industrial businesses had reached 100% in half of the 100 largest cities (by GDP) and an average of 99.1% across the country. For MSMEs, the reopening rate is only 84% on April 15 (Alexander W. Bartik, Marianne Bertrand, Feng Lin, Jesse Rothstein 2020; McKibbin and Fernando 2020). The results of this study should be paid more attention by the Indonesian government during economic recovery after COVID-19 was declared officially over.

The crisis due to the COVID-19 pandemic has created a vicious circle that must be broken down gradually so as not to cause a second wave of the pandemic. The handling of the pandemic is generally divided into five phases as shown in the following figure:

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**Figure 1. Phases in Overcoming The Pandemic**

1. **Rescue** is a condition in which the affected community must immediately obtain economic assistance. In Indonesia, the affected people are the poor, vulnerable to poverty, and suddenly poor because of termination of work contracts or because their businesses close. In the rescue phase, the community is still in fear so it requires special socialization about COVID-19 pandemic.
2. **Stability** is the period when people begin to be able to carry out various activities with health protocols according to WHO guidelines, such as online activities. In this phase, people have moved on from fear into awareness.
3. **Recovery** is a condition where people begin to make peace with the COVID-19 pandemic. They start their activities with new habits (*new normal*).
4. **Development** is a condition in which the economy begins to grow slowly through various community activities in the fields of economy, health, education, and socio-culture.
5. **Growth** is a condition in which the economy is growing again and recovering.

Currently, Indonesia is returning to the first phase (Rescue) due to the second wave of the pandemic. People return to fear with various restrictions, but, on the other hand, there are people who, due to ignorance or lack of information, continue to carry out activities that violate health protocols so that they pose a greater risk to themselves and the surrounding people (Irrera and Policaro 2020). This phase is different in each region so it requires different ways of management. This study focuses on the economic aspect of each of these phases.

Sragen Regency is one of the areas affected by the pandemic, including MSMEs in this region, which leads to an increase in unemployment. Based on the mapping, the types of MSMEs in Sragen that is most affected is the food and beverage business with 72%, followed by fashion with 8% and handicraft. This implies that the majority of the affected MSMEs are engaged in the creative economy sector. The affected MSMEs experienced a decrease in turnover by 46.20%, a decrease in their assets by 13.66%, and a decrease in the number of their workers by 30.56%.
METHOD

This study used a mixed method with a sequential explanatory model, where the researcher uses quantitative and qualitative methods sequentially (Creswell, 2014). The quantitative method was carried out by analyzing the business cycle to determine the types of business according to the stages: peak, recession, depression, or recovery so as to provide an overview of the pattern of MSME development.

Primary data was obtained through questionnaires from 140 respondents consisting of various types of MSMEs. The primary data included capital, assets, turnover and marketing. The data was processed using descriptive statistics, cross tabs, and chi squares and continued with a Focus Group Discussion with several related stakeholders. The results were then processed using phenomenology, an analysis to see the phenomena that occur in the relationship among the stakeholders in formulating the MSMEs development policies during and post-pandemic.

Result and Discussion

The business cycle in this study was measured by analyzing capital, turnover, and profit, each of which is shown in more detail in the following figure:

![Figure 1. Changes in capital before and during the COVID-19 pandemic](image)

During the pandemic, many businesses have experienced losses and even stopped operating so that their capital decreased and eventually ran out. The same situation occurs in MSMEs in Sragen. Figure 1 shows that almost all MSMEs experienced a relatively large decline in capital due to the drastic weakening of their business and some were even forced to stop their operations. The results of data processing show that some businesses with sufficiently large capital are not affected by the pandemic and their capital remains stable. After in-depth interviews, it was discovered that businesses that were able to survive during the pandemic had made changes in their strategies and operations as a method of adaptation to the massive restrictions imposed for several months. These businesses are moving to and optimizing online marketing to expand their market and facilitate communication with their customers. On the other hand, businesses that are less skilled in technology 4.0 experience a decrease in the number of consumers and marketing performance so they have to reduce their production.

The second indicator, turnover, is calculated for a certain period, for example monthly and yearly. The turnover value is obtained by multiplying the amount of production by the price of goods sold. Turnover indicates business performance, where higher demand will lead to
higher production and sales, and vice versa. Positive or negative prospects for a business can be seen from the turnover data from time to time. Turnover with an uptrend indicates that the business is performing well, and vice versa.

The COVID-19 pandemic has caused a decline in people’s purchasing power and has an impact on falling demand. This directly causes a drastic decline in business turnover (Fernandes 2020). The data in this study shows that all businesses experienced a decline, and businesses with a larger turnover tended to experience a larger decline. The results of in-depth interviews revealed that many big businesses with very specific products, such as batik, were forced to close their businesses because consumers reduced their spending on tertiary and luxury goods. Primary data obtained from in-depth interviews are shown in Figure 2 below.

![Figure 2. Changes In Turnover Before and During The Pandemic](image1)

Profit is the main indicator of the success of a business because it reflects business results. If the business does not generate adequate profit, this will affect the capital and business continuity. During the pandemic, profits decreased drastically along with declining turnover and revenue. Interestingly, in some cases, profit, capital, and turnover decreased simultaneously but the business continued to operate. After in-depth interviews, it was found that these business owners continue to run their businesses to ensure income and avoid either permanent or temporary layoffs. The primary data on profit is shown in Figure 3 below.

![Figure 3. Business Profit Before and After COVID-19 Pandemic](image2)
The three main business indicators showed a significant decline, with an average decrease in capital of 10.5%, turnover of 16.5%, and profit of 19%. Based on these three indicators, it can be concluded that MSMEs in Sragen district are in the recession phase, where business performance is declining but has not yet reached its lowest position (trough). This implies that the decline may continue if the pandemic situation is not improving. The MSMEs business cycle is shown in Figure 4 below.

![MSMEs Business Cycle Before and During The COVID-19 Pandemic](image)

**Figure 4.** MSMEs Business Cycle Before and During The COVID-19 Pandemic

This recession needs to be overcome so that it does not worsen through the formulation of various policies that are tailored to the needs of MSMEs so that they can recover and grow again.

The second objective of this study was investigated using a simple analysis, namely chi square, which, despite its simplicity, is able to answer this objective. One of the main indicators of business success is marketing. The pandemic has caused a drastic drop in demand from consumers whose purchasing power has weakened or even disappeared. This study groups MSMEs in Sragen Regency based on their marketing level: national, regional, and local. Each MSME experiences a different impact, depending on their strength and ability to survive. To test the impact, the Pearson chi square was used and the results are shown in Table 1 below.

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>140.980</td>
<td>16</td>
<td>.000</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>136.638</td>
<td>16</td>
<td>.000</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>139</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The results of the Pearson Chi Square calculation produced a probability value of <5%. This value indicates an association between marketing scale before and during the COVID-19 pandemic. Tables 1 suggest the following:

1. MSMEs with national scale marketing and still surviving during the pandemic reached 65.5%. MSMEs with a national scale marketing but declining to a regional scale was 20.7%, and a local scale was 6.9%/; such as the furniture MSMEs. Furthermore, MSMEs with national scale marketing but later stopping their operation due to the pandemic were batik MSMEs with 6.9%.
2. MSMEs with a regional scale marketing and still surviving during the pandemic reached 57.9%. MSMEs with marketing on a national scale but declining to a regional scale were 36.8% and those experiencing business closures reached 2.6%, as seen in souvenir products MSMEs.

3. MSMEs with a national scale marketing but then rising to a national scale during the pandemic were printed batik with 3.3%. MSMEs with local scale marketing and still staying at the same level was 91.7% but 5% MSMEs, mostly in souvenir businesses, with a local scale marketing had to close the business due to the closure of the tourism areas in Sragen.

4. MSMEs with national, regional, and local scale marketing before the pandemic and still surviving at these levels were 18.3%, but some MSMEs were only limited to the national scale with 18.2%. MSMEs that experienced a decline to regional and local scales reached 9.1%, namely fashion or textile MSMEs. Furthermore, there were MSMEs whose marketing is only limited to a local scale of 45.5%, namely MSMEs that produce food and beverages. However, 9.1% of businesses must stop operating, such as furniture MSMEs.

These four conditions require different handling policies that suit the needs and positions of the business during the COVID-19 pandemic.

Workforce is one of the main factors in business development, even though the problems faced by businesses will have a direct impact on their condition. The results of data processing using Pearson Chi-Square regarding the number of workers produced a probability value of < 5%, which indicates the relationship between the number of workers before and during the pandemic. The decrease in production has caused a decrease in demand and product, naturally leading to a decline in the number of workers. However, some business owners are still keeping their workforce, without reducing the number through layoffs, in the hope that businesses will recover once the pandemic is over. Based on the results of data processing, 53.96% of MSMEs had the same number of workers before and during the pandemic, while the remaining 46.04% reduced the number. Batik MSMEs experienced the highest decline in workforce, with around 75%.

One of the parameters of business success is turnover and the pandemic certainly has an impact on decreasing or increasing turnover. On the one hand, several MSMEs suffered from a drastic decline in their turnover, and some even had to stop operating. On the other hand, some businesses are actually growing and experiencing a rapid increase in turnover during the pandemic.

The data in this study indicate that 94.24% of the MSMEs samples in Sragen experienced a decrease in turnover, with the largest decline (51-75%) occurring mostly in furniture and batik MSMEs with 35.97%. The second range (26 – 50%) was occupied by non-furniture and batik MSMEs, such as the shop business, with 22.3%.

One type of business with the largest decline in turnover is Batik tulis (hand-written batik) MSMEs. This condition is in contrast to printed batik, which actually experienced an increase in revenue during the pandemic. A large decline was also experienced by MSMEs which used distribution channels for marketing, rather than direct sales to the consumers. This type of MSMEs experienced a decline in turnover of around 75-100% with a total sample of 14.39%.

In contrast, several types of MSMEs experienced an increase in their turnover during the pandemic, such as MSMEs selling medicines, herbs, and basic necessities. MSMEs that experienced an increase in turnover reached 5.04%. In more details, 0.72% samples experienced an increase in turnover of 0-25%, 3.6% experienced an increase in turnover of 26-50%, 0.72%
experienced an increase in turnover of 51-75%. The following is an illustration of MSMEs that experienced an increase in their turnover during the COVID-19 pandemic.

This study then analyzed the turnover during the COVID-19 pandemic. Data from respondents were processed using the chi square test and the results are shown in Table 2.

Table 2. Relationship Between Decreased Turnover and the Pandemic

<table>
<thead>
<tr>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>3677.399(^a)</td>
<td>2444</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>741.379</td>
<td>2444</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>79.286</td>
<td>1</td>
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<tr>
<td>N of Valid Cases</td>
<td>139</td>
<td></td>
</tr>
</tbody>
</table>

The Chi Square test shows significant results and the Pearson Chi-Square value has a probability value of <5%, which indicates a change in turnover due to the pandemic. To determine the scale of changes in turnover, paired t-test was used to measure turnover before and during the pandemic. The results are shown in table 3 below.

Table 3. Changes in Turnover After the Pandemic

<table>
<thead>
<tr>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair 1 Omzet_Bcovid</td>
<td>87174460.4317</td>
<td>139</td>
<td>180691971.29799</td>
</tr>
<tr>
<td>Omzet_Acovid</td>
<td>32353525.1799</td>
<td>139</td>
<td>47747415.77138</td>
</tr>
</tbody>
</table>

The average turnover of MSMEs before the pandemic was IDR 87,174,460.43, but during the pandemic, this figure decreased by 62.89% to IDR 32,353,525.18. The figures were obtained from all sample MSMEs engaged in the furniture, batik, food and beverage products, and souvenirs. To focus specifically on furniture MSMEs, the turnover before the pandemic reached Rp. 107,203,676.6 but then experienced a very significant decrease to Rp. 42,003,676.47 due to the narrowing of market share and people's purchasing power. In batik MSMEs, the average turnover before the pandemic was Rp. 188,826,087 but then the majority of this type of MSMEs stopped operating and closed the business, especially the hand-written batik MSMEs, so that their turnover decreased drastically to Rp. 55,826,086.96. By comparing the average turnover, it can be seen that the MSMEs engaged in producing batik has a higher turnover compared to MSMEs that produce furniture.

The results of data analysis on each variable show a relatively significant change. The association between the two was tested using SPSS and the results are shown in table 4 below:

Table 4. Association between Turnover and Number of Workers

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean Rank</th>
<th>Sum of Ranks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Omzet_Acovid - Omzet_Bcovid</td>
<td>Negative Ranks</td>
<td>63(^d)</td>
<td>7216.50</td>
</tr>
<tr>
<td></td>
<td>Positive Ranks</td>
<td>15(^c)</td>
<td>533.50</td>
</tr>
<tr>
<td></td>
<td>Ties</td>
<td>139</td>
<td></td>
</tr>
<tr>
<td>TK_Acovid - TK_Bcovid</td>
<td>Negative Ranks</td>
<td>63(^d)</td>
<td>2074.50</td>
</tr>
</tbody>
</table>
Table 4 shows that sales turnover during the pandemic saw a negative value of 114 (82%), which indicates a very sharp decline. Meanwhile, 18% of MSMEs experienced an increase in turnover during the pandemic. The workforce also experienced a relatively significant change, because almost 45.32% of MSMEs reduced the number of their workforce to reduce production costs. On the other hand, 53.96% of MSMEs maintain their workforce during the pandemic to maintain and continue business operations.

The results of the four analyzes above show that the COVID-19 pandemic has significantly affected the MSMEs in Sragen Regency.

The third objective is to analyze MSME Immunity. Immunity analysis was carried out using in-depth interviews and Focus Group Discussions involving the government, community, academics, and business owners. The results of the analysis using phenomenology found that the impact of the COVID-19 pandemic on MSMEs could be grouped into the following 4 quadrants:

1. Quadrant 1: Unable to Produce and Unable to Market, namely businesses with the following characteristics:
   a. Small-scale businesses whose products cannot be sold due to large-scale regional restrictions and then stop their production due to limited capital.
   b. Medium and large-scale businesses that carry out inter-regional trade and even exports. Large-scale regional restrictions have caused the transportation business to drop drastically, especially between islands and between countries. The restrictions cause businesses to stop operating and business owners with inter-regional markets are forced to also stop marketing their products because of rising transportation costs, and thus increasing the production costs. Consequently, business owners have to increase product prices to suppress losses but this move is unpopular as it reduces or even eliminates demand. Several large-scale businesses in Sragen chose to close and stop their operations because of the risk to the branding that had been built.
   c. The business of tertiary necessities such as decoration and souvenirs as well as tourism. During the pandemic, this type of business lost customers who prioritized primary and secondary needs.

2. Quadrant 2: Able to produce but Unable to Market, namely businesses with the following characteristics:
   a. Business with inter-regional, inter-island, and inter-country marketing orientation. This type of business is able to produce but cannot market its products due to limited and expensive transportation due to large-scale regional restrictions.
   b. Businesses with traditional marketing models are therefore affected by large-scale regional restrictions. If it is not immediately supported, this type of business will continue to record losses or even go bankrupt.

3. Quadrant 3: Unable to produce but able to Market, namely businesses with the following characteristics:
   a. Businesses that use advances in information technology so that they can engage in regional and national scale marketing.
b. Businesses that use raw materials from outside the region, island or country so that these materials are scarce and the price increases.

4. Quadrant 4: Able to produce and able to Market, namely businesses with the following characteristics:
   a. Business with relatively sufficient capital.
   b. Business with local scale marketing.
   d. Business with primary and secondary goods.

These four quadrants affect the MSMEs survival behavior during this pandemic. The results of the in-depth interview resulted in a common perception, especially regarding the holistic expectations of MSME owners as shown in the following figure:

![Figure 5. MSMEs Expectations](image)

Referring to Figure 5, the MSMEs development model involving various stakeholders can be illustrated as follows:
CONCLUSION AND RECOMMENDATION

The MSMEs conditions during the COVID-19 pandemic can be divided into 4 quadrants: 1) Unable to market and unable to produce; 2) able produce but unable to market; 3) unable to produce but able to market; 4) able to produce and market. These four conditions refer to their survival ability during the pandemic. A business that is able to survive is one that is able to maintain its capital and market its products digitally so that the implementation of the MSME model during and after the pandemic becomes the most crucial part. One of the important policies and program activities that must be carried out by the government is related to these two factors.

REFERENCES


Irrera, Maurizio, & Giuseppe Antonio Policaro. (2020). Liquidity Support to Small and Medium Sized Enterprises By The Banking System at The Time. Torino Italy.


