FINANCIAL ACCESS AND MSMEs PERFORMANCE DURING PANDEMIC COVID-19: THE MODERATING ROLE OF DIGITIZATION

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ABSTRACT

The Micro Small and Medium Enterprises (MSMEs) sector is critical pillars of the Indonesian economy. The COVID-19 pandemic has had a negative impact on MSMEs. The existence of activity violation policies, namely lockdown and social distancing, needs to be anticipated by MSME actors because it has changed consumer behavior and business competition. Digital transformation is a solution for MSMEs to survive the COVID-19 pandemic. The objective of this study is to investigate the impact of access to finance on MSME performance moderated by digitalization. This study utilized 83 MSMEs as a sample. Data was collected by distributing questionnaires to MSME owners who were selected as research samples. Data analysis was performed using the Moderated Regression Analysis (MRA) method. The results of the study indicated that digitization significantly strengthens the relationship between financial access and MSME performance. For MSME actors, digitization will also make it simpler to introduce products, boost turnover, and assist with recording and producing financial reports.

Keywords: Financial Access, MSMEs Performance, Digitization.

JEL: G21; L25.


Introduction

Micro, Small and Medium Enterprises (MSMEs) play a vital role in national economic development because the MSME sector can expand the availability of jobs. The amount of MSMEs reaches 64.19 million and contributing 60.3 percent of Gross Domestic Product (GDP) with labor absorption of 97% (Bachtiar, 2021). This number shows that MSMEs sector have significant contribution for the national economy in Indonesia. MSMEs sector has been one of the hardest-hit sectors during the COVID-19 pandemic in Indonesia. The contribution of MSMEs to GDP in Indonesia decreased drastically from 60.3 percent to 37.3 percent in 2020. MSME actors are very difficult to sell their products (Ayem et al., 2020).

Indonesia experienced an economic slowdown affected by COVID-19. There are 37 thousand MSMEs in Indonesia that have experienced a decline in performance due to COVID-19, with the resulting impacts being a decrease in sales (56%), funding (22%), distribution
of goods (15%), and access to raw materials (4%) (Rahman, 2020). Low digitization, difficult access to financing, and lack of understanding of strategies pose a threat to MSMEs in facing the COVID-19 pandemic (OECD, 2020).

![Figure 1: Contribution of MSMEs to GDP](Source: Lokadata (2020))

The implementation of Large-Scale Social Restrictions (PSBB) with the issuance of Government Regulation (PP) Number 21 of 2020 has had a major impact on MSME operations in Indonesia. The existence of restrictions on social activities and restrictions on the provision of services to consumers is one form of change in the business environment that must be responded to by MSMEs (Sasmitha, 2021). Limited financial or capital resources are often an obstacle for the MSME sector to develop businesses and expand networks. The global crisis that occurred due to the COVID-19 pandemic caused a decline in credit growth which slowed down the decline in the national economy (OECD, 2021). This difficulty in accessing financing has forced MSME actors to be able to manage their finances effectively and efficiently in order to survive during COVID-19 pandemic. During the COVID-19 pandemic, the government intervened through a policy of suspending credit interest rates until September 2020 (Ayem et al., 2021).

The results of research regarding the influence of the relationship between financial access and performance of MSMEs are still inconsistent. Research by Lekfebrianto & Arianto (2022), Suaranda & Musmini (2020) and Rita & Huruta (2020) showed that financial access has a positive relationship with SMEs performance in Indonesia. Meanwhile, Fowewe (2017), Sibanda et al. (2018) result that financial access has negative and significant effect on performance. The result of previous studies still inconsistent, so motivate researchers to offer alternative factors that influence the relationship between digitization and MSME performance with adding a variable access to financing as moderating variable. Research by Eller et al. (2020) and Octavina et al. (2020) showed that digitization has positive and significant effect on MSMEs Performance.

The existence of the COVID-19 Pandemic has greatly affected MSMEs in Rembang which are the leading sectors that require good risk management. This study is intended to review the performance of small and medium enterprises (SMEs) in Rembang Regency. The aim of the study was to provide the knowledge to be aware with the factors affecting performance of SMEs during pandemic COVID-19 and this would help them to manage their business sustainably. This study is the first to investigate the moderating effect of digitization business on the relationship between financial access and MSEMs performance, especially in pandemic COVID-19. Digital transformation is a solution for MSMEs to survive during COVID-19 pandemic. Digital-based marketing communications can be key in optimizing business because digitization gives better and faster access that can help MSMEs expand marketing coverage and improve MSME performance.
Literature Review

**Technology Organization Environment (TOE) Theory**

The Mechanisms of Technological Innovation by Tornatzky & Fleischer (1990) describes the technology-organization-environment (TOE) framework, which explains how three key aspects of a firm’s surroundings affect adoption decisions. The technology context, organizational context, and environmental context are these three components (Baker, 2012). Making wise decisions in a hostile situation requires using TOE. On the other hand, the Indonesian MSME sector was compelled to utilize an online marketing-based strategy due to the widespread use of social distance. MSMEs must also offer services that allow clients to continue their online purchasing offline. The most effective and efficient method of reaching the general public and customers is through digital media (Effendi et al., 2020). The ideal paradigm for comprehending technology adoption has similarly been shown to be TOE.

The COVID-19 pandemic is the biggest challenge for all MSME players to innovate to survive. The innovation breakthrough that needs to be done is through the digitization of MSMEs. Innovative marketing determines successful interactions with potential customers. Rapid changes in customer needs and market demand can also affect marketing innovation. The use of e-commerce can be a way to overcome the problems of MSME actors so that their businesses can continue to survive amid the COVID-19 pandemic. The use of e-commerce helps MSMEs to increase their activities starting from selling, purchasing and marketing products (goods and services) using the internet network even though sellers and consumers do not meet in person, but transactions still run smoothly (Harfie & Lastiati, 2022). E-commerce is also utilized to enhance operational aspects such as order processing, fulfillment and shipping and marketing aspects such as online advertising.

**Hypothesis Development**

Every business, whether small or large, must have faced capital problems. In Indonesia, there are still quite a number of MSMEs that are constrained by capital problems for business development. SMEs need additional funds to develop their businesses. Some commercial banks have involved MSMEs in the financing scheme. This is useful for developing access to financing for MSMEs (Nkundabanyanga et al., 2014). Research conducted by Taslim et al. (2020) shows that financing has a positive and significant effect on the performance of MSMEs. The existence of a loan or credit can help businesses to achieve optimal production conditions so as to improve the financial performance of MSMEs themselves.

**H1**: Access to financing has a positive and significant effect on the financial performance of MSMEs

Access to digital financing is made easier for business, particularly for Indonesia’s small and medium-sized enterprises (SME). More than 60% of our economy is supported by MSMEs, thus when we talk about economic digitalization, it is clear that MSMEs are the priority for digitization. As a result, digital transformation offers a solution for boosting access to credit. For small firms that have trouble obtaining bank financing, peer-to-peer lending is crucial. Fintech P2P lending platforms can improve funding for Businesses. With the help of payment gateway services, many people, especially SME owners, will be able to satisfy their needs. For instance, small and medium businesses can now provide clients with electronic payment choices (Utami & Sitanggang, 2021). People’s actions in the digital age are inextricably linked to technology and the internet. By using digital marketing, MSME actors may find it simpler to connect with their customers and enhance sales. MSMEs now have the flexibility to respond to changing client needs, including the ability to advertise products online thanks to responsive digital marketing (Wardhana, 2015). One of the key forces behind MSMEs’ sustained competitive advantage is innovation. Several experts assert that the use of digital
technology is necessary to improve the productivity and performance of SMEs (Nurdany & Prajasari, 2020; Papadopoulos et al., 2020). Digital technology can support the performance of MSMEs during this large-scale social restriction period. Several studies have shown that digitalization of MSMEs has a positive and significant impact on MSME performance (Octavina & Rita, 2021; Widnyani et al., 2021).

**H₂**: Digitization strengthens relationship between Financial Access and MSME performance.

**Data and Research Methods**

The technique used by researchers in collecting research data is by making a Google form and also a survey using a questionnaire that is distributed directly to MSME owners. The population as the unit of analysis is MSME actors in Rembang Regency. For sampling, this study used a purposive sampling method with 3 criteria consisting of:

- a. MSMEs have made credit loans at banks/other financial institutions
- b. MSMEs already using digital platforms
- c. MSMEs that have been operating for at least 2 years.

This research method is quantitative. This study was established to find hypothesis-testing results to strengthen or reject existing theories and hypotheses. The data sources used in this study are either primary data or data obtained directly from respondents through a questionnaire targeting the entire MSME population in Rembang and using Data Instrument Test and MRA (Moderating Regression Analysis) to analyze the result.

**Methodology**

In this study, the data analysis technique used is Moderated Regression Analysis (MRA). The theoretical framework of this research is as follows:

![Figure 2: Research Framework](image)

This study’s dependent variable is MSMEs performance. Then, the independent variable of this research is financial access, consists of two responses (or categories): informal loans and formal loans. In this study, the digitization variable is added as a moderating variable which is a research update. The following indicators used in this study:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Definition</th>
<th>Indicator</th>
</tr>
</thead>
</table>
| Financial Access as Independent Variable | Access to financing is the ease of access for MSME actors when applying for credit (Lusimbo & Muturi, 2015; Taslim et al., 2020) | 1. Frequency of accessing formal credit  
2. Amount of credit received  
3. Ease of obtaining credit (Survey responses to: how easy it is to obtain a bank loan in your country with only a good business plan and no collateral (1 = impossible, 7 = easy)) |
| MSMEs Performance as Dependent Variable | Performance is the level of MSME’s ability to generate profits as seen from sales turnover (Idawati & Pratama, 2020) | Total of sales and productivity |
Digitization as
Moderating Variable
Digitization is the act of MSME actors to convert analog information into digital information using existing digital platforms (Widnyani et al., 2021)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Definition</th>
<th>Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1. The online platform used</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Application of business digitization</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. The effectiveness of digitization for MSMEs (increase in the amount of income indicator)</td>
</tr>
</tbody>
</table>

**Finding and Discussion**

**Characteristic of Respondents**

We begin our discussion by examining the characteristics of respondent in this research. Characteristics of respondents are characteristics that describe the identity of the respondent that distinguishes one respondent from another.

**Table 2: Characteristic of Respondents by Gender**

<table>
<thead>
<tr>
<th>Gender</th>
<th>Amount</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>21</td>
<td>21.92%</td>
</tr>
<tr>
<td>Female</td>
<td>62</td>
<td>78.08%</td>
</tr>
</tbody>
</table>

Table 2 shows that the majority of respondents were male, namely 18 people or 60%, while female respondents were 12 people or 40%. Thus, it can be concluded that the MSME actors in Rembang Regency are dominated by men compared to women.

**Table 3: Characteristic of Respondents based on Education**

<table>
<thead>
<tr>
<th>Educational Level</th>
<th>Amount</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary School</td>
<td>5</td>
<td>6.02%</td>
</tr>
<tr>
<td>Junior High School</td>
<td>14</td>
<td>16.87%</td>
</tr>
<tr>
<td>Senior High School</td>
<td>48</td>
<td>57.83%</td>
</tr>
<tr>
<td>Graduate Level</td>
<td>16</td>
<td>19.28%</td>
</tr>
</tbody>
</table>

Based on Table 3, it is known that the number of research samples with elementary education level is 5 respondents (6.02%), junior high school is 14 respondents (16.87%), senior high school is 48 respondents (57.83%) and the last education is graduate level amount 16 respondents (19.28%). This shows that based on the data studied, MSME actors are still dominated by senior high school education.

**Validity and Reliability Analysis**

**Table 4: The Result of the Validity Test**

<table>
<thead>
<tr>
<th>Variable Research</th>
<th>F_{count}</th>
<th>F_{table}</th>
<th>Sig.</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSMEs Performance</td>
<td>0.847</td>
<td>0.213</td>
<td>0.0000</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>0.854</td>
<td>0.213</td>
<td>0.0000</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>0.794</td>
<td>0.213</td>
<td>0.0000</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>0.444</td>
<td>0.213</td>
<td>0.0000</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>0.828</td>
<td>0.213</td>
<td>0.0000</td>
<td>Valid</td>
</tr>
<tr>
<td>Financial Access</td>
<td>0.850</td>
<td>0.213</td>
<td>0.0000</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>0.859</td>
<td>0.213</td>
<td>0.0000</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>0.834</td>
<td>0.213</td>
<td>0.0000</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>0.593</td>
<td>0.213</td>
<td>0.0000</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>0.785</td>
<td>0.213</td>
<td>0.0000</td>
<td>Valid</td>
</tr>
</tbody>
</table>
The validity of this study is determined by the instrumentation under investigation. If invalid data are available during data collection, the results of the study cannot describe the actual situation. Therefore, we conducted research using two test methods: a validity test and a reliability test to confirm the quality of measuring instruments. Efficacy tests were performed by correlating the score obtained for each statement with the total score. Test the validity of this study using the product moment technique with approach like in table 4.

Based on the information from the results of the validity test, it shows that the r-count of each question item for each variable is stated to be greater than the r-table, so that all questionnaire items in the variables of access to financing, MSME performance and digitalization are declared valid. After knowing the validity test results, the next step is to perform a reliability test. The results of the reliability test were carried out on all statement items used in this study. Data is reliable or consistent if Cronbach’s alpha is greater than 0.60. Table 5 presents the results of the reliability test.

Table 5: The Result of the Reliability Test

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial Access</td>
<td>83</td>
<td>0.844</td>
</tr>
<tr>
<td>Digitalization</td>
<td>83</td>
<td>0.956</td>
</tr>
<tr>
<td>MSMEs Performance</td>
<td>83</td>
<td>0.810</td>
</tr>
</tbody>
</table>

Moderated Regression Analysis (MRA)

Table 6: Moderated Regression Test

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>13.594</td>
<td>1.220</td>
<td>11.143</td>
</tr>
<tr>
<td></td>
<td>Financial Access</td>
<td>-0.505</td>
<td>0.148</td>
<td>-0.533</td>
</tr>
<tr>
<td></td>
<td>Moderate</td>
<td>0.037</td>
<td>0.005</td>
<td>1.261</td>
</tr>
</tbody>
</table>

a. Dependent Variable: MSMEs Performance

Based on the result of the moderating regression equation (MRA), financial access provides a coefficient value parameter of -0.505 with a level significance of 0.001 (<0.05). This shows that financial access has a negative and significant effect on MSMEs Performance. The results of this study are supported by Fowewe (2017), Sibanda et al. (2018) who stated that access to finance has a negative impact on the SME performance. The results of the linear regression test show a significance level of 0.037 which is smaller than 0.05. This means that the digitalization plays a role in the financial access and is not significant to the success of MSMEs performance.

Conclusion

Research findings have shown that access to finance has a significant negative effect on MSME performance. Access to finance is a vital part of MSME development. The impact of the COVID-19 pandemic has really brought the community economy to a standstill, including
the MSME sector. The government has also made efforts to provide easy access to funding for MSMEs during this pandemic, but the government’s policies to overcome the pandemic have also become a dilemma for the MSME sector. The government’s policy regarding Large-Scale Social Restrictions (known as PSBB) was followed by restrictions on operating hours for MSMEs, so that they experienced a drastic decline in sales. Limited mobility and declining income have a major impact on MSME actors. Digitalization has proven to be able to weaken the relationship between financial access and MSMEs’ performance amid the COVID-19 pandemic. MSME actors still do not understand how to access financial technology because of the lack of socialization. There were still MSMEs actors who were accustomed or more comfortable using manual transactions, but many also started using financial technology.

Declaration

Conflict of Interest

There is no conflicting of interest for this manuscript.

Availability of Data and Materials

The data that support the findings of this study are available on request from the corresponding author, [NGD]. The data are not publicly available due to restrictions because their containing information that could compromise the privacy of research participants.

Authors’ Contribution

NGD conceptualized the study and created the methodology; TAW and RR wrote, reviewed, and edited the manuscript; NGD and RR wrote the original draft.

Funding Source

The institution that financed this research was Universitas YPPI Rembang.

Acknowledgment

We would like to thank the Universitas YPPI Rembang, for their technical support and all the contributors who helped in this study.

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