INDONESIAN SMALL MEDIUM ENTERPRISE (SME) CAN SURVIVE DURING COVID-19: FACTS OR ILLUSIONS?

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ABSTRACT

The 1997 economic crisis gave a strong impetus to the emergence of large-scale SMEs in Indonesia and continues to this day. This research examines the fate of SMEs during the Covid-19 pandemic in 2020. Studies on secondary documents from the BPS (Indonesian central statistics agency) survey results on the economic situation during the Covid-19 period from 34 provinces were conducted. Descriptive analysis was carried out to see the resilience of SMEs under Covid-19 pressure. Because each province has unique characteristics, the researchers suspect that there will be certain patterns that allow the resilience of SMEs in one area to be better than the resilience of SMEs in other regions. The researcher uses the PESTEL (Politics, Economics, social, technological, environmental, and legal) framework to explain the patterns found in the data. The literature study on the survey report on the impact of the pandemic on the business world involving 25,256 SMEs in Indonesia was analyzed descriptively and by correlation. It was found that about half of SMEs in Indonesia can be said to be resilient and this resilience is greatest for SMEs that were worst affected by the pandemic, reflecting the possibility of a rebound effect. We argue that contingency factors play a bigger role than resources in explaining the phenomenon that occurs in the resilience of SMEs in Indonesia.

Keywords: SME resilience, Covid-19 pandemic, PESTEL, Indonesia, Optimism

INTRODUCTION

Indonesia is a large entrepreneurial country. BPS noted that there are 64 million SMEs in Indonesia, making up 99.9 percent of all businesses operating in Indonesia (Santia, 2020). The abundance of SMEs in Indonesia is a paradox. This country is very collectivistic (Hofstede, 2021), but it is the country with the densest number of SMEs in the world, only beaten by Brunei Darussalam which is geographically much smaller than Indonesia (Hermanus, 2016).

SMEs in Indonesia exploded after the 1997 Asian monetary crisis when many large companies died due to bankruptcy. People have to survive by trading anything and small and medium enterprises are one of the solutions. The Indonesian government defines SMEs as companies with sales of between IDR 300 million to IDR 500 million per year, equivalent to the US $ 30,000 to US 50,000 per year (Pratono, 2018). The penetration of information technology across the archipelago only amplifies this phenomenon. The Indonesian online marketplace is a wilderness area full of various SME products. At least 3.7 million SMEs are currently running online businesses (Pratono, 2018). It is not surprising that we can view the situations like this as deindustrialization.

Yet, we can also see the situation of SMEs in Indonesia as a condition of proto-capitalism. The literature states that collectivism hinders entrepreneurship and countries with high individualism are more likely to show associations with entrepreneurial fervor (Bogatyreva et al., 2019). Collectivism has begun to shift to individualism which characterizes the entrepreneurial spirit (Hueso et al., 2020). This is also used to explain the economic boom phenomenon in many countries (Santos et al., 2017).

While SMEs do not provide many benefits for taxation, they are the blood of society. A variety of food and clothing, as well as products for souvenirs and other creative economy products, stretches across the major avenues of the country. The government is well aware of this. Instead of imposing SME tax compliance, which rates are already very small and progressive, the government is struggling to push the progress of SMEs in Indonesia. The shadow economy is the real economy.

The history of SMEs in Indonesia can be drawn from a long history. Indonesia's geographical position as an archipelago allows trade with a high diversity of products to take place. Various islands have unique resources that can be traded with traders from other islands. In the Majapahit era, traders from the eastern archipelago sailed and traded in Tuban, East Java. In the following season, these traders returned to Sulawesi, Maluku, and Papua, to be replaced by traders from western regions such as Sumatra and Kalimantan. They buy products that were brought from the East and sell special products that they have brought from the West. The cycle repeats every year as changes in the west and east monsoons circulating in the islands between the Indian and Pacific Oceans. The communication factor plays a big role so that the Malay language becomes the unrivaled lingua franca in this archipelago (Ladiqi et al., 2019). This makes Java a hub that facilitates trade between western Indonesia and eastern Indonesia. It is not surprising that now more than half of Indonesia's population lives on the island of Java and Java is the largest economic center in Indonesia.

The 1997 economic crisis that sparked an entrepreneurial boom in Indonesia has continued until now, at least before the Covid-19 Pandemic. Indonesian SMEs have continued in utilizing information technology, particularly social media, in generating a strong new media-based economic power, supported by technocapitalists in the field of telecommunications network providers and the marketplace, which are dominated by domestic start-ups.

Now, when the Covid-19 Pandemic hits, the question arises whether Indonesian SMEs will survive or collapse? Covid-19 has caused various changes in the business environment fundamentally and encouraged businesses at various levels to take mitigation steps to survive in this suddenly changing situation (Priyono et al., 2020). Many large, labor-intensive companies also failed to...
deal with the pandemic, resulting in massive unemployment. Some of the former employees then took advantage of severance pay and government assistance to build new SMEs. Of course, if we talk about quantity, logically this will trigger more SMEs. But then, the existing or even new SMEs have risks to be crushed by the impact of the pandemic. Social distancing or restrictions on activities outside the home, for example, would severely reduce the number of customers needed by these SMEs to survive.

The resilience concept has been used to describe a process of recovery and transformation in SMEs (Korber & McNaughton, 2018). There is a doubt that SMEs are resilient in the pandemic given these firms so sensitive to environmental disruption (Župerkiénė et al, 2021). SMEs’ resiliency could be detected by the optimistic attitude they have under this environmental disruption. Optimism is known to be an indicator of resiliency (Alberti et al., 2018). It follows that if we could detect much optimism in the SMEs population, we could infer that the SMEs were generally resilient under Covid-19 disruption.

This study aims to determine the resilience of Indonesian SMEs with the current pandemic. This research will be useful in reviewing the current condition of SMEs in Indonesia and how they can develop with the support of policies. In this research, we use the PESTEL framework to explaining Indonesian SMEs’ behavior in the pandemic. This study contributes to the literature by examining questions that probe the external factors affecting SMEs’ resilience in the Covid-19 pandemic situation. This contribution is significant since SMEs are the backbone of Indonesian economics, deeply rooted in local foundations. The ability of external factors to influence SMEs’ resilience will justified government interventions to support these economic motor.

LITERATURE REVIEW

THE FATE OF SMES IN THE COVID-19 ERA

A previous survey found that microbusinesses are the most at risk and in general, of all SMEs, 61% are at risk of running out of cash during a pandemic (Cowlings et al., 2020). A survey in China found that most SMEs were unable to continue their business due to a lack of pandemic mitigation materials, the inability of employees to return to work, disruptions to supply chains, and decreased market demand (Lu et al., 2020). The study confirms that SMEs are badly affected by the Covid-19 pandemic so that without government intervention, SMEs will not be able to survive long through the pandemic (Razumovskaia et al., 2020). Nurunnabi (2020) claims that government assistance is quite effective in ensuring the survival of SMEs in Saudi Arabia.

Apart from government stimulus, SMEs are trying to survive in various ways, one of which is by utilizing digital technology. Many SMEs carried out accelerated digitization in the pandemic era, but research is still very rare that attempts to review the impact of this digitization on the resilience of SMEs (Papadopoulos et al., 2020). In Indonesia, previous research has identified three SME strategies in the industrial sector in response to Covid-19 (Priyono et al., 2020): SMEs with high ICT maturity accelerate digital transformation, SMEs with low maturity but experiencing liquidity problems only digitize the marketing function, and SMEs with very low digital literacy but high social capital are trying to find partners who have satisfactory digital capabilities. Priyono et al.’s (2020) research is qualitative and only reviews eight SMEs in the industrial sector, which is certainly not representative enough to describe the diversity of SMEs in Indonesia.

This study seeks to fill this gap by using secondary data that includes a large number of SMEs based on data collected by government statistical agencies in each province in Indonesia. In this way, we can see the broader impact of the pandemic on SMEs.

THE INFLUENCE OF PESTEL ON SME RESILIENCE

The SME literature generally reviews the resilience of SMEs from the perspective of resource-based view theory (Raymond et al., 2018). This means that the survival of SMEs is supported by the ability of individuals to make the best use of resources (Safari & Saleh, 2020). But lately, the contingency perspective has increasingly surfaced in discussing the resilience of SMEs (Mole et al., 2017). The contingency perspective puts forward external factors as a source of survival for SMEs (Sardi et al., 2020). Including these factors are political, economic, social, technological, environmental, and legal factors, which are summarized as PESTEL. PESTEL analyzes the ability of an entity to survive based on external aspects (Chege & Wang, 2020). PESTEL has been used in exploring the macro-environment that allows the survival of entities in certain situations, including pandemic situations (Gamage et al., 2020). PESTEL dimensions help model factors that are important in driving the continuity of the entity (Mostafavi et al., 2020).

The dimensions of PESTEL are very broad because they are a concept which from the start includes macro things. The political dimension can include regulatory frameworks, partnership models, financial subsidies, or policies that promote adaptation. The economic dimension includes, for example, investment policies, tax relaxation, and cost reduction. The social dimension includes, for example, community dynamics and disturbances, community awareness, and compensation for local communities. The technological dimension concerns marketing technology, supply chain, or disinfectant technology. The environmental dimension includes environmental policies to combat pandemics and pollution control. The legal dimension can be in the form of developing legal policies and compliance with the law (Thakur, 2021).

The diagram in Figure 1 serves as a visual representation of the PESTEL effect on SME Resilience in the Covid-19 pandemic. It shows that each component of PESTEL may influence SME resilience. Based on the nature of our dataset, we operationalize SMEs’ resilience as SMEs’ optimism to develop their business during or after the pandemic. This is in line with previous research that found optimism is an enabler for SMEs’ resilience (Alberti et al., 2018; Korber & McNaughton, 2018; Župerkiénė et al., 2021). Župerkiénė et al (2021) conclude that SMEs’ resilience facing the Covid-19 pandemic is maintained by several strategies, including strategies to engage employees so that they do not lose optimism. Korber and McNaughton (2018) review literature on SMEs’ resilience and noted that optimism is usually used as a synonym to resilience or at least, become a part of the concept. Some
authors, such as Walmsley (2019) argued that optimism not a good indicator of resilience because even optimistic firms may not undertake any measures to address the problem they face. However, various case studies show that optimism important to the speed of a firm to recover after a disaster (Mendoza et al., 2018).

METHODS

The methodological approach used by this research is descriptive quantitative using secondary data from the Indonesian Central Statistics Agency (BPS). In July 2020, BPS conducted a national survey to determine the impact of the Covid-19 pandemic on the business world. The business world is divided into large companies, medium and small companies (SME), and agricultural companies. A large number of indicators are used to measure the impact of a pandemic, but researchers only take a few indicators that are relevant to the resilience of SMEs.

BPS conducts surveys nationally and locally. Several provinces have produced separate reports from the report made by National-Level BPS, regarding the impact of Covid-19 on the business sector in their provinces. Indonesia consists of 34 provinces. Of the 34 provinces, only 10 provinces reported their survey results on the impact of Covid-19 on the business world in their provinces. Of these 10 provinces, only seven have complete measurements on the parameters used by this research. The remaining 24 provinces report collectively (along with 10 provinces that also report individually) in a national level report. To add to the data, the researcher included data from the national level, so that the total data used consisted of seven provincial-level reports and one national-level report. Samples from seven provinces covered 30% of the total national sample (7,544 SMEs to a total of 25,256 SMEs).

The following table reports all areas and SME samples used by each report. Report from national level BPS has the largest sample size followed by a report from Central Java province. This fairly in line with the population in the province where Central Java is one of the most populous provinces in Indonesia. Central Kalimantan has the least SMEs samples, using only 327 SMEs for their report.

<table>
<thead>
<tr>
<th>No</th>
<th>Region</th>
<th>Sample Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>North Sumatra</td>
<td>1,173</td>
</tr>
<tr>
<td>2</td>
<td>Bangka Belitung Islands</td>
<td>645</td>
</tr>
<tr>
<td>3</td>
<td>Lampung</td>
<td>750</td>
</tr>
<tr>
<td>4</td>
<td>Banten</td>
<td>861</td>
</tr>
<tr>
<td>5</td>
<td>Central Java</td>
<td>3,076</td>
</tr>
<tr>
<td>6</td>
<td>Central Kalimantan</td>
<td>327</td>
</tr>
<tr>
<td>7</td>
<td>East Nusa Tenggara</td>
<td>712</td>
</tr>
<tr>
<td>8</td>
<td>National (34 Provinces)</td>
<td>25,256</td>
</tr>
</tbody>
</table>
There are four groups of indicators that researchers collect from secondary data. The resilience of SMEs is approached with one indicator, namely a plan to develop the business after the pandemic ends. Respondents were asked to take one of three options: none, but still in the form of ideas, and exist and have been documented. Two later options combined to show the percentage of SMEs which have a plan to develop the business after the pandemic ends. The differences between these two options are not very obvious for Indonesians, where oral culture is still strong and written documentation of ideas is not prioritized, especially since there is no formal requirement to do this. BPS provides other data, namely the belief that they will be able to survive more than three months without assistance and the mitigation strategies taken to face Covid-19. Even so, BPS does not disaggregate the data obtained based on the size of the business, so the data provided is a mixture of responses from SMEs, large companies, and the agricultural sector. There is only one BPS publication, namely a publication from West Java that carries out this sorting. From these data, it is known that only 22.22% of SMEs in West Java are sure that they will survive more than three months without assistance; and that the strategies are generally taken by SMEs to cope with the pandemic are reducing working hours (28.09%), diversifying products (20.92%), and expanding to online businesses (49.2%) (BPS Provinsi Jawa Barat, 2020).

Three other groups of variables are drawn directly from the classification made by BPS, namely the impact of the Covid-19 pandemic, efforts to maintain safety, and the need for support to be able to continue the business. The variables that fall into the impact category of the Covid-19 pandemic are (1) employee reduction, (2) income reduction, (3) demand decrease, (4) bad impact on a partner, and (5) financial difficulties. Variables that fall into the category of safety measures include (1) physical distancing, (2) handwashing/hand sanitizer, and (3) masks/face shields. The variables that fall into the category of assistance needed by SMEs are (1) need business capital assistance, (2) utilities bill relief, (3) relaxation/delay in loan payments, (4) ease of administration of financing applications, and (5) postponement of tax payments (tax relaxation).

The analysis began with a set of descriptive statistics of the variables. Variables were described by reporting the percentage of SME samples experienced in the variable in question. Column charts were employed to visually inspect each variable for percentage comparisons. Apart from descriptive analysis, the researcher also conducted correlation analysis to determine the correlation between the variables of resilience and the variables of impact, safety, and assistance needed. The correlation test was chosen because the number of samples to be analyzed was very small (only eight samples), even though each sample represented a very large sample of SMEs. We have to test whether difficulties from Covid-19, the safety measures, plan for future development, and supportive measures connected.

RESULTS

DIFFICULTIES FROM COVID-19

As shown in Figure 2, the main impact of the Covid-19 pandemic on SMEs in Indonesia is income reduction. Nationally, 84.2% of SMEs experienced a reduction in income. This figure is higher than that found in Russia, where only 78% of SMEs experienced a reduction in income (Razumovskaia et al., 2020). Interestingly, the impact of Covid-19 was lowest in Eastern Indonesia where the lowest income reduction was in Central Kalimantan and East Nusa Tenggara, both of which were below 80%. Meanwhile, the Java region (Banten and Central Java) experienced the worst impacts where these two provinces were the highest in almost all parameters of the impact of Covid-19.
SAFETY MEASURES

As can be seen in Figure 3, adherence to health protocols as safety measures for the pandemic was lowest in the North Sumatra region compared to other places studied. Nationally, the average level of compliance is 80% in terms of physical distancing, handwashing/hand sanitizers, and face masks.
PLAN FOR FUTURE DEVELOPMENT
Figure 4 shows that between 40-60% of SMEs have future business development plans if Covid-19 ends. Two provinces (Bangka Belitung Islands and Banten) have the most enthusiasm for development where above 60% of SMEs have plans to develop their business. Nationally, about half of SMEs in Indonesia have plans to encourage business development.

SUPPORTIVE MEASURES
An interesting pattern emerged when SMEs were surveyed regarding their business support needs. Nationally, the problem of capital is the most important, where 69.02% of SMEs require additional capital in their business. However, the provinces in the outer Java-Sumatra region are the lowest in need of additional capital. At the same time, these two provinces are most in need of tax reductions. Meanwhile, provinces in the Sumatra region most need the relaxation of loan installments.
BIVARIATE CORRELATION ANALYSIS

The amount of data in this study consisted of only eight groups so that the options for possible quantitative analysis were very limited. Bivariate analysis is a possible option where the minimum sample requirement is eight data per variable (ITRC, 2013), the same as the number of data groups in this study. Because the main variable in this study is the resilience of SMEs, which will be operationalized by the existence of future development plans, this variable will be correlated with other variables in the three groups of variables above (impact, safety, and supportive measures). All data were normally distributed as tested by the Kolmogorov-Smirnov test. Tables 2, 3, and 4 show the results of Pearson's correlation analysis for the study variables.

Table 2 Results of the Correlation Analysis of the Development Plan Variables and the Impact of Covid-19

<table>
<thead>
<tr>
<th></th>
<th>Employee reduction</th>
<th>Income reduction</th>
<th>Demand decrease</th>
<th>Bad impact on partner</th>
<th>Financial difficulties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Correlation</td>
<td>.833</td>
<td>.790</td>
<td>.845**</td>
<td>.796*</td>
<td>.896**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.010</td>
<td>.020</td>
<td>.008</td>
<td>.018</td>
<td>.003</td>
</tr>
</tbody>
</table>

Note: *. Correlation is significant at the 0.05 level; **. Correlation is significant at the 0.01 level

Note that from the analysis results, all correlations are significant and positive. This means that the higher the impact felt by SMEs, the higher the plans for SMEs to develop their business in the future. Instead of giving up, SMEs in Indonesia are more eager to develop their business after Covid-19 after being faced with various problems due to the pandemic. This signals an optimistic stand that relates to SMEs' resilience (Korber and McNaughton, 2018).

Table 3 Results of the Development Plan Variable Correlation Analysis and Safety Measures

<table>
<thead>
<tr>
<th></th>
<th>Physical distancing</th>
<th>Handwashing</th>
<th>Face mask</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Correlation</td>
<td>.569</td>
<td>.283</td>
<td>.719*</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.141</td>
<td>.497</td>
<td>.044</td>
</tr>
</tbody>
</table>

Note: *. Correlation is significant at the 0.05 level; **. Correlation is significant at the 0.01 level

The table above shows that there is no significant correlation between the development plan and the safety measure except for the face mask, even this with a low correlation. The following table correlates the development plans needed with supportive measures.

Table 4 Results of the Development Plan and Supportive Measures Correlation Analysis

<table>
<thead>
<tr>
<th></th>
<th>Capital need</th>
<th>Debt relaxation</th>
<th>Utility bills discount</th>
<th>Financing easiness</th>
<th>Tax relaxation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Correlation</td>
<td>.796*</td>
<td>-.403</td>
<td>.425</td>
<td>.420</td>
<td>-.766*</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.018</td>
<td>.322</td>
<td>.293</td>
<td>.300</td>
<td>.027</td>
</tr>
</tbody>
</table>

Note: *. Correlation is significant at the 0.05 level; **. Correlation is significant at the 0.01 level

In the supportive variable group, two significant correlations emerged. First, capital requirements are positively correlated with development plans, suggesting that to survive, SMEs need additional external capital. On the other hand, tax relaxation has a negative correlation, indicating that SMEs do not require a tax reduction to survive.

DISCUSSION

This research found a statistically significant correlation between the severity of impact felt by SMEs and the plan to develop the business in the future, which denotes optimism, an indicator of resilience (Zuperkiene et al, 2021). We also found a significant correlation between capital need with the plans to develop the business and a negative correlation between tax relaxation with the plans to develop the business. Generally, it can be concluded that difficulties faced by SMEs push them to create a plan for future development and paying tax without relaxation, given the capital support from the government available.

Are SMEs in Indonesia resilient to Covid-19? Data from BPS on 25,256 SMEs in Indonesia shows that there is great optimism from at least half of the SMEs in Indonesia, which suggests that the answer is yes. But on the other hand, it seems very subjective. Besides, almost all SMEs face problems in various forms and need external help to survive. This resilience appears to be related to external factors, especially political, economic, social, and technological factors. These are the traditional factors of PEST which are simpler than PESTEL. Politics comes from government support in the form of capital assistance, which is why it is also related to the economic context. The Social Dimension plays a role by creating a collective drive. For example, the Islamic teachings adopted by most Indonesians view entrepreneurship as a major activity in earning a living income. Prophet Muhammad is an entrepreneur and the concept of fortune (rejeki) is more often prioritized by SME activists than risk.
Technology plays a role by helping SMEs in marketing products, for example through social media or online marketplaces. Although the report from West Java was not included because it did not contain future planning variables, the report from West Java provided important information. Of the 3,898 SMEs surveyed, 49.2% used the digitalization strategy by migrating to online sales. The influence of political factors also appears large because there is a great need for SMEs to increase their capital through government assistance in exchange for high tax compliance.

These external factors are contingent, not originating from within the SME itself. If they have large internal strengths, for example, capital, there will be no correlation or even a negative correlation between the spirit of development and the need for capital. However, what was found was a positive correlation between the need for capital and the intention to develop, indicating that these entrepreneurs have a desire to develop without having sufficient capital for it. This courage appears to have cultural roots, given the high resilience of Indonesian society due to long-standing maritime geographical conditions and the risk of large and haunting natural disasters. More than that, Islamic teachings that prioritize opportunity (fortune) rather than a threat (risk) can play a role in encouraging the spirit of doing business in Indonesian society.

If the government uses the results of the BPS survey as a guide for the development of SMEs during a pandemic, which they do, then these findings can provide additional policy contributions. The government can campaign for efforts to increase the entrepreneurial spirit of SMEs, especially those who feel hopeless and have no future planning. Business capital assistance programs can be accompanied by an obligation to attend training so that the funds provided can maximize business benefits. SMEs in Indonesia are calculative risk-takers (Pratono, 2018), enthusiastic about utilizing social media (Yuldiawati et al., 2018), and family-based (Kussudaryarsana et al., 2019), indicating that the resilience of SMEs is supported by social and technological factors.

CONCLUSION

This paper uses a BPS national survey of 25,256 SMEs in Indonesia to examine the resilience of SMEs in Indonesia in the face of the Covid-19 pandemic. This study provides evidence that SMEs in Indonesia have considerable resilience during the pandemic. We found high optimism among the SMEs that they have plans to develop the SMEs after the pandemic, indicating SMEs resilience (Mendoza et al., 2018). By adopting the PESTEL approach, we explain that this resilience is the result of external pressure where there is a kind of rebound effect that makes SMEs even more eager to develop due to the plight of problems from the Covid-19 pandemic. The greatest external influence appears to be technology.

The government can empower information technology and digital technology to help develop SMEs in Indonesia as well as provide social assistance through joint market activities. Further research is needed to examine whether, after the pandemic, SMEs in Indonesia experienced a bigger spike such as during the crisis or the introduction of a new information and communication technology. We also need to find out whether the rebound effect occurs on SMEs facing the pandemic. The increasing number of post-disaster SMEs can be seen as a community response to the environment to keep people cohesive in disaster situations (Sauser et al., 2018).

This study has at least two drawbacks. First, the sample data group used was minimal. If BPS throughout Indonesia can publish their survey results, the number obtained could reach 34 data clusters and national data is not required for analysis. Even so, given the limited data available, we are still able to produce empirical conclusions that can be tested in broader further research, including those using primary data such as questionnaire-based research on SME actors.

Second, the survey conducted by BPS uses online questionnaires and remote interviews so that there is a potential for bias to select SMEs that have sufficient information technology capabilities or capabilities. Further research needs to use samples of SMEs that are difficult to digitize, such as SMEs that sell fresh or agricultural food, so that they can achieve a more comprehensive classification of SMEs.

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