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# Adaptation Level of Small Enterprises to the Covid-19 Pandemic in Lebak Regency, Banten Province, Indonesia

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## Abstract

The Covid-19 pandemic required changes in the norms of life that communities have long embraced. The government of Indonesia also pursued intervention to limit social interaction. As a result, small entrepreneurs have suffered a significant slump in turnover and lost customers or business partners. They have to be adaptive to the Covid-19 pandemic to sustain their business. This article described the adaptation of small entrepreneurs in Lebak Regency, Banten Province, Indonesia to the Covid-19 pandemic. This study was survey research. Data were analyzed using the Chi-square test. The study showed that gender, access to the information, and business capital of the small enterprise owner had a relationship to their capacity to adapt to the Covid-19 pandemic which is related to their level of adaptation. This finding emphasizes the importance of broadening the access of small business owners to the required resources to adapt to the Covid-19 pandemic.

**Keywords:** Adaptation, Covid-19, Sustainability, Pandemic, Small Enterprise

## 1. Introduction

The Covid-19 pandemic that has spread to almost all regions in Indonesia has wreaked an impact on various sectors of life. Particularly, the economic sectors that are in direct contact with the people's livelihoods (Olivia et al., 2020). This condition ultimately led to a dramatic loss of opportunities, income levels, and even the business sustainability of small entrepreneurs. Although, history has proven that the form of small and medium enterprises (SMEs), especially the local SMEs, had succeeded in demonstrating their ability to support the national economy from the hit of the monetary crisis of Indonesia in 1999 (Tambunan, 2019).

The Covid-19 pandemic also became an economic crisis (Irawan & Alamsyah, 2021). It is mainly because the virus is invisible and threatens human safety, so its emergence requires changing the norms of life that lead to restrictions on social interactions, including interactions in economic activities. Various changes occur during the Covid-19 pandemic, such as production patterns (Uğur & Buruklar, 2022) and consumer behavior (Zwanka & Buff, 2020) that will shift or reform as well. This condition obliges small entrepreneurs to adopt these changes, as



### 3.1 Characteristics of respondents

The average age of the respondents is 45.34 years with an age range of 23 to 68 years and is dominated by male small entrepreneurs. Most of the respondents are of productive age. Hence, they still could develop their business, although most of them have relatively low formal education. It is following the results of research by Ardiana, et al. (2010) and Seran (2016) stated that generally, workers in the micro, small and medium enterprises (SMEs) sector have a low education background.

The average number of dependents in the respondent's family is three people ranging from one to seven people. Most respondents have a family with three to four dependents (Table 1). Respondents have run their businesses for nine years on average. In general, they use personal savings for financing the business. Several respondents rely on both personal savings and loans from individuals and institutions. It is because most of the respondents have joined economic institutions by becoming members of cooperatives, bank customers, or associations of business actors such as associations of women entrepreneurs. We can conclude that many respondents have realized the essential role of economic institutions in business development. It is mainly related to access to capital, information, technology, mentoring, and marketing.

The Covid-19 impact on respondents' small businesses reduced profits by 47.42% in the range of 6.67 to 97%. Most of the respondents are agricultural product processing industry. Since the government implemented a policy of limiting community activities, many community members are also afraid of being exposed to Covid-19 if they leave the house, so they prefer to make their food. This condition is following the explanation of the Ministry of Cooperatives that around 163,713 SME actors were affected by the Covid-19 pandemic and the SMEs most affected were food and beverage businesses.

Table 1: Characteristics of respondents

Variable	Category	Number (People)	Percentage (%)
Age (year)	< 41 year	47	31.13
	41-50 year	64	42.38
	> 50 year	40	26.49
Gender	Male	94	62.25
	Female	57	37.75
Education level	≤ Junior high school	90	59.60
	≥ Junior high school	61	40.40
Number of dependent (people)	< 3	43	28.48
	3-4	83	54.97
	> 4	25	16.55
Length of business (years)	< 7	62	41.06
	7-12	58	38.41
	> 12	31	20.53
Sources of capital	Personal saving	92	60.93
	Personal savings and loans	59	39.07
Economic institutions	Joined	97	64.24
	Not joined	54	35.76
Exposure levels to the Covid-19 pandemic	Low	38	27.94
	Moderate	59	43.38
	High	40	29.41
Diversity of information sources	< 2 types	86	56.95
	2 types	48	31.79
	>2 types	17	11.26

Respondents' small business information sources are low diverse because most respondents only use one of four information source types commonly used to obtain information on small business development. The most widely used are personal or individual information sources, such as fellow business owners, raw materials suppliers, and marketers. Meanwhile, the information needed or transferred includes raw materials prices and availability, access to market products, market conditions or selling locations, the Covid-19 pandemic situation, also various adaptation actions to the Covid-19 pandemic.

In addition, Respondents use television and internet-based media to seek knowledge on business development (Table 2). The rapid advancement of information and communication technology has established digital media as an alternative information source that everyone could apply to seek information. This type of media has the characteristics of being easier to use, fast, complete, and without being constrained by space and time. When we need information, we can obtain them immediately because of the ease of search facilities (search engines) available. Andarwati and Sankarto (2005) explained that the internet is considered a sophisticated library with high technology that allows accessing information handily. Internet-based media usually used by respondents as a source of innovation information are WhatsApp and Facebook to find information and market opportunities, level of competition, and innovation. It showed that some respondents are literate in information and communication technology and keep up with the times.

The low proportion of respondents who use marketing institutions as a source of information is due to the lack of knowledge regarding this institution. A search at the research site reveals that the role of marketing institutions in the Rangkasbitung market has not functioned optimally in carrying out marketing functions and meeting consumer needs. Therefore, most respondents are reluctant to seek information from these marketing agencies. Besides, SMEs generally have limited access to productive sources such as technology, markets, and information.

Table 2: The proportion of respondents who use every source of information for business

Source information	The proportion of users (%)
TV	37.09
Internet-based media	34.44
Personal	71.52
Marketing institution	15.89

### 3.2 Respondents adaptive capacity to the Covid-19 Pandemic

We measured the adaptive capacity of respondents to the Covid-19 pandemic by the respondent's ability to access the resources needed to take action to deal with the Covid-19 pandemic, such as capital assistance, information on innovation and technology, communication, training, and partnerships with other businesses aimed at sustaining the business. The adaptability capacity of most respondents is in the medium category. It means that most respondents afford to access the resources needed to adapt to the Covid-19 pandemic. Meanwhile, although there are fewer, the proportion of respondents with low and high adaptive capacity is almost equal.

Table 3: Number and percentage of respondents based on adaptive capacity to the covid-19 pandemic

Adaptive capacity	Category	Number (people)	Percentage (%)
< 19.97	Low	25	16.56
19.97 - 22.85	Moderate	98	64.90
> 22.85	High	28	18.54
Total		151	100

Table 4 shows that even during the Covid-19 pandemic, most respondents afford to access suppliers of raw materials needed for production. However, almost half of respondents found difficulties accessing consumers which indicated a decline in sales levels, income, and ability to pay labor wages. Therefore, it can be understood

why only a few respondents were able to get business capital assistance because the creditors would refer to the shocking economic conditions amid the pandemic. Meanwhile, the lowest adaptive capacity to the pandemic was accessibility to other business opportunities besides existing businesses and business partnerships with other parties. This finding confirms the strong impact of the Covid-19 pandemic on small entrepreneurs, where most business actors, alternative enterprises that may be occupied, and the availability of resources needed for business development are both under pandemic stress.

Table 4: The proportion of respondents who afford to access resources to adapt to the Covid-19 pandemic

Resources	The proportion of respondents (%)
Business capital assistance	35.09
Raw material supplier	80.79
Consumer	54.30
Labor wages	55.62
Information on business innovation	40.39
Online marketing tools	44.37
Other business opportunities rather than the existing	19.86
Business partner	23.84
Business development training	21.85

Almost half of the respondents indicated that the ease of accessing online marketing tools was sufficient to increase the respondent's adaptive capacity to the Covid-19 pandemic. Internet-based information and communication technology tools are not only useful for marketing products online, but also could be applied to search for business innovation information and overcome the difficulty of accessing offline business development training suffered by most respondents. That difficulty appeared due to the limited frequency and intensity of interaction of community members during the pandemic as a form of implementing social distancing.

### 3.3 Adaptation level of respondents to the covid-19 pandemic

We measured the adaptation level of business owners based on the diversity of actions taken by respondents to adjust their business during the Covid-19 pandemic. Most of the respondents have a high level of business adaptation (Table 5). This finding shows that respondents are making various efforts so that their businesses can survive during the covid-19 pandemic.

Table 5: Number and percentage of respondents based on the level of adaptation to the covid-19 pandemic

Adaptation level	Category	Number (people)	Percentage (%)
< 1.73	Low	44	29.14
1.73 - 3.00	Moderate	49	32.45
> 3.00	High	58	38.41
Total		151	100

Table 6 shows that most of the respondents have adapted to the Covid-19 pandemic by reducing production volumes and reducing the workforce. These actions were interrelated because the volume of production is largely determined by the number of workers. These strategies were quite realistic to implement considering that during the Covid-19 pandemic, community movements were restricted through large-scale social restrictions (PSBB) by the government, so community mobility was reduced, especially in the tourism sector which led to a decrease in demand for SMEs products. This finding is in line with Barisa (2021) found that some SME actors adapted by reducing the supply of goods during the Covid-19 pandemic.

Table 6: The proportion of respondents in each type of business adaptation action during the covid-19 pandemic

Business adaptation actions	The proportion of respondents (%)
Reducing labor	40.40
Reducing production volume	47.68
Marketing products online	26.49
Resizing product	25.83
Increasing business capital	22.52
Join other business owners	18.54
Switching to other business	18.54
Changing the shape of the product	15.89
Decreasing selling price	11.26
Adding production technology	6.62
Decreasing labor wages	2.65
Product diversification	0.66

Many respondents also took other adaptation actions by shifting the way of marketing products from offline to online. It indicated that during the Covid-19 pandemic, since the limited movement of consumers, many business owners have innovated product marketing by utilizing social media such as Facebook, Instagram, and WhatsApp to survive and even develop their businesses. Other studies conducted by Rosi and Makruf (2020), Hardilawati (2020), and Rosmadi (2021) revealed that many SME owners managed to rise during the Covid-19 pandemic by using social media as their online product marketing tools. This condition showed the importance of guidance on using and managing digital media to lead business owners can determine the appropriate kind of digital media for marketing their products and increasing awareness and public interest in the products. Training and guidance give a positive impact on small entrepreneurs to increase their knowledge regarding general digital media, various media that are available to use, and skills to use and manage the digital media for branding (Raharja and Natari 2021).

On the other hand, the Covid-19 pandemic impact has brought the supply of raw materials to be hampered and difficult to gain in the market. The price of raw materials has also been higher than usual. For dealing with this condition, many respondents took adaptation action by increasing their business capital. Some respondents also changed the product size but did not reduce the selling price, hence production continuity, product availability for consumers, and business profits could be maintained.

A few respondents took other adaptation actions such as reducing selling prices or labor wages, adding production technology, and diversifying products. They considered these actions to be challenging to take or pose a risk to their business continuity, including strategies to change the shape of products that are more embedded in consumer perception. Many respondents decided to merge their business with the other businesses (partners), both of the same type or different types. Moreover, some respondents turned to other businesses to prevent losses. This condition indicated the importance to conduct socialization, introduction, training, and mentoring activities for small entrepreneurs, such as those carried out by Kusnandar et al. (2020) by introducing packaging and promotion technology, as well as business innovation training for small entrepreneurs.

### *3.4 Relationship between respondents' characteristics and adaptive capacity to the covid-19 pandemic*

The chi-square (Equation 1) was applied to test the relationship between the characteristics and adaptive capacity of the respondents. The chi-squared test shows that there is a significant difference in the adaptive capacity in running a business during the Covid-19 pandemic based on gender, diversity of sources of capital, and diversity of small business information sources from the respondents, which is indicated by a p-value smaller than 5% (Table 7). In addition, there is no difference in the adaptive capacity of respondents in business during the Covid-19 pandemic based on other characteristics of respondents such as age, education level, number of family dependents, length of entrepreneurship, membership in economic institutions, and exposure to the Covid-19

pandemic on the respondent's business. It can be interpreted that the more diverse sources of information and sources of capital, respondents tend to have more adaptive capacity in doing business during the Covid-19 pandemic.

Table 7: The significance level of the relationship between respondent characteristics and adaptation capacitation to the Covid-19 pandemic

Personal Characteristics	Value	Df	Asymp. Sig. (2-sided)
Age	1.976 <sup>a</sup>	4	.740
Gender	6.073 <sup>a</sup>	2	<b>.048</b>
Level of education	3.006 <sup>a</sup>	4	.557
Number of dependents	4.587 <sup>a</sup>	4	.332
Long of business	1.989 <sup>a</sup>	4	.738
Various sources of capital	8.264 <sup>a</sup>	2	<b>.016</b>
Membership in economic institutions	0.947 <sup>a</sup>	2	.623
Exposure to the Covid-19 pandemic on small businesses	0.241 <sup>a</sup>	2	.886
Diversity of information sources	15.497 <sup>a</sup>	4	<b>.004</b>

a. 0 cells (.0%) have expected count less than 5

Table 7. shows the importance of increasing the adaptive capacity of women small entrepreneurs, as well as increasing the access of small entrepreneurs to business information and capital to maintain the business continuity of small entrepreneurs. A study by Ruhyana et al. (2021) also agreed on the importance of increasing access to business information. The study explained that efforts to boost the resilience of SMEs to the Covid-19 pandemic are to increase adaptive capacity, for example through the expansion of internet signal coverage. Meanwhile, various sources of capital are closely related to the adaptive capacity of respondents because the first impact of the Covid-19 pandemic is the decline in the number of product requests from business actors due to the implementation of health protocols during the pandemic. This result is in line with the research of Hartono et al. (2021) who revealed that the provision of a new financing model provides many advantages for SMEs actors during the pandemic, especially in the financial, marketing, and product aspects, such as product development innovation and online marketing, ease of credit application, business assistance and flexible credit returns.

### 3.5 Relationship between adaptive capacity and adaptation level respondents to the covid-19 pandemic

The p-value that is smaller than 5% in Table 8 shows the differences in the level of adaptation of respondents based on the respondent's capacity to adapt to the Covid-19 pandemic. Respondents with higher adaptive capacity in running their business during the Covid-19 pandemic tend to be more adaptable to the Covid-19 pandemic, compared to respondents with lower adaptive capacity.

Table 8: The significance level of the relationship between adaptive capacity to the covid-19 pandemic and the adaptation level of respondents

	Value	Df	Asymp. Sig. (2-sided)
Adaptive capacity	19.320 <sup>a</sup>	4	.001

a. 0 cells (.0%) have expected count less than 5

This finding shows that small entrepreneurs could adapt to the Covid-19 pandemic as long as they have adaptive capacity. Nelson et al. (2007) confirmed adaptive capacity as the prerequisites needed to adapt, including social and physical elements and the ability to mobilize these elements. This condition is represented by available resources compilation and the capability of the system to respond to disturbances and includes the capacity to design and implement effective adaptation strategies to coexist with current and future events. Thus, the access of

small entrepreneurs to the required resources to adapt has to be improved to guarantee that small entrepreneurs could maintain business continuity.

#### 4. Conclusion and recommendation

Gender characteristics, as well as access to information and business capital, were related to the adaptive capacity of small entrepreneurs in Lebak Regency to the Covid-19 pandemic. On the other hand, adaptive capacity was related to the level of adaptation of small entrepreneurs in the Lebak Regency. We recommend to the Lebak Regency Government maintain the sustainability of small businesses in its area during the Covid-19 pandemic by increasing the adaptive capacity of small entrepreneurs in Lebak Regency through:

1. Training and business assistance during the Covid-19 pandemic for women small entrepreneurs.
2. Increasing access of small entrepreneurs to sources of business development information by establishing a business development information center during the pandemic that provides information services, consultations, and disseminates its media during the Covid-19 pandemic such as brochures, leaflets, posters, and flyers.
3. Increase innovation, technology, and inspirational content related to small business development during the Covid-19 pandemic on local television.
4. Providing internet quota aid to small entrepreneurs during the Covid-19 pandemic.
5. Increasing the role of existing marketing institutions by providing training and service management assistance to small entrepreneurs.
6. Increasing access of small entrepreneurs to financial institutions through a capital loan distribution program for small entrepreneurs affected by Covid-19 by establishing cooperation with cooperatives and banks.
7. Providing capital aid for small entrepreneurs.

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