



## **Economy Impact of the COVID-19 Prevention Policy on Business Continuity and Welfare of Street Vendors**

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<https://doi.org/10.18280/ijstdp.170612>

### **ABSTRACT**

**Received:** 17 May 2022

**Accepted:** 9 August 2022

**Keywords:**

*business continuity, COVID-19, impact, street vendors, welfare*

There is quite a lot of research on COVID-19, but research on the impact of COVID-19 prevention policies on business continuity and the welfare of street vendors has not been widely studied. This study examines the economic impact of COVID-19 prevention policies on business continuity and the welfare of street vendors. The regression value or the effect of the COVID-19 prevention policy on business continuity is 0.918. The coefficient of determination is 0.842, which means that the impact on business continuity is 84.2%. The regression value of the COVID-19 prevention policy on the welfare of street vendors is 0.934, with a coefficient of determination of 0.873. This means that the impact of the COVID-19 prevention policy on the welfare of street vendors is 87.3%. This study has limitations in one location in Semarang, and the research subjects are mostly culinary street vendors. The direction of future research is the impact of policies related to the pandemic or national economic crisis and the global crisis on the business continuity of street vendors and other informal economy business actors.

## **1. INTRODUCTION**

Street vendors are an informal economy business that has an essential function in the economic system; even in some countries, it supports the income of the poor [1, 2]. Street vendors could be found in third-world countries, especially in Asia and Africa [3-5]. However, the middle-income group is in great demand in these recent developments in informal economy activities. In the last 20 years, many middle-class groups in Semarang city have started as street vendors, either by opening small stores or selling public spaces. They use motorbikes as a means of trading, but many use pedicabs and cars [6]. Those who use cars as a means of commerce generally want to profit without paying a lot for permits, taxes, user fees, and others. The ease of mobility makes traders prefer to use cars or motorcycles to run their business. The business activities of street vendors were disrupted when the world was hit by COVID-19 [7-11].

The disease caused by the Coronavirus was first reported in Wuhan, China in 2019 and then spread to various countries [12]. This COVID-19 is like the SARS outbreak in 2002 and MERS in 2012. The World Health Organization officially declared the COVID-19 pandemic [13, 14]. The world's exposure to COVID-19 is enormous. On June 29, 2020, the total number of humans in the world who were infected with COVID-19 was 10,384,933 people, 5,643,645 people were cured, and 507,234 people died [15]. The following year, the number of people exposed to COVID-19 increased sharply in

every part of the world. As of September 21, 2021, WHO data showed that 227,940,972 people had been exposed to COVID-19, and 4,682,899 people had died. In Indonesia, the number of positive cases on June 30, 2021, was 2,178,272 people, of which 1,880,413 people were cured, and 58,491 people died from Coronavirus [16]. This number is among the highest compared to other countries in ASEAN. Because of this, Indonesia has been declared the epicenter of COVID-19 in Asia, surpassing India, which in early 2021 experienced an unusually large spike of positive cases [17]. On October 23, 2021, the confirmed positive numbers rose to 4,239,396, with 4,081,417 people cured and 143,176 declared dead.

The Coronavirus impacts human health and safety because the number of people exposed from time to time is increasing [18]. The impact of COVID-19 is not only in the health sector but in other areas of life, especially the economy. The influence of COVID-19 on economics that is not properly handled can disrupt the survival of a country. The Coronavirus caused many countries to experience a slump in economic growth [19].

Indonesia also experienced a similar impact on Micro, Small, and Medium Enterprises (MSMEs) businesses, including street vendors related to financing, production, distribution, and market demand. This problem is reasonable because even though they are independent business actors, their continuity depends on government policies.

Governments in various countries have taken policies to save citizens from the transmission of COVID-19. Various

government policies were adopted, including the policy of restricting community mobility. The policy was taken to suppress the spread of the virus and save human lives. These policies can overcome health problems but impact the disruption of community economic activities. To illustrate, social restriction policies in Indonesia, starting from the largest-scale social restriction policy in 2020 to the implementation of restrictions on community activities in 2021, affect the decline of the Indonesian economy.

This government policy affects the economic decline of large-scale business actors from small, micro, and medium enterprises. The street vendors' business is also affected by the government's policy. Knowledge about COVID-19 is needed by business actors so that they can adapt to the current situation to run their businesses. It is suspected that the knowledge of street vendors about the COVID-19 is limited and there is a lack of socialization from the local government.

There is a lot of research on COVID-19 and its effects. Most studies examine the impact of COVID-19 on physical and mental health and education [20-26]. Research on the effects of COVID-19 on the country's economy and society is reasonably available [27-31]. Still, research on the economic impact of COVID-19 prevention policies on business continuity and street vendors' welfare is not yet found, which is why this research fills the research gap on the effects of COVID-19 prevention policies on business continuity and welfare of street vendors. This is the novelty of this research, which is expected in future research to examine the impact of government policies related to COVID-19 or other crises on the business continuity of street vendors and other informal economies.

Based on this background, the problem of this research is that street vendors are experiencing social and economic impacts from the COVID-19 because of government policies in implementing social restrictions to reduce the spread of COVID-19. Therefore, the research questions in this study are (1) how big is the economic impact of the COVID-19 prevention policy on the business continuity of street vendors and (2) how significant is the economic impact of the COVID-19 prevention policy on the welfare of street vendors?

This paper starts with an introduction to the need for this research topic. The introduction explains how COVID-19 and government policy in the informal economy. The following section is a literature review with earlier research related to the informal economy and welfare on the COVID-19 prevention policy. The methodology uses quantitative design, and the sample uses an accidental proportional sampling technique, the analysis data uses a multiple linear regression test. The final part summarizes the findings with policy recommendations.

## 2. LITERATURE REVIEW

Many studies explain that urbanization in urban areas affects the development of the informal economy and appear problems, namely high-income inequality among urban residents [32].

The research results [33] explained that rapid industrial activities drive the pace of urbanization in cities. Capital-intensive industries generally use high technology and efficient human labor. The workforce needed by the industry is skilled and educated. Many unskilled and uneducated job seekers are displaced from capital-intensive industries, the

formal economic sector. People need to live and support their families, so they choose to leave their village to work in the big city. Those who are not absorbed formal economic then enter the informal [34]. Informal economics is a foam, at the same time, a safety valve for urban life.

The informal economy is the choice of the unskilled and uneducated urbanites because this sector is easily accessible. The informal economy has characteristics, such as being easy to employ, related to local resources, primarily family-owned, small operating activities, limited workforce capacity, unorganized and unregistered [33, 35].

The informal economy has a close relationship with the formal sector [36-39]. The informal economy depends on the formal economy. The informal economy is often exploited by the formal economy, especially as a supply chain for the formal economy. It could be that the informal economy becomes smoother for the wheels of the formal economy.

Among the many informal economy activities, street trading activities are informal economic activities chosen by many urbanites. Those engaged in street trading are called street vendors (PKL) [40-42]. Most street vendors run their businesses on the streets, sidewalks, and other public spaces. Most of them are classified as unregistered and illegal street vendors [43].

In running an informal economy business, street vendors can adapt to the environment and conditions that suppress their existence due to government policies or uncertain world economic conditions. The role of the informal economy, especially street vendors during the 1998 Indonesian economic crisis, proved that street vendors could adapt well and even became a savior for the poor who lost their jobs [44]. Unlike formal economic entrepreneurs, street vendors can survive the problems plaguing them. It is not uncommon for them to quickly obtain products on credit from their suppliers. Trust from suppliers is very reasonable because street vendors generally never break their promises to pay their debts. The formal and informal economy is evident from the activities carried out by street vendors and other informal economy business actors.

Respiratory disease due to the coronavirus was not first discovered in Wuhan, China, but it is estimated that the virus in Wuhan caused the COVID-19 pandemic in the world. The world population is estimated to be hundreds of millions, and those who have died have reached tens of millions. Social mobility experienced a pause, so humans began to rearrange their ways of life to maintain their health. Even amid limitations, humans carry out physical activities by exercising at home or in the surrounding environment to remain healthy [45]. In anticipating the Coronavirus, every country has made a social restriction policy so the positive rates will not increase [46]. The importance of maintaining social distance is one way to stop the transmission of COVID-19 [47]. For instance, Indonesia issued a regulation to coordinate the handling of COVID-19, limiting its spread [48].

In Indonesia, Coronavirus was found in March 2020. Until 2021, the number of Indonesians exposed to COVID-19 has reached millions, and tens of thousands have died. Liputan 6 reported that up to July 27, 2021, the Indonesian population exposed to COVID-19 was 3,239,936, and 86,835 died [49]. As of October, more than 4 million people have been confirmed positive for COVID-19, and more than 140,000 people have been declared dead.

To contain the spread of the virus, the Indonesian government decided to limit the social mobility of the

community; the policies known as largest-scale social restrictions are followed by the policy of enforcement of community activity restrictions and micro-scale community activities restrictions. This policy mainly limits community activities such as travelling between cities and provinces, gathering, inviting crowds, and selling.

The COVID-19 stood the informal economy activities, especially street vendors [50]. Government policies that restrict mobility in the community influence the activity of street vendors. This restriction can be done by those who carry out economic activities freely in public spaces with open working hours during a pandemic. Many street vendors suffer and lose because of government policies that prioritize public health over economic interests. Street vendors have lost income and savings used for daily consumption due to the Coronavirus outbreak [51-53]. In addition, informal economy entrepreneurs also survive during the pandemic [11].

To stay alive and support their families, street vendors must be creative in taking innovative strategies so that their business activities can run smoothly. Before the pandemic, there were many ways that street vendors did to run their micro-businesses, including decorating carts, putting up banners, promoting through social media, and using public spaces [54, 55]. During the pandemic, the strategies taken by street vendors to run their business smoothly include optimizing the resources they have, providing mobile transportation, reducing staff/workers, reducing expenses, and utilizing social network relationships [53, 56].

COVID-19 is expected to disrupt Indonesia's economic performance, such as the socio-economic crisis felt by almost all levels of society, declining demand and supply as well as consumption and production, and declining Indonesian export performance [57-60]. COVID-19 is also suspected of disrupting business continuity and the welfare of street vendors. Several studies showed the negative influence of the COVID-19 on the economic activities of street vendors and their welfare. Many small traders, such as meatball sellers, ice sellers, fried rice traders, "pecel" sellers, coffee drink traders, and others, have reduced turnover due to COVID-19 [61, 62].

### 3. RESEARCH METHOD

According to the research data, this research design is quantitative. This method is chosen to test and prove how significant the COVID-19 prevention policy impact is on the business continuity of street vendors and their welfare.

The subject of this research is the street vendors community that trades in six locations, namely in Simpang Lima Semarang, Pamularsih Street, Diponegoro Stadium Area, Waru Street, Sampangan, and Minister Soepeno Street Semarang. The reason for choosing these locations is because they represent all the street vendors' locations in Semarang.

The research population is all street vendors in Semarang City, registering as many as 3,850 traders. The sample uses a proportional random sampling technique because the population of street vendors is quite heterogeneous regarding educational background, business capital, types of goods, amount of street vendors, and mobility of street vendors. The research sample was 10% of the total population of 3,850 traders, with as many as 385 traders as respondents.

Research data were collected through questionnaires. The questionnaire was used to obtain data on COVID-19 prevention policies, the business continuity of street vendors, and the welfare of street vendors.

This research has two variables, namely COVID-19 prevention policy as an independent variable and business continuity and the welfare of street vendors as the dependent variable. The indicators of the research variables above are as follows.

No	Variable	Indicator
1	COVID-19 Prevention Policy	Policy for the Enforcement of Community Activity Restrictions (PPKM), COVID-19 socialization policy, physical health maintenance policy, health protocol implementation policy, COVID-19 vaccination policy, selling hours policy during the COVID-19 pandemic, and merchant service policies to buyers.
2	Business Continuity	Business growth per month (monthly income increase), amount of initial capital, amount of monthly money after the covid-19 pandemic, amount of reserve capital after the covid-19 pandemic, sources of capital, quality of products offered after the covid-19 pandemic, ability to compete or competitiveness business to similar businesses after the covid-19 pandemic, the condition of the business environment after the covid-19 pandemic, the number of products offered, the capital used, the monthly income, the duration of trading every day.
3	The welfare of street vendors	Owned assets/assets; savings in banks, cooperatives, or other money storage places; ownership of investments such as securities (land certificates, BPKB motorcycles/cars, etc.), deposits, gold investments, property businesses, investing in shares in cooperatives/limited company/other joint ventures; health fund per month; participation in health insurance; the place to go for treatment when sick; a number of recreations per month; recreational fund per year, recreational participants; recreation areas; recreational options; provision of social funds (to help others, donated to mosques, to orphanages, etc.)

A regression test was carried out to see the economic impact of the COVID-19 prevention policy on business continuity and the welfare of street vendors. As for the multiple linear regression test, that is by using the formula  $Y = \alpha + \beta X$ , with the rules of significance testing on F count F table with a significant level of 5% (0.05), then  $H_0$  is rejected and if F count F table with a significant level of 5% (0.05) then  $H_0$  is accepted. Regression tests in research data analysis using SPSS program assistance with linearity, normality, and heteroscedasticity tests were performed first. From the results of the linearity test, it was found that the p-value of the simultaneous test was 0.003, which means the data has a linear relationship. Meanwhile, from the normality test results obtained p-value or Asymp. Sig. (2-tailed) of 0.2 so that it is greater than alpha 0.05, which means that the residuals from the regression have met the normality assumption, or the data is normally distributed. Furthermore, from the results of the heteroscedasticity test, it was found that there was "Ha" marked by a large wave pattern which then narrowed, so it can be said that there were signs of heteroscedasticity. After the data is declared linear, normally distributed, and has heteroscedasticity, the next step is to test the effect of the

economic impact of the COVID-19 prevention policy on business continuity and the welfare of street vendors. The test results are then interpreted based on the hypotheses that have been prepared.

#### 4. RESEARCH RESULT

Analysis of the economic impact of the COVID-19 prevention policy on business continuity and the welfare of street vendors was carried out through a linear regression test. The steps taken were to examine the economic impact of the COVID-19 prevention policy on business continuity, then to test the economic impact of the COVID-19 prevention policy on the welfare of street vendors.

The effect of the COVID-19 prevention policy on the business continuity of street vendors is 0.918 (Table 1). The coefficient of determination of the COVID-19 prevention policy on business continuity is 0.842; meanwhile, the regression value of the COVID-19 prevention policy impact on the welfare of street vendors is 0.934 (Table 1). The coefficient of determination is 0.873. Here means that the effect of COVID-19 prevention policies on business continuity is 84.2%; while the effect of COVID-19 prevention policies on the welfare of street vendors is 87.3%.

The significance of the COVID-19 prevention policy on business continuity is 2043.513 (Table 2). The COVID-19 prevention policy has an impact on business continuity. The significant test results of the COVID-19 prevention policy impact on the welfare of street vendors are 2636.630 (Table 2). The COVID-19 prevention policy impact influences the welfare of street vendors in Semarang City.

The significance test through the t-test determines whether there is a significant effect of the COVID-19 prevention policy on business continuity and a significant impact of the COVID-19 prevention policy on the welfare of street vendors. The first hypothesis of this research is:

Ho: There is no significant effect of the COVID-19 prevention policy impact variable (X) on the business continuity variable (Y).

H1: There is a significant effect of the COVID-19 prevention policy impact variable (X) on the business continuity variable (Y).

The second hypothesis of this research is:

Ho: There is no significant effect of the COVID-19 prevention policy impact variable (X) on the welfare of street vendors variable (Y).

H1: There is a significant effect of the COVID-19 prevention policy impact variable (X) on the welfare of street vendors variable (Y).

The t-count value is 90.439 with a significance value of  $0.000 < 0.05$  (Table 3), then Ho is rejected, and H1 is accepted, which means there is a significant effect of the COVID-19 prevention policy on business continuity.

The regression equation in Table 3 shows a constant of 146.997. The regression coefficient for the impact of COVID-19 prevention policies on business continuity is -0.994. Here implies that the direction of the relationship between the COVID-19 prevention policy variable and the business continuity variable is negative. The X regression coefficient of -0.994 means that for every additional 1 (one) value of the COVID-19 prevention policy, the value of business continuity will increase by -0.994 (Table 3). If the COVID-19 prevention policy is carried out strictly, the business continuity of street vendors will be disrupted.

**Table 1.** Impact of COVID-19 prevention policies

	Impact of COVID-19 Prevention Policy on Business Continuity	Impact of COVID-19 Prevention Policy on Welfare Street Vendors
<i>R</i>	0.918	0.934
<i>R</i> <sup>2</sup>	0.842	0.873
<i>Adjusted R</i> <sup>2</sup>	0.842	0.873
<i>Std. The Error of the Estimate</i>	3.868	3.564

**Table 2.** The score of F regression

	Impact of COVID-19 Prevention Policy on Business Continuity	Impact of COVID-19 Prevention Policy on Welfare Street Vendors
<i>Sum of Squares</i>	30568.613	33497.550
<i>Df</i>	1	1
<i>Mean Square</i>	30568.613	33497.550
<i>F</i>	2043.513	2636.630
<i>Sig</i>	.000	.000

Significance level of 0.000 < 0.05

**Table 3.** The score of T

	Impact of COVID-19 Prevention Policy on Business Continuity		Impact of COVID-19 Prevention Policy on Welfare Street Vendors	
	(Constant)	COVID-19	(Constant)	COVID-19
<i>Unstandardised Coefficients B</i>	146.977	-.994	150.004	-1.040
<i>Unstandardised Coefficients Std. Error</i>	1.625	.022	1.498	.020
<i>Standardised Coefficients Beta</i>		-.918		-.934
<i>T</i>	90.439	-45.205	100.156	-51.348
<i>Sig</i>	.000	.000	.000	.000

The t-count value is 100.156 with a significance value of  $0.000 < 0.05$ , then  $H_0$  is rejected, and  $H_1$  is accepted, which means there is a significant effect of the COVID-19 prevention policy on the welfare of street vendors.

The regression equation in Table 3 shows that there is a constant of 150.004. The regression coefficient for the COVID-19 prevention policy impact on the welfare of street vendors is -1.040 (Table 3). Here means that the direction of the relationship between the COVID-19 prevention policy variable and the welfare of street vendors variable is negative. The X regression coefficient of -1,040 means that for every additional 1 (one) value of the COVID-19 prevention policy, the value of the welfare of street vendors will increase by -0.994 (Table 3). If the COVID-19 prevention policy is carried out strictly, the welfare of street vendors is expected to decline.

The working hypothesis ( $H_1$ ) is proven, where the COVID-19 prevention policy significantly affects business continuity and street vendors' welfare. This influence is scientifically understandable because prevention policies prioritizing health over economic aspects have disrupted informal economy businesses, especially street vendors who rely more on face-to-face interactions with buyers. In contrast, strict social restriction policies such as the Enforcement of Restrictions on Community Activities (PPKM) have prevented many street vendors from selling in public spaces. As a result, their income decreases, and this has an impact on the decline in welfare.

## 5. DISCUSSION

Presidential Regulation No. 125 of 2012 concerning Coordination of Arrangement and Empowerment of Street Vendors and Minister of Home Affairs Regulation No. 41 of 2012 concerning Guidelines for Structuring and Empowering Street Vendors are regulations intended to encourage street vendors to improve and develop their business to maintain the survival of street vendors. This regulation is evidence that the existence of street vendors is recognized as an economic entity, as well as clear regulations regarding the future of street vendors.

Like other economic entities, street vendors need to survive and develop their business during economic competition among street vendors, other informal economic entrepreneurs, and formal economic business actors. However, it is recognized that a highly competitive economic match often makes economic actors bounce off the economic stage, especially those who work in the informal economy. Informal economy business actors do not have solid legal protection compared to formal sector business actors

COVID-19 has changed normal conditions into a new normal, including economic life. The government does not want to risk letting people's mobility run out of control. The Indonesian government has adopted limiting social mobility and community activities. Various political, social, cultural, and economic activities are affected. In the economic aspect, street vendors as sector economy are also affected.

The COVID-19 prevention policy disrupts the business continuity and welfare of street vendors. Statistical analysis found that the COVID-19 prevention policy on business continuity was 0.918, and the determination value was 0.842, which means the impact of the COVID-19 prevention policy on business continuity was 84.2%. Meanwhile, the effect of the COVID-19 prevention policy on the welfare of street vendors was 0.934; the determination value is 0.873, which

means that the COVID-19 prevention policy on the welfare of street vendors is 87.3%. This statistical analysis shows that the COVID-19 prevention policy significantly impacts business continuity and street vendors' welfare because the magnitude of the effect is more than 80%.

The effect of the COVID-19 prevention policy on the business continuity of street vendors, including their welfare, is supported by several similar research results. Several street vendors in Asian-African countries are experiencing similar problems related to social restrictions policies to suppress the spread of COVID-19. The perceived impact is a decrease in assets, a decline in the number of buyers, termination of employment, reduced trading activities, disruption of supply chains, disruption of food security, and others [63-68].

Street vendors make choices when faced with the pandemic conditions they face. This is following the rational choice theory that the actual situation during the pandemic forces them to survive to run a business to maintain survival [69].

The situation faced by street vendors encourages them to apply cultural behavior to obtain the necessary rationale. Rational choice begins with standard conventional definitions of ways of living, thinking, and identifying. Further, it will be revealed that subculture and identification are problems with cost-benefit calculations, resulting in a rational choice. Rational choice intends to view cultural behavior as a rational desire and examine the level of behavior in the person. By modeling rational choices in cultural behavior as a product of people's rational desires, it will provide a new understanding of personality and the freedom to choose how to live to survive amid a crisis or pandemic [70].

The government must take flexible and adaptive policies to address economic problems caused by the COVID-19 pandemic. This policy is essential to maintain the continuation of the community's economic activities so that they do not fall into poverty. The Chinese government, for example, has made an accommodative policy toward street vendors to continue their economic life [71].

This study recommends that policies related to COVID-19 and its impact on street vendors be further deepened, especially regarding their welfare and survival and possibly other impacts such as falling into poverty. This study also provides directions for future research on the effects of pandemics, economic crises, and global crises that may occur, and their impact on street vendors' businesses and other informal economy actors.

## 6. CONCLUSIONS

The regression test results for the impact of COVID-19 prevention policy on business continuity and the welfare of street vendors in Semarang City can be concluded as follows. The determination value of the regression test on the impact of COVID-19 prevention policies on business continuity is 84.2%. The value of determination from the regression test for the effects of COVID-19 prevention policies on the welfare of street vendors is 87.3%. This means that the COVID-19 prevention policy that prioritizes health factors by implementing social restrictions affects business continuity and the welfare of street vendors. On the coefficient value, the influence test results using the t-test also show that  $H_1$  is accepted where the COVID-19 prevention policy has a significant effect on business continuity and the welfare of street vendors. The higher and stricter the COVID-19

prevention policy in regulating community mobility, the negative impact on business continuity and the welfare of street vendors. This means that social restrictions on the community, including street vendors, have disrupted the business continuity of street vendors because they make a living from selling face-to-face. The disruption to the street vendors' business also impacts the decline in the welfare of street vendors. After all, their income has decreased because their business could not continue as usual before the COVID-19 pandemic. The novelty of the research is that the COVID-19 prevention policy has a significant effect on business continuity and the welfare of street vendors. The theoretical implication of this research is the need for an in-depth, multidisciplinary study on the impact of policies related to the pandemic or national economic crisis and global crisis on the business continuity of street vendors and other informal economy business actors. At the same time, the policy implication is that it is necessary to formulate policies involving all government departments to empower the informal economy, especially street vendors, to survive during the pandemic and post-pandemic.

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