The Study on Covid-19 Outbreak and Its Influences on Household Economic Resilience in Jakarta

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ABSTRACT: The importance of this research is to determine the impact of Coronavirus Disease 2019 (COVID-19) on the household economic resilience of the people of Jakarta in meeting their families' food, education, and health needs. The method used in this study is a descriptive correlation canonical to determine the relationship andinfluence of COVID-19 on the economic resilience of the people of Jakarta. This research was conducted in the province of Jakarta, representing five areas of Jakarta (Central, East, West,South, and North). The population of this study is the entire population of Jakarta, as many as 10,560,000 (CBS, 2022) with an error rate of 7% ($\alpha = 0.07$) or DF = 93%, obtained a sample of 204respondents. This research data is primary data obtained by distributing questionnaires to the public in five areas of Jakarta, each region represented by 41 respondents, and secondary data obtained fromthe Indonesian Central Bureau of Statistics (CBS) and related literature. The study results show an effect of the COVID-19 outbreak on household economic resilience in meeting food needs, health costs,and education costs in Jakarta. The study results show a relationship and influence of COVID-19on the economic resilience of the people of Jakarta. The implication of the study result is to answer the confusion of the Jakarta government in making policies. Furthermore, reduce the debate in societyabout the presence or absence of the influence of COVID-19. The findings reference the Jakarta government and enlighten the public about the impact of COVID-19.

KEYWORDS: COVID-19, Food, Education, Health

INTRODUCTION

COVID-19 hit the world in December 2019; a virus attacked the human body, causing many people to die. As per World Health Organization (WHO) data, by 25th September 2020, 1,161,212 confirmed cases and 25,202 deaths had been reported from Africa, and 6,530,873 confirmed cases and 108,181 deaths had been reported in South-East Asia (SEA) (WHO, 2020). These figures are rapidly changing as the pandemicprogresses. (Kar et al., 2020). This virus attack has made the government implement a policy of limiting activities. As a result, people have difficulty sustaining their lives from food, education, andhealth. There is disagreement among the public regarding the dangers of COVID-19. Some say that this virus is not dangerous, so there is no need to limit activities that make life difficult, but there arealso those who support the policy of limiting activities so that the spread of this virus can be prevented. Disputes of opinion in the community have made researchers interested in bringing up the topic to answer public confusion about the impact of COVID-19.

Research similar to this topic was previously conducted by Arndt et al. (2020) entitled COVID-19 Lockdowns, Income Distribution, and Food Security: An analysis for South Africa which concluded that COVID-19 had an immediate effect on public health, income distribution, and food security of the people of South Africa. Research by Arndt. et al. (2020), in South Africa, there is a problem: people have difficulty getting vaccines to reduce the spread of COVID-19, while in this study, the people of Jakarta did not. The next study was conducted by Fischer et al. (2020) regarding the implications of COVID-19 on household economic resilience in Kenya and Uganda, which resulted inworsening food security and quality in both countries during the COVID-19 period compared to before.

It is due to the loss or reduction of income, limited access to markets, and low purchasing power (Kansiime et al., 2021). Subsequent research conducted by Mamedia et al. (2022) entitled COVID-19's impacts on incomes and food consumption in urban and rural areas are surprisingly similar: Evidencefrom five African countries concluded that most of the population experienced a decline in income between March and July 2020. The next research was conducted by Headey et al. (2022) entitled Poverty and food insecurity during COVID-19: Phone-survey evidence from rural and urban Myanmarin 2020, which concluded that there was an increase in poverty to food insecurity in the Yangon community. The next study related to the effect of COVID-19 on unemployment in California was conducted by Molitor

et al. (2021) concluded that unemployment increased from 5.3% in March 2020 to 16.3% in May 2020 due to COVID-19.

The gap between previous researchers and this research are various weaknesses in each country, such as the finding of a vaccine shortage in South Africa, anxiety in the Indian community, and a significant decrease in income for the people of Kenya and Uganda after the COVID-19 outbreak. The researcher's temporary observation is that many problems have arisen in Jakarta during the COVID-19 outbreak, namely difficulties in meeting food, difficulties in education costs, so many dropout of college, and difficulties in health costs. To overcome the above, the government has taken countermeasures such as those carried out by the United States government, known as Brighter Bites. Brighter Bites is an evidence-based, coordinated school health program implemented in six US cities (Houston, Austin, Dallas, New York City, Washington DC, and Southwest Florida). Families enrolled in Brighter Bites receive a weekly distribution of fresh produce, plus nutrition education at school and home (Haidar et al., 2021). Because of the above, researchers are interested in knowing how big the impact of the COVID-19 outbreak is on each variable of economic resilience. The COVID-19 variables referred to in this study are 1. policy for limiting activities outside the home (Y1), 2. Reports on the number of deaths (Y2), while the household economic resilience variable in question is 1. Ability to meet food needs (X1), 2. Ability to finance education (X2), 3. Ability to finance family health (X3) from January 2020 to February 2022.

Based on the above background, researchers are interested in researching to answer public confusion regarding the impact of COVID-19 on the economy of the people of Jakarta.

OBJECTIVES OF THE STUDY

a. There is a problem with food costs in Jakarta households due to the Jakarta government's policy of limiting people's activities outside the home and the Jakarta COVID-19 Task Force report on the number of victims who died

b. There is a problem with the cost of education for Jakarta households as a result of the Jakarta government's policy of restricting people from doing activities outside the home and the Jakarta COVID-19 Task Force report on the number of victims who died

c. There is a problem with Jakarta household health costs due to the Jakarta government's policy of limiting people's activities outside the home and the Jakarta COVID-19 Task Force report on the number of victims who died

CONCEPTUAL REVIEW

Covid-19 is an infectious disease caused by SARS-CoV-2, a type of coronavirus in which sufferers experience fever, dry cough, and difficulty breathing. https://www.who.int/docs/default-source/coronaviruse/who-rights-roles-respon-hw-covid-19.pdf. According to World Health Organization,(WHO), Coronaviruses (CoV) are a large family of viruses that cause illness ranging from the common cold to more severe diseases. Find out more about this novel coronavirus (nCoV) that has not been previously identified in humans.

Ling Mei (2020), a researcher at Hong Kong's School of Public Health Hong Kong University virologist (HKU), said humans built the virus by combining genetic material from two bat coronaviruses and claiming protein spikes are structures on the surface of the virus that is used to bind to cells. To make it easier for the virus to attach to human cells. However, this was denied by scientists, including Carl Bergstrom (2020), a biologist at the University of Washington who stated that what Li Meng Yan had put forward about the man-made Coronavirus was baseless and strange. Likewise, Andrew Preston (2020) said the results of Ling Mei's research have not been published and have not been peer-reviewed.

Michael Head (2020), a global health expert from the University of Southampton, published the research in Nature Medicine who concluded that SARS-CoV-2, which is referred to as the Coronavirus, was not the result of engineering made in the laboratory or a virus that was deliberately manipulated and said that this type of Coronavirus has been around in bats for decades. Kristian Andersen (2020) researcher from the Scripps Research Institute in La Jolla, California, told Mirror.uk that the Coronavirus originated in other animals before jumping to humans and the spikes in the Coronavirus consist of two connected parts that cause disease in humans. Andrew Rambaut of the University of Edinburgh published his paper in Nature Medicine in March 2020, saying that SARS-CoV-2 is the seventh virus known to infect humans, not from the previously used viral backbone but its genetic material suggesting the virus' natural origin. Anggela Rasmussen (2020), an infection and immunity expert from Columbia University in New York, told The Atlantic that the site where the virus binds to human cells has a sub-optimal match, indicating that this site was not designed. Trevor Bedford (2020) of the Fred Hutchinson Cancer Research Center in Seattle says we do not have any evidence of genetic engineering.

Definition of Activity Restriction Policy

The policy of restriction outside the home, according to the Regulation of the Minister of Health of the Republik of Indonesia Number 9 2019 article 13 paragaraph 1 for the prevention of Covid-19 is to stop all activities. http://hukor.kemkes.go.id/uploads/produk_hukum/PMK_No__9_Th_2020_ttg_Pedoman_Pemcepatan_Sosial_Berskala_Besar_dalam_Penanganan_COVID-19.pdf, accessed on July 7, 2022. According to World Health

Organization (WHO), Activity restriction is the act of informing the patient to avoid certain body movement or types of physical activity.According to Lincey Marr (2020), an aerosol expert from Virginia Tech said that the spread of Covid 19 in humans through air media must stop the spread by limiting activities outside the home. Kumar et al. (2021) stated that lockdown and their population under the lockdown. However, according to Zhang et al. (2020), the lockdown policy in China and the United States cannot be carried out continuously. Alternatives must be sought, such as conditional quarantine, so that the two countries' economies continue to run.

Report on the Number of Dead Victims.
Reports of the number of people dying due to COVID-19 always make people experience anxiety and fear of doing activities outside the home. From January 2020 to February 2022, there were 14,690 confirmed cases of COVID-19 in Jakarta. https://corona.jakarta.go.id/id/data-pemantauan. As Pieh et al. (2020) stated, COVID-19 causes anxiety and fear in the community. In Jakarta, reports of victims who died due to COVID-19 are increasing daily (CBA, 2020). Likewise, in all parts of the world, the number of victims continues to increase, as the results of research by Ahmad et al. (2020) reported that 25% of Indian people experience mental anxiety due to the large number of reports of victims who died due to COVID-19.

Ability to Meet Food Needs
According to Law Number 7 of 1996 concerning food, food security is a condition of meeting household food needs which are reflected in the availability of sufficient food, both in terms of quantity and quality, safe, equity, and affordable (Energi, 2015). A household is said to have fulfilled its food needs following Law Number 7 of 1996 above. As a result of the COVID-19 pandemic, household food costs have decreased due to a decrease in household income. The COVID-19 pandemic has contributed to the disparity of income between rich households and poor households, which is getting farther away. Prior to the COVID-19 pandemic, according to a report from the Jakarta Provincial Central Bureau of Statistics for the third quarter of September 2019, the level of inequality in Indonesian spending as measured by the Gini Ratio was 0.380. This figure decreased by 0.002 points when compared to the Gini Ratio in March 2019, which was 0.382, and decreased by 0.004 points compared to the Gini Ratio in September 2018, which was 0.384. The Gini Ratio in urban areas in September 2019 was recorded at 0.391, down from the Gini Ratio in March 2019, which was 0.392, and did not change compared to the Gini Ratio in September 2018 at 0.391. The Gini Ratio in rural areas in September 2019 was recorded at 0.315, down from the Gini Ratio in March 2019, which was 0.317, and compared to the Gini Ratio in September 2018, which was 0.319. After the Corona Virus outbreak, the poverty inequality rate increased.

Based on the World Bank inequality measure, expenditure distribution in groups in the bottom 40 percent is 17.71 percent. Population spending in September 2019 was in the category of low inequality. If broken down by region, in urban areas, the figure was recorded at 16.90 percent, which means that it belongs to the category of moderate inequality. Meanwhile, for rural areas, the figure was recorded at 20.66 percent, which means that it belongs to the category of low inequality.

Ability to Finance Education
The ability to pay for education is enough money to send their children to school. According to Rand, D. et al. (2010), parents' income is very influential in the continuation of their family's education. Family education costs are all costs incurred to pay for their family's education. According to Wiborg & Grätz (2022), the wealth and income of parents are closely related to their children's education. It causes the appearance of children in school depending on the wealth of their families (Breen & Jonsson, 2005). It also causes the resilience of families in Jakarta to send their children to different schools during the COVID-19 situation. In the coronavirus pandemic, many households have been disturbed to pay for their children's education due to declining incomes. The research results over the last decade have shown that socioeconomic status is related to the quality of parent-child relationships and impacts children's development (Manurung, 2010).

Ability to Finance Family Health
Understanding family health is the science and art of preventing disease, prolonging life, reaching out, and promoting health and efficiency (Titasari, 2021). Thus, family health costs are all expenses incurred to prevent disease and prolong life. COVID-19 caused a lot of unemployment, decreased household income, poverty, and food insecurity, which caused mental disorders. (Campion et al., 2022). Not only was Jakarta devastated due to COVID-19, but the United States also stated that the early care and education (ECE) sector was already in a dangerous situation (Kim et al., 2022). They try to make policies aligned for each program to be effective. The same thing happened to German people whom COVID-19 hit, but German people have a high level of solidarity to prevent the spread of COVID-19 by raising funds (Hangel et al., 2022). The United States has a Rendesivir program free of drug costs and hospitalization while in quarantine (Whittington et al., 2022). According to Nagata et al. (2021), During the COVID-19 pandemic, food insecurity and mental illness rates in the US increased due to significant social and economic disruptions. A study in the UK concluded that to avoid the spread of COVID-19, they prefer to eat at home rather than eat out (Filimonau et al., 2021). However, there are positives during the lockdown in Italy, namely increasing awareness of reducing food for food management in households (Dalal, 2021).

METHODOLOGY

Research Design

The research method used is Descriptive Correlation Canonical to explain the influence of Jakarta government policies, reporting the number of deaths from COVID-19 cases in Jakarta on household economic resilience (fulfilling food costs, financing education, and financing health) in five areas in Jakarta Province (Gay, 1976).

Research Population

The population is a generalization area consisting of objects or subjects with certain quantities and characteristics determined by researchers to be studied, and then conclusions are drawn (Sugiyono, 2019). This study's population is Jakarta's entire population, as much as 10,560,000 (CBS, 2022).

Research Sampling Techniques

The sample is part of the number and characteristics of the population (Sugiyono, 2019). The sampling technique in this study was based on random cluster sampling; namely, the researcher determined respondents randomly based on areas scattered in Jakarta at both the sub-district and village levels (Umar, 2008). This study uses the Slovin formula, with an error rate of 7% ($\alpha = 0.07$) and a confidence level (df) of 93% for the entire population of Jakarta of 10,560,000.

Slovin's formula is as follows: $n = \frac{N}{1+N\,(e)^2}$;

Description: n = Number of Samples ; N = Total Population; e = Error rate

$$n = \frac{10.560.000}{1+10.560.000\,(0.07)^2} \quad ; \quad = \quad n = 204$$

The data in this study consisted of secondary and primary data. Secondary data were obtained from the literature and library sources related to this research from February 2020 to February 2022, and primary data was conducted from January to March 2022. The number of sub-districts in Jakarta is 42 minus the Thousand Islands 2 sub-districts (CBA Jakarta, 2022). The questionnaires were distributed to 42 sub-districts, minus one sub-district located in an elite area, with the assumption that the people there are not too affected by Covid-19.

Researchers determine the character of the respondents to be distributed questionnaires are workers and households from all professions who are in each output in each sub-district. Each sub-district was distributed 4 to 5 questionnaires considering the number of sub-districts in the area as a sample. The measurement scale of this research questionnaire uses an ordinal scale. For qualitative research purposes, ten actors were interviewed. A Likert scale was used for the items: [5] strongly disagree, [4] disagree, [3] neutral, [2] agree, and [1] strongly agree. The collected data were tabulated and then tested with statistical tools and analyzed with canonical correlation using SPSS 26 (Ghozali, 2016).

Model Equation

The Canonical equation model used in this study follows : Y1 + Y2 + Y3 = X1 + X2

where X1, X2 is the independent variable and Y1, Y2, Y3 is the dependent variable.

(Y1): Ability to meet family food needs

(Y2): Ability to finance family education

(Y3): Ability to pay for family health

(X1): The Jakarta government's policy is to limit people's activities outside their homes

(X2): Jakarta Covid-19 task force report the number of deaths.
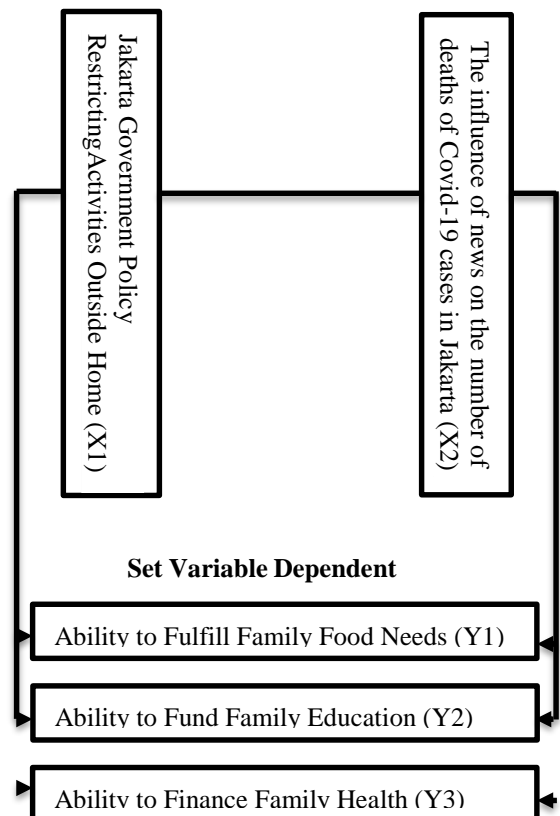
Set Variable Independent

Figure 1. Model Equation

Test of Canonical Requirements

Before processing data with canonical correlation, it is necessary to pass the test requirements for data normality, linearity, multicollinearity, and homoscedasticity tests (Ghozali, 2016). The normality test was conducted to determine whether the residual variable in the regression model hada normal distribution. The test was carried out with Kolmogorov Smirnov; if the significance value was 0.05, then the residual value was normally distributed. Then the linearity test was carried out to determine whether the model's specifications were correct. Testing is done by comparing the value of the F-count with F-table. If the value of the F-count is smaller than the -table value, then the independent and dependent variables are linear.

The next test is the multicollinearity test using the Tolerance and VIF methods to determine whether there is a strong intercorrelation between the independent and dependent variables. A good regression model does notoccur symptoms of multicollinearity between the independent and dependent variables. If the Tolerance Value is greaterthan 0.01 and the VIF value is less than 10, there are no multicollinearity symptoms. The last test requirement is the heteroscedasticity test using the Geljser test to determine whether there is a similarity between the variances of the residual values for all observations in the regression model; agood regression model does not have heteroscedasticity symptoms. If the significance value betweenthe independent variable and the absolute residual is greater than 0.05, there is no heteroscedasticityproblem.

Definition of Operational and Data Processing
a. Determining the Purpose of Canonical Correlation Analysis
b. Designing Canonical Correlation Analysis
c. Assumption of Canonical Correlation
d. Getting Canonical Function and Assessing Overall Fit
e. Canonical Variate Interpretation

RESULTS AND DISCUSSION OF FINDINGS
The Impact of the Spread of Covid-19 in Jakarta on the Economic Resilience of the Jakarta Household
According to data from the Jakarta Covids-19 Task Force, from January 2020 to February 2022,there were 1,178,473 confirmed cases of COVID-19 in Jakarta, 5,077 cases (0.4%), 14,690 deaths (1.2%), isolation independent as many as 32,698 cases (2.8%). Nationally, there were 5,589,176 confirmed cases of Covid-19 and 148,664 cases of death. Thus, the confirmed comparison nationally and Jakarta is 21%, as shown in Table 1 below:

Table 1. Number of Confirmed Covid-19 Cases and Deaths Nationally and in Jakarta from January 2020 to February 2022

Confirmed Case of Covid-19 Nasional				
Positive Case		Died		
5.589.176		148.664		
Jakarta's Covid-19 Confirmed Case				
Case	Treated	Isolation	Died	%
1.178.473	5.077	32.698	14.690	21

Source: DKI Jakarta Covids 19 Handling Task Force. https://corona.jakarta.go.id/id/data-pemantauan

Table 1 shows that the number of cases nationally and in Jakarta were confirmed positive and died, treated, and self-isolated due to COVID-19. Nationally, in the distribution of the number of cases, Jakarta Province ranks at the top with a total of 21%. The DKI Jakarta provincial government enforces physical and social distancing, which impacts the company's operating hours. (DKI Jakarta COVID-19 Handling Task Force). The impact is different and depends on the business's type and scale. WHO reported that in India, from January 2020 to July 2022, there were 43,585,554 confirmed cases of COVID-19 with 525,343 deaths, reported to WHO. While in New Delhi, there were 357,229 deaths, and 20.3 million confirmed. https://covid19.who.int/region/searo/country/in Likewise, the impact on the company's revenue depends on the scale of the company (micro, small, medium, and large) and the location of the company in Ayuni, S. et al. (2020). The company's policies related to these conditions are, 8.76% stop operating; 5.45% operate by implementing WFH or work from home (remote or teleworking) for some employees; 2.05% operate with the implementation of WFH for all employees; 24.31% operate with reduced capacity (working hours, machines and labor); 0.49% operating, even exceeding pre-COVID19 capacity; 58.95% are still operating as usual. (Ayuni, S. et al. (2020). The company's operational conditions are uncertain, resulting in a decrease in household income. According to Raharja and Manurung (2010), income is all receipts from money or nonmoney received by households in a certain period. The revenue is obtained from selling goods and services from business activities, wages, and salaries in return for the services provided and from the government (Case and Fair, 2007). There is a significant increase in the poor population due to the policy limiting activities outside the home.

Fluctuations of the Poor in Jakarta During Covid-19 The Gini ratio increase, namely the number of poor people in Jakarta due to the news of the massive death toll, has caused fear of working and opening a business. Limiting activities outside the home from January 2020 to February 2021 led to a decrease in the labor force participation rate and an increase in the open unemployment rate. It can be seen in Table 2.(Second) below

Table 2. Gini Ratio, Number of Poor Population, and Percentage of Poor Population in DKI Jakarta2020-2021

Gini Ration City Jakarta	
2020	2021
0.399	0.409
Number of Poor Population	
2020	2021
480.86	501.92
Percentage of Poor Population	
2020	2021
4.53	4.72

Source: https://jakarta.bps.go.id/indicator/23/645/1/ 1/garis-1/garis-kemiskinan-jumlah-dan-persentase-penduduk-miskin-di-daerah-menurut-kabupaten-kota-di-provinsi-dki-jakarta.html

Table 2 shows, the increase poor population in Jakarta during COVID-19 is in line with the results of a study by Headey et al. (2022) regarding the decline in the income of the poor in Yangon city, only $1.90/day, close to the poverty line in the city. In this study, households experienced increased poverty and food insecurity during COVID-19. Likewise, a study by Kumar (2021) in South Africa showed that poverty was increasing because people with low education only got low incomes, and eventually, their lives depended on government assistance.

Employment in Jakarta During Covid-19.

The employment data for Jakarta Province, namely, decreased the labor force participation rate from 67.95% in February 2020 to 62.63% in August 2021. The open unemployment rate experienced a sharp increase from 4.93% in February 2020 to 10.95% in August 2020, declining to 8.5%. From February 2020 to August 2021 during COVID-19, as shown in Table 3 (Third) below.

Table 3. Employment Data for DKI Jakarta Province from January 2020 to August 2021

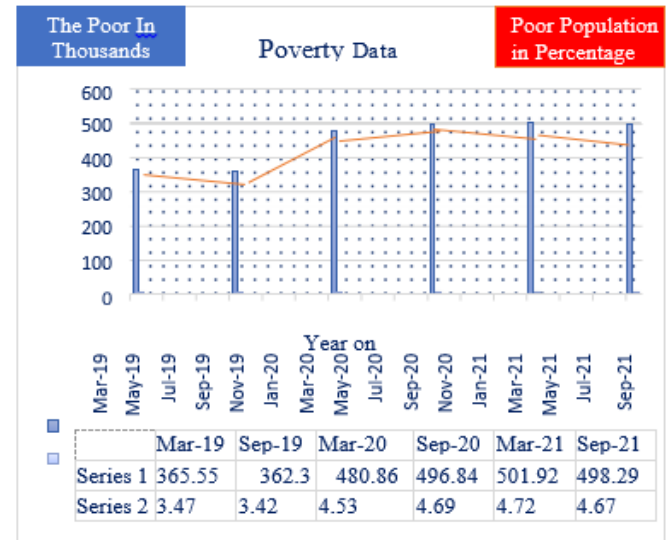| Employment	Employment Conditions February and August Conditions (Percentage)			
	February 2020	August 2020	February 2021	August 2021
Labor Force Participation Rate	67.95	63.81	65.12	62.63
Open Unemployment Rate	4.93	10.95	8.51	8.50

SourceUrl:https://jakarta.bps.go.id/indicator/6/889/2/keadaan-ketenagakerjaan-kondisi-februari-dan-agustus.html.

Table 3. shows The decline in job participation and the increasing unemployment rate in Jakarta is almost in line with the results of a study conducted by Molitor et al. (2021) on Californians, who concluded that unemployment rose from 5.3% in March 2020 to 16.3% in May 2020. due to COVID-19.

Poor Population Decrease.

According to CBA Jakarta (2022), the poor population in Jakarta experienced a decline in September 2021 although in the previous year it had experienced a significant increase. After a year of going through the COVID-19 Pandemic which increased the poverty rate, but in September 2021 for the first time the poverty rate decreased. The number of poor people decreased by 3,630 people during the period March-September 2021. Even the decrease in the percentage of poor people in March-September 2021 (0.05 percent) was higher than September 2020 (0.02 percent). This is due to the Jakarta government's success in maintaining price stability and an increase in people's purchasing power due to the general increase in income. The rise and fall of the number of poor people or the Gini ratio can be seen in the Gini coefficient value on the Lorenz curve where the value lies between 0 (perfect equality) to 1 (perfect inequality). The greater the Gini index, the more unequal the distribution of income, and vice versa. According to Arsyad (2010), the classification of low inequality has a Gini value between 0.2-0.35; moderate inequality Gini value between 0.36-0.49 ; The high inequality of Gini values is between 0.5-0.7 as shown in Figure 2 (Second) below.

Sources: https://jakarta.bps.go.id/indicator/23/645/1/garis-kemiskinan-jumlah-dan-persentasependuduk-m

Figure 2. Number and Percentage of Population Living in Poverty in Jakarta 2019-2021.

The findings are in Figure 2. The increasing poverty rate in Jakarta is in line with the research conducted by Mamedia et al. (2022) entitled Covid-19's impacts on incomes and food consumption in urban and rural areas are surprisingly similar: Evidence from five African countries which concluded that most of the population experienced a decline in income between March and July 2020. It is in line with the research conducted by Headey et al. (2022) entitled Poverty and food insecurity during Covid-19: Phone-survey evidence from rural and urban Myanmar in 2020, which concluded that there was an increase in Poverty to food insecurity among the people of Yangon. It is just that in these two studies, it is not explained about the reduction in the poor population at the end of 2021 as happened in the city of Jakarta.

Data Normality Test.

Table 4. Data Normality Test Results

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig	Statistic	df	Sig
Jakarta GovernmentPolicy	0.237	.204	4.57	3.57	3	3.86

Restricting Community Activities Outside the Home(X1)						
Jakarta Covid-19 Task Force Report Number of Deaths (X2)	0.241	.204	4.14	4.00	3	3.86
Ability to Fulfill Family Food Needs (Y1)	0.219	.204	4.29	3.43	3	3.86
Ability to Fund Family Education (Y2)	0.327	.204	4.43	3.86	3	3.71
Ability to Finance Family Health (Y3)	0.239	.204	4.57	3.57	3	3.86
a. Lilliefors Significance Correction						

Table 4. shows the normality test results by the Kolmogorov-Smirnov values for X1, X2, Y1, Y2 and Y3, respectively 0.237, 0.241, 0219, 0.327, and 0.239 with p values = 4,570, 4.140, 4.290, 4.430, and 4,570 greater than 0.05 thus all data are normal.

Linearity Test

To find out whether there is a linear relationship between the independent variable and the dependent variable, it is done by comparing the significance value of F from Deviation from linearity with a probability value of 0.05. If the significance value of F is greater than 0.05, then there is a linier relasionship between the independent variable and dependent variable.

Table 5. Liniearity Test Results

Anova Table		F		Sig
Ability to Meet Family Food Needs *(Y1) Jakarta Government Policy Restricting Community Activities outside the Home (X1	Between Groups	(Combined)	0.92	0.46
		Linearity	4.03	0.046
		Deviation from Linearity	0.149	0.96
	Within Groups			
	Total			
Ability to Finance Family Education * (Y2) Jakarta Government Policy Restricting Community Activities outside the Home (X1)	Between Groups	(Combined)	1.064	0.38
		Linearity	4.83	0.029
		Deviation from Linearity	0.12	0.97
	Within Groups			
	Total			
Ability to Finance	Between Groups	(Combined)	0.89	0.486
		Linearity	3.57	0.04

Family Health * (Y3) Jakarta Government Policy Restricting Community Activities outside the Home (X1)		Deviation from Linearity	0.22	0.92
	Within Groups			
	Total			
Ability to Finance Family Education *(Y2) Jakarta Covid-19 Task Force Report Number of Deaths (X2)	Between Groups	(Combined)	1831.	0.00
		Linearity	5259.	0.00
		Deviation from Linearity	116.8	0.46
	Within Groups			
	Total			

Table 5. shows the significance value of F in this linearity test 0.963 ; 0.974 ; 0.925 ; 0.460 greater 0.05, then there is a linier relasionship between the independent variable and dependent variable.

Multicollinearity Test

To find out whether there is a intercorrelation between the independent variable, it is done by comparing the significance value of tolerance and variance inflation factor (VIF). If the significance value of tolerance greater than 0.10 and value of Variance Inflation Factor (VIF) smaller than 10. Thus there is no strong intercorrelation between the independent variables as shown in table 6 (Sixth) below

Model		t	Sig	Collinearity Statistics	
				Tolerance	VIF
1	(Constant)	13.08	0.00		
	Jakarta Government Policy Restricting Community Activities outside the Home	1.681	0.094	0.993	1.007
	Jakarta Covid-19 Task Force Report Number of Deaths	-0.600	0.00	0.993	1.007
1	(Constant)	9.251	0.000		
	Jakarta Government Policy Restricting Community Activities outside the Home	1.874	0.062	0.993	1.007
	Jakarta Covid-19 Task Force Report Number of Deaths	-.6.72	0.000	0.993	1.007
1	(Constant)	10.76	0.000		
	Jakarta Government Policy Restricting Community Activities outside the Home	1.476	0.142	0.993	1.007

Jakarta Covid-19 Task Force Report Number of Deaths	-10.0 87	0.000	0.993	1.007

Table 6. shows results obtained a Tolerance value of 0.993, greater than 0.10, and a VIFvalue of 1.007 is smaller than 10. Thus, there is no strong intercorrelation between the independent variables.

Heteroscedasticity Test

Table 7. Heteroscedasticity Test Results

Model		t	Sig
		Beta	
1	(Constant)		3.246	0.001
	Jakarta Government Policy Restricting Community Activities outside the Home(X1)	-0.092	-1.321	0.188
	Jakarta Covid-19 Task Force Report Number of Deaths (X2)	-0.145	-2.085	0.383
	a. Dependent Variable: Abs_res			
1	(Constant)		3.096	0.002
	Jakarta Government Policy Restricting Community Activities outside the Home (X1)	-0.064	-0.917	0.360
	Jakarta Covid-19 Task Force Report Number of Deaths (X2)	-0.111	1.579	0.116
	a. Dependent Variable: Abs_res			
1	(Constant)		3.096	0.002
	Jakarta Government Policy Restricting Community Activities outside the Home(X1)		-0.064	0.360
	Jakarta Covid-19 Task Force Report Number of Deaths (X2)	-0.111	-1.579	0.116
	a. Dependent Variable: Abs_res			

Table 7. shows Heteroscedasticity test results using the Glejser method obtained significance values: 0.188, 0.383, 0.360, 0.116 greater than 0.05 (0.188, 0.383, 0.360, 0.116) 0.05, for all independent variableson the dependent variable, thus there is no symptom of heteroscedasticity

Canonical Correlation Test

a. Test of Significance Multivariate Test of Significance with Wilks Lambda

Table 8. Results of the Multivariate Test of Significance with Wilk's Lambda

Test Name	Value	Approx. F	Hypoth. DF	Error DF	Sig. of F
Pillais	1.54565	226.79234	6.00	400.00	0.000
Hotellings	106.995	3530.8382	6.00	396.00	0.000
Wilks	0.78117	961.06690	6.00	398.00	0.000
Roys	0.99063				
Note.. F statistic for WILKS' Lambda is exact.					

Table 8. shows Test the significance of the canonical correlation of the first function with Wilk's Lambda all statistically significant tests at 0.05. It can be concluded that the first canonical correlation is significant as well as the correlation of the second canonical function.

b. Test Eigenvalues and Canonical Correlations

Table 9. Test Results of Eigenvalues and Canonical Correlations

Root No.	Eigenvalue	Pct.	Cum. Pct.	Canon Cor.	Sq. Cor
1	105.74782	98.83427	98.8342	0.9953	0.99063
2	1.24728	1.16573	100.000	0.7449	0.55502

c. Dimension Reduction Analysis

Table 10. Dimension Reduction Analysis

Roots	Wilks L.	F	Hypoth. DF	Error DF	Sig. of F
1 TO 2	0.78117	961.06690	6.00	398.00	0.00
2 TO 2	0.44498	124.72772	2.00	200.00	0.00

Table 9. shows in the model there are two independent variables and three dependent variables. The first canonical correlation "covariate" canonical variable is able to explain 99.063% (0.99531) and the second canonical correlation is able to explain 55.502% (0.74499) variation in the dependent canonical variable. **Table 10.** shows function one and function two, the significance value is 0.00 below 0.05, so it can be processed further

d. Test Canonical Loading

Table 11. Canonical Loading Test Results

Correlations between DEPENDENT and canonical variables		
Function No.		
Variable	1	2
Y1	0.98472	0.17204
Y2	0.99992	-0.01109
Y3	0.85161	-0.20537
Correlations between COVARIATES and canonical variables		
CAN. VAR.		
Covariate	1	2
X1	0.83085	-0.55650
X2	0.99085	0.13494

Table 11. shows The results of the canonical test loading of the first dependent variable functions areall above 0.5, namely Y1 with loading 0.98472, Y2 with loading 0.99992 and Y3 with loading 0.85161. As for the independent variables (covariates) all above 0.5, namely X1 0.83085 and X2 0.99085. From the canonical loading results, it can be

concluded that there is a significant relationshipbetween the dependent variate and the independent variate or Y1 (Ability to Fulfill Family Food Needs), Y2 (Ability to Finance Family Education), Y3, (Ability to Finance Family Health) correlated together with X1 (Policy Jakarta Government Restrictions on Community Activities outside the Home), X2 (Report of the Jakarta Covid-19 Task Force on the Number of Deaths).

DISCUSSION

Since COVID-19 spread in Jakarta, according to data from the Jakarta COVIDs-19 Task Force, from January 2020 to February 2022, first table shown there were 1,178,473 confirmed cases of confirmed Jakarta residents, 5,077 cases (0.4%), 14,690 deaths (1.2). %), self-isolation as many as 32,698 cases (2.8%). Nationally, there were 5,589,176 confirmed cases of COVID19 and 148,664 cases of death. Jakarta is the largest percentage exposed to COVID-19 among the provinces in Indonesia. Impact of the policy prohibiting activities outside the home and announcements in the media about the number of cases exposed, many companies are laying off and reducing the working hours of their employees. According to employment data for Jakarta Province, the labor force participation rate has decreased from 67.95% in February 2020 to 62.63% in August 2021. The open unemployment rate has increased sharply from 4.93% in February 2020 to 10.95% in August 2020, declining to 8.5 % from February 2020 to August 2021 during Covid-19. The next multi-effect is the increasing number of poverty in Jakarta. Table 2 (Second). above shows the increase in the Gini ratio, from 0.399 in February 2020 to 0.409 in January 2021 (CBA Jakarta).

However, according to CBA Jakarta (2022), the poor population in Jakarta experienced a decline in September 2021 after a year of the COVID-19 Pandemic, which increased poverty rates. The number of poor people decreased by 3,630 from March-September 2021, and the decrease in the percentage of poor people in March-September 2021 (0.05 percent) was higher than in September 2020 (0.02 percent). It can happen because the Jakarta government has managed to maintain price stability and increase people's purchasing power due to the general increase in income. The discussion continued on the results of statistical testing on conditions of poverty, employment, and health minus the data on the number of students and students who stopped continuing their education in Jakarta due to COVID-19. All testing requirements for canonical correlation analysis starting from normality, linearity, multicollinearity, and heteroscedasticity tests were passed well. Table 4 (Fourth). the results of the normality test of the data obtained are the KolmogorovSmirnov values for the variables X1, X2, Y1, Y2, and Y3, respectively 0.237, 0.241, 0219, 0.327, and 0.239 with p values = 4.570, 4.140, 4.290, 4.430, and 4,570 is greater than 0.05 thus all data are normal. Table 5 (Fifth). The results of the Linearity Test obtained a significant value of

Deviation from Linearity of 0.963, 0.974, 0.925, and 0.460, which is greater than 0.05; thus, there is linearity between the independent variable and the dependent variable. Table 6 (Sixth). The results of the multicollinearity test obtained a Tolerance value of 0.993, which is greater than 0.10, and a Variance Inflation Factor (VIF) value of 1.007 is smaller than 10; thus, there is no strong intercorrelation between the independent variables. Table 7 (Seventh). Heteroscedasticity test results using the Glejser method obtained significance values: 0.188, 0.383, 0.360, 0.116 greater than 0.05 (0.188, 0.383, 0.360, 0.116 0.05, for all independent variables on the dependent variable, thus there is no symptom of heteroscedasticity. Table 8 (Eighth). The results of the canonical correlation significance test of the first function with Wilk's Lambda all statistical tests are significant at 0.05. It can be concluded that the first canonical correlation is significant, as well as the correlation of the second canonical function. Tables 9 (Ninth) and 10 (Tenth) show the Eigenvalues and Canonical Correlations test results, namely the relationship between the independent and dependent variables. The result of Test Eigenvalues and Canonical Correlations function 1 is 0.9906 (0.99531) and function 2 is 0.5550 (0.74499). It means that the Jakarta Government Policy Restricting Activities Outside Home (X1) is covariant able to explain 99.53% and the dependent variable and function 2 The influence of news on the number of deaths of COVID-19 cases in Jakarta (X2) is covariant able to explain 74.49 %. Thus, there is a covariate relationship between the independent and dependent variables. Table 11 (Eleventh) Test results Canonical Loading the first function dependent variables are all above 0.5, namely Ability to Fulfill Family Food Needs (Y1) with loading 0.98472, Ability to Fund Family Education (Y2) with loading 0.99992, and Ability to Finance Family Health (Y3) with loading 0.85161. It is concluded that there is an effect of the independent variables on the dependent variable; as for the independent variables (covariates) all above 0.5, namely X1 0.83085, the Government Policy Restricting Activities Outside Home (X1) affects the dependent variable by 83.%. Likewise, X2 0.99085, meaning The influence of news on the number of deaths of COVID-19 cases in Jakarta (X2) affects the dependent variable by 99%. From the canonical loading results, it can be concluded that there is a relationship and influence between Government Policy Restricting Activities Outside the Home, The influence of news on the number of deaths of COVID-19 cases in Jakarta on the Ability to Fulfill Family Food Needs, Ability to Fund Family Education and Ability to Finance Family Health. This research is in line with previous research conducted by Arndt et al. (2020) entitled COVID-19 lockdowns, income distribution, and food security: An analysis for South Africa which concluded that COVID-19 had an immediate effect on public health, income distribution, and food security of the people of South Africa. Likewise, research conducted by Fischer et al. (2020) related

the implications of COVID-19 on household economic resilience in Kenya and Uganda, which resulted in worsening food security and quality in both countries during the COVID-19 period compared to before.

CONCLUSION

Based on the result and discussion, the first finding is that the city of Jakarta ranks at the top in Indonesia, exposing COVID-19 by 21%. The labor force participation rate decreased from 67.95% in February 2020 to 62.63% in August 2021. The second finding was that the open unemployment rate experienced a sharp increase from 4.93% in February 2020 to 10.95% in August 2020, decreasing to 8.5% from February 2020 to August 2021 during COVID-19. The third finding is an increase in the poverty rate in Jakarta, and an increase in the Gini ratio, from 0.399 in February 2020 to 0.409 in January 2021 (Central Bureau of Statistics, Jakarta). The fourth finding of the significance test results of the first function canonical correlation with Wilk's Lambda all statistical tests was significant at 0.05. It can be concluded that the first canonical correlation is significant, and the second canonical function correlation. The fifth finding is that there is a relationship between the independent variable and the dependent variable with the results of the Eigenvalues and Canonical Correlations Test, the first function is 0.99060 (0.99531), and the second function is 0.5550 (0.74499). It means that the Jakarta Provincial Government Policy on Restricting Activities Outside the Home (X1) is covariate and able to explain 99.53%. For the dependent variable and the second function, the influence of news coverage on the number of deaths of COVID-19 cases in Jakarta (X2) is covariate able to explain 74.49 %. Thus, there is a covariate relationship between the independent and dependent variables. The sixth finding is the Canonical Loading Test Results, the functions of the first dependent variable are all above 0.5, namely the ability to meet family food needs (Y1) with loading of 0.98472, the ability to finance family education (Y2) with the loading of 0.99992 and the ability to finance family health (Y3) with the loading of 0.85161. It is concluded that there is an effect of the set of independent variables on the set of dependent variables. Meanwhile, all independent variables (covariates) are above 0.5, namely X1 0.83085, meaning that Jakarta Provincial Government's Policy Restricting Activities Outside the Home (X1) affects the dependent variable by 83.%. Likewise, X2 0.99085 means that the influence of news on the number of deaths of Covid-19 cases in Jakarta (X2) affects the dependent variable by 99%. It is concluded that there is a relationship and influence between the Jakarta Provincial Government's Policy on Restricting Activities Outside the Home (X1) and the Effect of News on the Number of Deaths of COVID-19 Cases in Jakarta (X2) on the Ability to Fulfill Family Food Needs (Y1), Ability to Fund Family Education (Y2) and Ability to Finance Family Health (Y3). This study has difficulty

obtaining comprehensive secondary data, such as data on children and students who have dropped out of school due to the COVID-19 pandemic. The next obstacle, because this is field research, the data collection process is quite long. Further research should increase the number of samples and reduce the error rate below 5% to improve the results.

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