



## Analysis of The Corona Virus Outbreaks Short-Term Effects on Indonesias Economy and Poverty

Saiful Adhi Saputra  
Karta Sedyatmo  
Badan Pusat Statistik  
Pos-el: [saiful.as@bps.go.id](mailto:saiful.as@bps.go.id), [karta.sedyatmo@bps.go.id](mailto:karta.sedyatmo@bps.go.id)

DOI: 10.32884/ideas.v8i2.769

### Abstract

The goal of this study is to look at the short-term effects of the coronavirus epidemic in Indonesia on the economy and poverty. The Indonesian government has enacted many policies to limit the incidence of coronavirus transmission in the country, however, these efforts have had a significant impact on the country's economy and poverty. Indirectly, the coronavirus pandemic harmed Indonesia's economic sector. This viral epidemic has reduced job prospects, raised unemployment, and led some sectors to shut down, resulting in a drop in people's earnings and spending power. Furthermore, the Indonesian economy was hit by a downturn, which pushed up the poverty rate. The coronavirus outbreak has an immediate impact on all levels of society and diverse groups; nevertheless, the IMF expects that the impact of this virus outbreak will endure for a long period, implying that this virus will have a long-term influence. The Indonesian government has implemented several policies that are causal in suppressing the coronavirus transmission, such as health protocols, large-scale social restrictions (PSBB), and restrictions on community activities (PPKM), as well as policies for community economic recovery and poverty alleviation, such as the distribution of fast and medium-term social assistance, as well as capital assistance. The government's program is projected to minimize the rate of coronavirus transmission and restore economic mobility in Indonesia, as well as address the problem of poverty, particularly among those affected by the coronavirus epidemic.

### Keywords

Economy, corona virus, poverty, short-term, policies

### Abstrak

Tujuan dari penelitian ini adalah untuk melihat dampak jangka pendek dari wabah virus corona di Indonesia terhadap perekonomian dan kemiskinan. Pemerintah Indonesia telah mengeluarkan banyak kebijakan untuk membatasi kejadian penularan virus corona di negara ini, namun upaya tersebut berdampak signifikan terhadap perekonomian dan kemiskinan negara. Secara tidak langsung, pandemi virus corona merugikan sektor ekonomi Indonesia. Pandemi virus ini telah mengurangi prospek pekerjaan, meningkatkan pengangguran, dan menyebabkan beberapa sektor ditutup, mengakibatkan penurunan pendapatan dan daya beli masyarakat. Lebih jauh lagi, perekonomian Indonesia mengalami keterpurukan yang mendorong naiknya angka kemiskinan. Wabah virus corona berdampak langsung pada semua lapisan masyarakat dan kelompok yang beragam; namun demikian, IMF memperkirakan dampak wabah virus ini akan bertahan lama, menyiratkan bahwa virus ini akan memiliki pengaruh jangka panjang. Pemerintah Indonesia telah menerapkan beberapa kebijakan yang bersifat kausal dalam menekan penularan virus corona, seperti protokol kesehatan, pembatasan sosial berskala besar (PSBB), dan pembatasan kegiatan masyarakat (PPKM), serta kebijakan pemulihan ekonomi masyarakat dan kemiskinan. Pengentasan, seperti penyaluran bansos cepat dan jangka menengah, serta bantuan permodalan. Program pemerintah tersebut diproyeksikan untuk menekan laju penularan virus corona dan memulihkan mobilitas ekonomi di Indonesia, serta mengatasi masalah kemiskinan, khususnya di antara mereka yang terkena dampak epidemi virus corona.

### Kata kunci

Ekonomi, virus corona, kemiskinan, jangka pendek

### Introduction

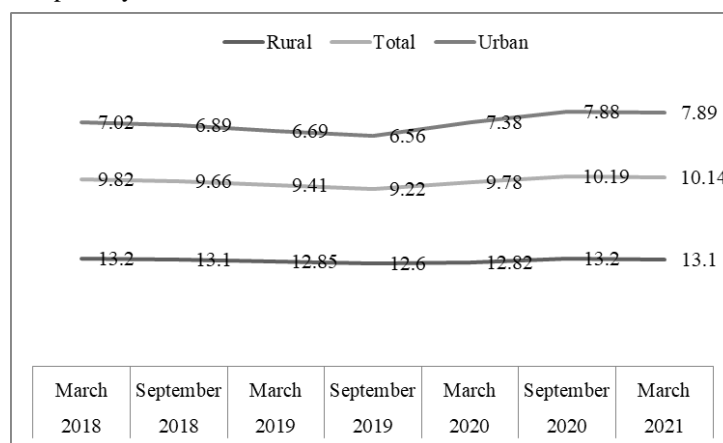
Indonesia is one of the world's developing countries, where poverty remains a contentious and difficult issue. To date, Indonesia's poverty rate has remained high. Poverty in Indonesia is caused by a number of issues, including an uncontrolled population, low labour absorption, which results in a high unemployment rate, and a low level of

education, which is one of the barriers to work productively in Indonesia. The government has made comprehensive efforts to alleviate poverty, yet poverty remains subject to attacks from both internal and external crises (Yogaswara, 2017).

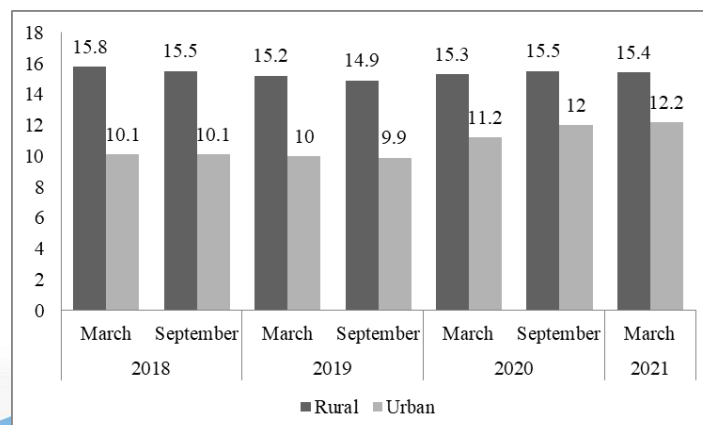
The coronavirus epidemic is the present tragedy that is endangering Indonesia's poverty level. Due to the continuing epidemic, Indonesia has been in a state of economic disaster since the second quarter of 2020. Because of huge layoffs, Indonesia's unemployment rate has risen dramatically since the start of the epidemic. The current economic crisis is exacerbated by the high number of citizens who have been infected and exposed to the coronavirus epidemic, with the majority of those affected belonging to the producing class. This circumstance makes it difficult for households to satisfy their daily needs, especially for those who are immediately impacted by the viral outbreak (Izzati, 2021).

The reduction in economic growth is one of the early symptoms of an economic crisis in 2020. According to the Indonesian Central Statistics Agency, GDP growth in the first quarter of 2021 was -0.74 percent. The Indonesian economy is currently in significantly worse shape than it was before the coronavirus epidemic, albeit it is already better than it will be in 2020. This demonstrates that the Indonesian economy remains vulnerable to calamities and is currently operating at a much slower rate than before the coronavirus epidemic. The growth rate of national income per capita, or the national average welfare metric, was also influenced by the pandemic breakout, and it fell by 3.15 percent in 2020 (BPS, 2020). This indicates that during the coronavirus epidemic, the standard of living of Indonesian families fell.

According to a study provided by the Central Statistics Agency in March, 10.14 percent of Indonesia's population, or 27.54 million people, live in poverty. Although it has reduced marginally since September 2020, the poverty rate remains high. The Indonesian Central Statistics Agency created a visual representation that illustrates the evolution of poverty rates in Indonesia from 2018 to 2021.



**Figure 1.** Line Diagram of the National Poverty Level from 2018 to 2021 (percent of the population)  
Source: BPS (2021)



**Figure 2.** Shows the number of poor people in Indonesia from 2018 to 2021 (Million People)



Source: BPS (2021)

Figures 1 and 2 show that the number of impoverished people in Indonesia began to rise in March 2020. A decline in home welfare prompted a rise in the number of impoverished individuals in Indonesia, which led to a fall in household income. Furthermore, more than half of all small-business-owning households saw a drop in turnover, and some even went bankrupt. In August 2020, the unemployment rate increased to 2.7 million individuals, who were laid off as a result of the coronavirus epidemic. Simultaneously, the average nominal salary for employees or laborers fell -5.2 percent from the preceding nominal wage.

In the near term, Corona pandemic has impacted poverty (Mofijur et al., 2021), particularly in areas of poverty in Indonesia. Long-term impacts, such as the hysterical effect of unemployment and the breakdown of the supply side chain, must be anticipated (Setyadi & Indriyani, 2021). Outbreaks of communicable illnesses do have an influence on peoples wellbeing, according to Jemberu et al., (2014), who found that infectious epidemics like Ebola harm the welfare of Ethiopian farmer families. According to Bocconis (2020) research, epidemics of infectious illness outbreaks had an impact on poverty in both the early industrial and pre-industrial periods. According to Bausch & Schwarz (2014), the Ebola outbreak in Gueina had a significant influence on the local economy, making it difficult to contain the outbreak. The reason for this is because when a communitys economy is assaulted, those who are sick with the illness swarm wildly in effort to live, infecting additional regular inhabitants or health personnel. As a result, the government must be steadfast in enacting regulations to stem the growth of the coronavirus pandemic in Indonesia at this time.

The purpose of this study is to investigate and assess the influence of the coronavirus outbreak on the threat of poverty in Indonesia, particularly in the aftermath of the outbreak. The focus of this research will be on numerous issues, including the national development of poverty, the distribution of poverty in Indonesia, and poverty as a result of the direct coronavirus epidemic, as well as the Indonesian governments policy reaction.

## Method

The impact of the coronavirus outbreak on poverty levels is discussed in this study. Poverty is defined as the inability of a population to meet basic needs like clothing, food, and shelter. One of the most important elements in determining the number and position of people living in poverty is their income, which impacts their purchasing power. Because of disparities in resource considerations, information technology accessibility, employment prospects, and the reach of the development, poverty does not grow in the same way in all places (Tarigan et al., 2019). Researchers are interested in testing and analyzing descriptively related to the problem of poverty and this pandemic outbreak because the occurrence of the coronavirus pandemic in all corners of the world is expected to have a significant impact on the pattern of peoples lives, especially in terms of the economy.

This study employs the descriptive analysis technique because it necessitates meticulous attention to each component so that the subject and object under investigation approach the perfect truth. The Central Statistics Agency (BPS) and other entities that provide data on the coronavirus epidemic were used in this investigation. This study will focus on data from March 2020 to November 2021, when the coronavirus epidemic in Indonesia occurred. Because the data and literature on the coronavirus impact on poverty in the near term are still limited, this study will concentrate on that aspect. The data collecting approach employed in this study was documented analysis, which entails looking for information on reputable written sources. After that, the researcher will supplement the data by performing a scientific assessment of the relevant literature and investigating the poverty problem. This research will be presented in the form of a systematic investigation and analysis, with proposals and policy recommendations for the government at the conclusion.

## Result and discussion

### *During the Corona Virus Outbreak Government Policy*

The coronavirus epidemic began in Indonesia in early 2020, and it had a significant impact on numerous key economic sectors. The government implemented several policies to combat the spread of the coronavirus in Indonesia, including strict health protocols. However, these policies were insufficient to reduce the transmission rate in Indonesia, so the government implemented Large-Scale Social Restrictions (PSBB), in which most economic activities were forced to do so.

To lower the number of people, operations must be temporarily halted. As the rate of transmission of the coronavirus decreases over time, the government shifts its policy to Implementation of Community Activity Restrictions (PPKM), in which the government just limits operation hours without having to halt and regulate the social distance between communities. While some of these strategies may be able to minimize the number of coronavirus transmissions, they have a negative influence on the community's economy, which leads to poverty.

The government is requiring the execution of several rules in response to the coronavirus epidemic, which has short-term effects that vary between places or over time (TheWorldBank, 2021). Because it is closely tied to the most basic necessities, the impoverished group feels the most immediate impact (Tarigan et al., 2019). From the beginning of the coronavirus epidemic till today, the government has responded to the crisis by implementing a number of initiatives, including the distribution of different social safety net programs and community pre-employment. The policy is split into two sections: short-term and medium-term.

The government provided immediate and short-term assistance in the form of basic necessities to 1.9 million residents in the Jabodetabek area, as well as cash social assistance to residents outside the Jabodetabek area. In addition, the government provided free electricity to 33.6 million customers and subsidized employee salaries for four months to residents outside the Jabodetabek area. With a value of 37.7 trillion rupiahs (Elim et al., 2021). This short-term aid is provided to help people overcome the challenges of essential food and non-food items, particularly for the poor and precarious, when they can no longer satisfy their basic daily needs.

Medium-term policies are programs provided by the government to the community in the form of Direct Cash Assistance (BLT) sourced from village funds, pre-employment cards for training and incentives, BLT for micro and small businesses for 1 million UMK given to groups who fall into poverty because losing work opportunities due to the corona virus outbreak, it is hoped that with the provision of skills, labor-intensive work opportunities can be productive again and can be re-established.

The coronavirus epidemic has had a short-term impact on Indonesia's economic activity and development, and it is expected to have a long-term impact. The coronavirus pandemic has generated an economic crisis and a recession over the past two decades, with the International Monetary Fund predicting a 3% reduction in global economic growth in 2020 (IMF, 2021). In addition to the economic slowdown induced by the coronavirus epidemic, the recession would stimulate an increase in the number of newly impoverished people, notably in Indonesia (Suryahadi, 2020).

## Result

### *The Corona Viruss Spread in Indonesia*

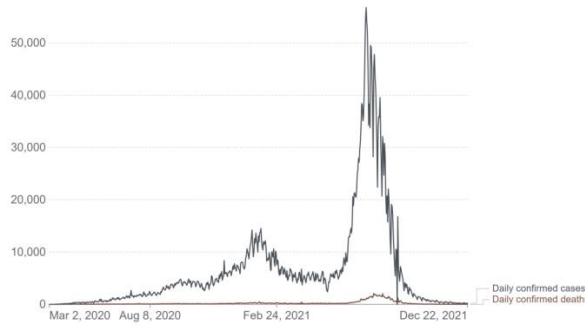
The coronavirus epidemic started in Wuhan, China, near the end of last year. Then, at the start of 2020, in February, there were Indonesian residents affected by the virus, allowing the coronavirus to quickly spread throughout the country. Hundreds of thousands to millions of confirmed coronavirus infections have been reported throughout time, with a link to death and the economic crisis. The picture below depicts the spread of the coronavirus epidemic in Indonesia on a map.



**Figure 3.** Map of the distribution of corona virus cases in Indonesia  
Source: SatgasCovid-19 (2021)

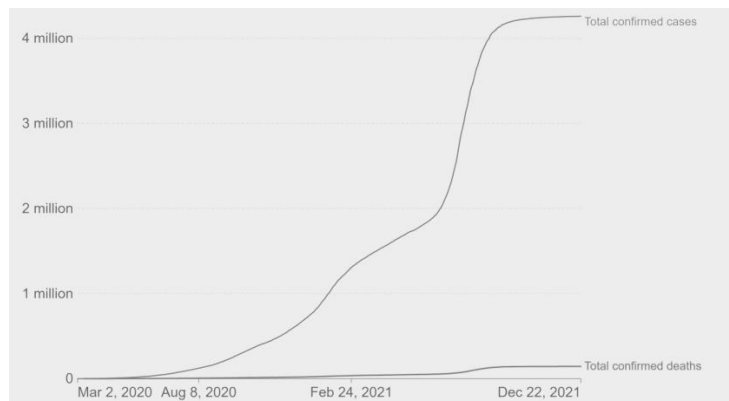


Based on Figure 3. above, it can be seen that the Corona virus outbreak has spread to all provinces in Indonesia. The provinces affected by the corona virus outbreak include Aceh, North Sumatra, Riau, Kep. Riau, West Sumatra, Jambi, South Sumatra, Lampung, Kep. Belitung Belitung, Banten, DKI Jakarta, West Java, Central Java, Special Region of Yogyakarta, East Java, Bali, West Nusa Tenggara, East Nusa Tenggara, West Kalimantan, Central Kalimantan, East Kalimantan, North Kalimantan, South Kalimantan, West Sulawesi, Central Sulawesi, South Sulawesi, Southeast Sulawesi, Gorontalo, North Sulawesi, North Maluku, Maluku, West Papua and Papua.



**Figure 4.** Line Diagram of Daily Confirmed COVID-19 Cases and Deaths Indonesia  
Source: Hopkins (2021)

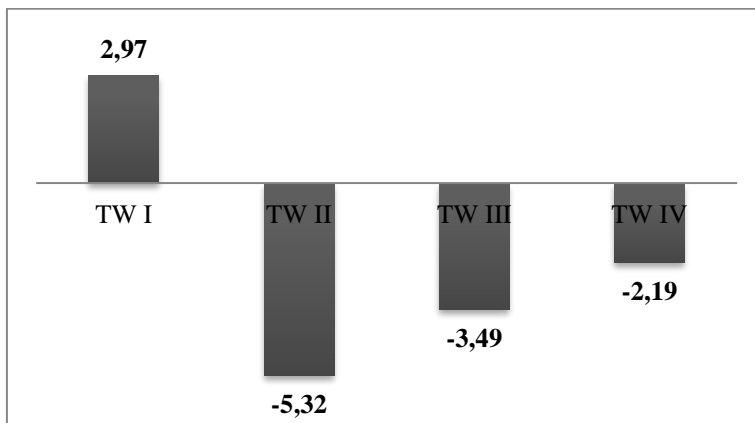
The evolution of the coronavirus case in Indonesia from March 2020 to mid-December 2021 may be observed in the graph above. Confirmed instances of the coronavirus in Indonesia varied, but they continued to rise and peaked in July 2021. Deaths from this virus are also on the rise. The following is a line chart depicting instances of coronavirus-related fatalities in Indonesia:



**Figure 5.** Line Diagram of Cumulative Confirmed COVID-19 Cases and Deaths Indonesia  
Source: Hopkins (2021)

### ***The Economic Situation in Indonesia Following the Corona Virus Outbreak***

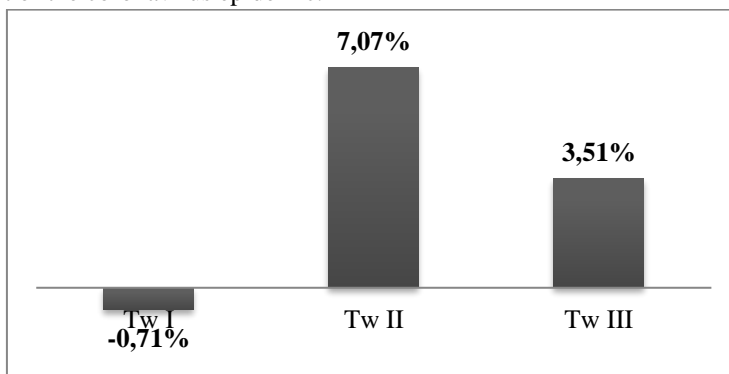
Many sectors, particularly the economic sector, were affected by the corona virus pandemic that swept around the world, including Indonesia. The coronavirus outbreak, which lasted from early 2020 till now, has caused a three-period decline in Indonesias economic development (Dewi & Melati, 2021). The following is information about Indonesias economic growth in 2020:



**Figure 6.** Data on Indonesias Economic Growth in 2020  
 Source: BPS (2021)

The graph above depicts economic growth from the first through the fourth quarters of 2020. Because of the corona virus epidemic in Indonesia, overall economic growth in 2020 will be -2.07 percent (y-o-y). In the second quarter of 2020, economic growth began to decline, but in the third quarter, it began to revive. In the fourth quarter of 2020, economic growth continued to strengthen, aided by the implementation of stimulus and good contributions from the external sector. In the fourth quarter of 2020, most components of demand and business areas showed signs of improvement. According to Bank Indonesia, economic growth will steadily expand and improve in 2021 as a result of this development (BI, 2021).

Improvements in community mobility, the realization of government stimulus increased by 1.94 percent in the form of social assistance and expenditure on goods and services, improved investment from -6.48 percent YoY to -6.15 percent YoY, and total exports also increased due to export performance amid limited imports all contributed to the improvement in economic growth in 2020. This recovery situation is predicted to stabilize Indonesias economy, preventing further deterioration of family welfare and an increase in the communities poverty rate as a result of the coronavirus epidemic.



**Figure 7.** Data on Indonesias Economic Growth in 2020  
 Source: Bank Indonesia (2021)

In 2020, the coronavirus epidemic has led the Indonesian economy to shrink three times. Despite the fact that the coronavirus pandemic has not been totally addressed, the Indonesian economy has gradually recovered over time. Figure 7 depicts the economic development of Indonesia from the first to third quarters of 2021. Export performance in 2021 is expected to be excellent due to robust demand from key trade partners, with the export performance expected to be 29.16 percent. Aside from exports, the value of imports, investment, household consumption, and government spending began to improve. In this approach, Bank Indonesia continues to work with the government and other agencies to improve coordination in order to promote faster economic growth, such as through monetary and fiscal policy coordination, priority sector policies, greater exports, and financial-economic inclusion. If the economy continues to deteriorate and no prompt action is done, poverty will rise and



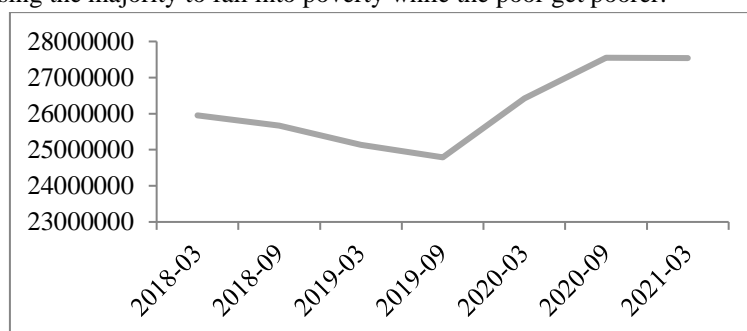
peoples well-being will deteriorate. As a result, the government has implemented a number of strategies to address the economic consequences of the coronavirus pandemic.

## Discussion

### *Poverty in Indonesia as a result of the Corona Virus Outbreak*

Each area in Indonesia has a varying amount of poverty, as well as various reasons and solutions. According to the picture of poverty in Indonesia, the majority of it is concentrated in rural regions. According to data released by the Central Statistics Agency in 2018, the eastern area, specifically the provinces of East Nusa Tenggara (NTT), Papua, and West Papua, had the greatest poverty prevalence of more than 20% (BPS, 2021c). This is due to a number of causes, including physical isolation and telecommunications, impotence as a result of limited access to technology, and peoples proclivity to work in the agriculture sector and produce inferior goods. Land damage, home damage, and public amenities are all impacted by the rising frequency of natural catastrophes and climate change.

The coronavirus outbreak, which began in 2020, has resulted in a rise in the number of impoverished individuals in most Indonesian regions. The coronavirus outbreaks badly impacted 22 of the 34 provinces, particularly in the economic sector. The greatest impact was felt in Java and Bali, with the quickest impact in urban areas (7.49 percent), particularly in the heart of commercial areas such as industry, trade, transportation, and tourism. Meanwhile, 6.56 percent of people in rural regions were impacted. The drop in buying power comes as a result of the transmission process, which results in reduced or even lost labor, and individual productivity, which reduces income, causing the majority to fall into poverty while the poor get poorer.



**Figure 8.** Line Diagram of the Number of Poor People in Indonesia  
Source: BPS (2021a)

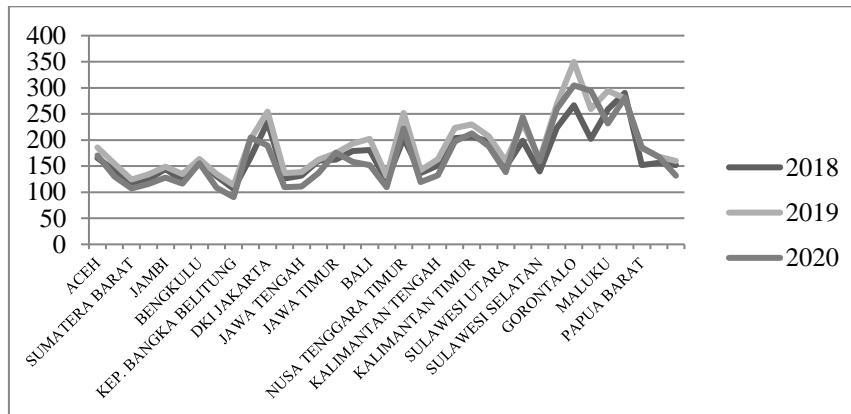
Since the second quarter of 2020, the Indonesian economy has been in a state of crisis. This is owing to the enormous number of people afflicted with the coronavirus, particularly those of working age. As a result, families capacity to fulfill their daily requirements is deteriorating, especially for those who are most impacted by the virus epidemic. Then there were the installation of social restriction rules and policies to limit community activities, which resulted in economic activities not running to their full potential because most enterprises were forced to close temporarily and some people were laid off (Izzati, 2021).

According to a study provided by the Indonesian Central Statistics Agency (BPS) in the first quarter of 2021, economic growth slowed somewhat from -0.74 percent in 2020. Although improvement has been made, the Indonesian economy is still operating at a slower rate than before the coronavirus epidemic. In 2020, the national income per capita growth rate will be 3.15 percent lower than it was at the time. In comparison to the previous year, this implies a decrease in the level of wellbeing of Indonesian families in 2020.

The coronavirus pandemic, as well as the poverty rate in Indonesia, resulted in a drop in the wellbeing of Indonesian families in 2020. From March 2015 to September 2019, the number of impoverished individuals fell steadily from 28.59 million to 24.79 million (BPS). According to the 2018-2019 BPS statistics, the number of people living in poverty, particularly in cities, has regularly fallen from 7.07 percent in March 2018 to 6.56 percent in September 2019. Similarly, the prevalence of poverty in rural regions dropped from 13.20 percent to 12.6%.

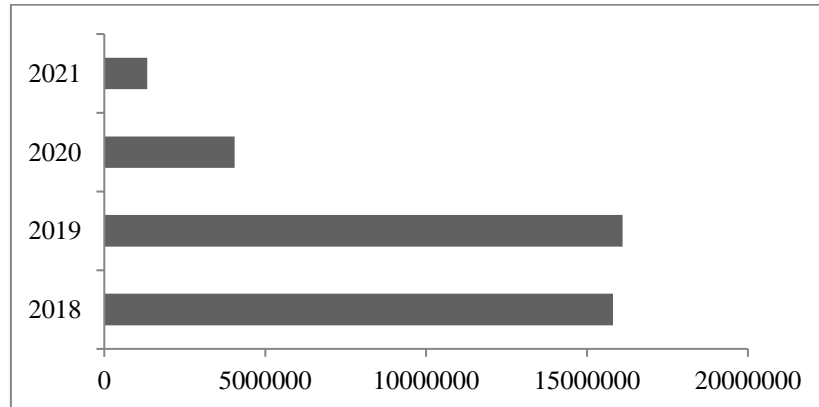
The coronavirus outbreak has had a worldwide impact; numerous nations lockdown measures have hampered international trade, business, and tourism, and most migrant workers have been compelled to return to

Indonesia. As a result, the state of the Indonesian economy has deteriorated, and the countrys poverty rate has risen in tandem with the coronavirus pandemic. When the coronavirus entered and expanded throughout Indonesia, the government responded by enacting a series of laws targeted at lowering the number of instances of viral transmission (Dewi & Melati, 2021), however, these policies only worsened poverty. The micro, small, and medium company sector, tourism, transportation, and other sectors are all impacted significantly by these regulations.



**Figure 9.** Outline Diagram of Small and Medium Industry Sector  
 Source: BPS (2021a)

According to Figure 9, the development of Indonesias small and medium industry sector rose from 2018 to 2019 but then declined in 2020 following the coronavirus epidemic. Aside from the small and medium industrial sectors, there are other industries that have had major declines, such as tourism. The statistics on the growth of international tourist visits to Indonesia are shown in the form of a bar chart.



**Figure 10.** Bar Chart of the Development of Foreign Tourist Visits to Indonesia  
 Source: (BPS, 2021d)

Figure 10 depicts a rise in international tourist visits to Indonesia from 2018 to 2019, but the same cannot be said for the small and medium industry sector, which saw a fall in 2020 and 2021 when the coronavirus outbreak first appeared in Indonesia.

In light of the major decline in the growth of numerous sectors in Indonesia, it is clear that the coronavirus pandemic has had a short-term impact on all levels of society, particularly in Indonesia. The downturn of Indonesias economic sectors led to a reduction in job prospects and mass layoffs, resulting in an increase in the number of jobless in the country. These are some of the factors that have contributed to the Indonesian markets drop in marketability. The incidence of poverty as a result of the coronavirus outbreak that struck Indonesia, resulting in a fall in peoples income.

Fewer employment possibilities, reduced working hours, lower worker earnings, and worse work productivity all contributed to the fall in revenue. Working time reductions and obstacles emerge as a result of constraints on domestic and international mobility of activities, particularly for individuals in the industrial,



commercial, and agricultural sectors. Many reductions in the workforce during the COVID-19 pandemic resulted in an increase in poverty in Indonesia. The poverty rate in Indonesia before the pandemic, precisely in September 2019 reached 9.22%, then after the Covid-19 pandemic, precisely in September 2020, Indonesian poverty increased to 10.19% (BPS, 2021b). As a result, the government must create a causative strategy, specifically one that may lower the number of coronavirus infections while simultaneously balancing the growth in poverty rates in Indonesia as a result of this incident.

### Conclusions

The coronavirus outbreak has resulted in changes in social behavior and economic activity, resulting in a rise in poverty both nationally and between areas. The government undertook many strategies to minimize the incidence of coronavirus transmission, however, these efforts only worsened Indonesias economic difficulties and poverty. The viral spread also resulted in a drop in income at all levels of society. As a result, the depth and severity of poverty increases, with a reduction in work prospects and a worsening of the situation of those who were previously classed as poor. The coronavirus pandemic has also slowed national economic growth, which is a contributing factor to Indonesias rising poverty rate. The Indonesian governments deteriorating economy and poverty did not go unnoticed. Several causative measures, such as those aimed at reducing the spread of the coronavirus and those aimed at restoring the economy and reducing poverty, are still being implemented. As a result, while the coronavirus outbreak has not yet subsided, transmission instances are beginning to decline, and Indonesias economic situation is gradually improving.

### References

- Badan Pusat Statistik. (2020). Statistik Pertumbuhan Ekonomi Indonesia Triwulan I-2020. *Pertumbuhan Ekonomi Indonesia Triwulan IV-2019*, 17, 2. <https://www.bps.go.id/pressrelease/2020/02/05/1755/ekonomi-indonesia-2019-tumbuh-5-02-persen.html>
- Bausch, D. G., & Schwarz, L. (2014). *Outbreak of Ebola Virus Disease in Guinea : Where Ecology Meets Economy*. 8(6), 8–13. <https://doi.org/10.1371/journal.pntd.0003056>
- BI. (2021). Pertumbuhan Ekonomi Indonesia Triwulan Iv 2020. *Bank Indonesia*. [bi.go.id/](http://bi.go.id/)
- Bocconi, L. (2020). *Epidemics , Inequality and Poverty in Preindustrial and Early Industrial Times. 1800*(October). <https://doi.org/10.31235/osf.io/36c9f>
- BPS. (2021a). *Industri Mikro dan Kecil*. <https://www.bps.go.id/subject/170/industri-mikro-dan-kecil.html#subjekViewTab3>
- BPS. (2021b). *Kemiskinan dan Ketimpangan*. <https://www.bps.go.id/subject/23/kemiskinan-dan-ketimpangan.html#subjekViewTab3>
- BPS. (2021c). *Profil Kemiskinan di Indonesia*. 00(53), 1–12.
- BPS. (2021d). *Sektor Pariwisata*. <https://www.bps.go.id/subject/16/pariwisata.html#subjekViewTab3>
- BPS. (2021e). *STATISTIK Pertumbuhan Ekonomi Indonesia Triwulan IV-2020* (Issue 13).
- Dewi, N. I., & Melati, F. C. (2021). The Impact on Economic and Environmental Development of COVID-19 Pandemic: a Case Study in Indonesia. *Ekulilibrium: Jurnal Ilmiah Bidang Ilmu Ekonomi*, 16(1), 1–11.
- Elim, Y. V., Sangaji, A. H., & Nggili, N. (2021). Dampak Pandemi Covid-19 Terhadap Perekonomian di Provinsi NTT. *Widyagama National Conference on Economics and Business (WNCEB)*, 2(1), 799–817.
- Hopkins, J. (2021). *Cumulative COVID-19 Test, Confirmed Cases and Deaths*. Ourworldindata.Org. <https://ourworldindata.org/coronavirus-data?country=~IDN>
- IMF. (2021). *World economic outlook reports*. International Monetary Fund.
- Izzati, R. Al. (2021). Situasi Kemiskinan Selama Pandemi. *Smeru.or.Id, September 2020*, 1–13. <https://smeru.or.id/id/content/situasi-kemiskinan-selama-pandemi>
- Jemberu, W. T., Mourits, M. C. M., Woldehanna, T., & Hogeveen, H. (2014). Economic impact of foot and mouth disease outbreaks on smallholder farmers in Ethiopia. *Preventive Veterinary Medicine*, 116(1–2), 26–36. <https://doi.org/10.1016/j.prevetmed.2014.06.004>
- Mofijur, M., Fattah, I. M. R., Alam, M. A., Islam, A. B. M. S., Ong, H. C., Rahman, S. M. A., Najafi, G., Ahmed, S. F., Uddin, M. A., & Mahlia, T. M. I. (2021). Impact of COVID-19 on the social, economic,



- environmental and energy domains: Lessons learnt from a global pandemic. *Sustainable Production and Consumption*, 26, 343–359. <https://doi.org/10.1016/j.spc.2020.10.016>
- SatgasCovid-19. (2021). Peta Sebaran Kasus Covid-19 Per Provinsi. <https://Covid19.Go.Id/Peta-Sebaran>.  
<https://covid19.go.id/peta-sebaran-covid19%0Ahttps://covid19.go.id/peta-sebaran>
- Setyadi, S., & Indriyani, L. (2021). Dampak Pandemi Covid-19 Terhadap Peningkatan. 4.
- Suryahadi, A. (2020). *The Impact of COVID-19 Outbreak on Poverty: An Estimation for Indonesia The Impact of COVID-19 Outbreak on Poverty: An Estimation for Indonesia*.
- Tarigan, H., Simatupang, P., Wahyuni, S., & Maulana, M. (2019). Strategi penanggulangan kemiskinan di pertanian dan perdesaan. *Laporan Teknis. Pusat Sosial Ekonomi Dan Kebijakan Pertanian, Bogor*.
- TheWorldBank. (2021). *Poverty and Distributional Impacts of COVID-19: Potential Channels of Impact and Mitigating Policies*.
- Yogaswara, A. (2017). Analisis Faktor-Faktor yang Mempengaruhi Kemiskinan. 282.