

Analysis of the Impact of Covid-19 Pandemic on the Economic Condition of Wonogiri

Kharimah Aullia, M Iqbal Taufiqurrahman Sunariya*

Faculty of Geography, Universitas Muhammadiyah Surakarta (UMS), Surakarta, Indonesia

*Corresponding author: mit375@ums.ac.id

ABSTRACT

Coronavirus Disease or commonly known as Covid-19 which attacks the respiratory system, severe lung infections and causes death. The Covid-19 virus in several regions continues to increase, this of course causes economic tension in various parts of Indonesia, one of which is Wonogiri Regency. The purpose of this study was to determine the impact of the Covid-19 pandemic on the economy of a region. This study uses GRDP data in Wonogiri Regency in 2016-2020, data processing uses the formula for the rate of economic growth and is analyzed using a comparative descriptive method. Based on research results, the COVID-19 pandemic caused a very sharp decline in the economic sector, the annual GRDP decreased by 3.25%. The economic growth rate of Wonogiri Regency decreased from 4.88% in 2019 down to -1.63% in 2020.

INTRODUCTION

Coronavirus diseases, or the virus commonly known as Covid19, is a virus that started to spread in the city of Wuhan, China, since December 2019. The World Health Organization (WHO) has described COVID-19 as a virus that infects the respiratory tract. Symptoms of this virus include fever, dry cough, loss of smell (lost of smell), and difficulty breathing. The main transmission of the Covid-19 virus occurs through direct contact without protection, such as droplets from sneezing and coughing. The incubation period for this virus is from 2 to 14 days. The most vulnerable to the Covid-19 virus are parents with weak immune systems and children with immature immunity (Nurwati & Mardiyah, 2020).

The Covid-19 virus has had a negative impact on Indonesia in various fields including the economy, health and education. The Indonesian economy is the area most affected by the spread of the COVID-19 virus. According to the Republika.co.id 2020 report, the Covid-19 virus has affected the Indonesian economy in three ways. The first impact of low consumption or purchasing power of households, which make up 60% of the economy is severe. This is evidenced by data from the Central Statistics Agency (BPS) that household consumption fell from 5.02% in the first quarter of 2019 to 2.84% in the first quarter of 2020. The second impact is the emergence of long-term uncertainty, which weakens investment and has an impact on closing Indonesian businesses. The third impact was the weakening of the global economy, with Indonesia's imports (YTD) falling 3.7% between January and March 2020, as commodity prices fell and import and export activities stopped. (Zuraia, 2020).

As the center of the Indonesian economy, Java is dominated by industry, trade and the low purchasing power of the people who make up the GRP, and these investments have had a significant impact on the country's GDP decline. The COVID-19 pandemic and massive social constraints (EIA) reduced purchasing power Investment also declined due to the uncertainty of the COVID-19 pandemic (Rahayu & Muharam, 2021) The three lowest growth rates were Bali, DKI Jakarta and Banten, each of which recorded 10.98%, 8.22%, and 7.40%.

The area with the lowest economic growth is Bali. 4,444 Around 58% of Bali's economy depends on tourism. Food and beverage supply in the transportation and hotel sectors fell sharply between 39.48-33.10%. These two sectors are closely related to tourism which is the backbone of Bali's economy. DKI Jakarta is the second largest area with an economic growth rate of 8.22% in the second quarter of 2020. Investment has made a significant contribution in driving economic growth in Jakarta with a market share of 34.3 GRP, however Covid 19 and the PSBB have reduced investment and household

consumption, resulting in a severe economic downturn in the province of Jakarta. The country with the highest economic growth rate is Banten. Banten's economy is volatile in most of its business sectors. The sectors that experienced the worst recession were transportation and warehousing, which fell 47%. This is because 4,444 social activities that interfere with economic activities are restricted. (Rahayu and Muharam, 2021).

Economics is one of the important fields in human life because all human activities are strongly influenced by the economic field. Because the economic field is considered very important in the lives of individuals, the Indonesian state has an obligation to regulate economic policies. The economic system is used by a country to allocate resources owned by all individuals or organizations in the country (Mardiyah & Nurwati, 2020). However, as the pandemic spread to Indonesia, the economic crisis became weaker than usual (Mardiyah & Nurwati, 2020). The current situation in Indonesia is felt everywhere, one of which is Wonogiri Regency. In 2020, national income per capita is lower than in previous years, and economic changes in the Wonogiri area have also decreased. According to the Wonogiri Central Statistics Agency (BPS), the decline in 2020 was 1.63%. The purpose of the study was to determine the impact of the Covid-19 Pandemic on the economy in Wonogiri Regency.

DATA AND METHOD

Area of Study

Wonogiri Regency is one of the regencies on the east side of Central Java Province. Geographically, Wonogiri Regency is located between 7°32' to 8°15' South Latitude (LS) and between 110°41' to 111°18' East Longitude (BT), with an area of 1,822 Km². The boundaries of the area in Wonogiri Regency are in the east by Ponorogo Regency, East Java Province, in the south by Pacitan Regency, East Java Province and the Special Region of Yogyakarta, in the west by Sukoharjo Regency and Karanganyar Regency, in the north by Karanganyar Regency and Magetan Regency, East Java Province (Central Statistics Agency, Wonogiri Regency Area Description, 2020). The research location can be seen in Figure 1.

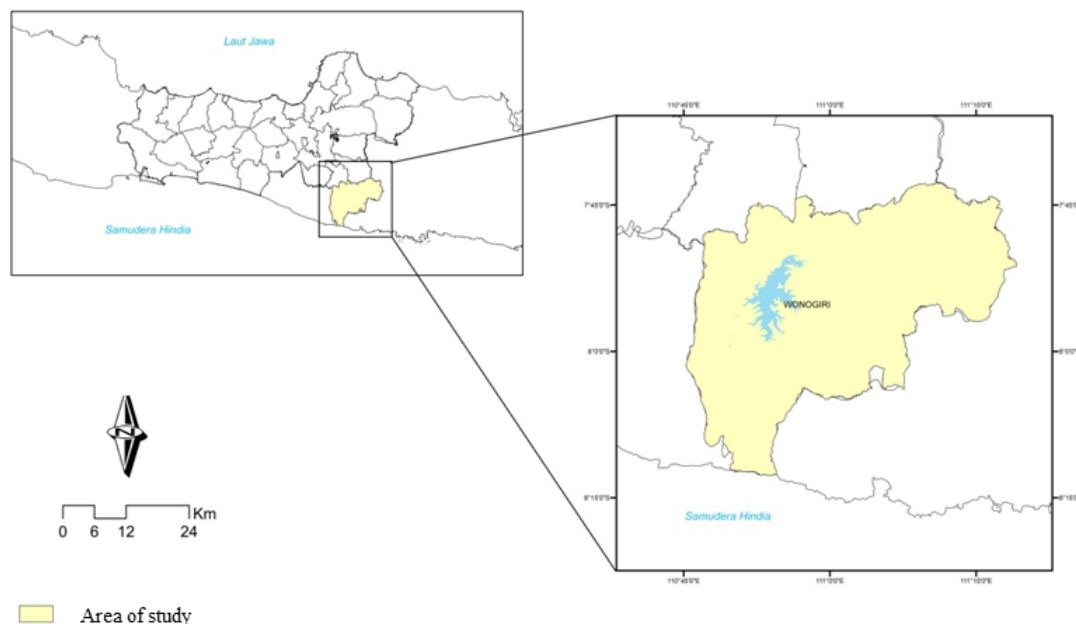


Figure 1. Research location

Economic Growth Rate

The opinion that economic development is the dominant variable that determines the size of the component of national income. Economic development is a macroeconomic basic assumption variable that is directly related to government revenues regardless of domestic tax revenues (income tax, value added tax, -added) Taxes, Land and Building Taxes, Excise Taxes and Other Taxes) or Non-Taxable State Revenues (earnings per share. BUMN). The results of the calculation formula will reveal the economic growth that occurred in Wonogiri Regency in 2016-2020. The formula used to analyze economic changes in Wonogiri from 2016 to 2020 is as follow :

$$PE = \frac{PDRB_t - PDRB_{t-1}}{PDRB_{t-1}} \dots\dots\dots(1)$$

Where,

- PE = Economic growth
- PDRB = Gross Regional Domestic Product
- t = Specific Period
- t-1 = Previous Period

Comparative Description Method

The analysis of the impact of the Covid-19 pandemic on the economic sector was carried out using a comparative descriptive method, namely by looking for basic answers regarding the causes of an increase in unemployment and economic changes as a result of the Covid-19 pandemic, analyzing economic changes in Wonogiri Regency. This analysis is also used as a comparison of data on economic changes and the increase in unemployment over the last five years and is associated with the Covid-19 pandemic, comparisons before the Covid-19 pandemic and during the pandemic.

RESULTS AND DISCUSSION

GRDP of Wonogiri Regency

Economic changes can be seen from the level of Gross Regional Domestic Product (GDP) of each region. One indicator of the level of prosperity of the population in an area is GRDP per capita. The size of the population affects the value of GRDP per capita, while the size of the GRDP is highly dependent on the potential of natural resources and several production factors in the area studied. The following Table 1 is the GRDP Per Capita of Wonogiri Regency in 2016-2020.

Table 1. Per-capita Gross Regional Domestic Product (GRDP) of Wonogiri Regency 2016-2020.

GRDP/year	2016	2017	2018	2019	2020
On the basis of constant prices (ADHK 2010) (million)	18,771	19,712	20,726	21,737	21,383
The Per-Capita GDP Growth Rate (ADKH)	4.93	5.01	5.15	4.88	-1.63

Based on table 1 data, the per capita GRDP value is above 18.77 million rupiah in 2016 and increased to 21.73 in 2019. However, in 2020 it decreased to 21.38 million, this is due to the Covid-19 pandemic which affected economy in Wonogiri Regency.

2010 GRDP at Constant Prices (ADHK) by Field of Business

Gross Regional Domestic Product (GRDP) according to business sector is broken down into 17 groups. The following is a description of each group in 2016-2020.

Table 2. 2010 ADKH GRDP by Business Fields in Wonogiri Regency in 2016-2020.

No	GRDP Sector Business Field	ADHK GDP by Business Field				
		2016	2017	2018	2019	2020
1.	Agriculture, Forestry and Fisheries	5.654.169,88	5.752.966,9	5.798.518,28	5.777.872,89	6.025.355,95
2.	Mining and excavation	555.171,05	563.062,63	579.218	584.428	571.618
3.	Processing industry	2.740.706,28	2.932.998,37	3.142.072,89	3.356.314,20	3.431.096,04
4.	Electricity and Gas Supply	14.749,42	15.677,30	16.390,66	17.120,33	18.019,02
5.	Water Supply, Waste Management, Waste and Recycling	13.027,50	13.917,74	14.525,04	15.417,88	15.915,14
6.	Construction	1.184.081,08	1.302.427,13	1.414.277,92	1.528.744,03	1.486.304,24
7.	Wholesale and Retail Trade : Car and Motorcycle Repair	3.064.115,94	3.227.896,13	3.465.108,94	3.728.288,26	3.668.905,16
8.	Transportation and Warehousing	1.214.442,19	1.332.006,13	1.466.955,10	1.622.124,57	1.070.560,53
9.	Provision of Accommodation and Food and Drink	439.428,27	467.930,67	496.366,35	539.807,72	572.465,02
10.	Information and Communication	192.509,29	227.669,96	260.659,06	291.872,10	343.314,71
11.	Financial Services and Insurance	539.506,86	567.921,03	599.005,18	628.257,46	637.209,23
12.	Real Estate	151.668,19	161.512,92	168.445,78	174.179,43	173.847,79
13.	Company Services	72.395,63	78.715,63	83.716,93	91.788,65	88.096,29
14.	Government Administration, Defense and Mandatory Social Security	508.618,91	523.065,63	536.815,59	560.623,92	554.353,34
15.	Education Services	1.018.204,80	1.105.372,24	1.199.296,25	1.293.408,88	1.291.611,12
16.	Health Services and Social Activities	166.837,51	182.937,86	199.218,38	216.172,51	234.168,51
17.	Other services	339.517,61	363.872,11	296.432,54	429.789,30	423.761,97
Gross Regional Domestic Product		17.869.145,42	18.818.939,39	19.837.002,48	20.856.209,49	20.561.601,85

Based on table 2, GRDP at constant prices according to business fields in Wonogiri Regency has increased and decreased in each indicator. The difference between the increase and decrease in GRDP from 2019 and 2020 can be seen in Table 3 below.

Table 3. The Difference Between the Increase and Decrease in 2010 ADHK GRDP in 2019-2020.

GRDP Sector Business Field	ADHK GDP by Business Field			
	2019	2020	Difference	Description
Agriculture, Forestry and Fisheries	5.777.872,89	6.025.355,95	247.483,06	increase
Mining and excavation	584.428	571.618	-12.810,00	decrease
Processing industry	3.356.314,20	3.431.096,04	74.781,84	increase
Electricity and Gas Supply	17.120,33	18.019,02	898,69	increase
Water Supply, Waste Management, Waste and Recycling	15.417,88	15.915,14	497,26	increase
Construction	1.528.744,03	1.486.304,24	-42.439,79	decrease
Wholesale and Retail Trade : Car and Motorcycle Repair	3.728.288,26	3.668.905,16	-59.383,10	decrease

Transportation and Warehousing	1.622.124,57	1.070.560,53	-551.564,04	decrease
Provision of Accommodation and Food and Drink	539.807,72	572.465,02	32.657,30	increase
Information and Communication	291.872,10	343.314,71	51.442,61	increase
Financial Services and Insurance	628.257,46	637.209,23	8.951,77	increase
Real Estate	174.179,43	173.847,79	-331,64	decrease
Company Services	91.788,65	88.096,29	-3.692,36	decrease
Government Administration, Defense and Mandatory Social Security	560.623,92	554.353,34	-6.270,58	decrease
Education Services	1.293.408,88	1.291.611,12	-1.797,76	decrease
Health Services and Social Activities	216.172,51	234.168,51	17.996,00	decrease
Other services	429.789,30	423.761,97	-6.027,33	decrease
Gross Regional Domestic Product	20.856.209,49	20.561.601,85	-249.608,07	decrease

Based on Table 3, it can be seen that the difference in income in each sector in 2019 and 2020 is clearly experiencing a lot of decline. The growth rate of GRDP can be seen in Table 4 below.

Table 4. ADHK 2010 GDP Growth Rate Wonogiri Regency 2016-2020.

No	GRDP Sector Business Field	ADHK GRDP Growth Rate by Business Field (Percent)				
		2016	2017	2018	2019	2020
1.	Agriculture, Forestry and Fisheries	3.23	1.75	0.79	-0.36	4,28
2.	Mining and excavation	1.54	1.42	2.87	0.90	-2,19
3.	Processing industry	6.80	7.02	7.13	6.82	2,23
4.	Electricity and Gas Supply	8.60	6.29	4.55	4.45	5,25
5.	Water Supply, Waste Management, Waste and Recycling	1.94	6.83	4.36	6.15	3,23
6.	Construction	6.99	9.91	8.67	8.09	-2,78
7.	Wholesale and Retail Trade : Car and Motorcycle Repair	5.42	5.35	7.35	7.6	-1,59
8.	Transportation and Warehousing	5.95	9.68	10.13	10.58	-34,00
9.	Provision of Accommodation and Food and Drink	7.27	6.49	6.08	8.75	-2,29
10.	Information and Communication	8.67	18.26	14.49	11.97	17,63
11.	Financial Services and Insurance	9.87	5.27	5.47	4.88	1,42
12.	Real Estate	6.80	6.49	4.29	3.40	-0,19
13.	Company Services	10.13	8.73	6.35	9.64	-4,02
14.	Government Administration, Defense and Mandatory Social Security	2.62	2.84	2.63	4.44	-1,12
15.	Education Services	7.55	8.56	8.50	7.85	-0,14
16.	Health Services and Social Activities	7.72	9.65	8.90	8.51	8,33
17.	Other services	6.63	7.17	8.95	8.41	-1,40
	Gross Regional Domestic Product	5,25	5.32	5.41	5.14	-1.41

Based on Table 4 GRDP growth rate at constant prices 2010 Wonogiri Regency from 2016-2019 experienced a significant increase, but in 2020 many sectors experienced a decline. This is due to the impact of the ongoing Covid-19 pandemic throughout Indonesia. The contribution of the Information and Communications sector to GRDP in 2020 grew by 17.63 percent, higher than other sectors. This is of course due to policies from the government that limit the mobility and activities of the community during the Covid-19 pandemic. Various outdoor activities that previously could be

done freely are now restricted to control the spread of the virus. Thus, people are more likely to take advantage of virtual channel facilities by maximizing online media. The difference in the decline in the rate of GRDP growth in 2019 and 2020 can be seen in Table 5.

Table 5. Increase and Decrease in 2010 ADHK GDP Growth Rate by Business Field (Percent).

GRDP Sector Business Field	ADHK GRDP Growth Rate by Business Field (Percent)		
	2019	2020	Description
Agriculture, Forestry and Fisheries	-0.36	4.28	increase
Mining and excavation	0.9	-2.19	decrease
Processing industry	6.82	2.23	decrease
Electricity and Gas Supply	4.45	5.25	increase
Water Supply, Waste Management, Waste and Recycling	6.15	3.23	decrease
Construction	8.09	-2.78	decrease
Wholesale and Retail Trade : Car and Motorcycle Repair	7.6	-1.59	decrease
Transportation and Warehousing	10.58	-34	decrease
Provision of Accommodation and Food and Drink	8.75	-2.29	decrease
Information and Communication	11.97	17.63	increase
Financial Services and Insurance	4.88	1.42	decrease
Real Estate	3.4	-0.19	decrease
Company Services	9.64	-4.02	decrease
Government Administration, Defense and Mandatory Social Security	4.44	-1.12	decrease
Education Services	7.85	-0.14	decrease
Health Services and Social Activities	8.51	8.33	decrease
Other services	8.41	-1.4	decrease
Gross Regional Domestic Product	5.14	-1.41	decrease

Based on table 7 and table 8 above, it can be seen that in 2020 many experienced a drastic decline. This decline occurred none other than the impact of the Covid-19 pandemic that entered the Wonogiri Regency area. The negative macroeconomic impact of COVID-19 is undoubtedly a serious pandemic and humanitarian tragedy that first hit the world, resulting in a massive health crisis (WHO, 2020), a disproportionate social order (UN VILLAGE, 2020) and economic losses. Large (IMF, 2020). This has a significant negative impact on the global economy, where governments, businesses and individuals struggle to coordinate (Fernandes, 2020; Pinner et al., 2020; Sarkis et al., 2020; Sohrabi et al., 2020; Van Bavel et al., 2020). Indeed, the COVID-19 pandemic has distorted global assumptions by demonstrating the lack of resilience of the dominant economic model to respond to unplanned shocks and crises (Pinner et al., 2020). It highlights the weaknesses of the global economy and the shortcomings of excessive centralization of complex global supply and production networks, while also underscoring the weak links between industries (Fernandes, 2020; Guan et al., 2020; Sarkis et al., 2020). This has a direct impact on employment and increases the risk of food insecurity for millions of people due to quarantines and border restrictions (Guerrieri et al., 2020). This has helped prevent a health system overload (JHU, 2020), reporting that the socioeconomic impact of COVID-19 will be felt in the coming months.

Consumer Behavior There has long been a distinction between consumer trends and biophysical realities (Spash, 2020). However, the need for reflection on the social impact of individual lifestyles is increasing due to COVID-19. In many domains, consumer behavior is at risk of being warned

by the frenzy of buying food and hygiene products (Sim et al., 2020). Consumer sentiment at the private level has also changed. Lack of access to goods and services has forced citizens to rethink their spending patterns and needs, focusing on the goods that matter most (Company, 2020; Lyche, 2020). Spash (2020) argues that the technological obsolescence of modern products, driven by rapid innovation and individual consumption, can also affect linear economic models. For example, the average cell phone lifespan is 4 years (2 years in the US), suggesting that production/service increases are limited to economic disruptions and shutdowns (Schluep, 2009).

The Covid-19 pandemic has a direct impact on the economy of several regions in Indonesia, including Wonogiri Regency. While the fixed price Gross Regional Domestic Product (GRDP) (ADHK) in 2010 decreased compared to the previous year in 2020, this certainly cannot avoid the impact of the Covid19 pandemic which has increased sharply in Wonogiri Regency. Not only regional GRDP, but also GRDP of the business sector fell. 4,444 The biggest decline occurred in the transportation and warehousing sector by 34.00%, as well as the information and communication sector which grew the most at 17.63%. The growth of the telecommunications sector is driven by government regulations that limit all social activities that cause congestion and crowds, with people choosing to use virtual services to carry out activities such as schools, office meetings and other events, which of course also has a negative impact on the transportation sector. The number of parks needs to be reduced due to restrictions on the movement of people using public transport due to the absence or sharp decline of passengers.

In 2016-2019 the GRDP of Wonogiri Regency has increased since before the pandemic the most affecting sector was the information and communication sector, followed by the transportation, corporate and social health sectors. Until the time of the pandemic, the information and communication sector continued to increase this was due to several activities starting to use online media, so that currently Telkomsel, XL and Indosat companies have quite high profits, due to use during Work From Home (WFH) and learning from house is getting taller. Meanwhile, the transportation sector before the pandemic continued to increase because people currently use online motorcycle taxi services which are more efficient and relatively inexpensive. However, during the pandemic, this dropped drastically due to policies to reduce direct contact and maintain distance so that many online motorcycle taxi users no longer use their services. Things like this do not only happen in Wonogiri Regency, but also in Purworejo Regency. The Covid-19 pandemic has caused a decline in income of up to 75 percent (Musliman, 2020).

From the analysis above, it is found that the decline in the rate of economic growth in Wonogiri Regency is due to a decrease in the number of people's consumption which has decreased so that the income generated is not in line with expectations, coupled with the Covid-19 pandemic which has spread throughout the region. The COVID-19 pandemic is getting worse in areas with high mobility, high population, high population, and high economic activity. According to the Central Statistics Agency in 2020, the population of Wonogiri Regency is 1,091.20 inhabitants. On the other hand, the population of the Wonogiri sub-district is relatively high, where the center of the Wonogiri district government is in the sub-district, thus causing the most spread of covid-19 to be in the Wonogiri sub-district and causing the economy in the sub-district to be almost paralyzed.

CONCLUSIONS

The impact of the Covid-19 pandemic on the economy of the Wonogiri Regency area was very bad, the economy continued to decline by -1.63%. The decline also occurred in Gross Regional Domestic Product (GRDP) according to employment, the lowest decline was in the transportation and warehousing sector at -34.00%, while the highest increase was in the information and communication sector at 17.63%. The decline and increase in these two sectors occurred due to government regulations that had limited the space for people to move outside, this of course to reduce the potential increase in the number of patients affected by the Covid-19 virus. The sub-district with the most visible decline

in income is the Wonogiri sub-district where the sub-district is the center of government. When Covid-19 enters the area, the economy is said to be close to being paralyzed.

ACKNOWLEDGEMENT

The authors thanked to the Faculty, Geography, University of Muhammadiyah Surakarta for their support, and to reviewers for their constructive input.

REFERENCES

- Anwar, D. P., Ati, N. U., & Pindahanto, R. (2020). Implementasi Program Bantuan Pangan Non Tunai (BPNT) Dinas Sosial Dalam Menanggulangi Kemiskinan Di Kelurahan Sisir Kecamatan Batu Kota Batu. *Respon Publik*, 1-7.
- Badan Pusat Statistika. (2020). Deskripsi Wilayah Kabupaten Wonogiri. In T. BPS, *Kabupaten Wonogiri Dalam Angka 2020* (pp. 3-9). Kabupaten Wonogiri: BPS-Statistic of Wonogiri Regency.
- Badan Pusat Statistika. (2021). Produk Domestik Regional Bruto Kabupaten Wonogiri Tahun 2016-2020. In *Produk Domestik Regional Bruto Kabupaten Wonogiri Tahun 2016-2020*. Wonogiri: bps.go.id.
- Baeti, N. (2013). Pengaruh Pengangguran, Pertumbuhan Ekonomi, dan Pengeluaran Pemerintah Terhadap Pembangunan Manusia Kabupaten/Kota Provinsi Jawa Tengah 2007-2011. *Economics Development Analysis Journal*.
- Baker, S., Bloom, N., Davis, S., & Terry, S. (2020). Covid Induced Economic Uncertainty. *Nasional Bureau Of Economic Research*.
- Company M. A global view of how consumer behavior is changing amid COVID-19. McKinsey. 202
- Duko, H., Pangemanan, P. A., & Katiandagho, T. M. (2018). Analisis Pengaruh Variabel Ekonomi Terhadap Pertumbuhan Ekonomi Di Kabupaten Halmahera Timur. *Agri-SosioEkonomiUnsrat*, 95-108.
- Fernandes, N., 2020. Economic effects of coronavirus outbreak (COVID-19) on the world economy. Available at SSRN 3557504.
- Hanoatubun, S. (2020). Analisis Covid-19 Terhadap Perekonomian Indonesia. *EduPsyCouns Jurnal*, 148-149.
- Ibrahim, I. (2018). Analisis Potensi Sektor Ekonomi Dalam Upaya Peningkatan Pertumbuhan Ekonomi (Studi Empiris Kabupaten dan Kota di Provinsi Gorontalo tahun 2012-2016). *Gorontalo Development Review*, 44-47.
- Pinner D., Rogers M., Samandari H. McKinsey & Company; 2020. McKinsey Quarterly: Addressing climate change in a post-pandemic world; pp. 1-6
- Putri, I. A. (2018, Mei 24). *Struktur Geologi Kabupaten Wonogiri*. Retrieved Nopember 25, 2021, from Scribd: <https://id.scribd.com/document/183667256/STRUKTUR-GEOLOGI-WONOGIRI>
- Rahayu, N. T., & Muharam, H. (2021). The Impact of The Covid-19 Pandemic on Provincial Economic Performance In Indonesia. *Management Analysis Journal*, 27.
- Sarkis J., Cohen M.J., Dewick P., Schröder P. A brave new world: lessons from the COVID-19 pandemic for transitioning to sustainable supply and production. *Resour. Conserv. Recycl.* 2020
- Schluep M. UNEP; 2009. Recycling-from e-waste to resources: Sustainable innovation technology transfer industrial sector studies.
- Sim K., Chua H.C., Vieta E., Fernandez G. The anatomy of panic buying related to the current COVID-19 pandemic. *Psychiatry Res.* 2020

- Sohrabi C., Alsafi Z., O'Neill N., Khan M., Kerwan A., Al-Jabir A., Iosifidis C., Agha R. World Health Organization declares global emergency: A review of the 2019 novel coronavirus (COVID-19) *Int. J. Surg.* 2020
- Spash, C. (2020). The economy as if people mattered: Revisiting critiques of economic growth in a time of crisis. *Globalizations*.
- Syahputra, R. (2017). Analisis Faktor-faktor Yang Mempengaruhi Pertumbuhan Ekonomi di Indonesia. *Jurnal Samudera Ekonomika*, 183-191.
- Welianto, A. (2020, Jui 16). *Pertumbuhan Ekonomi: Pengertian dan Teori Pertumbuhan* . Retrieved Mei 05, 2021, from Kompas: www.kompas.com
- Van Bavel J.J., Baicker K., Boggio P.S., Capraro V., Cichocka A., Cikara M., Crockett M.J., Crum A.J., Douglas K.M., Druckman J.N. Using social and behavioural science to support COVID-19 pandemic response. *Nat. Hum. Behav.* 2020:1–12.