



## Investigating of Macroeconomic Assessment Against Economic Resilience During Pandemic Covid-19

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### Abstract

The Covid-19 pandemic has brought about changes in recent times, one of which impacts economic conditions. This study aims to investigate government policies through the National Economic Recovery (PEN) with a macroeconomic approach to the condition of economic resilience. Macroeconomic indicators use interest rates (IR), inflation, IHSG, money supply (MS), and tax revenues to see the effect on economic resilience, which consists of economic growth (GDP), unemployment, and poverty. The data used is a time series with an observation period from January 2017 to June 2021. The analytical method used is the Error Correction Model (ECM). The results show that the policy package through the National Economic Recovery (PEN) effectively overcame the economic downturn during the pandemic, although it is not yet fully optimal. At least policies based on fiscal and monetary can bring Indonesia's economic growth in a positive direction. So that in the long term, unemployment and poverty due to a decrease in people's purchasing power can be overcome.

**Keywords:** Macroeconomics, Resilience, Error Correction Model, National Economic Recovery.

### Introduction

Since being declared a Covid-19 pandemic outbreak on March 11, 2020, by the World Health Organization (WHO), Covid-19 has spread widely throughout the world. According to data from [worldometers.info](http://worldometers.info), September

12, 2021, 223 countries in the world have reported contracting Covid-19 with a total of 225.11 million cases and 4.63 million deaths. Not only has an impact on the health crisis, but the Covid-19 pandemic has also caused most countries' economies to grow negatively and even into recession.

From 2020 until the first semester of 2021, the Covid-19 pandemic has caused a global economic crisis. It is not only experienced by developing countries and emerging countries, but even advanced economies countries have also felt the negative impact of the spread of Covid-19. Most developing countries are even trapped in a deep economic recession. Only a handful of countries in the world can survive and grow positively to face the impact of the Covid-19 pandemic in 2020, such as China, Turkey, Iran, Egypt, and Bangladesh.<sup>1</sup>

**Table 1.** World GDP Projection Growth 2018-2023 (YoY)

	2018	2019	2020e	2021f	2022f	2023f
<b>World</b>	<b>3.2</b>	<b>2.5</b>	<b>-3.5</b>	<b>5.6</b>	<b>4.3</b>	<b>3.1</b>
<b>Advanced economies</b>	<b>2.3</b>	<b>1.6</b>	<b>-4.7</b>	<b>5.4</b>	<b>4</b>	<b>2.2</b>
United States	3	2.2	-3.5	6.8	4.2	2.3
Euro area	1.9	1.3	-6.6	4.2	4.4	2.4
Japan	0.6	0	-4.7	2.9	2.6	1
<b>Emerging market and developing economies</b>	<b>4.6</b>	<b>3.8</b>	<b>-1.7</b>	<b>6</b>	<b>4.7</b>	<b>4.4</b>
East Asia and Pacific	6.5	5.8	1.2	7.7	5.3	5.2
China	6.8	6	2.3	8.5	5.4	5.3
Indonesia	5.2	5	-2.1	4.4	5	5.1
Thailand	4.2	2.3	-6.1	2.2	5.1	4.3
Europe and Central Asia	3.5	2.7	-2.1	3.9	3.9	3.5
Russian Federation	2.8	2	-3	3.2	3.2	2.3
Turkey	3	0.9	1.8	5	4.5	4.5
Poland	5.4	4.7	-2.7	3.8	4.5	3.9
Latin America and the Caribbean	1.8	0.9	-6.5	5.2	2.9	2.5
Brazil	1.8	1.4	-4.1	4.5	2.5	2.3
Mexico	2.2	-0.2	-8.3	5	3	2
Argentina	-2.6	-2.1	-9.9	6.4	1.7	1.9
Middle East and North Africa	0.6	0.6	-3.9	2.4	3.5	3.2
Saudi Arabia	2.4	0.3	-4.1	2.4	3.3	3.2
Iran, Islamic Rep. <sup>3</sup>	-6	-6.8	1.7	2.1	2.2	2.3
Egypt, Arab Rep. <sup>2</sup>	5.3	5.6	3.6	2.3	4.5	5.5
South Asia	6.4	4.4	-5.4	6.8	6.8	5.2
India <sup>3</sup>	6.5	4	-7.3	8.3	7.5	6.5
Pakistan <sup>2</sup>	5.5	2.1	-0.5	1.3	2	3.4
Bangladesh <sup>2</sup>	7.9	8.2	2.4	3.6	5.1	6.2
Sub-Saharan Africa	2.7	2.5	-2.4	2.8	3.3	3.8
Nigeria	1.9	2.2	-1.8	1.8	2.1	2.4

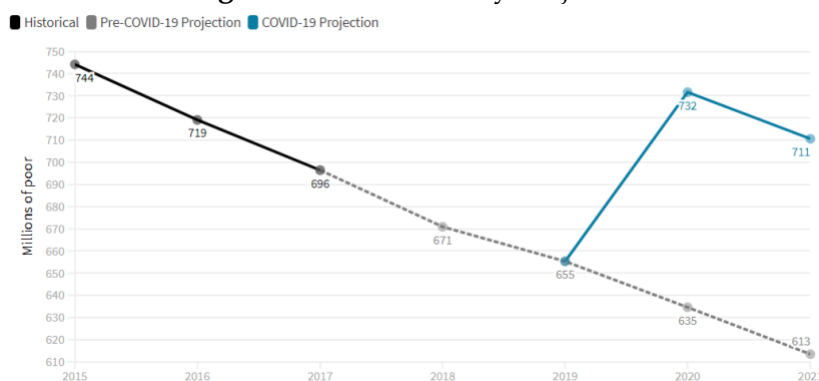
<sup>1</sup> The World Bank, *Global Economic Prospects, Global Economic Prospects* (Washington, 2021).

South Africa	0.8	0.2	-7	3.5	2.1	1.5
Angola	-2	-0.6	-5.2	0.5	3.3	3.5

Source: The World Bank

Outside of these countries, the Covid-19 pandemic has ravaged countries' economies, including advanced ones. The economic growth of advanced economies countries in 2020, such as America, corrected at the level of -3.5%. Europe was recorded to fall to -6.6%, and Japan shrank to -4.7%. Indonesia, an emerging and developing country, also recorded its lowest level in the last decade, at -2.1%<sup>2</sup>.

**Figure 1. Global Poverty Projection**



Source: 3

In addition to affecting economic growth, in the research conducted by Lakner, it is known that Covid-19 affects global poverty projections. Initially, poverty was predicted to fall by 21 million in 2021. But in fact, the Covid-19 pandemic has pushed 60 - 94 million people into extreme poverty from 2020 to 2021<sup>4</sup>. Likewise, in Indonesia, the Covid-19 pandemic has forced the Government to issue a mobility restriction policy with the PSBB and PPKM. Therefore, this policy will lead to a minus of economic growth, trigger deflation, and impact the number of unemployed due to layoffs. In aggregate, it triggers an increase in poverty, which can be seen through the poverty line, Gini ratio, poverty gap index (PGI), and poverty severity index (PSI). Poverty indicators can be seen in the following table:

<sup>2</sup> Ibid.

<sup>3</sup> Christoph Lakner et al., "How Much Does Reducing Inequality Matter for Global Poverty?," *How Much Does Reducing Inequality Matter for Global Poverty?*, no. June (2020).

<sup>4</sup> Ibid.

**Tabel 2.** Indonesia's Poverty Indicator

Year	Period	Gini Ratio	PGI	PSI	Pov Line
2017	March	0,393	1,83	0,48	374478
2017	September	0,391	1,79	0,46	387160
2018	March	0,389	1,71	0,44	401220
2018	September	0,384	1,63	0,41	410670
2019	March	0,380	1,55	0,37	425250
2019	September	0,380	1,50	0,36	440538
2020	March	0,381	1,61	0,38	454652
2020	September	0,385	1,75	0,47	458947
2021	March	0,384	1,71	0,42	472525

Source: BPS, 2021

Based on the data above, it was found that in the first quarter of 2020, since the first Covid-19 case was announced, it became the initial turmoil of increasing poverty trends. The impact of declining economic growth increased unemployment. This is due to shocks in the real sector. The Government responded to this shock by restricting activities so that the lower-middle-class economy was the segment that was hardest hit by the Covid-19 pandemic. The results found that poverty increased along with the economic recession at the end of the third quarter of 2020.

On July 20, 2020, the Indonesian government through Perpres Nomor 82 Tahun 2020 established the Covid-19 Handling Committee and National Economic Recovery (Komite Penanganan Covid-19 dan Pemulihan Ekonomi Nasional)<sup>5</sup>. National economic recovery (Pemulihan Ekonomi Nasional/ PEN) is carried out by adopting comprehensive fiscal and monetary policies. In addition, the Government also allocates APBN funds for economic recovery amounting to Rp. 695.2 trillion. Three policies are carried out to achieve their objectives: increasing domestic consumption, increasing business activity, maintaining economic stability, and monetary expansion. These policies are implemented simultaneously with synergy between fiscal policyholders, monetary policyholders, and related institutions. Therefore, to support the recovery of the national economy, Bank Indonesia maintains stabilization of the rupiah exchange rate, lowers interest rates, purchases government securities, and maintains macroeconomic and financial system stability. The purpose of

<sup>5</sup> Gitiyarko Vincentius, "Kebijakan Pemerintah Menangani Covid-19 Sepanjang Semester II 2020," *Kompaspedia*.

lowering interest rates is to increase financial liquidity to encourage business activity<sup>6</sup>.

The trickle-down effect theory explains that the progress made by a group of people has a top-down character. Optimal economic growth will flow downwards, creating jobs and various economic opportunities. Thus, the theory explains that economic growth indirectly reduces poverty rates due to the vertical flow from the rich to the poor<sup>7</sup>. This also means that poverty will be reduced microscopic if the poor receive only a tiny amount of the total benefits arising from economic growth. This condition can open up opportunities for an increase in poverty due to increasing income inequality caused by economic growth that favours the rich over the poor.

Then, among the many policies taken, monetary policy is recognized as a powerful modern instrument for managing economic growth. The dynamics of the central bank's interest rate policy also determine the national economy's condition. Studies on monetary policy and poverty almost always focus on a short-term perspective. And as part of the overall macroeconomic policy on the demand side (demand-side policy). Monetary policy may, to some extent, stabilize the business cycle through its effects on output, unemployment, and inflation variables in the short term. If the poverty rate reacts to these variables, monetary policy can be directed to affect the prosperity of the poor. In addition, because inflation can change the distribution of assets from creditors to debtors, monetary policy can also affect income distribution<sup>8</sup>.

Estimates of the cyclical behaviour of poverty and income inequality show that the poverty rate will decrease if unemployment falls. It is believed that the decline in unemployment can be achieved by implementing a low-interest rate policy. However, no evidence was found of the effect of the unemployment rate on income distribution. Furthermore, it is found that rising

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<sup>6</sup> Edward UP Nainggolan, "Strategi Kebijakan Pemulihan Ekonomi Nasional (PEN)," *DJKN* (Jakarta, August 2020).

<sup>7</sup> W. Arthur Lewis, "Economic Development with Unlimited Supplies of Labour," *The Manchester School* 22, no. 2 (May 1954): 139–191; John C. H. Fei and Gustav Ranis, "Economic Development in Historical Perspective," in *Discussion Papers*, 1968, 68; Hyun Son and Nanak Kakwani, "Economic Growth and Poverty Reduction: Initial Conditions Matter" (September 2004).

<sup>8</sup> Gurmit Kaur and Siti Ayu Jalil, "Examining the Linkage between Poverty and Macroeconomic Variables in Malaysia: A Co-Integration Analysis," *Information Management and Business Review* 9, no. 2 (June 2017): 6–15; Paul Cashin et al., "Macroeconomic Policies and Poverty Reduction: Stylized Facts and An Overview of Research," *IMF Working Papers* 01, no. 135 (2001): 1; Abi Fadillah, "Marko Ekonomi Dan Pengentasan Kemiskinan Di Indonesia," *Ascarya: Journal of Islamic Science, Culture, and Social Studies* 1, no. 2 (September 2021): 186–205.

inflation (and the impact of loose monetary policy) will reduce the poverty rate. In contrast, the impact of inflation on income inequality cannot be detected <sup>9</sup>.

The results of several previous studies show that the assessment of macroeconomic factors influences economic stability and resilience. Economic resilience is contained in the 17 SDGs goals, including economic growth, inequality, and poverty as indicators that several countries in the world must overcome. This is in line with the Government's policy package, where fiscal and monetary policies are the main priorities to save Indonesia from recession and recover the economy due to the Covid-19 pandemic. This study tries to assess macroeconomic variables consisting of inflation, money supply, interest rates, composite index (IHSG), and exchange rate on economic resilience as measured by economic growth (GDP) and poverty (Gini ratio, poverty gap index/PGI, and poverty severity Index/PSI).

The position of this research compared to previous research is to strengthen the assumption that empirically, the impact of Indonesia's fiscal and monetary policies during the Covid-19 pandemic. In addition, this study also looks at the impact of the Covid-19 pandemic on several macroeconomic indicators. Therefore, the findings of this study can later be used as a scientific basis for evaluating policies that have been carried out by the Government so that they can provide recommendations for achieving sustainable economic recovery.

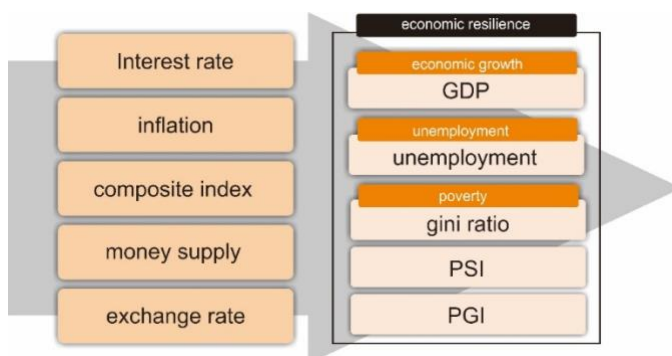
### Research Framework

Based on the theory above, this study takes the framework of macroeconomic and financial variables as antecedents in economic growth and poverty during the pandemic. The macroeconomic and financial framework is proxied through interest rates (IR), inflation, the composite index (IHSG), money supply (MS), and the exchange rate (ER). As a criterion, the proxy for economic growth is seen through GDP unemployment. In contrast, the poverty aspect can be seen through the Gini ratio, poverty gap index (PGI), and poverty severity index (PSI) indicators. Previous research stated that the predictor raised

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<sup>9</sup> Md Abdullah Omar and Kazuo Inaba, "Does Financial Inclusion Reduce Poverty and Income Inequality in Developing Countries? A Panel Data Analysis," *Journal of Economic Structures* 9, no. 1 (2020): 1–25, <https://doi.org/10.1186/s40008-020-00214-4>; Ahmadi Murjani, "Short-Run and Long-Run Impact of Inflation, Unemployment, and Economic Growth Towards Poverty in Indonesia: Ardl Approach," *Jurnal Dinamika Ekonomi Pembangunan* 2, no. 1 (2019): 15–29; Kaur and Jalil, "Examining the Linkage between Poverty and Macroeconomic Variables in Malaysia: A Co-Integration Analysis"; Fadillah, "Marko Ekonomi Dan Pengentasan Kemiskinan Di Indonesia."

by this study affected economic growth <sup>10</sup>. In addition, all predictors also affect unemployment <sup>11</sup> and poverty level <sup>12</sup>. The framework is presented as follows:



**Figure 2.** Research Framework

### Hypothesis:

H<sub>1</sub>: Interest rate (IR) affects GDP, unemployment, and poverty

H<sub>2</sub>: Inflation affects GDP, unemployment, and poverty

H<sub>3</sub>: Composite Index (IHSG) affects GDP, unemployment, and poverty

H<sub>4</sub>: Money Supply (MS) affects GDP, unemployment, and poverty

H<sub>5</sub>: Exchange Rate (ER) affects GDP, unemployment, and poverty

## Result and Discussion

Stationary data is necessary for time-series regression analysis to minimize model errors. So, if the data is not stationary, then a stationary transformation must be carried out through a differentiation process if the trend

<sup>10</sup> Prasert Chaitip et al., "Money Supply Influencing on Economic Growth-Wide Phenomena of AEC Open Region," *Procedia Economics and Finance* 24, no. July (2015): 108–115, [http://dx.doi.org/10.1016/S2212-5671\(15\)00626-7](http://dx.doi.org/10.1016/S2212-5671(15)00626-7); Muhammad Zayyanu Bello et al., "Reationship Between Inflation, Money Supply, Interest Rate and Income Growth (RGDP) in Nigeria 1980-2010. an Empirical Investigation.," *Journal of Economics and Sustainable Development* 4, no. 8 (2013): 7–13; Nahida Sultana, "Impacts of Money Supply , Inflation Rate and Interest Rate on Economic Growth : A Case of Bangladesh.," *Journal of Emerging Technologies and Innovative Research (JETIR)* 5, no. 10 (2018): 66–78; Tomas Urbanovsky, "Interconnection of Interest Rate, Price Level. Money Supply and Real GDP: The Case of the Czech Republic" 220 (2016): 531–540.

<sup>11</sup> Amyir Aljileedi Mustafa Rayhan and Heri Yanto, "Factors Influencing Unemployment Rate: A Comparison Among Five Asean Countries.," *Journal of Economic Education* 9, no. 1 (2020): 37–45; Hafiansyah Mahadika and Wisnu Wibowo, "The Effect of Monetary Policy on Unemployment Rate in Indonesia.," *Jurnal Ilmu Ekonomi Terapan* 6, no. 1 (2021): 1.

<sup>12</sup> Y. Yolanda, "Analysis of Factors Affecting Inflation and Its Impact on Human Development Index and Poverty in Indonesia.," *European Research Studies Journal* 20, no. 4 (2017): 38–56; Maryam Saeed, "The Effects of Monetary Policy on Poverty Alleviation in Pakistan.," *SSRN Electronic Journal* (September 2020); Patrick Bolton, "The Poverty of Monetarism.," *China Economic Quarterly International* 1, no. 1 (2021): 1–14, <https://doi.org/10.1016/j.ceqi.2020.11.002>; Meinny Kolibu, Vekie A. Rumat, and Daisy S.M. Engka, "Pengaruh Tingkat Inflasi, Investasi, Pertumbuhan Ekonomi Dan Tingkat Pengangguran Terhadap Tingkat Kemiskinan Di Provinsi Sulawesi Utara.," *Jurnal Pembangunan Ekonomi dan Keuangan Daerah*, 19(3), 19, no. 3 (2019): 1–14.

is linear. Meanwhile, if it is not linear, then the linearity transformation of the trend goes through the natural logarithm process if the trend is exponential. If the shape is different, then a weighting process (simple exponential smoothing) is carried out as a differentiation process on the data resulting from the linearity process. Stationarity test results can be seen in the following table:

**Table 3.** ADF Test Results (in level)

Series	Prob.	Lag	Max Lag	Obs	Information
IR	0.8178	1	10	52	Non-Stationer
INF	0.9074	0	10	53	Non-Stationer
LNIHSG	0.0960	0	10	53	Non-Stationer
LNMS	0.9516	1	10	52	Non-Stationer
LNER	0.0709	0	10	53	Non-Stationer
LNTAX	0.3666	0	10	53	Non-Stationer
GINI	0.0035	0	10	53	Non-Stationer
LNGDP	0.6208	0	10	53	Stationer
LNUNEMP	0.6294	0	10	53	Non-Stationer
PGI	0.6518	0	10	53	Non-Stationer
PSI	0.5321	0	10	53	Non-Stationer

Source: Data Processed (2021)

**Table 4.** ADF Unit Root Test Results (in 1<sup>st</sup> Difference)

Series	Prob.	Lag	Max Lag	Obs	Information
D(IR)	0.0013	0	10	52	Stationer
D(INF)	0.0000	0	10	52	Stationer
D(LNIHSG)	0.0000	0	10	52	Stationer
D(LNMS)	0.0000	0	10	52	Stationer
D(LNER)	0.0000	0	10	52	Stationer
D(LNTAX)	0.0000	0	10	52	Stationer
D(GINI)	0.0000	0	10	52	Stationer
D(LNGDP)	0.0000	0	10	52	Stationer
D(LNUNEMP)	0.0000	0	10	52	Stationer
S	0.0000	0	10	52	Stationer
D(PSI)	0.0000	0	10	52	Stationer

Source: Data Processed (2021)



**Table 5.** ADF Unit Root Test of Error Correction Term Results (in level)

Series	Prob.	Lag	Max Lag	Obs	Information
ECT(-1) <sub>1</sub>	0.0006	0	10	53	Stationer
ECT(-1) <sub>2</sub>	0.0287	0	10	53	Stationer
ECT(-1) <sub>3</sub>	0.0006	0	10	53	Stationer
ECT(-1) <sub>4</sub>	0.0133	0	10	53	Stationer
ECT(-1) <sub>5</sub>	0.0170	0	10	53	Stationer

Source: Data Processed (2021)

Table 3 shows the results that all variables (except the GINI variable) are not stationary because the ADF value is more positive than the critical value (significance > 0.05). As a consequence of not meeting the stationarity assumption at zero or I(0), all variables will be tested by testing the degree of integration at the first difference level. Table 4 shows all stationary variables at the first difference level because the ADF value is more negative than the critical value (significance < 0.05).

The Cointegration test aims to test whether the regression residual is stationary or not. A cointegration test can only be done if the related variables have the same degree of integration. Table 5 shows the stationary RESID (ECT) at all significance levels (5%). The stationary cointegration regression residual shows that all variables have a long-run equilibrium relationship and can form a short-term ECM model developed by Engle-Granger.

In general, as seen from GDP indicators, Indonesia's economic growth fluctuated between before and after the pandemic. Before the pandemic, GDP experienced a downward trend since the observation period. The most severe decline occurred in the second quarter of 2020. The period was the impact of the Large-Scale Social Restrictions (PSBB) launched by the Government, especially in Jakarta, on April 7, 2020. President Jokowi then issued nine economic policies. Including budget refocusing (Inpres no. 4 of 2020) for Covid-19 handling activities, Pra-Kerja Implementation to anticipate unemployment, Direct Cash Assistance (BLT/ Bansos) to maintain purchasing power, relaxation of credit and taxes, mortgage stimulus, deflation control with interest rate policies and ensuring the availability of labour-intensive (padat karya)<sup>13</sup>. Even though it is

<sup>13</sup> Ihsanuddin, "9 Kebijakan Ekonomi Jokowi Di Tengah Pandemi Covid-19: Penangguhan Cicilan Hingga Relaksasi Pajak Artikel Ini Telah Tayang Di Kompas.Com Dengan Judul "9 Kebijakan

officially a recession, Indonesia is slowly starting to rise with increasing GDP value in a positive direction with this policy.

Based on table 7 above, the results show that inflation, ihsg, and tax revenues have a long-term effect on economic growth (GDP). Composite Index (IHSG) and tax revenues have a positive effect, meaning that it is directly proportional to economic growth (GDP). Based on the data, GDP fell sharply in the month when the first cases were announced. The decline in GDP occurred until the third quarter, so Indonesia entered a recession due to negative growth. Although the interest rate (IR) has no direct effect on GDP, the Government's monetary policy by lowering the interest rate is expected to trigger an expansion in the real sector. It is proven that inflation has a significant positive effect on GDP<sup>14</sup>. This monetary policy is expected to return inflation to a positive path so that the real sector affected by the pandemic can be overcome. The Government's nine initial policies were able to minimize the effects of deflation in aggregate. So that the general trading sector, as reflected in the composite index (IHSG), initially declined, then there was a positive trend in the 3rd quarter to the 4th quarter. This indicates that the market is starting to expand again.

However, in the short term, the results show that the composite index (IHSG) and the exchange rate (ER) have a significant effect on economic growth (GDP). This indicates that changes in the exchange rate (ER) will coincide with the composite index (IHSG) response<sup>15</sup>. According to<sup>16</sup>, the increase in inflation and the weakening of the exchange rate will lower trading volumes due to lower profit margins. However, in a pandemic situation, the findings of this study state that the main factor in the lower profit margins of trading companies is the low purchasing power of the people. This is the impact of the policy of limiting community activities. This is reinforced by the results in table 7, which shows that the condition of low purchasing power, in the long run, was contributed by deflation, which resulted in high unemployment. This condition causes tax revenues to decline; therefore, the Government implements policies by providing tax incentives and relaxation. In the short term, changes in unemployment increase are directly due to deflation and interest rate.

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Ekonomi Jokowi Di Tengah Pandemi Covid-19: Penanggulangan Cicilan Hingga Relaksasi Pajak," *Kompas.Com* (Jakarta, March 2020).

<sup>14</sup> (Bolton, 2021; Fadillah, 2021; Murjani, 2019)

<sup>15</sup> Murjani, "Short-Run and Long-Run Impact of Inflation, Unemployment, and Economic Growth Towards Poverty in Indonesia: Ardl Approach"; Fadillah, "Marko Ekonomi Dan Pengentasan Kemiskinan Di Indonesia."

<sup>16</sup> Tandelilin (2010)

The open unemployment rate seems to have improved in the February 2021 period. This is presumably because the stimulus from the National Economic Recovery Program (PEN) experienced an increase in realization until the end of 2020 and saw success in early 2021. It was noted that, at the end of 2020, The realization of PEN for business stimulus reached 45% and assistance for SMEs reached 93%. On the other hand, the number of working-age population affected by the Covid-19 pandemic also decreased in February 2021 by 19.10 million people compared to August 2020, which was 29.12 million people. The most significant decline occurred in the number of people working with reduced working hours due to the pandemic (8.31 million people) <sup>17</sup>

In the poverty analysis, it is found that at the 10% confidence level, it is found that Interest Rate (IR), Inflation, Money Supply (MS), and Tax Revenue affect poverty. The Covid-19 pandemic triggered a systemic macroeconomic movement, starting with deflation, and then the Government responded by lowering the interest rate (IR). The aim is to trigger an expansion in the real sector. This is evidenced by the volume of Money Supply (MS) which increases every period. As discussed previously, the Government's policy is correct, but the condition of low purchasing power is the root of the problem that needs to be solved <sup>18</sup>. Low purchasing power then raises the problem of poverty. Based on graph 4, it can be seen that the poverty gap index (PGI) and poverty severity index (PSI) increased after the Covid-19 Pandemic. When the value of inequality seen from the Gini ratio is relatively stable, even though the PGI and PSI are increasing, the Government's cash direct assistance policy can keep inequality in a stable position by maintaining purchasing power.

The largest PEN budget is allocated for social protection (33%) and SMEs (17%). The distribution of PEN, which requires a process of verifying recipients of assistance or stimulus, began to be carried out at the end of June 2020, so that in September 2020, it still has not had much impact. The increasing poverty and inequality in this period are thought to be one of the consequences of the multiplier effect of the PEN stimulus that has not yet been felt in the community. With an increase in budget realization at the end of 2020, which reached 72%, efforts to recover the economy through the provision of stimulus by the Government are starting to show results. This is especially felt by the community at the lower level, namely the community group most affected by

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<sup>17</sup> Siti Masitoh, "LPEM FEB UI: Pandemi Covid-19 Membuat Tingkat Kemiskinan Dan Pengangguran Meningkat," *Kontan.Co.Id* (Jakarta, August 2021).

<sup>18</sup> Kolibu, Rumat, and Engka, "Pengaruh Tingkat Inflasi, Investasi, Pertumbuhan Ekonomi Dan Tingkat Pengangguran Terhadap Tingkat Kemiskinan Di Provinsi Sulawesi Utara"; Fadillah, "Marko Ekonomi Dan Pengentasan Kemiskinan Di Indonesia"; Lakner et al., "How Much Does Reducing Inequal. Matter Glob. Poverty?"

the restrictions on economic activities. This assumption is also supported by the improvement in the number and percentage of poor people as well as total inequality in March 2021 (0.384) compared to inequality in September 2020 (0.385)<sup>19</sup>.

The National Economic Recovery Program (PEN) has yielded positive results in 2020 and its projections for 2021. These indicators include the Manufacturing Purchasing Managers Index (PMI) in December 2020, which was recorded as entering the expansion zone (51.3). Meanwhile, the Consumer Confidence Index (IKK) and commodity prices also gradually improved and rose, driven by an improvement in demand (demand). The consumer confidence index in December 2020 was 96.5. This is an increase from the previous where in November 2020 it was at 92. Then other positive sentiments can also be seen in the financial market, which is reflected among others in the Composite Stock Price Index (IHSG), which is already at a level above 6,000 and the stable Rupiah exchange rate. In the range of IDR 14,000 per USD.

## Conclusion

The COVID-19 pandemic has brought changes to the world with various challenges that were never imagined before. COVID-19 has infected more than 4 million people in Indonesia since the first case was announced in March 2020. However, efforts to slow the spread of the COVID-19 virus have hampered economic activity, and the community increasingly feels the impact on the level of social welfare. Indonesia's economic resilience has begun to be tested with this pandemic. At least the indicators of economic growth, unemployment, and poverty are examples of conditions greatly affected by the pandemic. After showing exemplary growth achievements to enter the advanced economy category and even reducing poverty in recent years, everything has changed after the Covid-19 pandemic.

In the face of this economic crisis, the Government of Indonesia has issued several policy packages, both monetary and through large-scale fiscal stimulus through the National Economic Recovery Program (Pemulihan Ekonomi Nasional/PEN). Based on the study results, it shows that Indonesia is trying to improve its economic conditions from a macroeconomic perspective. This right can be seen from the evaluation of this study that starting from the policy of reducing interest rates, relaxation, and tax incentives, credit restructuring to direct cash assistance (BLT/ Bansos) are the Government's efforts to improve the economy in a pandemic condition. The National

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<sup>19</sup> Masitoh, "LPEM FEB UI: Pandemi Covid-19 Membuat Tingkat Kemiskinan Dan Pengangguran Meningkat."

Economic Recovery Program has yielded positive results in 2020 and its projections for 2021.

The recommendations are in designing the PEN program based on needs (bottom-up approach), which is oriented towards small communities and MSMEs to maintain purchasing power. For example, credit restructuring ease of financing and the flexibility of financing programs for Micro, Small, and Medium Enterprises (MSMEs) to suit the needs and characteristics of MSMEs. Strengthening the digital ecosystem, due to limited mobility due to the pandemic, business actors, especially MSMEs, must also adapt to technology and digitization both in terms of service and product sales. Carrying out comprehensive guidance and assistance for MSMEs needs to be done, in addition to reducing the gap between MSMEs and supporting technological literacy for MSMEs so that MSMEs can develop superior local products. The recovery of the tourism sector is gradually regional based on extensive data analysis and focuses on domestic tourists. Adaptation in tourist destinations to pandemic conditions also needs to be done. So that collaboration with various parties, both local, central, and other related parties, is necessary to encourage tourism and the creative economy. They are strengthening the social security system for the community by expanding beneficiaries' coverage.

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