

# Inequality of Countries' Capabilities in Dealing With Covid-19 Pandemic and Its Impact On the Global Economy

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## INEQUALITY OF COUNTRIES' CAPABILITIES IN DEALING WITH COVID-19 PANDEMIC AND ITS IMPACT ON THE GLOBAL ECONOMY

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### Abstract

The COVID-19 Pandemic impacts on the multi- sectoral, including disrupting the economic growth of many countries. This study aims to analyze the impact of the COVID-19 pandemic, inequalities' capabilities 5 dealing the Covid-19 as well as fiscal and monetary capabilities, and the income status of the country on the economic growth of the affected countries. The results of this study give the implication that all countries in the world need to continue to watch out for the increase of cases and the time of exposure to the COVID-19 Pandemic to not affect the sharper contraction of economic growth. At the same time, the countries affected by the pandemic need to more carefully manage their fiscal and monetary policy, especially government spending and debt management. The effectiveness of government spending and debt needs to be continuously improved so it can be a positive 5 impact on their economic recovery. If the pandemic is under control (in cases and time of exposure) and there are no disparities in governance between regions and countries, then global economic growth is potentially positive 5 8%. If government spending to tackle the pandemic is increased by one million dollars, this measure has the potential to reduce the impact of the contraction by 0.27%. In relative terms, the impact of a Covid-19 pandemic in terms of health and economic growth from worst is Asia, America, Africa, Europe and Oceania.

**JEL Classification:** E5, E6, F6, H3, H6, I1

**Keywords:** Covid-19, Economic Growth, Inequality, Fiscal, Monetary, Global Economy

### 1. Background

Coronavirus Disease 2019 (COVID-19) has become a pandemic that is quite dire. This global coronavirus outbreak in a short time 6 (in a matter of months) has spread to hundreds of countries across continents[1]. At the end of April 2020, at least 3.5 million people from 210 countries were admitted to hospital or were self-quarantined. Outbreaks 7 have also been caused over 250 thousand citizens died in hospitals in the region of Asia, America, Europe, Australia, Africa and Antarctica. Now (as of February 2, 2022) the COVID-19 pandemic has reached nearly 30 million cases and more than 2.3 million deaths in 213 countries and two regions. During 2020, every day there are an average of 250 thousand cases and 6,000 deaths [32].

<sup>2</sup> COVID-19 first outbreak in Wuhan, China, before the end of December 2019. Then spread to all provinces in there. In a time of less than two months, coronavirus generate 80 thousand cases and 3,000 deaths. Starting in the third week of January 2020, the Covid-19 then crossed to a number of countries in Asia, America, Europe, Australia and Africa [2]. When this outbreak subsided in China, the transmission of COVID-19 actually exploded in a number of countries in America, Europe and Asia. As of April 24, 2020, the number of infected cases in the US, Spain, Italy, France, Germany, UK, Turkey and Iran has surpassed China as the initial pandemic epicenter[3]. Meanwhile, in terms of the number of deaths, there are six countries that exceed China, namely: the US, Italy, Spain, France, Britain, Germany, Iran and Belgium. Meanwhile, the number of victims in the Netherlands has also begun to approach China[7].

The COVID-19 outbreak in China has indeed subsided. Similar conditions were also encountered by a number of European countries, which in the March-May 2020 period became the epicenter of COVID-19, such as Italy, Spain, France, Britain, and Germany[9]. The epicenter has shifted from China to Europe, and is now engulfing the countries in the American South, America North, Asia and Africa.

As of 2020, the position of the Chinese there are in ranked 35th in the number of cases and ranks 28th in the number of deaths. There are 72 countries with a record of more than 20,000 cases and 1,000 more deaths. Now, China is in 35th position (85,004 cases), Indonesia is in 23rd position (162,884 cases). Entering the top ten are the US, Brazil, India, Russia, Peru, South Africa, Colombia, Mexico, Spain, Chile. Apart from that, countries that have beaten China in cases and subsequent deaths are: Argentina, Iran, England, Saudi Arabia, Bangladesh, Pakistan, Turkey, Italy, France, Germany, Iraq, Philippines, Indonesia, Canada, Qatar, Bolivia, Ukraine, Ecuador, Israel, Kazakhstan, Egypt, Dominica, Panama and Oman[5].

<sup>2</sup> In physical and psychic, COVID-19 Pandemic has been disturbing of over 8.9 billion humans in Asia, America, Europe, Australia, Africa and Antarctica worry. Most of them had to undergo a phase of social distancing (keeping distance safely, quietly at home, work at home, even worship at home) for months, the conditions were fairly terrible of the amount and coverage area outbreak[4].

The Covid-19 Pandemic also have an impact beyond the ordinary for world economy and the countries affected. The threat of recession and even depression are already in front of the eye. Many country as strong as Singapore, South Korea, Japan, the US, New Zealand, England, France, has already felt it[12]. Indonesia also encountered the impact. In two quarters in a row of growth national economy encountered a contraction of up to -5.32%[20].

2 To prevent, or at least suppress, the rate of transmission of a number of the main affected countries have implemented lockdowns, territorial quarantine, and large-scale social restrictions (LSSR)[18]. A number of flights were suspended in many countries. Land and sea transportation is also restricted. A number of industries stopped producing, because the large-scale of social restriction, this condition directly affected the economic activities[31].

3 The economic effects of the pandemic have been hugely varied across society. Those in full-time work, often in highly paid jobs working from home, have accumulated substantial savings since there is less to spend wages on [13].

1 The novelty of this study is to measure the impact of Covid-19 pandemic on the aspect of health and economy by the regions and the inequality of income countries, since the World bank release COVID-19 to Plunge Global Economy into Worst Recession since World War II. East Asia and Pacific: Growth in the region is estimated to fall to 0.5% in 2020, the lowest rate since 1967, reflecting disruptions caused by the pandemic. Europe and Central Asia: The regional economy is forecast to contract by 4.7%, with recessions in nearly all countries. Latin America and the Caribbean: The shocks stemming from the pandemic will cause regional economic activity to plunge by 7.2% in 2020. Middle East and North Africa: Economic activity in the Middle East and North Africa is forecast to contract by 4.2% as a result of the pandemic and oil market developments. South Asia: Economic activity in the region is estimated to contract by 2.7% in 2020 as pandemic mitigation measures hinder consumption and services activity and as uncertainty about the course of the pandemic chills private investment. Sub-Saharan Africa: Economic activity in the region is on course to contract by 2.8% in 2020, the deepest on record [17].

3 The very rich country, especially in the US, have benefited from huge stock market increases driven by pandemic successes like Amazon, Netflix and Zoom and this looks likely to continue. The big question for the economy is whether in the coming year those with secure jobs and high incomes will return to their previous spending patterns, or hold on to their savings in the face of continuing uncertainty [9].

In contrast, many who have lost jobs or businesses or been furloughed will struggle to find new work or return to their previous income levels – especially since low-wage sectors such as retail and hospitality are unlikely to recover fully after the pandemic. This group includes many younger people, women and ethnic minorities [13].

The inequality could be increased as rich governments scale back the huge subsidies being used to keep many workers employed or furloughed. Cooperation could ease the adjustment to a post-pandemic world. But international cooperation during the pandemic has been weak, and economic tensions have further undermined the world's commitment to free trade – not a good start for Brexit Britain. Domestically, redistribution of wealth and income through higher taxes could give western



3 governments more resources to deal with the victims of the pandemic, but will be politically difficult in a continuing recession. Social unrest has been one consequence of previous pandemics. Let's hope that this time, we find the wisdom to tackle the gross inequalities revealed by COVID-19, and build a fairer world [4].

So, this study is to answer how big a Covid-19 pandemic affect the economic growth of countries in the world. What is the health and economic aspects of Pandemic and the regional differences influence the worst of the impact of the pandemic on the health economy.

## 2. Theoretical Review

### 2.1. GDP and the Global Economy

Product Domestic Gross or GDP (Gross Domestic Product), according to Mankiw (2019) is an important economic statistic because it is considered as the best indicator of public welfare[15]. McEachern argues, GDP is the total market value of final goods and services produced by the source of the power of a country for a period of time specified, usually one year[16]. GDP also can be used to study the economy from time to time. GDP is determined by two approaches: the approach of spending, (summing up the entire spending aggregates in the entire goods and services end that is produced for one year); The income approach, adding up all income aggregates were received during the year by those who produce the output[10].

GDP can be calculated using two approaches, namely the spending approach and the income approach [23]. The general formula for GDP using the spending approach is:  $GDP = consumption + investment + government\ spending + (exports - imports)$ . In which the consumer is spending that is done by the house stairs, investment by the business sector, government spending by the government, and exports and imports[31].

Meanwhile, the income approach calculates the income received by the factors of production:  $GDP = rent + wages + interest + profit$ . In which the rent is income owners of the factors of production remains as land, wages for labor work, interest to the owners of capital, and profits for employers. In theory, according Mckibbin, GDP by spending approach and income should produce numbers are the same. However, because the practice of calculating GDP with the approach of income is hard to do, then that is often used is the approach to spending[17].

### 2.2. Economic Growth

Economic growth is an important factor in reducing poverty and generating a source of power which is necessary for the development of human and environmental protection. The economy will expand if there is positive growth. Conversely, the economy contracts

if growth is negative. However, economic growth alone does not guarantee human development. In addition to the growth of the economy which is reflected in the statistics of GDP and income per capita, the necessary presence of collateral security, the availability of access to education and services of health and education. Thus, the concept of the human development index (HDI) developed.

Apart from GDP, several concepts emerged, such as the human development index (HDI), the people's welfare index (pledge) and the economic welfare index (Eurostat). Far earlier, Islam is actually already introduced the concept of index beneficiaries as the essence of the main of maqasid sharia[31].

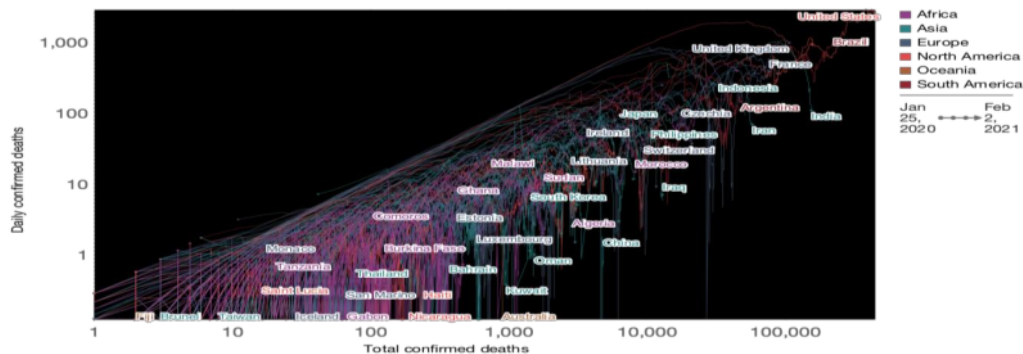
Wildan (2020) stated that Global growth in Gross Domestic Product (GDP) of a country is influenced by various factors. Among other factors of capital accumulation, productivity of natural resources, human resources, institutional politics, entrepreneurship and new products, changes in the structure of the economy, and factors environment (disease outbreaks, natural themes, climate change due to global warming), as well as limited resources and energy[31].

### 2.3. COVID-19 Global Pandemic

The COVID-19 outbreak started in Wuhan, China. On 31 December 2019, the WHO China Country Office reported cases of pneumonia were not unknown etiology in Wuhan City, Hubei Province, China. On January 7, 2020, China identified pneumonia that is not unknown etiology such as the type of the new coronavirus [14]. On the date of 30 January 2020 the WHO has set as a Public Health Emergency of International Concern (PHEIC). The increase in the number of COVID-19 cases is taking place quite quickly and there has been a spread between countries [21].

When on Quarter I, China became the epicenter of a major Covid-19 Pandemic, now there are 35 countries affected are already surpass China in the records of cases and deaths from Covid-19. Within eight months of the pandemic, the epicenter of the pandemic has shifted from China to Europe, and is now engulfing the countries in the region South America, North America, Asia and Africa[24].

Many parties, individual experts and credible institutions, alarming pandemic does not only affect the crisis economics but also the economic depression of the magnitude of the impact is more greater and much longer than the crisis of 1997-1998. Pandemic also have an impact beyond the ordinary for world economy and countries affected[19]. The threat of recession and even depression have been and are being afflict many countries affected. Many countries as strong as Singapore, Japan, Korea, South Korea, and the US have already felt it. The capital market is also in turmoil [30].



**Graph 1.** Distribution of Accumulated Cases of the COVID-19 Pandemic

Source: worldometer.info, 3 February 2021

The International Monetary Fund (IMF) projects that global economic losses due to the corona virus pandemic could reach US\$12 trillion or around IDR174,000 trillion (Rate 1US\$=IDR14,500). IMF Managing Director Kristalina Georgieva explained that the pandemic has brought the global economy to the brink of crisis. This is because 95 percent of countries in the world are estimated to experience contraction or economic growth in the negative zone.

Capital market and developing economies is estimated IMF will face the growth of income per capita is negative in 2020[8]. The markets and countries thrive, except China, are expected will undergo a punch greater in growth Product Domestic Bruto (GDP) rather than the developed countries in the year 2020 to 2021[8]. The world economic growth is predicted to contract or grow negatively by 4.9 percent in 2020. Figures are much higher 1.9 points of projection before April 2020 (-3.0%. In succession, the IMF is projecting growth of economic groups of countries developed as follows: United States -8 percent, Japan -5.8 percent, Britain -10, 2 percent, Germany -7.8 percent, France, -12.5 percent, while Italy and Spain grew -12.8 percent [6]. for Indonesia, the IMF is projecting will experience contraction or growth of negative 0.3 percent in the year's. But predictions This is a mistake considering the fact, Indonesia, as stated by President Jokowi and Minister of Finance Sri Mulyani, Indonesia's GDP in the second quarter had shrunk by -5.2%. In fact, in 2020 Indonesia's economic contraction had reached -6.13% [20].

#### 2.4. The Impact of Covid-19 Pandemic on Economic Growth

The existence of the potential impact of a COVID-19 Pandemic against the economy globally has been predicted by some parties. Among others, the IMF, World bank and World Economy Forum. The IMF, for example, has published predictions for March and

June 2020. IMF Fiscal Monitoring 2020, among others, provides information and forecasts on several fiscal and monetary indicators of the affected countries (as shown in Table 1). The IMF makes three categories of countries; namely: Advance Economies (developed countries), Developing Countries and Middle-Income Economies, as well as the state Low Income Developing Countries[8].

IMF predicts economic team during a COVID-19 Pandemic on the developed countries have a contraction of economy growth between 5.5% (Germany) to -15.4% (USA). During the pandemic, developed countries are predicted to experience a growth of minus 10.7% on average.

**Table 1.** Estimated GDP Growth for Countries Affected by COVID-19

	2012	2013	2014	2015	2016	2017	2018	2019	Estimated 2020
<b>World</b>	-3.8	-2.9	-2.9	-3.3	-3.4	-3.0	-3.1	-3.7	-9.9
<b>Advanced Economies, Developed Countries</b>	-5.5	-3.7	-3.1	-2.6	-2.6	-2.3	-2.6	-3.0	-10.7
United States	-8.0	-4.6	-4.0	-3.6	-4.3	-4.5	-5.7	-5.8	-15.4
<b>Euro Area</b>	-3.7	-3.0	-2.5	-2.0	-1.4	-0.9	-0.5	-0.7	-7.5
France	-5.0	-4.1	-3.9	-3.6	-3.5	-2.8	-2.3	-3.0	-9.2
Germany	0	0	0.6	0.9	1.2	1.2	1.9	1.4	-5.5
Italy	-2.9	-2.9	-3.0	-2.6	-2.4	-2.4	-2.2	-1.6	-8.3
Spain	-10.7	-7.0	-5.9	-5.2	-4.3	-3.0	-2.5	-2.6	-9.5
<b>Japan</b>	-8.6	-7.9	-5.6	-3.8	-3.7	-3.1	-2.4	-2.8	-7.1
<b>United Kingdom</b>	-7.6	-5.5	-5.6	-4.6	-3.3	-2.5	-2.2	-2.1	-8.3
<b>Canada</b>	-2.5	-1.5	0.2	-0.1	-0.5	-0.1	-0.4	-0.4	-11.8
<b>Others</b>	0.4	0.2	0.2	0.1	0.7	1.4	1.4	0	-5.3
<b>Middle- Income Economies, Developing Countries</b>	-0.9	-1.5	-2.5	-4.4	-4.8	-4.1	-3.8	-4.8	-9.1
Excluding MENAP Oil Producers	-1.9	-2.3	-2.7	-4.0	-4.4	-4.0	-4.0	-5.0	-9.0



	2020	2021	2022	2023	2024	2025	2026	2027	2028
1 Asia	-1.6	-1.8	-1.9	-3.3	-3.9	-4.0	-4.5	-6.0	-9.9
China	-0.3	-0.8	-0.9	-2.8	-3.7	-3.8	-4.7	-6.4	-11.2
India	-7.5	-7.0	-7.1	-7.2	-7.1	-6.4	-6.3	-7.4	-7.4
Europe	-0.7	-1.5	-1.4	-2.7	-2.9	-1.8	0.4	-0.7	-6.1
Russia	0.4	-1.2	-1.1	-3.4	-3.7	-1.5	2.9	1.9	-4.8
Latin America	-2.9	-3.2	-5.0	-6.8	-6.2	-5.4	-5.2	-4.0	-6.7
Brazil	-2.5	-3.0	-6.0	-10.3	-9.0	-7.9	-7.2	-6.0	-9.3
Mexico	-3.7	-3.7	-4.5	-4.0	-2.8	-1.1	-2.2	-2.3	-4.2
MENAP	5.6	3.9	-1.5	-8.5	-9.6	-5.8	-2.9	-3.8	-9.8
Saudi Arabia	11.9	5.6	-3.5	-15.8	-17.2	-9.2	-5.9	-4.5	-12.6
South Africa	-4.4	-4.3	-4.3	-4.8	-4.1	-4.4	-4.1	-6.3	-13.3
<b>Low-Income Economies, Developing Countries</b>	<b>-2.0</b>	<b>-3.3</b>	<b>-3.2</b>	<b>-3.8</b>	<b>-3.7</b>	<b>-3.6</b>	<b>-3.8</b>	<b>-4.1</b>	<b>-5.7</b>
Nigeria	0.2	-2.3	-2.1	-3.2	-4.0	-5.4	-4.3	-5.0	-6.4
Oil Producers	1.6	0.4	-1.1	-4.2	-4.6	-2.6	-0.6	-1.0	-7.6
Memorandum									
World Output (percent)	3.5	3.5	3.6	3.5	3.4	3.9	3.6	2.9	-3.0

Source: IMF Fiscal Monitoring, 2021

The Emerging and Middle Countries have contraction on their economic growth between -4.8 (Russia) to -13.3% (Africa South). During the pandemic, the average middle-income country encountered economic growth of minus 9.1%. The Low-Income Developing Countries were predicted by the IMF to get an average economic growth contraction of -5.7%. At a glance, the effects of economic contraction faced by low income countries were relatively smaller than those of middle and developed countries.

### 3. Methods

#### 3.1. Research Methods

This research uses quantitative analysis methods with a dummy variable multiple regression approach. Mechanical taking samples saturated than 153 countries affected.

2

The data used is generally a secondary data obtained from the IMF, WHO, and Worldometer, and source-source references online that are scattered in various portal of information and news. Most large the data growth of GDP, receipts, spendings countries and the debt the country is taken from the Fiscal Monitor IMF June 2020 while the data COVID-19 Pandemic was taken from the website of WHO and portal coronavirus Worldometer.org[32].

Data were collected subsequently grouped into dependent variable and the independent variable. The dependent variable is the value of GDP growth. While the independent variable is the number of cases. Cases of active, critical cases, time began to be exposed, the length of time of exposure, the number of deaths, the number of PCR tests, spending and debt the country of 153 entities of the country. Besides also there are two groups of dummy variables: Regional differences (Oceania, Africa, Asia, Europe, North America, South America), as a comparison is Oceania. The dummy variables are differences in the income status of the countries: the advance country, the emerging country, and the low income country. The definition of the IMF, the low income country as the reference variable.

Dummy variables were created to see the effect of regional differences and differences in the income status of country. For the regional category, Oceania was used as the reference or comparison variable. Meanwhile, for the category of state income status, low income countries are the reference variables.

### 3.2 Econometric Model

The data processed was analyzed by quantitative descriptive with the model regression with dummy variables. Eviews 12 software is used to analyze the effect of the COVID-19 pandemic, fiscal capacity, as well as regional differences and the income status of country on the dynamics of GDP growth (G-GDP). Model econometric were used as follows:

$$G - GDP = \beta_0 + \beta_1 TCases + \beta_2 TDeath + \beta_3 Pop + \beta_4 G - GDP - 1 + \beta_5 T \\ - Morbids + \beta_6 Expen + \beta_7 Debt + \beta_8 America + \beta_9 Africa + \beta_{10} Asia \\ + \beta_{11} Europe + \beta_{12} ADVANCE + \beta_{13} EMERGE + \beta_{14} EXP + \varepsilon$$

#### Research Hypothesis

##### Hypothesis I

H<sub>1.0</sub> The COVID-19 pandemic, monetary and fiscal capacity have no effect on GDP growth

H<sub>1.1</sub> The COVID-19 pandemic, monetary and fiscal capacity have an effect on GDP growth

Hypothesis 2

H<sub>2.0</sub> Inequalities in the region and the income status have no effect on the GDP growth

H<sub>2.1</sub> Inequalities in the region and the income status have an effect on the GDP growth

Classic Assumption Test

For this reason, it is necessary to first test the classical assumptions. Among other things includes a test multicollinearity, heteroscedasticity test, linearity test, and autocorrelation test. From the results of testing of the assumptions of classical obtained the results as follows:

Multicollinearity Test

**Table 2.** Multicollinearity Test Results

	Coefficient	Uncentered	Centered
Variable	Variance	VIF	VIF
TCASES	9.27E-17	10.20599	9.234988
T_MORBID	1.33E-08	74.10436	1.954559
D_START	4.59E-08	18.36210	2.690853
CRITICAL	7.45E-12	9.242929	8.392758
EXP01	0.000765	21.08367	2.380220
DEBT	5.11E-05	5.269468	1.302006
EMERGE	6.68E-05	5.248384	3.018678
ADVANCE	0.000118	8.133575	5.103420
AFRIKA	0.000386	12.59659	10.37366
AMERICA	0.000304	28.63787	14.03817
ASIA	0.000331	18.02357	12.72252
EUROPE	0.000903	1.091012	1.083881
POP	3.02E-22	3.208112	2.854372
TEST	1.10E-19	4.016821	3.621495
C	0.001280	236.7752	NA

Source: Data processed, 2021

From the diagnostic test for the coefficient of variance for inflation factor (VIF), it is found that almost all variables have a small VIF, except for dummy variables which

have a VIF between 10-14. The fact it does not become a problem because of the value of VIF great in regression with dummy variable ordinary happens [32]. That is the model the regression is already meet the requirements free of problems multi collinearity.

#### Heteroscedasticity test

**Table 3** Heteroscedasticity Test Results

Heteroskedasticity Test: Breusch-Pagan-Godfrey				
F-statistic	1.215686	Prob. F		0.2706
Obs*R-squared	16.79787	Prob. Chi-Square		0.2671
Scaled explained SS	44.01308	Prob. Chi-Square		0.0001

Source: Data processed, 2021

The Chi-Square Obs\*R-squared and F statistical probability value is 0.2671 or more than 0.05. This means that the model has not heteroscedasticity disorder.

#### Linearity Test

Test linearity is done by using the tool test Ramsey RESET Test that exist in the Eviews 12. The results are shown in Table 4. Looks value probabilitas F statistic to test Ramsey RESET Test worth 0.0623 or bigger than the standard 0.05. Meaning, a model of regression it meets the requirements of linearity.

**Table 4.** Linearity Test Results

	Value	P. Value
t-statistic	1.879808	0.0623
F-statistic	3.533680	0.0623
Likelihood ratio	3.896336	0.0484

Source: Data processed, 2021



### Auto Correlation Test

Autocorrelation is a problem that often occurs in statistical analysis using times series data. Test This can be done by du event: the first comparing the value of Durbin Watson with a standard value DW Table. From the calculated DW value 2.027 appears to be bigger than the dU value (1.723) and less than 4-dL (2.485). Or in other words, it is in an autocorrelation free area. To be sure it needs to be confirmed by the Breusch-Godfrey Serial Correlation LM Test. The test results are presented in Table 5 below:

**Table 5. Autocorrelation Test Results**

Breusch-Godfrey Serial Correlation LM Test:				
F-statistic	0.82931 4	Prob. F(2,131)		0.4386
Obs*R-squared	1.83793 8	Prob. Chi-Square(2)		0.3989

Source: Data processed, 2021

The Chi-Square probability value and the F-statistic probability are 0.4386 and 0.3989. Both have been more substantial than 0.05. That is, the regression model under study is free from autocorrelation problems. Thus, the last regression model is more valid than the first model.

## 4. Discussion

### 4.1. The COVID-19 Pandemic

In2020, the COVID-19 pandemic has occurred in 213 countries from six regions. Namely; North America, South America, Europe, Asia, Africa and Oceania. Asia From day to day the number of cases and deaths continues to increase [27]. Accumulatively there were 25,390,069 cases, 850,615 deaths, 17,709,077 people recovered,6,830,377 active cases, and 61,101 critical cases. They are distributed in North America 28.8%, Asia (27.56%), South America (24.59%), Europe (14.0%), Africa (4.92%) and Oceania (0.11%). The detailed table can be seen in Table below.

**Table 6. COVID-19 Pandemic Cases**

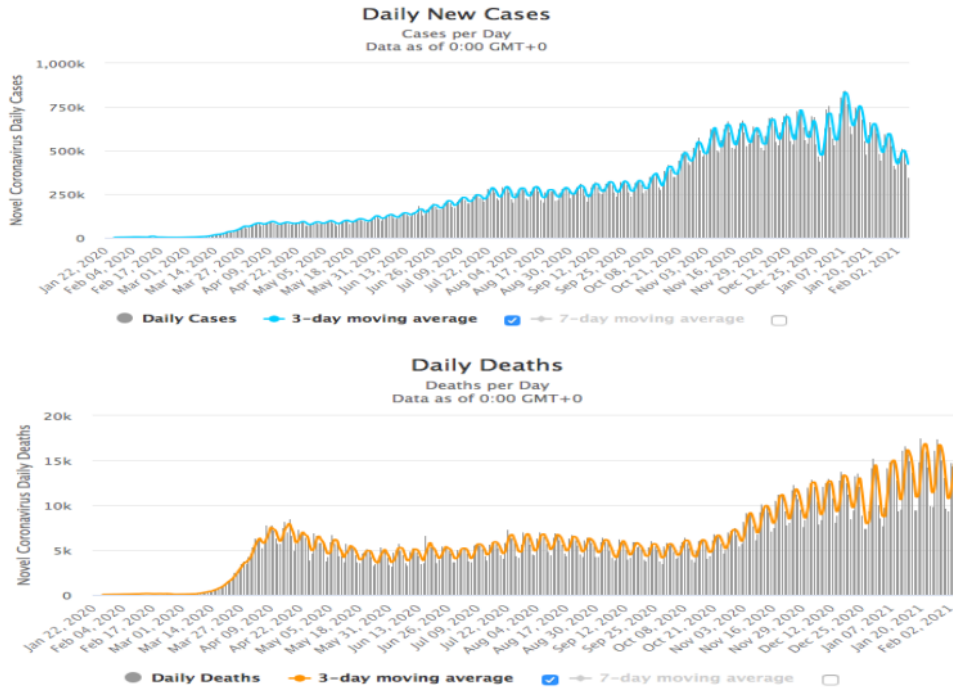
Region	Country	Case Number	Death	Healed	Test	Population
South America	14	6,244,321	201,164	4,834,353	26,659,437	431,343,377
	6.57%	24.59%	23.65%	27.30%	5.80%	5.29%
North America	39	7,312,603	270,532	4,203,181	90,877,241	589,866,928
	18.31%	28.80%	31.80%	23.73%	19.77%	7.23%
Europe	48	3,555,640	207,400	2,065,754	115,850,651	747,707,013
	22.54%	14.00%	24.38%	11.66%	25.20%	9.16%
Asia	49	6,998,654	141,205	5,602,612	188,590,955	4,615,185,050
	23.00%	27.56%	16.60%	31.64%	41.02%	56.55%
Africa	57	1,250,375	29,633	979,996	11,071,333	1,345,627,090
	26.76%	4.92%	3.48%	5.53%	2.41%	16.49%
Oceania	6	28,476	681	23,181	7,010,852	40,989,145
	2.82%	0.11%	0.08%	0.13%	1.53%	0.50%
Total	213	25,390,069	850615	17,709,077	440,060,469	7,770,718,603

Source: Worldometer, 2020

In quantity, the region with the North America and Asia be a region of the many affected by the COVID-19 pandemic. While Europe be a region of the many reported deaths due to COVID-19. North America, which has a population of 589.9 million, has recorded 7.313 million cases and 270.5 thousand deaths. Asia, where there are 4.615 billion people living, has a record of 6.999 million cases and 141 thousand deaths. Next is North America (where 431.34 million inhabitants have 6.244 million cases and 201 thousand deaths. The next sequence is Europe, Africa and Oceania. Europe has 355.56 million cases and 270,532 deaths. Africa has 1.25 million cases and 29,633 deaths. While Oceania who inhabited 40.9 million inhabitants just recorded 28 476 cases and 681 deaths due to COVID-19.

If you pay attention to the daily chart, this pandemic has passed a two-wave phase. Additional cases and deaths daily is still relatively high. During 2020, each day of Covid19 cases increased by more than 250 thousand cases, while the mortality rate increased by about 6,000 cases per day on average. In some cases, the second wave

is higher than the first wave[11]. While in death, the peak of a wave of second looks more lower than the peak of the wave first. There is a trend that the peak of the second wave has been passed and is now entering the peak phase of the decline,



**Graph 2.** Trends in Daily Cases and Daily Deaths during the COVID-19 Pandemic  
 Source: Worldometer, 02 February 2021

#### 4.2 The Impact of COVID-19 Pandemic To The Economic Growth

How big a pandemic impacting the growth of the economy? IMF Fiscal Monitoring July 2020 -as shown in Table 1 presents the estimated growth of a number of affected countries during the pandemic. The impact of pandemic Covid against the growth of the economy has variations in the width. The IMF makes three categories of countries; namely: Advance Economics (developed countries), Developing Countries and Middle-income Countries (developing and middle-income countries), and Low Income Developing Countries (low income countries).

IMF predicts economic team during a COVID-19 Pandemic countries advanced (Advance Country) encountered a contraction of economy growth between -5.5% (Germany) to -15.4% (US). During the pandemic, developed countries are predicted to experience a growth of minus 10.7% on average.

Emerging and Middle Countries suffered contraction between -4.8 (Russia) to -13.3% (Africa South). During the pandemic, the average middle-income countries encountered economic growth of minus 9.1%. Low Income Countries were predicted by the IMF to experience an average economic growth contraction of -5.7%.

At first glance the effects of contraction economy which is facing by the low income countries relatively smaller that upper-medium and developed countries[26]. Do regional differences and the income status of country affect the governance of the country in overcoming economic problems during the pandemic? For this reason, statistical analysis of multiple regression with dummy variables was carried out using the Eviews 12 software with 1,989 data samples. The output of the analysis results is shown in Table 7.

**Table 7.** The Regression Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
<b>DTCASES</b>	4.15E-06	1.84E-06	2.252963	0.0259
<b>DTEST</b>	-1.22E-07	8.79E-08	-1.386973	0.1678
<b>T_MORBID</b>	-0.303046	0.037515	-8.078086	0.0000
<b>GDP-1</b>	0.000349	0.000490	-0.711992	0.0477
<b>LOGPOP</b>	-3.261571	0.868373	-3.755957	0.0003
<b>AFRIKA</b>	-12.92822	7.738935	-1.670542	0.0972
<b>AMERICA</b>	-14.40056	6.821408	-2.111083	0.0366
<b>ASIA</b>	-15.65950	7.085263	-2.210150	0.0288
<b>EUROPE</b>	-10.58930	11.87675	-0.891599	0.3742
<b>EMERGE</b>	-4.605343	3.326520	-1.384433	0.1685
<b>ADVANCE</b>	-15.53806	4.212644	-3.688434	0.0003
<b>EXP</b>	-0.279737	11.11455	-2.516825	0.0130
<b>DEBT</b>	3.470767	2.986292	1.162233	0.2472
<b>C</b>	0.1801173	16.85937	10.68351	0.0000



2

<b>R-squared</b>	0.837905	Mean dependent var	42.44898
<b>Adjusted R-squared</b>	0.801809	S.D. dependent var	17.97075
<b>S.E. of regression</b>	11.33997	Akaike info criterion	7.784937
<b>Sum squared resid</b>	17103.13	Schwarz criterion	8.069741
<b>Log likelihood</b>	-558.1929	Hannan-Quinn criterion	7.900656
<b>F-statistic</b>	17.97369	Durbin-Watson stat	2.027738
<b>Prob(F-statistic)</b>	0.000000		

Source: Data processed, 2021

From the results of multiple regression analysis with dummy variables obtained cursory information that variables freely are simultaneously effects the development of GDP growth with a determination rate of 84% (shown R-squared 0.837905). This means that the regression model can explain as much as 84%, the rest (16%) is influenced by other variables that are not include on the model. In a partial number of cases (DTCases), time of exposure (T-Morbid),GDP-1, total population, working capacity, different the income status of country and regional differences affect the dynamics of GDP growth.

From the multiple regression analysis with dummy variables (Table 7), it is found that the dynamics of economic growth in affected countries are influenced by the number of cases (DTCase), time of exposure (T\_Morbid), G-GDP of the previous year, total population (log pop), share of spending (EXP), as well as regional differences (Asia, America and Africa) and differences in the income status of country(Advance). While the ratio of the debt, the region of Europe and countries thrive no real impact on the dynamics of growth of the economy, the countries affected by COVID-19 Pandemic[29].

The interesting things, almost all of the independent variables are negative correlated to the economy growth. Only two are positive correlated, namely the variable of the number of cases and the variable portion of debt. This means that in the current situation (where contraction generally occurs) the additional cases and an additional portion of debt can have an impact on increasing the negative value of economic growth[13].On the other hand, other variables such as time of exposure, population

size, the government spending, they have the opposite effect. If the value is increases, then it has a negative pressure effect on the dynamics of economic growth.

#### 4.3. The Impact of Regional Differences and The Income Status of Country

To answer the question whether the difference in the region and the income status of influential countries in the governance tackle the growing issue due to the COVID-19 Pandemic, used the data results of regression double-dummy variables that have qualified analysis of the statistics are valid[28].

From the results of multiple regression analysis with dummy variables obtained cursory information that variables freely in simultaneous impact on the growth of GDP. By partially, on the level of confidence of 90% (standard error 10%), the number of cases, the exposure time, the government spending, as well as differences in the region (America, Asia, Africa) and the income status of state (Advance) influence is the significance of the dynamics of GDP growth[25]. While the number of tests and the debt the state is not real effect on the dynamics of growth of the economy.

The relation coefficient for the dummy variable of Asia is bigger than in America and Africa. It gives meaning that regions in Asia are relatively more sensitive in the comparative impact of the region in America and Africa, besides the Europe is not different with Oceania region.

Advance dummy variable have a significant effect on the dynamics of GDP growth. Meanwhile, the Emerge dummy variable does not have a significant effect on the dynamics of economic growth. This gives an indication that the management of the impact of the pandemic in developed countries is proving to be better than that of low income countries[22]. Meanwhile, the management of the impact of a pandemic in developing and middle-income countries is not much different from that of low-income countries. Thus, more efforts are needed to increase efficiency and effectiveness of dealing with the impact of the coronavirus pandemic [1]. Finally, the research found an econometric model is valid on the level of confidence of 90% ( $\alpha$ 10%) as follows:

$$\begin{aligned} G - GDP = & 0.180117 + 0.00000415DTCASES - 0.303046T\_MORBID + 0.000349G \\ & - GDP - 3.261571LOGPOP - 12.92822AFRIKA - 14.40056AMERICA \\ & - 15.65950ASIA - 15.53806Advance - 0.279737EXP \end{aligned}$$

From the model econometric are already valid and legitimate, the obtained interpretation as follows:

- If the pandemic is under control (in the cases and time of exposure) and there is no disparity in management between regions and between countries, then global economic growth is potentially positive 0.18%
- If the number of cases increased by 1 million, the global economic growth will tend to be depressed to 0.415%.
- If the exposure time COVID-19 increased by one unit, then the economy growth does not exist pandemic and the number does not exist influence of the region.
- If the previous economic growth grew by 1%, the next year's economic growth will grow by 0.000349%.
- If the population increases by 1 million, then the economic growth will tend to be eroded by the logarithm of 0.00326 or the equivalent of 1.007 points.
- If cases of pandemic took place in the region of Africa, the impact on the economic growth in the region have tended to be worse around 112.93 times of the impact of the pandemic in the region of Oceania.
- If the case of pandemics occurred in the American region, the impact on the economic growth in the region have tended to worse 14.4 times of the impact of the pandemic in the region of Oceania.
- If the case of pandemics occurred in the Asian region, the impact on the economic growth in the region have tended to worse 15.66 times of impact of the pandemic in the region of Oceania.
- The impact of the pandemic on the economic growth of countries in the European region is not significantly different from the impact of the pandemic in the Oceania region.
- In relative terms, the impact of the pandemic on economic growth in the Asian region is heavier than in other regions. The order of the impact of the pandemic on regional economic growth in order from the heaviest to the lightest is: Asia, America, Africa, Europe and Oceania.
- If the pandemic override countries with the income status of developed countries, the impact tends to be worse 15.53 times of the impact of the pandemic that encountered by the low income countries.
- The impact of the pandemic which overrides medium income countries is almost equal to the impact of which is received by the low income countries. Means, the Governance of medium income countries must be corrected in order to be a good and effective results.
- If the government spending to tackle the pandemic is increased by one million dollars, thus it potentially reduces the impact of an economy growth contraction of 0.27%

## 5. Conclusion

COVID-19 Pandemic has impact of all sectors. This pandemic has participated exacerbate the effects of the economic contraction for the countries in the Asia, America, Africa, Europe and Oceania. The variable of pandemic cases, the time of exposure, the number of residents, the difference region and differences in the income status of country, influence on the economic growth of the country affected by this Covid-19 Pandemic by the coefficient of correlation of 0.8379.

If the pandemic is under control (in cases and time of exposure) and there are no disparities in governance between regions and between countries, then global economic growth is potentially positive 0.18%. If government spending to tackle the pandemic is increased by one million dollars, this measure has the potential to reduce the impact of the contraction by 0.27%.

Governance impact of the pandemic in the region of Asia, America and Africa different significance with the governance in the country area of Oceania. While governance pandemic in Europe do not differ significance of the governance of the country Oceania. The difference in the income status of developed countries is significantly different from low income countries. However, the income status of middle and low income countries is not significantly different from the management of handling the Covid-19 pandemic. In relative terms, the impact of a pandemic on the growth of the economy in the region of Asia, America and Africa more weight than the other regions. The order of the impact of the pandemic on regional economic growth from the heaviest to the lightest is: Asia, America, Africa, Europe and Oceania.

## 6. Implication and Limitation

The results of the study give the implication that all countries in the world need to continue watch out the increase of cases and the time of exposure to COVID-19 Pandemic in order to not affect the sharper contraction of economic growth. At the same time, the countries affected by the pandemic need to more carefully manage the fiscal and monetary policy, especially the government spending and debt management. The effectiveness of spending and debt needs to be continuously improved so that it has a positive impact on economic recovery.

The alertness is necessary for the countries in Asia, America and Africa. The impact of the Covid-19 pandemic in these regions is more sensitive than in countries in the Oceania region or the European region. For the middle-income countries need to be prudent in their policy to manage this difficulties condition of Covid-19 Pandemic to have better effectiveness than low income countries.



The limitation of this research is the data changes overtime due to uncertainty about when the Covid-19 pandemic storm will end. Need an advanced research to obtain the conclusion of the study were more reliable to help the countries in the world to avoid getting into a deeper recession.

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# Inequality of Countries' Capabilities in Dealing With Covid-19 Pandemic and Its Impact On the Global Economy

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