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Could Fiscal Capacity Be Affected by the Covid-19 Pandemic?

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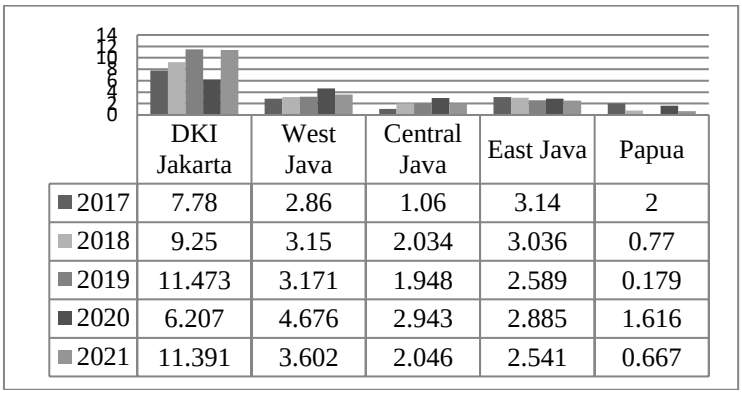
ABSTRACT

The world economy, including Indonesia, in the first quarter of 2020 has not been too affected by Covid-19. However, in the second quarter of 2020, national economic growth began to decline. As a result of the contraction of the Indonesian economy, it has an impact on the decline in regional fiscal capacity. This study focuses on: 1) The effect of Economic Growth on fiscal capacity in 34 provinces in Indonesia before and during the Covid-19 pandemic?; 2). Development of sources of fiscal capacity in Indonesia; 3). Quadrant of Relationship between Economic Growth and Fiscal Capacity; 4). The government's policy direction is to encourage increased fiscal capacity during the Covid-19 pandemic. This research uses descriptive quantitative method using panel data regression model. The rate of economic growth does not significantly affect the amount of regional fiscal capacity in 34 provinces in Indonesia. The decline in fiscal capacity was largely influenced by a decrease in Regional Original Income (ROI). In 2021 the sources of fiscal capacity building have not run normally. The effect is that the regional fiscal capacity is still low for each province. Therefore, to restore the economy, the government uses various stimuli, namely fiscal, monetary, and sectoral.

1. INTRODUCTION

Since December 2019, the World Health Organization (WHO) announced the emergence of the Covid-19 Virus for the first time in Wuhan City, China. The spread of the Covid-19 virus has spread to various parts of the world and entered Indonesia on March 2, 2020. As a result of the Covid-19 Virus, the economy slowed down throughout 2020. The world economy, including Indonesia, in the first quarter of 2020 was not too affected by the Corona Virus. 19, However, in the second quarter of 2020, national economic growth began to decline. As a result of the contraction of the Indonesian economy, the impact on the decline in regional fiscal capacity. Regional fiscal capacity according to the Minister of Finance Regulation No. 120/PMK. 07/2020 is the financial capacity of each region which is reflected through regional income minus the income whose use has been determined and certain expenditures. The current fiscal existence if managed properly and effectively and efficiently with the right allocation can stimulate an increase in regional economic growth. However, in fact the regional fiscal capacity in 2017 to 2019 has increased. However, since the beginning of 2020, regional fiscal capacity has decreased due to the decline in the national economy as a result of the Covid-19 Virus. in fact the regional fiscal capacity in 2017 to 2019 has increased. However, since the beginning of 2020, regional fiscal capacity has decreased due to the decline in the national economy as a result of the Covid-19 Virus. in fact the regional fiscal capacity in 2017 to 2019 has increased. However, since the beginning of 2020, regional fiscal capacity has decreased due to the decline in the national economy as a result of the Covid-19 Virus.

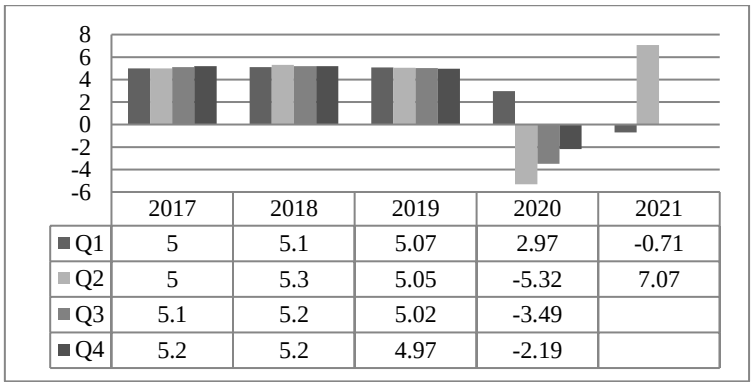


	DKI Jakarta	West Java	Central Java	East Java	Papua
2017	7.78	2.86	1.06	3.14	2
2018	9.25	3.15	2.034	3.036	0.77
2019	11.473	3.171	1.948	2.589	0.179
2020	6.207	4.676	2.943	2.885	1.616
2021	11.391	3.602	2.046	2.541	0.667

Source: Minister of Finance Regulation 2017-2021

Figure 1. The Best 5 Provincial Fiscal Capacity Index 2017-2021

As reflected in the DKI Jakarta Regional Fiscal Capacity Index (RFCI) in 2017 of 7.87% then it rose in 2019 to 11.473% until the arrival of Covid-19 made DKI Jakarta's RFCI slump to 6.207% but DKI Jakarta was able to reverse the figure. RFCI to 11.391%. This is also felt by several regions such as West Java Province which experienced an increase in 2020 by 4.676% but decreased in 2021 to 3.602%, then East Java which declined in 2021 with an RFCI of 2.541% which was originally 2.885% in 2020, Java Central also felt this decline, namely in 2020 it was 2.943% and then it fell in 2021 to 2.046%, not only felt on the island of Java, Papua Province, which has been included in the very high RFCI category several times, has also experienced a decrease in fiscal capacity which in 2020 can step on to 1.616% RFCI, now in 2021 it is only 0.667%. Regional fiscal capacity reflects the financial capacity of an area that will encourage economic growth in that area. Declining economic growth, followed by a wave of terminations of employment caused the Indonesian economy to decline in 2020. Due to the wave of layoffs carried out by several companies, it resulted in a decline in the community's economy which was marked by a decrease in tax revenues. Declining tax revenues will also have an impact on Indonesia's economic growth which will decline in 2020.

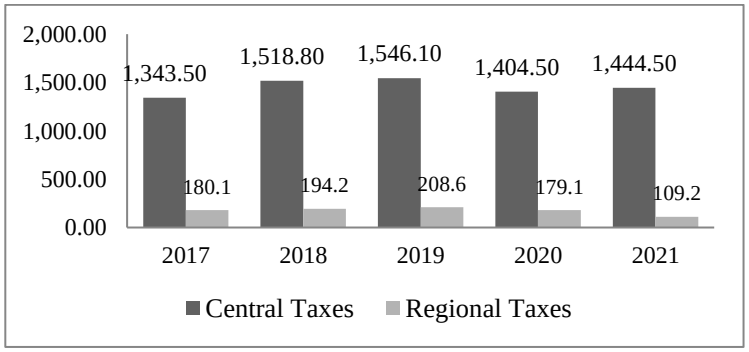


	2017	2018	2019	2020	2021
Q1	5	5.1	5.07	2.97	-0.71
Q2	5	5.3	5.05	-5.32	7.07
Q3	5.1	5.2	5.02	-3.49	
Q4	5.2	5.2	4.97	-2.19	

Source: Central Bureau of Statistics 2017-2021

Figure 2. Indonesia's Economic Growth Rate in 2017-2021

The economic contraction was followed by a decrease in central and local tax revenues, which can be seen in the table below. In the range of 2017 to 2019 central and local tax revenues showed a significant increase, but in 2020, central tax revenues decreased with revenues of 1,404.5 T until 2021, central tax revenues rose to 1,44.5 T. This increase was also supported with various government policies in dealing with the Covid-19 pandemic. The decline in tax revenues was also felt by the regions, it was written that regional tax revenues experienced a considerable decline in 2020 to 179.1 T and until now in 2021 local tax revenues are still declining at 109.2 T.



Source: Directorate General of Fiscal Balance 2017-2021.

Figure 3.2017-2021 Tax Revenue

Seeing this phenomenon, researchers are interested in discussing further, namely; 1) how is the effect of Economic Growth (EG) on fiscal capacity in 34 provinces in Indonesia before and during the covid-19 pandemic?; 2) Development of sources of fiscal capacity in Indonesia; 3) Quadrant of Relationship between Economic Growth (EG) and Fiscal Capacity; 4) The direction of government policy is to encourage increased fiscal capacity during the Covid-19 pandemic.

2. LITERATURE REVIEW

2.1 Concept of Fiscal Capacity

Regional fiscal capacity according to the Regulation of the Minister of Finance Number 120/PMK.07/2020 is the financial capacity of each region which is reflected through regional revenues minus revenues whose use has been determined and certain expenditures. The regional capacity maps are grouped based on the regional fiscal capacity index which can be used for consideration in determining the grant recipient area, determining the amount of matching funds by

the regional government, if required and/or other uses in accordance with the provisions of the legislation. The regional capacity map is divided into two, namely the Provincial Fiscal Capacity Map and the Regency/City Fiscal Capacity Map.

Calculation of Regional Fiscal Capacity

RFCprovince = income – [income whose use has been determined + certain expenditure]

Information :

RFCprovince= fiscal capacity of a province

In the Minister of Finance Regulation Number 120/PMK.07/2020 it is stated that the income in question is Regional Original Income (ROI), balancing funds, and other legitimate income. ROI is the income obtained by the region which is collected based on regional regulations in accordance with laws and regulations aimed at funding the implementation of regional autonomy in accordance with regional potential as a manifestation of decentralization. Balancing funds are sourced from revenues from the Indonesian State Budget which are allocated to regions to fund regional needs in the context of implementing decentralization. In addition, there is also legal income sourced from grants, emergency funds, and other income in accordance with the provisions of the legislation.

Income whose use has been determined is also one of the elements of calculating Regional Fiscal Capacity (RFC), which includes cigarette taxes, tobacco excise revenue sharing funds, natural resource revenue sharing funds, reforestation funds, special physical and non-physical allocation funds, special autonomy funds, profit sharing funds. mineral and gas natural resources in the context of special autonomy, and the special funds of the Special Region of Yogyakarta. Meanwhile, personnel expenditures, interest expenditures, and profit sharing expenditures are included in certain expenditure components.

Calculation of the Fiscal capacity index of the province

$$\mathrm{RFCI}_{provinsi-i} = \frac{\mathrm{RFC}_{provinsi-i}}{(\sum \mathrm{RFC}_{provinsi})/\mathrm{n}}$$

Information :
RFCIprovince-i = Regional Fiscal Capacity Index of a Province
RFCprovince-i = Regional Fiscal Capacity of a Province
RFCprovince = Total Provincial Capacity
n = 34 Provinces

Calculation of the provincial fiscal capacity index is grouped into five categories of regional fiscal capacity

Table 1. Fiscal Capacity Index Range

RFCI Range	Category RFC
RFCI< 0.277	Very low
0.277 RFCI< 0.564	low
0.564 RFCI< 0.934	Currently
0.934 RFCI< 1.920	Tall
RFCI 1,920	Very high

Source: Minister of Finance Regulation No. 120/PMK.07/2020

RFC uses data on adjustments to the Regional Revenue and Expenditure Budget for Fiscal Year 2020 and Presidential Regulation Number 72 of 2020 concerning Amendments to Presidential Regulation Number 54 of 2020 concerning Changes in Posture and Details of the State Revenue and Expenditure Budget for Fiscal Year 2020. In general, regions that have a proportion ROI for high incomes have a high RFC index, while regions with a low RFC index generally have low ROI. For provincial governments that have a low RFC Index, most (>50%) regencies/cities in their area have a low RFC Index, while for provinces that have a high RFC Index, it does not necessarily mean that most of the regencies/cities in their area have a high RFC Index. Tall (Herdiyana, 2019). The calculation of the regional fiscal capacity index is useful as a consideration in determining the grant recipient area, determining the amount of assistance funds by the regional government and other uses in accordance with the provisions of the legislation. This will certainly affect the economic growth in the area (Salma Nazikha & Rahmawati, 2021). This is in line with the research results Juma'eh et al., (2020) that the current fiscal existence if managed properly and effectively and efficiently with the right allocation can stimulate an increase in regional economic growth.

2.2 Economic Growth

Economic growth is the development of activities in the economy that causes goods and services produced in the community to increase and the prosperity of the community to increase (Sukirno, 2010). Economic growth is used as a benchmark to determine the economic development of a country from year to year. The economy is said to be experiencing growth if the real remuneration from the use of a factor of production in that year is greater than the previous year. This positive moving change is often interpreted as the Economic Growth Rate (EG). According to BPS, EG is calculated to measure economic growth from year t-1 to year t. The EG calculation is used to show the success rate of development of an area in a certain period of time. Here's the calculation formula:

$$\text{EG} = \frac{Y_{it} - Y_{i\,(t-1)}}{Y_{i\,(t-1)}} x\ 100$$

Information :
EG = Economic Growth Rate
Yit = GRDP at constant price in year t (nominal)
Yi(t-1) = GRDP at constant price year t-1 (nominal)

The increase in GDP from year to year will determine the economic growth of a country or region. Economic growth is influenced by autonomous investment, induced investment, and the potential of the economic sector of the country or region. In addition, the availability of renewable natural resources, the quality of human resources, technology and the entrepreneurial spirit of a society (Limplele et al., 2021).

2.3 Linkage of EG to Regional Fiscal Capacity

Fiscal capacity shows the ability of the region to finance its own government activities, development, and services to the wider community who have paid taxes and levies as a source of regional income. (Suhendra et al., 2019). Directly, the variables of fiscal capacity and government spending have a large impact on increasing economic growth. The government is advised to increase sources of regional revenue such as identifying new sources of revenue and innovating in the field of optimally receiving regional taxes and levies as a source of regional income that will be used for regional spending effectively and on target to increase regional economic growth (Juma'eh et al., 2020). Another study conducted by Salma Nazikha & Rahmawati (2021) on the effect of regional fiscal capacity on inclusive growth. The findings are that regional fiscal capacity has a positive and significant impact on inclusive growth in 34 provinces in Indonesia in 2017-2019. Which means that every single unit increase in regional fiscal capacity can increase inclusive growth. Inclusive growth is a measure of quality economic growth. In research Suparman (2021) regarding the impact of the Covid-19 pandemic on the management of state finances, it is proven that in an abnormal situation where the state budget is under extraordinary pressure during the pandemic, the government can overcome a deeper socio-economic crisis by taking extraordinary steps as an extraordinary breakthrough in the form of formulating and implementing policies to expand the deficit. budget for the sake of saving the economy and financial system, then after being able to pass the critical phase gradually focus on the recovery of the national economy. In research Nasution et al.,(2020) believes that strong intervention scenarios can be carried out to deal with the Covid-19 pandemic, such as through effective large-scale social restrictions coupled with fiscal stimulus.

3. METHODOLOGY

3.1 Types and Research Methods

The method used in this research is descriptive quantitative, which emphasizes the analysis on numerical data (numbers) which are processed by statistical methods. The quantitative method will obtain the results of the relationship between the variables studied. In general, quantitative research is a type of research that produces findings that can be achieved using statistical procedures (Sujarweni, 2014).

3.2 Sources and Types of Data

In this study, the data used are secondary data obtained from the Central Statistics Agency (CSA) and the Regulation of the Minister of Finance (RMF). The secondary data used are: Regional fiscal capacity index in Indonesia by province in 2017-2021; Economic growth in Indonesia in 2017-2021.

3.3 Analysis Method

The analytical method used in this research is panel data analysis. Panel data is a combination of time series and cross section data. Time series data is data from one object with several specific time periods, while cross section data is data obtained from one or more research objects in the same time period (Gujarati, 2012). This study uses time series data

for 5 years (t = 5) from 2017 to 2021, while the cross section data used in this study are 34 provinces (n = 34), so the total data used in this study is 34 x 5 = 170 data.

3.4 Analysis Model

Model analysis with panel data can be done through three approaches which include: Common Effect Model (CEM), Fixed Effect Model (FEM), and Random Effect Model (REM). The form of the panel data regression model in this study:

$$Y = \beta_0 + \beta_1 X_{i,t}$$

Where :
Y : Regional Fiscal Capacity
 : Constant
Xi, t : Economic Growth Rate for Region I in year t

In using panel data, there are several tests that must be carried out, namely the Chow test and the Hausman test to choose the use of fixed effects or random effects.

3.4.1 Chow test

The Chow test is used to determine the best model between CEM and FEM which will later be used in panel data analysis, with the following hypotheses:

H0 : Model following CEM
H1 : Model following FEM

3.4.2 Hausman test

Hausman test is used to determine the best model between FEM and REM which will later be used in panel data analysis, with the following hypotheses:

H0 : Model following REM
H1 : Model following FEM

After the Chow Test and Hausman Test can determine the most appropriate model, namely between CEM and FEM or FEM with REM. The next step is to test the classical assumptions.

3.4.3 Classical Assumption Test

Classical assumption test is a prerequisite for multiple regression analysis, this test must be met so that the parameters and regression coefficients are not biased. Classical assumption test includes normality test, multicollinearity test, autocorrelation test and heteroscedasticity test. However, by using the Panel model, some problems can be solved. In this study only used the data normality test (Kuncoro, 2014).

3.5 Operationalization of Variables

Operationalization of variables in this study can be seen in Table 2.

Table 2. Variable Operations

No	Variable	Definition	Data
[1]	Dependent Variable (Y)	Regional fiscal capacity according to the Regulation of the Minister of Finance Number 120/PMK.07/2020 is the financial capacity of each region which is reflected through regional revenues minus revenues whose use has been determined and certain expenditures.	Regional Fiscal Capacity 2017-2021
[2]	Independent Variable (X1)	Economic growth is the development of activities in the economy that causes goods and services produced in the community to increase and the prosperity of the community to increase (Sukirno, 2010).	Provincial Economic Growth Rate in Indonesia in 2017-2021

4. RESULT AND DISCUSSION

4.1 Effect of EG on Fiscal Capacity in 34 Provinces in Indonesia Before and During the Covid-19 Pandemic

This section is an analysis of the results of the panel model of the effect of EG on fiscal capacity in 34 provinces in Indonesia during the Covid-19 pandemic. To get a fit model, a number of tests were carried out in the form of Determination of Fixed Effects and Random Effects using the Hausman Test. After that, the classical assumption test is carried out to ensure the estimation model is BLUE (Best Linear Unbiased Estimation). The classic assumption test used in this study is

the Normality Test. At the end is a discussion of the results of the model estimation results. Here's a more complete discussion

Determining the Right Regression Model

At the stage of determining the regression model, the model used is the Random Effect. More details regarding the results of the panel test for determining the fiscal capacity model in Indonesia can be seen in Table 3.

Table 3. Panel Test Results for Determining Fiscal Capacity Models in Indonesia

Test	Prob.	Results	Decision
Chow test (CEM : FEM)	0.0000	Fixed Effect	**Random Effect**
Hausman test (FEM: REM)	0.8958	Random Effect	

Source: Calculations Using Eviews Software

From the results of the panel test using the Chow Test and Hausman Test, the most appropriate panel model is the Random Effect because the probability for the Random Effect is 0.08958 which is greater than = 0.05.

Classic assumption test

According to Gujarati and Porter (2012), the Random Effect Model estimation method uses the Generalized Least Square (GLS) method. Meanwhile, for the fixed efficiency model and the common effect model, the Ordinary Least Square (OLS) model is used. One of the advantages of the GLS method is that it does not need to meet classical assumptions. The GLS technique is believed to overcome the time series autocorrelation and the correlation between cross sections. The GLS method produces an estimator to meet the Best Linear Unbiased Estimation (BLUE) property which is a method to overcome the violation of homoscedasticity and autocorrelation assumptions. But according to Kuncoro (2014) the normality test still has to be done on the Random Effect Model (REM). The results of the normality test can be seen in Figure 4.

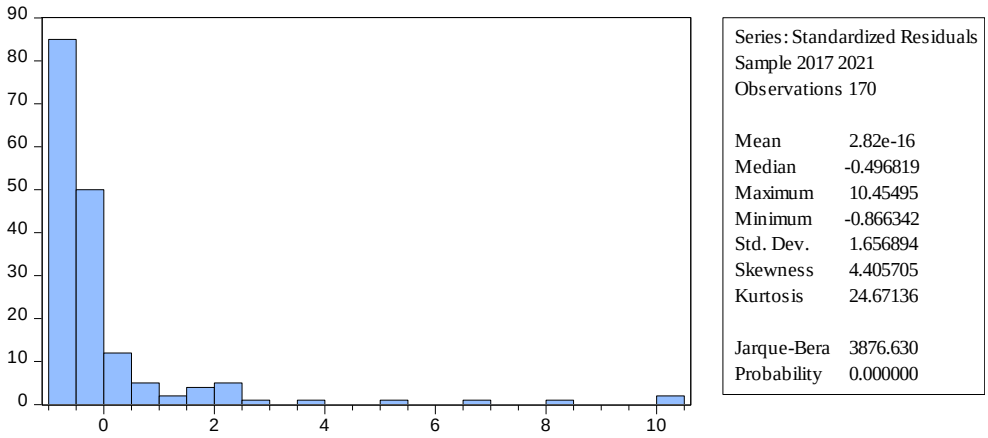


Figure 4. Normality test

Based on the normality test, the result is that the probability is 0.0000 which means that the data is not normally distributed.

Results Discussion

The results of the estimation of fiscal capacity in 34 provinces in Indonesia using the GLS method can be seen in Table 4.

Table 4. Estimated Fiscal Capacity in 34 Provinces in Indonesia

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.953763	0.285656	3.338857	0.0010
X1	0.011047	0.009495	1.163388	0.2463

Based on the estimation results in Table 4. the fiscal capacity model in 34 provinces in Indonesia is obtained as follows.

Y = 0.953762847472 + 0.0110466938843*X1
(3.338857) (1.163388)
[0.0010] [0.2463]

Information:
() = Count T Value
[] = Probability Value
Y = Regional Fiscal Capacity
X1 = Economic Growth Rate

From the estimation results of the panel model, it is known that the calculated t value for Indonesian EG is 1.163388 or with a probability of 0.2463. The probability value for the EG variable is greater than 0.05 or the hypothesis is accepted. This means that partially EG has no effect on fiscal capacity in each province in Indonesia. This finding contradicts the findings of Suhendra et al., (2019) and Juma'eh et al., (2020) where fiscal capacity is a source of economic growth. Regional revenue sources will be used to create new economic activities that will encourage increased economic growth Khakim et al., (2011) found that ROI have a positive effect on economic growth, but General Allocation Fund (GAF) and other legitimate ROI have a negative effect on economic growth. This provides important information that the GAF and other ROI that are legal in some provinces are not in line with economic growth in the region. The comparison of the effect of EG on RFC before and during the pandemic.

Table 4.2 The Effect of EG on Fiscal Capacity in 34 Provinces in Indonesia Before and After the Pandemic, 2019-2020

No	Province	Fiscal Capacity Before the Pandemic	Fiscal Capacity During a Pandemic
[3]	Aceh	3,990	0.948
[4]	North Sumatra	5.032	0.941
[5]	West Sumatra	4,829	0.935
[6]	Riau	2,708	0.940
[7]	Jambi	4,212	0.947
[8]	South Sumatra	5,485	0.951
[9]	Bengkulu	4,762	0.952
[10]	Lampung	5.070	0.934
[11]	DKI Jakarta	5,610	0.927
[12]	West Java	4,887	0.926
[13]	Central Java	5,205	0.923
[14]	In Yogyakarta	6,352	0.923
[15]	East Java	5,321	0.926
[16]	West Kalimantan	4,906	0.932
[17]	Central Kalimantan	5,899	0.937
[18]	South Kalimantan	3,933	0.933
[19]	East Kalimantan	4,569	0.921
[20]	North Sulawesi	5,446	0.942
[21]	Central Sulawesi	8,512	1.006
[22]	South Sulawesi	6,661	0.945
[23]	Southeast Sulawesi	6,266	0.945
[24]	Bali	5,398	0.850
[25]	West Nusa Tenggara	3,759	0.945
[26]	East Nusa Tenggara	5.051	0.943
[27]	Maluku	5,215	0.942
[28]	Papua	0.779	0.978
[29]	North Maluku	5,880	1.007
[30]	Banten	5.099	0.915
[31]	Bangka Belitung	3,200	0.927
[32]	Gorontalo	6,169	0.952
[33]	Kep. Riau	4,665	0.911
[34]	West Papua	2,564	0.944
[35]	West Sulawesi	5,465	0.926
[36]	North Kalimantan	6,651	0.940

Source: Author's Calculation of Regional Fiscal Capacity Model Equation

4.2 Development of Sources of Fiscal Capacity in 34 Provinces in Indonesia

In the Regulation of the Minister of Finance Number 120/PMK.07/2020 it is stated that income is Regional Original Income (ROI), balancing funds, and other legitimate income. The development of revenue sources for regional fiscal capacity is as follows.

Table 5. Development of Provincial RFC Revenue Sources in Indonesia in 2017-2021 (Trillion Rupiah)

No.	Province	Year				
		2017	2018	2019	2020	2021
[37]	Aceh	44	40	45	43	20
[38]	North Sumatra	53	54	58	53	27
[39]	West Sumatra	25	25	27	25	15

No.	Province	Year				
		2017	2018	2019	2020	2021
[40]	Riau	28	30	33	30	16
[41]	Jambi	17	17	19	17	8
[42]	South Sumatra	34	37	42	39	21
[43]	Bengkulu	11	11	12	11	6
[44]	Lampung	28	28	29	28	17
[45]	DKI Jakarta	64	61	62	55	35
[46]	West Java	117	120	131	124	73
[47]	Central Java	98	100	106	102	57
[48]	In Yogyakarta	14	15	16	15	10
[49]	East Java	115	122	129	121	74
[50]	West Kalimantan	24	24	26	24	13
[51]	Central Kalimantan	19	20	21	20	11
[52]	South Kalimantan	21	24	26	24	12
[53]	East Kalimantan	26	32	40	34	15
[54]	North Sulawesi	16	16	17	16	8
[55]	Central Sulawesi	18	18	22	19	10
[56]	South Sulawesi	40	41	43	41	22
[57]	Southeast Sulawesi	17	18	20	19	8
[58]	Bali	23	24	26	21	13
[59]	West Nusa Tenggara	20	19	21	19	12
[60]	East Nusa Tenggara	25	25	28	26	13
[61]	Maluku	13	13	14	13	5
[62]	Papua	49	52	53	47	22
[63]	North Maluku	10	11	12	11	6
[64]	Banten	32	33	36	33	23
[65]	Bangka Belitung	8	8	9	8	5
[66]	Gorontalo	7	7	8	7	4
[67]	Kep. Riau	11	11	13	12	5
[68]	West Papua	22	21	28	24	7
[69]	West Sulawesi	7	7	8	7	4
[70]	North Kalimantan	7	7	8	8	4

Source: Data Portal of the Directorate General of Fiscal Balance 2017-2021

Based on Table 5. the results show that the development of sources of regional fiscal capacity income originating from ROI, Balancing Funds and legitimate income in 2017 to 2019 is stable and has increased. This means, the economic capacity of each province in that year can be said to be quite good. In 2020, sources of revenue for regional fiscal capacity began to contract and experience a decline because the regional economic capacity in 2020 could be said to be not good due to the Covid-19 Pandemic. In general, the source of income most affected by the Covid-19 pandemic is Regional Original Income (ROI) where tax revenue in 2020 is strongly influenced by the decline in economic conditions due to the Covid-19 pandemic.

Table 6. DKI Jakarta 2020 Fiscal Capacity Revenue (Trillion Rupiah)

Province	Description	2020		
		ceiling	Realization	%
DKI Jakarta	ROI	38.09	37.43	98.27
	Regional taxes	32.48	31.90	98.20
	Regional Retribution	0.47	0.50	105.95
	Results of separated Regional Wealth Management	0.84	0.67	79.66
	Other Local Original Income	4.30	4.36	101.56
	Balancing Fund	17.05	16.90	99.09
	Revenue Sharing Fund (RSF)	13.65	13.65	100.00
	Tax RSF	13.57	13.57	100
	RSF Natural Resources	0.08	0.08	100

Province	Description	2020		
		ceiling	Realization	%
	Special Allocation RSF	3.40	3.25	95.43
	Other Legitimate Income	2.10	1.57	74.86
	Grant Income	2.03	1.50	74.05
	Adjustment Fund & Ostus	0.07	0.07	100.00

Source: Data Portal of DKI Jakarta Directorate General of Fiscal Balance in 2020

In Table 5. it can be seen that the ROI target of DKI Jakarta Province is Rp. 38.9 trillion, a decrease of 25.09% from the previous year with the realization of ROI in 2020 of 98.27% of the target. The realization decreased by 18.12%. Local taxes accounted for 85.23% of the total realization of ROI, the realization of local taxes in 2020 alone was 98.20% of the target. This realization could not reach the target due to the decline in community economic activity due to the pandemic which had an impact on income.

Table 7. West Java, East Java, Central Java, and Papua Fiscal Capacity Revenues in 2020 (Billion Rupiah)

Province	Description	2020		
		ceiling	Realization	%
West Java	ROI	42.051.11	39,451,20	93.82
	Regional taxes	32,297.08	29,897.71	91.64
	Regional Retribution	1080,12	922.25	85.38
	Results of separated Regional Wealth Management	845.76	801.43	94.76
	Other Local Original Income	7,828,14	8,129,82	103.85
	Central Government Transfer	68,961.70	66,909,72	97.02
	Balancing Fund	61,508.73	59,402.94	96.58
	Regional Incentive Fund	1,570.16	1,625.27	103.51
	Village Fund	5,882.81	5,881.51	99.98
	Transfer Between Regions	38.39	35.11	91.44
	Other Legitimate Income	5,167.17	4,141.27	80.15
	Grant Income	5,167.17	4,141.27	80.15
Central Java	ROI	27.139	27,811	102.4
	Regional taxes	16,862	16,450	97.55
	Regional Retribution	741	781	105.44
	Results of separated Regional Wealth Management	1.225	1,239	101.11
	Other Local Original Income	8,311	9,342	112.40
	Transfer Funds	68,914	61.493	89.23
	Balancing Fund	56,158	49,474	88,10
	Central Government Transfer – Others	7.104	6.852	96.45
	Local Government Transfer	4.727	4.403	93.14
	Financial Aid Transfer	926	764	82.56
	Other Legitimate Income	6.925	6.03	86.68
	Grant Income	3,460	2,996	84.56
	Other Income	3.465	3.077	88.81
Papua	ROI	34,415	37,064.87	107.7
	Regional Taxes	21,849	23,262.77	106.4
	Regional Retribution	1,343.9	1,217.79	90.61
	Results of separated Regional Wealth Management	926.73	922.86	99.58
	Other Local Original Income	10,295	11,661.45	113.2

Province	Description	2020		
		ceiling	Realization	%
East Java	Transfer Income	78.609	76.980.98	97.93
	Balancing Fund	73.193	71,659.85	97.90
	Regional Incentive Fund	1,889.4	2,267.50	120,20
	Village Fund	3,035.6	3,035.63	100.00
	Transfer Between Regions	472.75	0.01	0.00
	Other Regional Income	3,632.6	812.96	22.38
	Grant Income	3,225.8	505.82	15.68
	Other Income	406.75	307.14	75.51
	ROI	2,972.56	2,413.92	81.2
	Regional Taxes	1,684.10	1446,60	85.9
	Regional Retribution	174.20	130.23	74.8
	Results of separated Regional Wealth Management	165.43	88.65	53.6
	Other Local Original Income	948.83	748.45	78.9
	Transfer Income	50,735.10	40,453.91	79.7
Papua	Balancing Fund	34,133.81	27,933,10	81.8
	Government Transfers – Others	9,215.38	11,517.91	125.0
	Provincial Government Transfer	659.52	467.93	70.9
	Financial Aid Transfer	6,726.39	534.96	8.0
	Other Regional Income	767.96	513.04	66.8
	Grant Income	534.38	500.42	93.7
	Other Income	233.68	12.62	5.4

Source: Data Portal of the Directorate General of Fiscal Balance in West Java, East Java, Central Java, and Papua in 2020

Regional Original Income (ROI) in West Java in 2020 amounted to Rp42.95 trillion. In terms of realization, all ROI components have been realized above 85% but in fact the realization decreased by 11.8% in 2020 when compared to the previous year. Meanwhile, for Central Java Province in 2020, ROI was IDR 27.811 billion, an increase of 2.02% from the previous year. But in fact the composition of regional income from ROI is still low when compared to the balancing fund, this shows that the level of regional independence is still low due to the high level of regional dependence on the central government. ROI also experienced negative growth in East Java Province, the sharpest negative growth occurred in regional retribution which reached 23.25%. This decrease was caused by the policy of the Regional Government in East Java which provided fiscal incentives such as motor vehicle tax exemptions so that it affected the amount of ROI in East Java. The contribution of ROI in Papua Province by 5.56% decreased compared to the previous year, this condition was due to the fact that in 2020 the Papuan Regional Government was unable to optimally explore the potential of ROI sources as a result of the Covid-19 pandemic. In 2021, fiscal capacity income cannot be said to return to normal. This is because 2021 is still running and the realization of regional fiscal capacity revenues will continue to change. 56% decreased when compared to the previous year, this condition was due to the fact that in 2020 the Papuan Government was unable to optimally explore the potential of ROI sources as a result of the Covid-19 pandemic. In 2021, fiscal capacity income cannot be said to return to normal. This is because 2021 is still running and the realization of regional fiscal capacity revenues will continue to change. 56% decreased when compared to the previous year, this condition was due to the fact that in 2020 the Papuan Government was unable to optimally explore the potential of ROI sources as a result of the Covid-19 pandemic. In 2021, fiscal capacity income cannot be said to return to normal. This is because 2021 is still running and the realization of regional fiscal capacity revenues will continue to change.

4.3 Relationship between Regional Fiscal Capacity (RFC) and Economic Growth Rate (EG) Using 4 (Four) Quadrant Approach

Regional fiscal capacity and EG in the 2019-2021 period showed quite significant fluctuations, supported by the presence of the Covid-19 pandemic which made the national and regional economies experience a decline. However, some regions were able to survive in conditions of this economic crisis. To see the phenomenon of unequal economic conditions in 34 provinces in Indonesia, a 4 quadrant approach is used, while the relationship between regional fiscal capacity and EG is as follows.

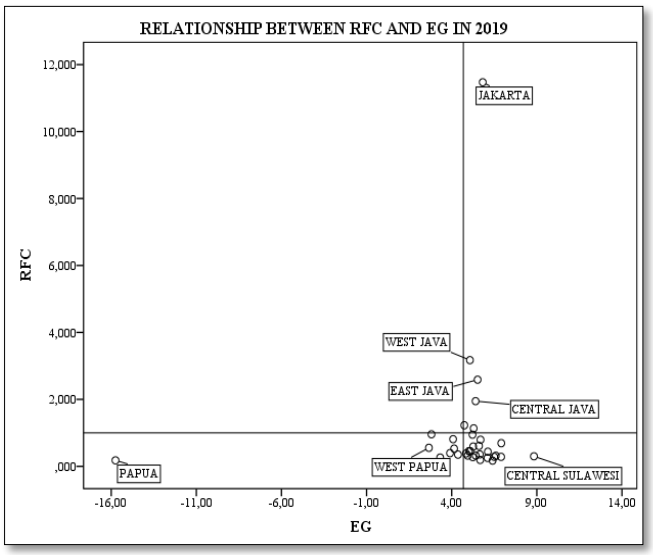


Figure 5. 4 Square Relationship Approach Between RFC and EG in 2019

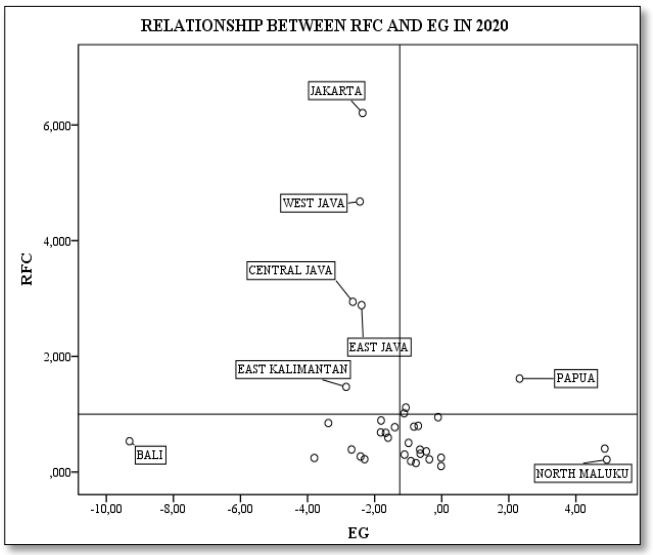


Figure 6. 4 Square Relationship Approach Between RFC and EG in 2020

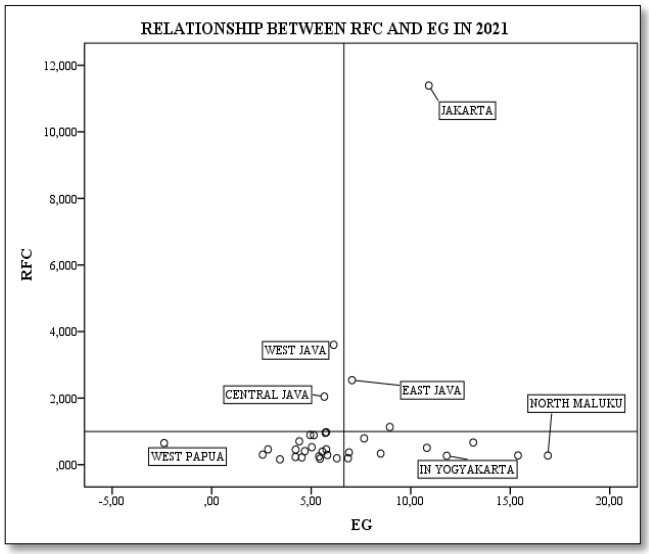


Figure 7. Approach to the 4 Square Relationship Between RFC and EG in 2021

Based on the 4 quadrant relationship, it can be seen in 2019 in quadrant I which shows regions with an EG average above the national average and obtaining a high RFC. The 5 provinces are DKI Jakarta, East Java, Central Java, and West Java. There are no regions in quadrant II that show areas with an average EG below the national average but above the RFC average of 34 provinces. Papua Provincelocated far right in quadrant III which has a regional fiscal capacity index of0.179 followed by a negative economic growth rate of -15.75.The contraction was triggered by a decline in production in the Mining and Quarrying category by -43.21%. This decrease in production was due to the decline in PT Freeport's metal ore production during 2019 due to the transition period of PT Freeport's mining locations from open pits to underground mines. In quadrant IV, there is an accumulation, which means that these areas are below the national EG average and the RFC average of 34 provinces. The entry of the Covid-19 pandemic into Indonesia has had a significant impact on the Indonesian economy, in the 2020 graph, most regions can see a shift in the quadrant. DKI Jakarta Province, which was followed by East Java, West Java, and Central Java shifted to quadrant II, but Papua Province actually moved to quadrant I because its economy grew by 6.29%. This growth was due to an increase in metal ore production which resulted in the Mining and Quarrying business field growing by 44.31%. Entering the second quarter of 2021, on a q-to-q basis, there was 2.06% growth supported by increased growth in some business fields and driven by the increase in PT Freeport's metal ore production and the celebration of religious holidays in May. The impact of the pandemic was felt by the Province of Bali, which shifted to quadrant III, where the economy of Bali in 2020 was recorded to have fallen by -9.31%. Bali's economy is still slumping as a result of the Covid-19 pandemic as an area that places tourism activities as the main contributor. Entering 2021 with various government policies related to the Covid-19 pandemic, the economy of some regions has recovered, such as the Provinces of DKI Jakarta, East Java, and Banten which have returned to quadrant I. The provinces of West Java and Central Java have seen significant changes. Not only that, Bali's economic growth was felt after experiencing a contraction in 2020, entering the second quarter of 2021, BPS noted that Bali's economy is now experiencing positive growth of 2.83% (y-on-y), Head of BI Representative Trisno Nugroho said that The easing of the restrictions on community activities policy

during the second quarter of 2021 provides space for the tourism sector and related sectors to encourage economic improvement (Media Indonesia, 2021).

4.4 Directions of Government Policy to Encourage Increased Fiscal Capacity of the Covid-19 Pandemic

The impact of the Covid-19 pandemic has made Indonesia more concentrated in terms of economic recovery, especially in fiscal stimulus. Fiscal policy stimulus is the most important thing in reducing the negative impact caused by the Covid-19 pandemic on economic activity, especially for business actors and the community who are the most affected (Fahrika & Roy, 2020). The President of the Republic of Indonesia has instructed that the priority of Indonesian State Budget policies in 2020 focus on three things, namely maintaining public health, protecting purchasing power, and protecting the business world from bankruptcy. At the end of February 2020, the government issued an economic stimulus worth Rp. 8.5 trillion, which was specifically directed at accelerating spending, especially social assistance and capital expenditures, encouraging the labor-intensive sector, as well as expanding basic food cards and incentives for the tourism sector. Then on March 13, 2020, the government again launched a second stimulus that focused on tax incentives worth IDR 22.5 trillion and also provided non-fiscal stimulus in order to facilitate exports and imports. The things that are done by the central and regional governments to encourage regional fiscal capacity are savings, refocusing activities, and reallocating budgets. Then the provision of the third fiscal stimulus was launched on March 31, 2020, worth Rp. 405.1 trillion, which was supported by the issuance of Government Regulation in Lieu of Law Number 1 of 2020 as a legal umbrella to take quick steps to deal with the Covid-19 pandemic. Fiscal policy stimulus is the most important thing in reducing the negative impact caused by the Covid-19 pandemic on economic activity, especially for business actors and the community who are the most affected. 1 trillion, which is also supported by the issuance of Government Regulation in Lieu of Law Number 1 of 2020 as a legal umbrella to take quick steps to deal with the Covid-19 pandemic. Fiscal policy stimulus is the most important thing in reducing the negative impact caused by the Covid-19 pandemic on economic activity, especially for business actors and the community who are the most affected. 1 trillion, which is also supported by the issuance of Government Regulation in Lieu of Law Number 1 of 2020 as a legal umbrella to take quick steps to deal with the Covid-19 pandemic. Fiscal policy stimulus is the most important thing in reducing the negative impact caused by the Covid-19 pandemic on economic activity, especially for business actors and the community who are the most affected.(Fahrika & Roy, 2020). One source of income to boost fiscal capacity is taxes, the government through the Directorate General of Taxes (DGT) has issued Perppu No.1 of 2020 as a fiscal policy strategy because Covid-19 has had an impact on the slowdown of national economic growth. This policy includes adjustment of income tax rates for domestic corporate taxpayers and permanent establishments, tax treatment in Trading activities through the electronic system, and extension of time for the exercise of rights and fulfillment of tax obligations. Tax relaxation is the most effective way to tackle the Indonesian economy. Reducing tax rates (relaxation) will result in a decrease in state revenues. However, the current corporate income tax rate is 25% (Aulawi, 2020).

5. CONCLUSIONS

Based on the explanation in the previous section, several conclusions can be drawn, including; First, the rate of economic growth does not significantly affect the amount of regional fiscal capacity in 34 provinces in Indonesia. Second, the source of revenue for regional fiscal capacity that is most contracted due to the Covid-19 pandemic is ROI. This is due to several policies issued by the regional government and the low level of regional independence, where regional finances are still significantly supported by funding from the central government. Third, during 2019 EG and RFC in 34 provinces were on average in quadrants III and IV. There are only 5 provinces that are in quadrant I, namely the EG average is above the national average and has a high RFC. Covid-19 has shifted quadrants from 34 provinces in Indonesia. The province most affected by Covid-19 is Bali Province. This happens because the main source of income for Bali is the tourism sector. Fourth, the government issued 3 fiscal stimulus in the context of economic recovery during the Covid-19 pandemic to encourage national and regional economic growth. At the end of February 2020, the government issued an economic stimulus worth IDR 8.5 trillion, then on March 13, 2020, the government launched a second stimulus that focused on tax incentives worth IDR 22.5 trillion and provided non-fiscal stimulus in order to facilitate exports and imports. The provision of the 3rd fiscal stimulus was launched on March 31, 2020, worth IDR 405.1 trillion.

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