



## The Role of Government Expenditure on Regional Economic Resilience During Pandemic Covid-19

Muhammad Heru Akhmadi<sup>1</sup>, Imam Sumardjoko<sup>2</sup>, Joko Sumantri<sup>3</sup>  
Polytechnic State of Finance STAN<sup>1</sup>, Ministry of Finance<sup>2</sup>, Polytechnic State of Finance STAN<sup>3</sup>  
[heru.cio@gmail.com](mailto:heru.cio@gmail.com)<sup>1</sup>, [imamdjo@gmail.com](mailto:imamdjo@gmail.com)<sup>2</sup>, [jokosumantri@pknstan.ac.id](mailto:jokosumantri@pknstan.ac.id)<sup>3</sup>

**Keywords:** *pandemic, reallocation, fiscal policy.* **ABSTRACT**

*The GDP growth rate in the second quarter of 2020 YoY decreased by 5.32%. This contraction was triggered by the COVID-19 pandemic which had an impact on economic activities. The policy of restricting the mobility of people and the closure of various business sectors has resulted in social and economic problems. This study examines government fiscal instruments to maintain the sustainability of the public economy. The analysis used in this study is a mixed method. Empirical testing is done by using regression techniques. The research variables include regional economic performance, spending on the prevention of COVID-19, spending on social safety nets, and spending on handling economic impacts. The research is also based on questionnaire conducted with local governments regarding health performance and economic recovery efforts. The data used is a cross section with the period at the end of the second quarter of 2020. The test results prove that the budget reallocation used for spending on COVID-19 disease control and social safety net spending has an effect on improving the regional economy during the study period with p-values of 0.021 and 0.000. The government, through the Sub-National Budget continues to refocus spending for economic recovery.*

**Kata Kunci:** *pandemi, realokasi, kebijakan fiskal.* **ABSTRAK**

Laju pertumbuhan PDB pada triwulan II tahun 2020 YoY mengalami penurunan sebesar 5,32%. Kontraksi ini dipicu oleh pandemi COVID-19 yang berdampak pada aktivitas perekonomian. Kebijakan pembatasan pergerakan orang dan penutupan berbagai sektor usaha telah menimbulkan permasalahan sosial dan ekonomi. Penelitian ini mengkaji instrumen fiskal pemerintah untuk menjaga keberlangsungan perekonomian masyarakat. Analisis yang digunakan dalam penelitian ini adalah metode campuran. Pengujian empiris dilakukan dengan menggunakan teknik regresi. Variabel penelitiannya meliputi kinerja perekonomian daerah,

belanja pencegahan COVID-19, belanja jaring pengaman sosial, dan belanja penanganan dampak ekonomi. Penelitian ini juga didasarkan pada kuesioner yang dilakukan dengan pemerintah daerah mengenai kinerja kesehatan dan upaya pemulihan ekonomi. Data yang digunakan adalah *cross section* dengan periode akhir triwulan II tahun 2020. Hasil pengujian membuktikan bahwa realokasi anggaran yang digunakan untuk belanja pengendalian COVID-19 dan belanja jaring pengaman sosial berpengaruh terhadap peningkatan perekonomian daerah. selama masa penelitian dengan p-value 0,021 dan 0,000. Pemerintah melalui APBD kembali fokus pada belanja untuk mendorong pemulihan ekonomi.

JEL CLASSIFICATION: H72, H75, H77

**How to cite:** Akhmadi, M.H., Sumardjoko, Imam., Sumantri, Joko. (2023). *The Role of Government Expenditure on Regional Economic Resilience During Pandemic Covid-19*. Jurnal Manajemen Keuangan Publik, 7(1), 74-89.

This work is licensed under a Creative Commons Attribution 4.0 International License.  
To view a copy of this license, visit <http://creativecommons.org/licenses/by/4.0/>.

## INTRODUCTION

The Corona Virus Disease 19 (COVID-19) pandemic has significantly affected the global social and economic order, including Indonesia. It began with the spread of diseases that led to a health crisis that resulted in the cessation of community activity through the call of stay at home. The COVID-19 pandemic problem has not provided a narrow rate at this point. Based on the COVID-19 development data of August 19, 2020, the positive confirmation rate is 2,351. There has been a positive increase of 543 confirmed by the previous date period. Another serious impact of the pandemic is the slowing of economic activity.

Public mobility is limited as a result of enforcing public movement policies in most areas. The impact of the housing sector is also softening. Greater community restrictions (lockdown) on the Eid Al-Fitr holidays reduce the growth of accommodations sectors, which is accompanied by the policy of closing tourist spots during the pandemic. The affected sectors during the COVID-19 pandemic are transportation, tourism, trade, health and other sectors, but the economic sector most affected by COVID-19 is the household sector (Susilawati et al., 2020). Until the end of the first semester of 2020, not all economic sectors were subjected to the pandemic. The three sectors that still demonstrate positive growth in motion are agriculture, information and communication, and water provision. Calling on stay-at-home and office activity arrangements by putting work from home makes the three sectors remain positive in the pandemic season.

Entering the planting season and plantation production, the agricultural sector has experienced a positive performance. Work from home and school from home policies can leverage the communication sector through the use of online meetings and learning. From the expenditure side, household consumption decreased by around 6.51% as a result of a decline in people's purchasing power or prioritizing staying at home. The export-import and investment sectors also showed a significant downward movement. Meanwhile, the government spending side through the State Budget and Sub-National Budget continues to be intensified during the COVID-19 pandemic to keep economic activities sustainable. Government consumption is the expenditure sector which continues to experience positive growth in the second quarter of 2020 with a figure of 22.32%.

Government spending is needed to develop economic activity (Mangkosoebroto, 2001). This study highlights the expenditure side of government consumption to maintain the sustainability of the public economy. Keynes Theory explains that the government plays an important role in directing optimal economic development. In an open economy it can be formulated  $Y = C + I + G + (X-M)$ . Comparative calculations between the values of Y and G over a certain period of time can determine the share of government spending on national income (Dumairy, 1996). Government spending has a large domino effect on economic growth (Dalsgaard et al., 2001; Abimanyu, 2005; Padoan, 2009). Government spending can act as a stimulus to people's economic activities. In developing countries, government spending has an important role in providing infrastructure. Government spending also has a causal relationship to Gross Domestic Product (Alfirman & Sutriyono, 2006). While other spending sectors contracted, government consumption could be maintained at a positive level. As an implication, the State Budget deficit until June 2020 touched the figure of Rp. 257.76 trillion (Ministry of Finance, 2020). This figure is still within the deficit tolerance

threshold as regulated in Law Number 17 of 2003, which is a maximum of 3% of the Gross Domestic Product.

The government's fiscal policy which maintains state spending as an instrument to overcome the impact of COVID-19 has resulted in a wide deficit. This is a form of countercyclical effort that needs to be done by fiscal managers. The State Budget deficit in Presidential Regulation 72 of 2020 is predicted to reach 6.34% or an increase of 1.27% compared to the previous change. Even in the pure State Budget for FY 2020, the State Budget deficit was budgeted at around 1.76%, an increase of three and a half times compared to the last posture.

The realization figure for State Budget financing is in the range of Rp. 416.18 T or about 40.05% of the financing budget. The dominance of financing comes from the issuance of state securities loans. The journey of the FY 2020, The State Budget is facing tremendous pressure due to the COVID-19 pandemic which has spread to economic and social issues. This issue requires the availability of an adequate budget in dealing with the COVID-19 pandemic, both in terms of health, disasters, social vulnerabilities, and the sustainability of economic activities. The domino effect of COVID-19 puts pressure on state revenues due to the economic slowdown (Chernick et al., 2020). Meanwhile, the state expenditure side must be maintained to face the challenges of the COVID-19 pandemic.

State Budget expenditures that are disbursed to stem the health crisis and improve the public economy (Chronopoulos et al., 2020) for both the community and business actors are estimated to reach Rp. 695.20 T. The increase in the type of State Budget expenditure which increased sharply compared to 2019 YoY was social assistance with a growing proportion of around 41%. Capital expenditure only increased 8.7% YoY. Meanwhile, expenditure on personnel and goods and services is contracted on a YoY basis. The State Budget has changed several times to cope with the COVID-19 pandemic, which has worsened the economic order.

The financial support through the provision of social assistance to households encourages increased spending and is correlated with the macroeconomic outlook and higher confidence in the government (Bui et al., 2022). The use of social assistance spending that rose sharply is intended to address the health, social and economic impacts of the COVID-19 pandemic. The implementation of social assistance is dominated by the Ministry of Social Affairs in the form of, among others, the basic food card program, food packages, cash assistance, and assistance in increasing the national health insurance premium for the National Health Insurance (JKN) Contribution Assistance (PBI) participants. The target of assistance for people who receive the National Health Insurance (JKN) Contribution Assistance (PBI) is around 96.8 million people, the recipients of the Family Hope Program (PKH) are 10 million beneficiary families and the target for basic food cards is around 20 million (Kartu Sembako).

On the non-ministerial side, it also showed an increase in spending compared to the year before the pandemic which was allocated for subsidy spending and other expenditures. The provision of subsidies in the context of mitigating the impact of COVID-19 is aimed at MSMEs in the form of interest subsidies, reduced electricity tariffs for certain electricity customers, and stimulation of public housing, which is expected to be an economic safety

net. Meanwhile, the use of other expenditures in the State Budget is directed at providing pre-employment cards and providing working capital incentives intended for employees who are unemployed as a result of the COVID-19 pandemic.

Therefore, the mitigation of the impact of COVID-19 is also carried out through monetary instruments taken by the government by synergizing with the Central Bank. One of them is through a joint decree with the Minister of Finance and the Governor of Bank Indonesia which stipulates that the central bank can buy government Sukuk in the primary market through auctions, additional auctions, or even private placements. This step was taken to build an effective fiscal and monetary policy mix. The fiscal policy describes the strategy carried out by the government in managing state revenues and expenditures (Mankiw, 2002; Dzigbede & Pathak, 2020). Various fiscal policy formulations implemented through State Budget and Sub-National Budget instruments should have an important role in tackling COVID-19 and its impacts.

Handling COVID-19, which has a widespread impact, requires the right synergy, including fiscal policy in the regions through Sub-National Budget instruments. Regional financial management through the Sub-National Budget has been directed to accelerate the handling of COVID-19 through the regulations stipulated in the Minister of Finance Regulation Number 19/PMK.07/2020 concerning the distribution and use of Revenue Sharing Fund (DBH), General Allocation Fund (DAU), Local Incentive Fund (DID) FY 2020 in the context of dealing with COVID-19 and the Minister of Finance Regulation Number 35/PMK.07/2020 concerning the Management of Transfer to Regions and Village Funds (TKDD) in the context of handling COVID-19 and/or facing threats that endanger the national economy. The distribution of budget refocusing is in line with previous research which showed that DAU, DBH, and Local Own-Sourced Revenue (PAD) were proven to have a significant and positive influence on Regional Expenditures (Fikri, 2020).

As an effort to emphasize the local government's commitment to focus the Sub-National Budget more on handling the impact on COVID-19, the Ministry of Finance and the Ministry of Home Affairs have issued Joint Decrees Number 119/2813/SJ and Number 177/KMK.07/2020 concerning Acceleration of Completion of the Revenue and Expenditure Budget Regions in 2020 in the Context of Handling COVID-19, As Well As Securing Public Purchasing Power and the National Economy. The policy provides guidelines for local governments to adjust revenues and expenditures in the Sub-National Budget and reallocate three objectives, namely health for handling COVID-19, providing social safety nets, and increasing the economic impact. Nevertheless, there are still many implementations of refocusing and reallocation of local government budgets that are inefficient and not yet on target with the aim of handling Covid-19 (Arsani & Sihombing, 2020).

In an effort to increase the effectiveness of spending, local governments are required to submit reports on the performance of the health sector in the context of handling COVID-19 in the regions (Angi et al., 2021). The refocusing of health spending is directed at providing personal protective equipment for health workers, handling COVID-19 patients, and providing health service facilities and infrastructure to the community. The reallocation of the budget for the provision of social safety nets is directed at increasing the purchasing

power of the people who have experienced a weakening due to the COVID-19 pandemic in the form of social assistance. The target recipients of social assistance are the poor and low-income people.

The Sub-National Budget is also expected to provide a stimulus for the sustainability of business actors in the regions through the support of micro, small and medium enterprises, empowerment of cooperatives, and restoring economic activity to local communities. The three focuses of the Sub-National Budget reallocation will later be able to accelerate the handling of COVID-19 and its socio-economic impact. Fiscal policy stimulus can create an economic driving force, people's purchasing power, and expansion of job opportunities (Wardhana & Hartono, 2012).

In various studies, there are still differences of opinion from researchers regarding the fiscal instruments run by the government. Fiscal stimulus through tax reduction is more effective in boosting economic performance than government spending (Blanchard & Perotti, 2002; Mountford & Uhlig, 2005; Alesina & Ardagna, 2009). On the contrary, government spending plays a larger role in the economy. rather than tax relaxation (Dalsgaard et al., 2001; Abimanyu, 2005; Padoan, 2009). This study aims to re-examine the role of government expenditure, through the State Budget and Sub-National Budget, to encourage regional economic improvement during the Covid-19 pandemic. This will evaluate economic performance until the end of the first semester of the 2020 fiscal year.

## **RESEARCH METHOD**

The State Budget and Sub-National Budget are fiscal instruments to raise the economic resilience during COVID-19, whose impact extends to socio-economic aspects. This study used quantitative method to determine and analyze variables in government spending and regional development. This study has a cross sectional design using secondary data that focus on 2020. The analysis used is a mixed method by performing multiple regression empirical testing. For deepening of problem solving, this research used a questionnaire submitted to 36 local governments as respondents. The questionnaire explores health performance and economic recovery efforts in the regions. The combination of empirical testing and the application of case control is expected to provide more comprehensive and exploratory research results related to the formulation of the problems raised in this study.

The variables of this study include Sub-National Budget expenditures for COVID-19 disease management, provision of social safety nets, social assistance, inflation and gross regional domestic product (GRDP). The GRDP figure is one indicator of regional economic performance due to the COVID-19 pandemic. Determination of economic growth can be calculated based on the achievement of Gross Domestic Regional Product (Anitasari & Soleh, 2015).

## **RESULT AND DISCUSSION**

Pandemic COVID-19 has spread to various regions in Indonesia since February 2020. The government has declared the COVID-19 pandemic in Indonesia as a national disaster through Presidential Decree No. 12 of 2020. As of August 23, 2020, the number of people who have been confirmed positive for COVID-19 has reached around 153,535 people.

Regions that have the highest positive confirmation numbers for category five are provinces in Java, namely Jakarta, East Java, Central Java and West Java. The four provinces have a proportion of 57.1% of the number of confirmed positive nationally. The number of confirmed positives in the top five is shown as follows:

**Table 1** Spread of COVID-19

No	Regions	Total	Desc.
1.	Jakarta	33.470	21,8%
2.	East Java	30.315	19,7%
3.	Central Java	12.476	8,1%
4.	South Sulawesi	11.470	7,5%
5.	West Java	9.283	6,0%

Source: Task Force for the Acceleration of Handling COVID-19, 2020

The dominance of the pandemic area in the Java region certainly has a major impact on health conditions, economic order and social problems. Around 56.56% of Indonesia's population lives in Java. The tendency for the spread of COVID-19 to be concentrated in the island of Java because it has a high population. Apart from Java, the number of positive COVID-19 confirmations that occurred in South Sulawesi is quite high. Meanwhile, the proportion of the population living on the island of Sulawesi is around 7.33% of the total population of Indonesia.

The demographic bonus of living in the Java region can lift the economy through household consumption expenditures. In terms of goods trade flows, West Java has the largest export value with a value of US\$ 12,444.9 million during the first semester of 2020. This is followed by the flow of goods exports from East Java with a value of around US\$ 9,469.8 million in the same period. This condition illustrates that economic activity in the area is conducive.

Using spatial data for the second quarter of 2020, six provinces in the Java region in aggregate are the highest contributors to Indonesia's economic growth. The area of the island of Java has a contribution of 58.55% of the national economy. The next rank is the region in the Sumatra island region with a contribution share of around 21.49% to the national economy in the same period. Meanwhile, the regions that contributed the lowest to the Indonesian economy were in the Maluku and Papua regions with a share of around 2.37%.

The island of Java has the highest COVID-19 pandemic mix, which is one of the triggers for the contraction of national economic performance in the final semester of I-2020 with a figure of around -5.32%. One of the policies of large-scale social restrictions has a negative impact on the economy. But on the other hand, this effort is made to prevent the spread of COVID-19, which can spread widely.

Social restriction policies require people to stay at home by implementing work from home and school from home. The impact is the level of household consumption has weakened. Although the island of Java provides a more than fifty percent share of the national economy, on a YoY basis, it experienced a contraction of around -6.69% in the second quarter of 2020. The island of Java experienced the highest contraction compared to other island regions.

The business sector that experienced the largest contraction in the first semester of 2020 was transportation and trade with a figure of around 29.22%. The causes include limited community mobility, government policies to prohibit going home on Eid al-Fitr 1441 H. A number of airlines do not carry out flight activities, resulting in a decrease in air transportation users. Land transportation is also blocked on the Trans Java and Pantura toll roads. Rail transportation did not carry passengers at that time. This condition resulted in a tremendous contraction impact on the transportation and warehousing business sector.

The type of transportation that contracted the most was air freight with a figure of around -80.23% in the second quarter of 2020 YoY. The next rank is rail transportation with a contraction rate of around -63.75% in the same period. Meanwhile, sea transportation experienced a contraction with a lower value than other types of transportation. The majority of the business sector types of air transportation and rail transportation are dominated in the Java region. When the business sector in the Java region experiences a contraction, it has a broad impact on the national economy.

The contraction that occurred in the transportation business sector was also accompanied by a weakening in the non-oil and gas processing industry by around -5.74% in the first semester of 2020. The main cause was the weakening of the type of transportation equipment industry which contracted by around 34.29%. This type of industry is most affected by the COVID-19 pandemic. During the pandemic, automotive sales will certainly experience a decline due to the appeal to the public to stay at home and not to move for urgent needs. As a result, the demand for motorized vehicles decreases. Data on the development of the transportation business sector in the first semester of 2020 is presented in the following table:

**Table 2.** Transportation bussines sector growth on semester I-2020 YoY

No	Bussines Field	Q2
1.	Rail transportation	-63,75%
2.	Land transportation	-17,65%
3.	Sea freight	-17,48%
4.	River lake and crossing transportation	-26,66%
5.	Airfreight	-80,23%
6.	Warehousing and cargos	-38,69%

Source: Indonesia Central Bureau of Statistics, 2020

The contraction that happened in the transportation business sector was also companied by the weakening of nonoil and gas processing with numbers around -5,74% on the first semester of 2020. The main cause is the weakening in kind of the transportation industry that was affected by the contraction of circa 34,29%. One kind of sector that is highly affected by the COVID-19 pandemic is the industrial sector. During the pandemic, vehicle or automotive sales decreased due to the government's appeal for the residents to stay at home and reduce mobility unless for emergency needs. As a result, the demand for vehicle and automotive are decreasing.

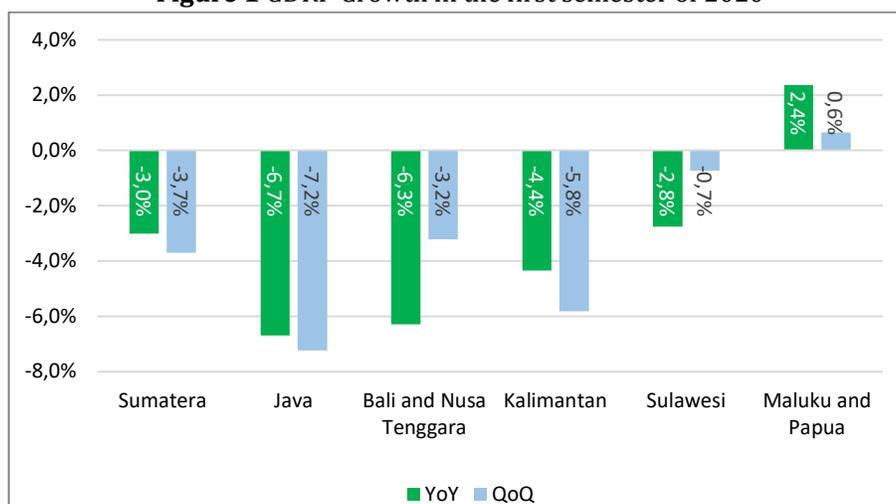
Even though in general processing industry sector has contracted, the chemical industry, pharmacy industry, and drug have YoY increasement circa 8,65% on the first semester of 2020. This kind of industry has a great growth than other non-oil and gas sectors. The fact that this situation is started by COVID-19 spreads, caused the demand side of the pharmacy sector to get great growth for disease treatment and preventing needs. Even demand for food supplements and vitamins gets excess demand at the beginning of the national disaster emergency announcement.

The shutdown policy of tourist attraction in the destination area affects a contraction in the accommodation business sector and also the food and beverage sector. This sector decreased circa -22,02% YoY in the 1st semester of 2020. This decrease caused by reduced tourist visitors. The hotel occupancy rate is decreasing because of the less mobility of residents and the closure of tourist attractions to prevent COVID-19 spread. Along with the contracted accommodation sector, the food and beverages sub-sector has an increment rate of -16,81% YoY in the first semester of 2020. Resident behavior patterns during a pandemic are shifting from having a meal in the restaurant on holiday to having a meal in their own house on holiday. The accommodation sector and F&B sector are potential revenue to support the Sub-National Budget in the city/district. Including tourist attractions that give a large contribution to regional real revenue in the destination region. The domino effect also affects the micro-business sector and medium business sector that relies on tourist attraction.

Characteristics of the Accommodation sector and food and beverages sector are much supported by tourism activity. This activity recovery is fast with setting a regulation to re-open tourist attractions or potential destinations so that it will attract tourists to gain revenue. Different from the recovery for those who in the processing industry that needs a stimulant and a production strategy. A region that relies on restaurant and hotel tax as their primary source of revenue for their regional real revenue, will suffer a negative impact on their Sub-National Budget. A shift in revenue will cause a regional expenditure to be adjusted and rationalized. At this condition make a rationalization to revenue budget and expenditure budget is a must. This policy emphasized and explained in *Surat Keputusan Bersama Nomor 119/2813/SJ* and *Surat Keputusan Bersama Nomor 177/KMK.07/2020* 9th April 2020. Bali, as one of the featured destinations, their real revenue is more rely on the accommodation sector and F&B sector. One of them is Badung city as a city that run into decrease in regional real revenue circa 54,39% in the 2020 Sub-National Budget (adjusted). This decrease proportion is equal to Rp 1,87 Trillion.

COVID-19 Pandemics had a great domino impact on economics, social life, health sector. Contraction of national economies in 2nd quarter of 2020 YoY is equal to -5,32% companied by decrease of Gross Domestic Regional Product (GDRP) in the same period. Data of GDRP growth based on region shows that Java Island has a deep contraction compared with the other five regions with numbers -6.69%. GDRP growth based on the island in the first semester of 2020 is shown as this table:

**Figure 1** GDRP Growth in the first semester of 2020



Source: Indonesia Central Bureau of Statistics, 2020

Java area has a great contribution to the national economy with a share of 58,55%. The contraction that occurred in the Java area will greatly affect national economic performance. Need more efforts to support the economic recovery in the area that is having a great contribution to speed up economic recovery. Based on the adjusted Sub-National Budget report in the context of COVID-19 prevention, revenue side and regional expenditure in the Java region get corrected. Regional revenue in city/district/province reduced by -12,85% compared to 2020 Sub-National Budget (unadjusted). Jakarta and Bandung City occupy the highest decline rate than other regions. Decreasement on regional revenue in Jakarta province 2020 Sub-National Budget (adjusted) corrected down circa 46,6% worth Rp 40,6 Trillion.

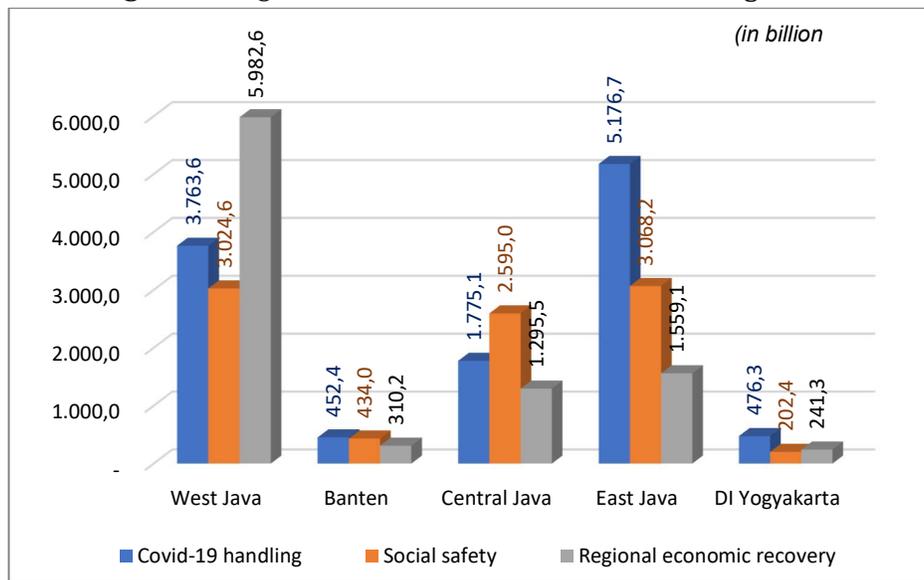
Sharp drop of regional revenue in Jakarta's State Budget in consequences of adjusted real regional revenue that budgeted circa -54,08% or worth Rp 31,13 Trillion. The budget revenue of Jakarta Province mostly comes from local revenue. In terms of government expenditure, the decline occurred in all types of expenditure except for social assistance expenditure. Personnel expenditure also raise-do until around 20.86%. The largest decrease in regional expenditures was carried out on capital expenditures with a proportion of around 96.89% or a nominal decrease of Rp15.59 trillion. Thus, the fulfillment of physical capital expenditures in adjustment budget in 2020 FY has encountered obstacles in its implementation.

The adjustment of the Budget of Jakarta in 2020 causing to financial support for governance and public service to become limited. Decreasement in regional revenue caused by hardly unreached target fulfillment on regional real revenue from Sub-National Budget due to declining economic activity. The social restrictions policy that the Jakarta government applies and the first regional area to get approval on social restriction (PSBB) from the central government brings logical consequences on economic activity. The hotel business sector, restaurant, tourist attraction, and entertainment sector always support Jakarta's regional real revenue doesn't give enough financial contribution and support toward

Jakarta government during the COVID-19 pandemic. The closure of several business sectors was carried out with the consideration that Jakarta is the province with the most numbers infection rate of COVID-19.

One of the efforts to reduce and prevent COVID-19 spreads become important things need to do. Regional expenditure rationalization that was affected by COVID-19 was then prioritized for three aspects. These aspects are COVID-19 prevention, social safety provision for residents, and economic countermeasures. Data about regional budget rationalization in Java Island sourced from Sub-National Budget rationalization is shown as this graphic:

**Figure 2** Budget reallocation in the Sub-National Budget 2020



Source: Indonesia Ministry of Finance, 2020 (modified)

Those budget reallocation intended for COVID-19 recovery acceleration and economic impact caused by the pandemic. Since the Sub-National Budget is being adjusted in April 2020, the budget reallocation of regional government is expected to bring such a good recovery in the health sector, social sector, and economic sector. Even though this program has been done in a relatively short period, those relocation programs need to be supervised and monitored for the next regulation.

Using regional economic performance data within the first semester of 2020 as a dependent variable. Regional economic performance shows goods and services produced within a year that are produced by the area. Whereas independent variables that are used in this research include COVID-19 handling expenditure budget, social safety, and economic impact recovery expenditure. These three kinds of expenditure variables are 2020 data collected from the 2020 adjusted Sub-National Budget with aggregate data basis in one province. The initial test carried out to detect this research variable implication is precondition assumption fulfillment.

Data normality fulfillment used in the model returns a prob z value of 0,195. This value was calculated with Shapiro Wilk-W Test. The use of the Shapiro test considers a research sample that is not too large because the research period was done in 2020. Based on

research that result, prob z value > 0,05. Therefore Ho received or data on the model has a normal distribution. These results can provide guidelines for research to test model data with a parametric statistical approach.

The next prerequisite that fulfillment testing performs is heteroscedasticity. This test is to see the impartiality of the variants in the model to be tested. Testing uses the Breusch-Pagan Cock-Weisberg Test. Ho's constructed formula is that there is no problem of heteroscedasticity in the model. Calculation of probability value with STATA 15 data instrument obtained Prob Chi2 number of 0.462. The provision of the Breusch-Pagan Cock-Weisberg Test, if the resulting probability value is greater than  $\alpha = 0.05$  then it is concluded that heteroscedasticity did not occurs. Thus, the value of Prob Chi2 = 0.462 is greater than 0.05. The decision taken from this Breusch-Pagan test was that Ho accepted or did not occur heteroscedasticity in the model.

Hypothesis testing also requires prerequisites for detecting multicollinearity. This test is conducted to determine the occurrence of linear relationships between independent variables in the model that is built. The determination of the problem is done by calculating the value of *variance inflation factor* (VIF). Ho's formula is that there is no problem of multicollinearity in the model, while Ha states that there is multicollinearity in the model. The calculation of VIF using STATA 15 obtained the VIF value for the variable lcov = 2.85, ljps = 2.85, ldpe = 2.58. The average VIF yield of the three variables is around 2.61. Based on the number of these calculations, the values VIF lcov, ljps, and ldpe are smaller than 10. Thus, Ho is accepted and concluded that there is no multicollinearity problem in the model.

The results of the prerequisite testing in the model have met for further testing with a parametric approach. Can the implementation of local government spending reallocation as outlined in the Sub-National Budget Adjustment 2020 or Regional Revenues and Expenditures Budget until the end of semester I-2020 encourage regional economic performance. That research question will be tested with a *multiple regression* technique that uses variable gross regional domestic product (lpdrb), spending on COVID-19 (lcov) countermeasures, spending on social safety nets (ljps) as well as spending aimed at improving economic impact (ldpe). Using the error rate  $\alpha = 0.05$ , obtained the test output by intrusion of STATA 15 data as follows:

**Table 3** Output multiple regression

lpdrb	Coef	Std. Err	t	P > [t]
lcov	0,4421564	0,1818915	2,43	0,021
ldpe	-0,0659339	0,166802	-0,40	0,695
ljps	0,7926524	0,1984532	3,99	0,000

Source: Statistics processed

Expenditures for the response to COVID-19 issues sourced from the reallocation of Sub-National Budget Adjustment 2020 or Regional Revenues and Expenditures Budget spending has significant implications for improving economic performance in the Indonesian region in the research period. LCov variable test results show a *p-value* of 0.021. The value of this

probability is smaller than  $\alpha = 0.05$ . Ho's formulation is that there is no influence between COVID-19 countermeasures spending in regions with regional economic performance. While Ha stated that there is an influence of COVID-19 countermeasures spending on the performance of the regional economy. Based on the results of the *p-value* calculation, it was concluded that Ho was rejected or there was an influence on spending on handling COVID-19 on improving regional economic performance.

Local government efforts in dealing with COVID-19 are considered able to increase public trust. Communities and businesses can carry out economic activities better if health conditions are maintained. The step of checking health samples as a detection while preventing the transmission of COVID-19 becomes the driving force for the running of trade and production activities. The results of a health performance questionnaire provided to 30 local governments concluded that most local governments had conducted rapid tests and SWAB tests adequately. Government budget support for health facilities, and facilities increases public trust and confidence so that the pandemic will not get worse. The results of the health performance questionnaire conducted showed that 94.7% of local governments have provided adequate personal protective equipment for health workers. However, respondents also revealed there are constraints on scarcity and expensive prices for medical equipment and supplies. Spraying disinfectants on the environment reduces excessive worry. Thus, trade and economic activities in the community can grow again.

Payment of health worker incentives through Health Operational Assistance provided to medics who deal directly with COVID-19 patients can increase purchasing power. The results of the questionnaire with 36 respondents, about 57.9% of regions have made incentive payments for health workers while the rest have not made such incentive payments. If the whole region has provided incentives for health workers, of course, it can boost the economy.

Providing social assistance to communities affected by COVID-19 to increase purchasing power and meeting living needs is one of the targets of the reallocation of FY 2020 Adjustment Sub-National Budget spending. As a table 4.5, the *ljps* variable showed a *p-value* of 0.000 smaller than  $\alpha=0.05$ . Ho formulated in this study is that spending on social safety nets has no effect on the regional economy. Ha is stated by spending social safety net has an influence on the economic performance of the region. The result of *the p-value* calculation for the social safety net spending variable is that Ho is rejected. Government budget support to provide a social safety net can encourage economic activity in the area during the research period.

Maintaining public purchasing power in the midst of the COVID-19 situation is one of the strategies to restore economic conditions that are currently experiencing contraction. The COVID-19 pandemic affected the workforce that was temporarily laid off due to the closure of certain business sectors. Conditions that pose social risks include a decrease in per capita income that has the potential to cause poverty. Low per capita income results in the decrease of people's purchasing power. The provision of a social safety net in the form of cash or non-cash assistance is believed to be able to encourage the economic sector to move. Paying attention to the test results, the social safety net variable has a coefficient value of 0.79. This figure has the strongest effect compared to other variables in affecting the

regional economy. Social assistance became a quick instrument in influencing purchasing power for society. The results of a national health performance and economic recovery questionnaire conducted to 36 local governments, 78.9% of regions run cash-intensive work that accommodates local resources in order to provide economic resilience and income for the community.

The budget support for mitigating the economic impact is aimed at overcoming the decline in the regional economy due to the pandemic. The areas most affected by the contraction were areas on the island of Java. Testing on the expenditure variable for handling the economic impact resulted in a p-value of 0.695. This probability is greater than the value of  $\alpha = 0.05$ . Construction of  $H_0$  (null hypothesis) which is expressed by no influence between spending on handling economic impacts and regional economic performance. Meanwhile,  $H_a$  (alternative hypothesis) which is formulated is spending on handling economic impacts that have an influence on the regional economy. Considering the p-value in table 4.5, it is concluded that  $H_0$  is accepted. There is no significant effect of spending on handling economic impacts on regional economic performance in the study period.

In the final stage of the I-2020 semester, support for the reallocation of regional expenditure budgets did not show a major impact. The credit stimulus given to small, micro, medium and cooperative business actors takes a long time. Business credit stimulus efforts differ from social assistance in the social safety net. The long-term benefits of the business credit stimulus will be felt and have a major impact on the economy. However, in the short term, economic leverage has not yet shown optimal performance. It is possible to continue to encourage credit stimulus to commercial entities. According to the results of the national economic recovery survey, the areas that support stimulus spending or subsidize business entities are still around 73.7%. This effort is continuously encouraged, so in the long run, this step can stimulate the economy. Local governments also need to be encouraged to develop Joint Business Group (KUBE) activities. So far, data from the National Economic Recovery (PEN) survey respondents that have been conducted shows that around 52.6% of local governments carry out these activities.

## **CONCLUSION**

The COVID-19 pandemic, which is still ongoing, requires fast handling in the health, social and economic fields. The government has set regulations governing regions to reallocate regional spending in the context of handling COVID-19 and securing public purchasing power and the national economy. The reallocation of spending is intended for three uses: COVID-19 for disease management, social safety nets, and coping with economic impacts. The local government has made adjustments to the 2020 FY (Fiscal Year) Sub-National Budget in April and May to support economic recovery.

The reallocation of regional spending used for spending on COVID-19 disease prevention and spending on social safety nets has an influence on improving the regional economy in the research period until the end of semester I-2020. In a pandemic situation, expenditures for the prevention of COVID-19 can stimulate regional economic performance. The public's trust in handling COVID-19 through health services and rewards for health workers are the driving forces of economic activity. The results of the health performance survey prove that

the regional government provides an adequate budget for the prevention of COVID-19 disease and prevention of its spread.

Spending on social safety nets is needed to provide social protection to affected communities. Social safety nets provide a fast way to maintain people's purchasing power. Cash and non-cash assistance for affected communities will be a barrier to poverty. The closure of certain business sectors due to the pandemic, the provision of this safety net provides income certainty. Regional spending on social safety nets was the strongest in influencing the regional economy during the study period.

Handling the economic impact requires a fairly long effective time. Small, micro, and medium enterprises need steps to be able to run their business again. Issues of business capital and marketing are important things that must be considered. Expenditures for handling economic impacts do not have a significant effect on the economy in the research period until the end of semester I-2020. The results of the national economic recovery questionnaire prove that about 52% of local governments are carrying out the expansion of the activities of the Joint Business Group.

The government through the Sub-National Budget fiscal instrument can carry out a sustainable refocusing of spending to help spur economic recovery. Fiscal expansion in the form of a social safety net remains to be considered without compromising stimulation for business actors. Local governments need to regulate mechanisms for providing incentives for potential new investors. Investment has a role as a trigger to improve the regional economy. Investments in the regions can continue to grow with support from providing connectivity to the economic centre areas.

As a measure of economic recovery in the regions, Sub-National Budget expenditures can be directed to support food security activities for the community, to expand labour-intensive cash to accommodate local workers, to selectively and strictly revitalize the tourism sector, to strengthen economic actors through the provision of capital assistance and credit stimulus, and encourage ease of doing business to attract capital. These various steps are expected to accelerate regional economic recovery.

## REFERENCES

- Abimanyu, A. (2005). Kebijakan Fiskal dan Efektivitas Stimulus Fiskal di Indonesia: Aplikasi Model Makro Modfi dan CGE Indorani. *Jurnal Ekonomi Indonesia*, 1, 1-36.
- Alesina, A., & Ardagna, S. (2009). Large changes in fiscal policy: Taxes versus spending. *NBER Working Paper*.
- Alfirman, & Sutriano. (2006). Analisis Analisis Hubungan Pengeluaran Pemerintah dan Produk Domestik Bruto di Indonesia Dengan Menggunakan Pendekatan Granger Causality dan Vector Autoregression. *Jurnal Keuangan Publik*, 4(1).
- Angi, Y. F., Ga, L. L., & Pau, S. P. N. (2021). Risk Management Analysis On Reallocation And Refocusing Of The Ntt Province Regional Budget During The Covid-19 Pandemic. *Review of Behavioral Aspect in Organizations and Society*, 3(1), 9-20. <https://doi.org/https://doi.org/10.32770/rbaos.vol39-20>
- Anitasari, M., & Soleh, A. (2015). Pengaruh Pengeluaran Pemerintah Terhadap Pertumbuhan Ekonomi Di Provinsi Bengkulu. *EKOMBIS REVIEW: Jurnal Ilmiah Ekonomi Dan Bisnis*, 3(2), 117-127. <https://doi.org/10.37676/ekombis.v3i2.139>
- Arsani, A. M., & Sihombing, P. R. (2020). Budget Ratcheting in Indonesia and The

- Implementation of Performance-Based Budgeting System During Pandemic. *Jurnal Mantik*, 4(1), 172–180.
- Badan Pusat Statistik. (2020). Pertumbuhan Ekonomi Indonesia Triwulan II Tahun 2020.
- Blanchard, O., & Perotti, R. (2002). An Empirical Characterization of the Dynamic Effects of Changes in Government Spending and Taxes on Output. *The Quarterly Journal of Economics*, 117(4), 1329–1368. <https://doi.org/https://doi.org/10.1162/003355302320935043>
- Bui, D., Dräger, L., Hayo, B., & Nghiem, G. (2022). The Effects of Fiscal Policy on Households During The COVID-19 Pandemic: Evidence From Thailand and Vietnam. *World Development*, 153, 105828. <https://doi.org/10.1016/j.worlddev.2022.105828>
- Chernick, H., Copeland, D., & Reschovsky, A. (2020). The Fiscal Effects of The COVID-19 Pandemic on Cities: An Initial Assessment. *Chicago Journals: National Tax Journal*, 73(3), 699–732.
- Chronopoulos, D. K., Lukas, M., & Wilson, J. O. S. (2020). Consumer Spending Responses to the COVID-19 Pandemic: An Assessment of Great Britain. *SSRN Electronic Journal*, 1–40. <https://doi.org/10.2139/ssrn.3586723>
- Dalsgaard, T., Andre, C., & Richardson, P. (2001). Standard Shock in The OECD Interlink Model. *OECD Working Papers*, 306.
- Dumairy. (1996). *Perekonomian Indonesia*. Erlangga.
- Dzibede, K. D., & Pathak, R. (2020). COVID-19 Economic Shocks and Fiscal Policy Options for Ghana. *Journal of Public Budgeting, Accounting and Financial Management*, 32(5), 903–917. <https://doi.org/10.1108/JPBAFM-07-2020-0127>
- Fikri, F. (2020). Flypaper Effect Analysis on Regional Expenditure in East Java Province, Indonesia. *Jurnal Ekonomi & Studi Pembangunan*, 21(2), 249–257. <https://doi.org/10.18196/jesp.21.2.5045>
- Jiranyakul, K., (2013). The Relation between Government Expenditures and Economic Growth in Thailand. *Journal of Economics and Economic Education Research*, 8(1): 93–102.
- Kementerian Keuangan. (2020). *APBN Kita Kinerja dan Fakta*.
- Mangkosoebroto, G. (2001). *Ekonomi Publik Edisi Ketiga*. BPFE Universitas Gadjah Mada.
- Mankiw, G. (2002). *Macroeconomics* (5th ed.). Worth Publisher.
- Mountford, A., & Uhlig, H. (2005). What Are The Effects of Fiscal Policy Shocks? *Journal of Applied Econometrics*. <https://doi.org/https://doi.org/10.1002/jae.1079>
- Okfitasari, A., Rachmadani, W. S., Rosadi, S., Lestari, I. P., & Hastuti, I. (2021). Review of refocusing and reallocation of the local government budget in handling Covid-19 in Indonesia. In International Conference Health, Science And Technology (ICOHETECH) (pp. 269-273).
- Padoan, P. C. (2009). Fiscal Policy in the Crisis: Impact, Sustainability, and Long-Term Implications. *Asian Development Bank Working Paper Series*, 178.
- Rostow & Musgrave. (1996). *Pembangunan Ekonomi*. Ekonomi Perencanaan Pembangunan. PT. Raja Grafindo Pustaka, Jakarta.
- Susilawati, S., Falefi, R., & Purwoko, A. (2020). Impact of COVID-19's Pandemic on the Economy of Indonesia. *Budapest International Research and Critics Institute (BIRCI-Journal): Humanities and Social Sciences*, 3(2), 1147–1156. <https://doi.org/10.33258/birci.v3i2.954>
- Wardhana, W., & Hartono, D. (2012). Instrumen Stimulus Fiskal: Pilihan Kebijakan dan Pengaruhnya terhadap Perekonomian. *Jurnal Ekonomi Dan Pembangunan Indonesia*, 12(2), 107–115. <https://doi.org/10.21002/jepi.v12i2.492>
- Zahari, M. (2017). Pengaruh Pengeluaran Pemerintah Terhadap Pertumbuhan Ekonomi di Provinsi Jambi. *Journal Economics and Business*. Vol. 1 No.1, September 2017: 180–196.