

Research Article

Balancing Fund and Inclusive Economic Growth: East Java Provincial Study

Nila Cahayati^{1*}, Dewanti Rahma Ariestingtyas¹, and Vidya Purnamasari²¹Department of Magister of Economic Science, Faculty of Economic and Business, Brawijaya University²Department of Economic Development, Faculty of Economic and Business, Universitas Negeri Malang**ORCID**Nila Cahayati: <https://orcid.org/0000-0002-1334-4748>**Abstract.**

One of the policies adopted by the government in development, especially in developing countries, is inclusive economic growth. This study examines how the effect of equalization funds as the main variables, as well as GDP per capita and open unemployment as control variables, on the Inclusive Economic Development Index (IDEI) as a proxy for inclusive economic growth. This research was conducted in 38 regencies/cities in East Java, in the period 2014-2020, using the PVECM Model as an analysis tool. In addition, this research also provides strategies and policy formulations in an effort to increase inclusive economic growth. The results show that in the long-term DAU and GDP per capita have a significant positive effect on inclusive development. Meanwhile, in the short term, DAK and GDP per capita have a positive insignificant effect. It can be concluded that the balancing fund supports inclusive economic development in East Java.

Keywords: intergovernmental transfer funds, inclusive economic development index, inclusive economic growth

Corresponding Author: Nila
Cahayati; email:
nilacahayati@student.ub.ac.id**Published** 31 July 2024Publishing services provided by
Knowledge E

© Nila Cahayati et al. This article is distributed under the terms of the [Creative Commons Attribution License](#), which permits unrestricted use and redistribution provided that the original author and source are credited.

Selection and Peer-review under the responsibility of the BESS 2023 Conference Committee.

1. Introduction

In the Law No. 23 of 2014 on Regional Government, local autonomy was granted to catalyze fair development and welfare for the community through public services, as well as to enhance the empowerment of natural and human resources in every region (Nani & Suryarini, 2022). One of the central government's efforts to support development through regional autonomy is through the transfer of funds to regional governments. By definition, transfer funds are funds provided by the central government to regional governments to balance the income and expenditure of the central and regional governments, in the form of Revenue Sharing Funds (DBH), General Allocation Funds (DAU), and Special Allocation Funds (DAK) (UU, 2014). These transfer funds can be allocated to strengthen infrastructure, improve the quality of education and health,

OPEN ACCESS

strengthen the agricultural sector, improve the quality of human resources, improve accessibility and availability of public services, and provide village funds (Kristian et al., 2020).

Inclusive economy refers to development activities that create broad access and opportunities for all levels of society in a fair manner, reduce disparities among groups and regions, and improve community welfare (Bappenas, 2020). In the context of inclusive development, transfer funds play an essential role in strengthening inclusive economic development. Sembiring (2020) stated that with targeted allocation, transfer funds could become a means to accelerate economic development and encourage sustainable economic sector growth, as well as strengthen the competitiveness of regions.

East Java Province is the second-largest contributor (25.25%) to Indonesia's Gross Domestic Product (GDP) after Jakarta Province (29.47%) (Bappeda East Java, 2023). East Java Province consists of 38 regencies and cities, which are divided into 9 cities and 29 regencies. Based on the distribution of Current Price Gross Regional Domestic Product (PDRB), there are three leading sectors that contribute to the PDRB of East Java Province, namely manufacturing industry (30.6%), trade and retail (18.67%), and agriculture, forestry, and fisheries (11.11%). Furthermore, in 2022, the economic growth in East Java was driven by the transportation and warehousing sector (19.47%), other services sector (12.44%), and accommodation and food and beverage provision (9.34%) (BPS, 2023). Therefore, the active economy of East Java Province becomes a significant potential source of regional income (PAD) and is essential for meeting the region's needs, in addition to the transfer funds.

The aim of this study is to analyze the impact of transfer funds on inclusive economic growth in East Java Province. The research gap developed in this study is to fill the gap in the study of the impact of transfer funds on inclusive economic growth in East Java Province from 2016 to 2021, which has not been specifically studied. The first section will discuss the background structure of the research, the objectives, and research gaps. The second section will discuss the literature review on transfer funds and inclusive economy. The third section will describe the data and methodology. The fourth section will present the results and discussions. Finally, the last section will present the conclusions and recommendations.

2. Literature Review

2.1. Fiscal Transfers

Fiscal transfers are funds provided by the central government to regional governments in order to fulfill the financing and development needs of the regions, as well as to equalize development among regions. This is regulated in Law No. 1 of 2022 on Financial Relations between the Central and Regional Governments. Fiscal transfers are divided into three types: General Allocation Fund, Special Allocation Fund, and Revenue Sharing Fund. The General Allocation Fund is a fund derived from the national budget revenue and provided to improve the financial imbalance among regions in financing regional needs in the context of decentralization. Meanwhile, the Special Allocation Fund is a fund also sourced from the national budget revenue but given specifically to certain regions to help finance special activities that are the responsibility of the regions and support national priorities. Furthermore, the Revenue Sharing Fund is a fund derived from the national budget revenue and given to regions based on a certain percentage to finance regional needs in the context of decentralization.

To reduce differences among regions in social and physical infrastructure, there are two ways: regional policies or intergovernmental transfer. In small countries, the central government can know the diverse public service needs and invest in different regions to achieve the desired regional balance (Rao, 2017). However, in large and diverse federations, balancing must be done through intergovernmental transfers because lower-level regions know different preferences of society and can provide public services according to their needs. Therefore, almost all large and diverse federations use intergovernmental transfers to manage regional differences in social and physical infrastructure (Ahmad, 1997).

2.2. Theory of Economic Growth

One of the crucial factors in analyzing the economic development of a country is economic growth. Economic growth indicates the economic activities that generate income for the society over a certain period of time. There are two main theories in discussing economic growth related to income, expenditure, and inequality: the Keynesian theory and the endogenous growth theory. The Keynesian theory emerged as a response to the Great Depression in the 1930s. One of the main equations in the Keynesian theory is the national output expenditure method, which consists of several types of expenditure, such as household consumption, investment, government

spending, and net exports. Therefore, the national output can be calculated using this equation.

In addition to the Keynesian theory, the endogenous growth theory, also known as the new growth theory, emerged as well. This theory was developed due to the unsatisfactory performance of neoclassical theories in explaining long-term economic growth. The endogenous growth theory argues that factors in the production process, such as increasing returns or the introduction of new technology, lead to economic growth, and this is studied as part of the growth model. According to Todaro, the endogenous growth model emphasizes that investment in physical and human capital will produce economic externalities and productivity gains that exceed the private gains of the investing parties, resulting in sustained and balanced long-term economic growth (Todaro, 2000).

2.3. Inclusive Economic Growth

According to Klasen, inclusive economic growth refers to growth that is either extensive across sectors or intensive in labor use. Inclusive growth, according to Klasen, involves the participation of all parties and can involve all sectors of the economy. Based on this concept, inclusive growth can be defined as growth that is non-discriminatory and ensures equal access to growth, as well as reduces disparities among groups by mitigating the groups that do not benefit from growth (Klasen, 2010). According to the World Bank, the concept of inclusive growth is related to the speed and pattern of economic growth, which are interrelated. The World Bank considers that although fast economic growth is crucial in reducing poverty, such growth should be spread across all sectors and encompass the majority of the workforce in a country. The World Bank approach emphasizes long-term perspectives and focuses on sustainable growth. In the World Bank view, inclusivity means equal opportunities in terms of access to markets, resources, and regulatory environments that do not favor individuals (OECD, 2014).

Numerous studies have been conducted with different variables, and on average, they show positive results for inclusive economic growth. Studies conducted by Aoyagi (2015) and Sabir (2019) using panel data regression methods show that GDP growth, trade openness, fiscal and monetary policies have a positive impact on inclusive growth. Sabir (2019) also found that other variables such as institutions, capital formation, and trade openness also have a positive influence on inclusive growth. However, research by Zulfiqar (2018) in Pakistan shows different results, where fiscal policy does not play an effective role in achieving inclusive growth.

3. Method

3.1. Data and Data Collection Method

The data collected for this study were secondary data. Bappenas provided statistical data on IPEI for 38 districts/cities in East Java from 2014-2020. DJPK also provided data on General Allocation Fund (DAU), Special Allocation Fund (DAK), and Revenue Sharing Fund (DBH). The data on Unemployment Rate and Per Capita Gross Regional Domestic Product (PDRB) were provided by the Central Statistics Agency (BPS).

3.2. Population

The entire set of values that can be determined by quantitative or qualitative measures that use specific characteristics within a set of objects is called a population. The population is a group of components that function as units of analysis in research. The population determined in this study is all districts/cities in the province of East Java.

3.3. Operational Definition

The variables and operational definitions of the variables used in the study are summarized in the following table:

TABLE 1: Variables.

| Variabel | Description |
|----------|---|
| IPEI | Inclusive Economic Development Index by BAPPENAS |
| DAU | The ratio between the realization of GAF and the population |
| DBH | The ratio between RSF realization and population |
| DAK | The ratio between SAF realization and population |
| TPT | Open Unemployment Rate |
| PP | GRDP percapita |

Source: author (processed)

$$\begin{bmatrix} \Delta IPEI \\ \Delta DAU \\ \Delta DBH \\ \Delta DAK \\ \Delta TPT \\ \Delta PP \end{bmatrix}_{it} = \begin{bmatrix} \alpha_0 \\ \alpha_1 \\ \alpha_2 \\ \alpha_3 \\ \alpha_4 \\ \alpha_5 \end{bmatrix} + \sum_{t-1}^k \tau_{it} \begin{bmatrix} \Delta IPEI \\ \Delta DAU \\ \Delta DBH \\ \Delta DAK \\ \Delta TPT \\ \Delta PP \end{bmatrix}_{it} + \pi \alpha \beta' \begin{bmatrix} IPEI \\ DAU \\ DBH \\ DAK \\ TPT \\ PP \end{bmatrix}_{it-1} + \begin{bmatrix} e_0 \\ e_1 \\ e_2 \\ e_3 \\ e_4 \\ e_5 \end{bmatrix}$$

Where

α_0 : Intercept

$\alpha_1- \alpha_5$: Variable Coefficients

k : Lag

e_0-e_5 : Error term

t : Time period of observion

i : I-th Entity

Γ : Short term relationships

β' : Long-Term Balance

4. Result and Discussion

4.1. Result

Based on the data on the Inclusive Economic Development Index (IDEI) in East Java over a decade (2011-2021), there are five cities with the highest IDEI growth in East Java in 2021, namely Kediri, Madiun, Blitar, Pasuruan, and Malang, with the two lowest districts being Sampang and Bangkalan. Generally, the IDEI in each district/city in East Java has increased. However, in 2020, the Inclusive Economic Development Index in East Java mostly decreased. This is due to the COVID-19 pandemic that has shaken the entire economic sector, leading to a domino effect on inclusive development in East Java. In the development of inclusive economic growth in East Java, it cannot be separated from the large amount of balance funds designed as an effort to improve the economic development of a region. High economic development and growth are essential in creating and expanding economic opportunities and job opportunities, ultimately creating inclusive economic growth (Safitri et al., 2021).

The Average of Inclusive Economic Development Index (IDEI) - 2017-2021

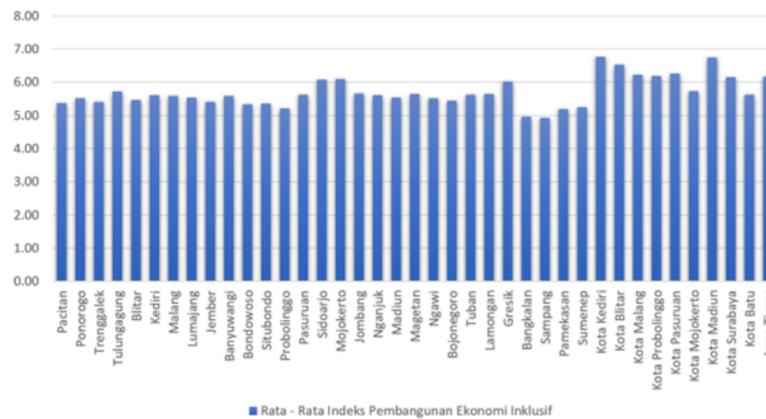


Figure 1: The Average of Inclusive Economic Development (IDEI) East Java on 2017-2021. Source: author (processed).

4.2. Data Analysis

In conducting the PVECM analysis, the software utilized for data processing in this study is E-Views. The data processing stages consist of five steps, namely classical assumption test, stationarity test, optimal lag test, PVECM test, Impulse Response Function (IRF), and variance decomposition, which will be explained in more detail as follows:

4.3. Stationarity Test

The results of the stationarity test indicate that there are several variables in the IPEI and non-stationary intergovernmental transfer variables at the level. The variable testing has been deemed successful in passing the stationarity test for 1st difference with a significance level of 5%, or can be represented as fulfilling the assumptions of the PVECM Method.

4.4. Determination of Optimal Lag

The results of the optimal lag test for the PVECM equation with variables IPEI, DAU, DAK, DBH, TPT, and PP produced a lag of 2 that met the criteria of LR, FPE, AIC, SC, and HQ. This is supported by the ADF t-statistics and p-value (with a p-value less than 0.05).

TABLE 2: Stationarity test.

| Statistics | Method | | |
|------------|-------------|---------------|--------------------------|
| | ADF- Square | Fisher Chi -- | PP- Fisher Chi -- Square |
| IPEI | 85.9458 | | 86.4890 |
| D(IPEI) | 139.193* | | 174.890* |
| LnDAU | 134.456* | | 148.773* |
| D(LnDAU) | 116.119* | | 133.948* |
| LnDAK | 153.120* | | 274.409* |
| D(LnDAK) | 2027.1735* | | 101.822* |
| LnDBH | 86.6142 | | 91.6083 |
| D(LnDBH) | 208.855* | | 319.811* |
| TPT | 91.6266 | | 83.5089 |
| D(TPT) | 109.332* | | 133.431* |
| LnPP | 109.857* | | 157.721* |
| D(PP) | 246.7434* | | 15.8798 |

Source: author (processed).

TABLE 3: Lag optimum test.

| Lag | LR | FPE | AIC | SC | HQ |
|-----|-----------|-----------|-----------|-----------|-----------|
| 0 | NA | 1.373642 | 17.34473 | 17.48874 | 17.40317 |
| 1 | 341.3281 | 0.106457 | 14.78632 | 15.79440* | 15.19544 |
| 2 | 106.7877* | 0.069900* | 14.36060* | 16.23273 | 15.12039* |
| 3 | 48.33409 | 0.080056 | 14.48340 | 17.21959 | 15.59387 |

Source: author (processed).

4.5. Estimation of PVECM

The long-run PVECM equation (in Appendix 1) shows that DAU and per capita GRDP have a significant positive impact on inclusive economic development, while DAK and DBH have significant negative effects on IPEI at both 5% and 10% significance levels. The coefficients of DAU and per capita GRDP are positive, meaning that an increase in these variables will lead to an increase in IPEI in the long run. On the other hand, the variable of open unemployment rate shows a negative sign, which means that every decrease in the open unemployment rate will increase IPEI in the long run.

In the short term, it can be represented that RSF and GAF do not have a significant effect at the 5% and 10% significance level. open unemployment rate (TPT) is constant and has a negative effect on IPEI because an increase in open unemployment rate (TPT)

TABLE 4: Long-term PVECM test.

| Long term equation | | | |
|--------------------|-------------|------------|--------------|
| Cointegration | Coefficient | Std. Error | t-statistics |
| DAU | 59.31810 | 8.17522 | 7.25584* |
| DAK | -9.762845 | 0.55453 | -17.6057* |
| DBH | -3.133328 | 1.46456 | -2.13943* |
| TPT | -0.219655 | 0.19522 | -1.12516 |
| PP | 26.92863 | 8.73243 | 3.08375* |
| C | | -1.044599 | |

Source: author (processed).

can be a means of lowering the inclusive economic index or IPEI. RSF and per capita GDP have a significant effect at the 5% and 10% significance levels. As it is known, the Covid-19 pandemic phenomenon has been a shock that has prevented the use of the balancing fund as a means of increasing IPEI in the short term, as the focus of recovery is based on grassroots efforts.

TABLE 5: Short-term PVECM test.

| Short-term | |
|-----------------|---------------------------------------|
| CointEq1 | 0,0136 |
| D(IPEI(-1),2) | -0.796841 (0.10229) [-7.78995]* |
| D(IPEI(-2),2) | -0.336980 (0.11940) [-2.82234]* |
| D(DAU(-1),2) | -0.052656 (0.32153) [-0.16376] |
| D(DAU(-2),2) | -0.047575 (0.06302) [-0.75496] |
| D(DAK(-1),2) | -0.101684 (0.04086) [-2.48863]* |

TABLE 5: Continued.

| Short-term | |
|--------------|--------------------------------------|
| D(DAK(-2),2) | -0.031978 (0.02744) [-1.16535] |
| D(DBH(-1),2) | 0.052879 (0.05494) [0.96244] |
| D(DBH(-2),2) | -0.062430 (0.07460) [-0.83684] |
| D(TPT(-1),2) | -0.001419 (0.00817) [-0.17377] |
| D(TPT(-2),2) | 0.002367 (0.00744) [-0.31808] |
| D(PP(-1),2) | 2.162584 (0.94074) [2.29880]* |
| D(PP(-2),2) | -1.123845 (0.93245) [-1.20526] |
| C | -0.086529 (0.02814) [-3.07531] |

Source: author (processed).

Meanwhile, PDRB per capita and Revenue Sharing Fund (RSF) have a significant effect on IPEI at a significance level of 5% and 10%, respectively. This can be explained by the fact that an increase in GRDP per capita and DBH will increase the value of

the IPEI index in East Java. The contribution of GAF, RSF, SAF, open unemployment rate, and GRDP per capita to IPEI is 69%, as seen from the adjusted R-squared value of 0.695, which means that 69% of these variables can represent factors that affect the increase in the value of IPEI, while the remaining 31% is explained by variables that are not accounted for in the study. This means that there are other factors that play a role in increasing inclusive economic growth in East Java, one of which is the quality of human resources or human capital, which can be seen from indicators such as school participation rates, average length of schooling, and life expectancy.

4.6. Impulse Response Function (IRF)

In the IRF testing, future impact forecasts of IPEI were conducted due to changes in GAF, RSF, SAF, open unemployment rate, and GRDP per capita. In the first period, shocks to the variables of GAF, RSF, SAF, open unemployment rate, and GRDP per capita in the first year did not have an impact on the level of IPEI. In the second year, changes in GAF, SAF DAK, GRDP per capita, and open unemployment rate had an impact on IPEI by 0.015, 0.012, 6.64, 0.037, and 0.127, respectively. From these values, it can be seen that DAK has the largest impact on IPEI.

TABLE 6: Impulse Response.

| Periods | IPEI | DAU | DBH | DAK | PP | TPT |
|---------|-------|--------|--------|--------|--------|--------|
| 1 | 0.109 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 2 | 0.030 | 0.015 | 0.012 | 6.64E | 0.037 | -0.127 |
| 3 | 0.042 | -0.084 | -0.015 | 0.013 | -0.034 | -0.172 |
| 4 | 0.061 | 0.051 | -0.038 | 0.006 | 0.015 | -0.057 |
| 5 | 0.036 | 0.023 | 0.089 | -0.013 | 0.004 | -0.166 |
| 6 | 0.053 | -0.142 | -0.066 | 0.015 | -0.043 | -0.167 |
| 7 | 0.055 | 0.142 | -0.054 | 0.013 | 0.068 | -0.123 |
| 8 | 0.040 | -0.014 | 0.182 | -0.032 | -0.025 | -0.097 |
| 9 | 0.050 | -0.244 | -0.185 | 0.041 | -0.071 | -0.197 |
| 10 | 0.059 | 0.345 | -0.029 | 0.006 | 0.141 | -0.129 |

Source: author (processed).

4.7. Variance Decomposition

Based on the results of the test in Table 6, it is shown that in the first year, IPEI is explained by itself by 100% (or it can be explained that other variables do not contribute

at all). Then, in the second year, IPEI represents itself by 87.41%, followed by GAF at 1.67%, SAF at 3.00%, RSF at 1.01%, open unemployment rate at 0.133%, and GRDP per capita at 9.75%. In the next 5 years, GAF at 1.67%, SAF at 3.00%, RSF at 1.01%, open unemployment rate at 0.133%, and GRDP per capita at 9.75% show that IDEI explains itself by 45.44%, GAF by 24.23%, SAF by 0.94%, RSF by 22.55%, open unemployment rate by 0.205%, and GRDP per capita by 6.605%. In the 10th year, the forecast error variance of 8.49% is explained by the variable IDEI itself, and further GAF at 58.58%, SAF at 0.93%, RSF at 21.85%, open unemployment rate at 1.127%, and PDRB per capita at 8.995%. Thus, it can be concluded that GAF in the 5th and 10th years becomes the largest contributor compared to other variables.

TABLE 7: Variance Decomposition.

| Periods | S.E | IPEI | DAU | DAK | DBH | TPT | PP |
|---------|----------|----------|----------|----------|----------|----------|----------|
| 1 | 0.109196 | 100.0000 | 0.000000 | 0.000000 | 0.000000 | 0.000000 | 0.000000 |
| 2 | 0.121256 | 87.41764 | 1.670890 | 3.00E-05 | 1.019067 | 0.133538 | 9.758833 |
| 3 | 0.158852 | 58.21255 | 29.08791 | 0.708563 | 1.555372 | 0.085058 | 10.35055 |
| 4 | 0.182821 | 55.13638 | 29.89116 | 0.662051 | 5.522584 | 0.255304 | 8.532522 |
| 5 | 0.208632 | 45.44827 | 24.23183 | 0.948891 | 22.55931 | 0.205938 | 6.605768 |
| 6 | 0.271169 | 30.83603 | 41.98347 | 0.904304 | 19.41982 | 0.355796 | 6.500577 |
| 7 | 0.324731 | 24.42435 | 48.51013 | 0.811254 | 16.33619 | 0.918762 | 8.999319 |
| 8 | 0.377432 | 19.22489 | 36.06295 | 1.345473 | 35.50683 | 0.751329 | 7.108516 |
| 9 | 0.496641 | 12.12258 | 45.11775 | 1.481717 | 34.48559 | 0.594776 | 6.197590 |
| 10 | 0.627165 | 8.497508 | 58.58953 | 0.938460 | 21.85170 | 1.127771 | 8.995023 |

Source: author (processed).

5. Discussion

5.1. The Impact of General Allocation Fund (GAF) on Inclusive Economic Growth

Based on long-term analysis, it can be concluded that GAF has a significant positive effect on inclusive economic growth, however, in the short term, GAF does not have a significant impact on inclusive economic development. In the long term, a 1% increase in GAF will increase inclusive economic growth by 59%. This information suggests that the impact of GAF on equalizing economic growth will be felt in the long term, and it cannot rapidly increase equalization. This is consistent with the study by Nany & Suryarini (2022) which states that GAF has a significant positive effect in the period (t+2). Another

finding of this study is that GAF has a positive but not significant effect on economic growth in the period (t+1) which is part of inclusive economic development. Another study by Paseki, Naukoko, and Wauran (2014) showed that GAF has a significant effect on economic growth. The short-term results are also in line with the study by Meylani M. Arina, Rosalina A.M. Koleangan, Deisy S.M. Engka (2019) which found that GAF does not have a significant effect on economic growth in the city of Manado.

General Allocation Fund (GAF) is a form of intergovernmental transfer of funds that is not related to specific expenditure programs. The function of GAF is to replace the subsidies of autonomous regions and to overcome fiscal gaps and increase fiscal capacity between regions (Talangamin, et al., 2021). With the fiscal gap being overcome, it is expected that economic growth between regions can occur evenly. The support from regional fiscal policies cannot be felt quickly, and its impact will be felt in the long term on the level of equalization. In the short term, if the realization of GAF allocation is less contributing maximally to the expenditure of the regency/city government in East Java, such as the development of public facility infrastructure (in the field of infrastructure, irrigation, technical training, research, etc.) that directly affects or enjoyed by the community in the short term. This is enriched by the existence of GAF, as it provides additional funds for regions to improve infrastructure development and human development. GAF given in the long term can increase inclusive economic growth by providing fiscal stability for regional governments and encouraging local economic development. According to Guntara (2014) in Sisilia (2021), GAF is used to overcome infrastructure disparities in each region to create equal economic growth.

5.2. The Effect of Revenue Sharing Funds (RSF) on Inclusive Economic Growth

Based on the analysis of the data, Revenue Sharing Funds (RSF) have a significant negative effect on inclusive economic development in the long term, while in the short term, RSF does not have a significant effect on inclusive economic development. In the long term, every 1% increase in RSF will decrease Inclusive Development Economic Index (IDEI) by 3%. This provides information that RSF does not contribute to the equality of economic development in the short term, while in the long term, it has a negative impact on the equality of economic development. These findings are consistent with the research conducted by Meylani M. Arina, Rosalina A.M. Koleangan, Deisy S.M. Engka (2019), which states that Revenue Sharing Funds (RSF) do not have a significant effect on economic growth in Manado City.

In the short term, this indicates that the allocation of RSF realization is not contributing maximally to the expenditure of Local Governments in East Java, such as the development of public facilities (infrastructure, irrigation, technical training, research, and others) that directly affect or benefit the community in the short term. In the long term, RSF can decrease inclusive economic growth because a consistent and continuous income flow from RSF can reduce incentives for governments and communities to undertake necessary structural reforms to improve economic growth and inclusivity. In the long term, this can reduce investment in productive sectors because RSF income can replace more productive resources. Data from the World Bank shows that countries that rely on natural resource revenue (including RSF) tend to have slower economic growth than countries that do not rely on natural resources. RSF can trigger the dependence of regions on natural resource revenue and inhibit economic diversification in those regions. William Easterly, an economist famous for the theory of the “tyranny of experts,” argues that RSF can lead to corrupt practices in the region. In his book “The Tyranny of Experts: Economists, Dictators, and the Forgotten Rights of the Poor,” Easterly emphasizes that corruption is one of the factors that inhibit economic growth and RSF policies can exacerbate the situation. According to him, RSF can increase revenue sources for local governments, but it can also be attractive to parties who want to profit unfairly from natural resources.

5.3. The Impact of Special Allocation Fund (SAF) on Inclusive Economic Growth

Based on data analysis, the Special Allocation Fund (SAF) has a negative and significant effect on inclusive economic development in both the short and long term. In the long term, every 1% increase in SAF will decrease the Inclusive Development Economic Index (IDEI) by 3%, while in the short term, every 1% increase in SAF will decrease IDEI by 0.1%. This provides information that in both the short and long term, SAF cannot promote economic development equity. In the long term, the use of SAF can also cause regions to become dependent on the central government, ultimately hindering the ability of regions to independently create inclusive economic growth. This is due to poor planning and weak coordination between the regional government and the central government in the use of SAF. SAF is often used for projects that are less strategic and do not have a significant impact on economic growth. Regardless of how much special allocation funds are given by the government to the region, it does not directly affect the level of regional self-reliance (Ahmad, 2021). This is because the main goal of the SAF

program is to support investment in development, acquisition, improvement or repair of facilities, and physical infrastructure in the region. Moreover, regional governments do not have the authority to manage and use the special allocation fund because its use has been determined by the central government. Therefore, regional governments can only act in accordance with the decisions made by the central government. SAF allocation is not used for capital expenditure aimed at increasing the level of economic growth. Instead, SAF allocation is used for other expenses, such as goods and services. Therefore, although SAF allocation is high, it does not necessarily have an impact on the equitable distribution of economic development.

Another example of the cause is the suboptimal use of the Education SAF. This is due to the low school participation rate, according to data from the Ministry of Education and Culture (Kemendikbud), in the 2017-2019 academic year for the age group of 19-24, the school participation rate in East Java was 23.34% in 2017, 22.86% in 2018, and 24.80% in 2019. This figure is lower than the national average of 24.47%, 24.40%, and 25.21% for the same level. This is in line with research results by Sulaeman (2021) stating that the Marine and Fisheries Sector SAF has a negative and significant effect on development performance indicators. The Education Sector SAF has a negative and significant effect on development performance indicators.

5.4. The Influence of Open Unemployment Rate on Inclusive Economic Growth

Based on the results of data analysis, the open unemployment rate does not have a significant effect on inclusive economic development in both the short and long term. A 1% decrease in the open unemployment rate will increase IDEI in the long and short term by 2% and 21%, respectively. There is an inverse relationship between the open unemployment rate and its significant effect on IDEI. The higher the open unemployment rate, the lower the likelihood of inclusive economic development. This is because open unemployment can cause a tendency towards structural unemployment and an overall decrease in productivity. Furthermore, the open unemployment rate can create social and economic disparities, health (Wang, 2015), and unemployment becoming a barrier to socio-economic growth and economic development in developing countries (Nwankwo & Ifejiyor, 2014; Elorhor, 2019; Shah & Shabbir, 2022).

5.5. The Influence of Gross Domestic Product (GDP) Per Capita on Inclusive Economic Growth

Based on the results of both short-term and long-term analyses, GDP per capita has a positive and significant effect on IDEI. In the long term, a 1% increase in GDP per capita will increase IDEI by 27%. In the short term, a 1% increase in GDP per capita will increase IDEI by 2%. It can be concluded that in the short term, GDP per capita has contributed to the equalization of economic development, and in the long term, the contribution of GDP per capita is even greater in improving economic development. From these results, an increase in GDP per capita indicates stronger and more even economic growth in the long term. Strong economic growth can create better job opportunities and improve access to better public resources and services, thus helping achieve inclusive economic development (Magdalena & Suhatman, 2020). Furthermore, GDP per capita can be a tool for improving people's quality of life through increased education, health, and welfare. Moreover, open GDP per capita does not always guarantee inclusive economic development. For example, high economic growth but unevenly distributed can cause greater social and economic disparities (Fahmi, 2019). This means that other factors play a role in improving inclusive economic growth in East Java, one of which is the quality of human resources or known as human capital (Naveh et al., 2012), which can be represented by school participation rates, average length of schooling, and life expectancy.

6. Conclusions

In the long term, an increase in inclusive economic development can be achieved by increasing the General Allocation Fund, as well as reviewing the allocation of the Special Allocation Fund and the Revenue Sharing Fund. In the short term, a review of the allocation of the Special Allocation Fund is also necessary, as it affects inclusive economic development. Overall, it can be concluded that fiscal decentralization has a positive impact on economic growth and the improvement of community welfare, where the better implementation and accuracy of decentralization allocation in aggregate can improve community welfare (Zahari et al., 2018; Hikatop et.al., 2020).

References

- [1] Ahmad E. Intergovernmental transfers – an international perspective. In: Ahmad E, editor. *Financing decentralized expenditures: an international comparison of grants*. Cheltenham: Edward Elgar Publishers; 1997. <https://doi.org/10.4337/9781035303403.00009>
- [2] Ahmad S. Pengaruh pendapatan asli daerah, dana alokasi umum, dana alokasi khusus terhadap tingkat kemandirian daerah di Kota Makassar. *Jurnal Ekonomika*. 2021;5(1):17–37.
- [3] Aoyagi CG, Ganelli G. Asia's quest for inclusive growth revisited. *J Asian Econ*. 2015;40:29–46.
- [4] Arina MM, Koleangan R A, Engka DS. Pengaruh pendapatan asli daerah, dana bagi hasil, dana alokasi umum, dan dana alokasi khusus terhadap pertumbuhan ekonomi Kota Manado. *Jurnal pembangunan ekonomi dan keuangan daerah*. 2021;20(3):26–35.
- [5] Bappeda Jawa Timur. *Ekonomi Jawa Timur tahun 2022 tumbuh 5,34 persen*. Diakses pada 2 April 2023. jatimprov.go.id
- [6] BPS. *Jawa Timur Dalam Angka 2023*. Diakses pada 2 April 2023. <https://jatim.bps.go.id/publication/2023/02/28/446036fbb58d36b009212dbc/provinsi-jawa-timur-dalam-angka-2023.html>
- [7] Easterly W. *The tyranny of experts: economists, dictators, and the forgotten rights of the poor*. Basic Books; 2014.
- [8] Elorhor OT. Unemployment and its effect on the growth of Nigeria economy. *Journal of Economics, Management and Trade*. 2019;23(2). <https://doi.org/10.9734/jemt/2019/v23i230129>
- [9] Fahmi A. Keterkaitan antara penerimaan pajak penghasilan dan PBB terhadap kesenjangan pendapatan. *JAK (Jurnal Akuntansi) Kajian Ilmiah Akuntansi*. 2019;6(1):39–54.
- [10] Hiktaop K, Ulita AS, Meilvidiri W, Herdjiono MV, Hayon PP. Influence of fiscal decentralization on the economic growth of public welfare and poverty between regions of Province of Papua. *IOP Conf Ser Earth Environ Sci*. 2020;473(1):1–7.
- [11] Klasen S. *Measuring and monitoring inclusive growth: multiple definitions, open questions, and some constructive proposals*. Asian Development Bank; 2010.
- [12] Magdalena S, Suhatman R. The effect of government expenditures, domestic investment, foreign investment to the economic growth of primary sector in Central

- Kalimantan. Budapest International Research and Critics Institute-Journal (BIRCI-Journal). 2020;3(3):1692–703.
- [13] Naveh M, Torosyan T, Jalaee SA. Regional economic integration and its effects on economic growth and economic welfare. *World Appl Sci J*. 2012;17(10):1349–55.
- [14] Nwankwo CA, Ifejiofor AP. Impact of unemployment on Nigerian economic development: a study of selected local government area in Anambra State, Nigeria. *Eur J Bus Manag*. 2014;6:103–12.
- [15] OECD. Report on the OECD framework for inclusive growth. *OECD Week*; 2014, May 2. pp. 1–58.
- [16] Paseki M, Naukoko AT, Wauran PC. Pengaruh dana alokasi umum dan belanja langsung terhadap pertumbuhan ekonomi dan dampaknya terhadap kemiskinan di Kota Manado tahun 2004-2012. *Jurnal Berkala Ilmiah Efisiensi*. 2014;14(3).
- [17] Rao MG. The effect of intergovernmental transfers on public services in India. *National Institute of Public Finance and Policy Working Paper Series*. 2017;(218).
- [18] Sabir S, Qamar M. Fiscal policy, institutions and inclusive growth: evidence from the developing Asian countries. *Int J Soc Econ*. 2019;46(6):822–37.
- [19] Shah SZ, Shabbir MR, Parveen S. the impact of unemployment on economic growth in Pakistan: an empirical investigation. *iRASD. J Econ*. 2022.
- [20] Sisilia M, Harsono H. Analisis pengaruh pendapatan asli daerah, dana alokasi khusus, dan dana alokasi umum terhadap pertumbuhan ekonomi di Kota Malang tahun 2010-2019. *Journal of Regional Economics Indonesia*. 2021;2(1):57–70.
- [21] Sulaeman AS, Andriyanto N. optimalisasi pengelolaan dana alokasi khusus (dak) untuk mendorong pertumbuhan pembangunan daerah di Indonesia. *Jurnal Aplikasi Akuntansi*. 2021;5(2):175–200.
- [22] Talangamin OB, Kindangen P, Koleangan RA. Analisis pengaruh pendapatan asli daerah (pad), dana alokasi umum dan dana alokasi khusus terhadap pertumbuhan ekonomi di Kota Tomohon. *Jurnal Pembangunan Ekonomi Dan Keuangan Daerah*. 2021;19(3):41–51.
- [23] Wang Q. The effects of unemployment rate on health status of Chinese people. *Iran J Public Health*. 2015 Jan;44(1):28–35.
- [24] Zahari M, Tan S, Haryadi H, Syaparuddin S. Analysis of fiscal decentralization impact on community welfare in Jambi Province. *Jurnal Perspektif Pembiayaan Dan Pembangunan Daerah*. 2018;6(3):319–30.
- [25] Zulfiqar K. Fiscal policy for inclusive growth: a case study of Pakistan. *Journal Pakistan Economic and Social Review*. 2018;56(1):21–46.