

UDC 332

## STUDY OF BALANCING FUNDS ON THE HUMAN DEVELOPMENT INDEX IN CENTRAL KALIMANTAN

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### ABSTRACT

The Balancing Fund's impact on Central Kalimantan's Human Development Index, both directly and indirectly through economic growth, is examined in this study. This study examines how profit-sharing, general allocation and special allocation funds affect HDI in Central Kalimantan. The research approach states that all Central Kalimantan Regencies and Cities are included. Secondary cross-section and time series panel data is employed. Path Analysis will analyze. Research results follow: (1) Revenue sharing funds (DBH) directly affect economic growth in 13 regencies and 1 city in Central Kalimantan; (2) The DAU directly affects economic growth in 13 regencies and 1 city in Central Kalimantan; (3) 13 Central Kalimantan regencies and 1 city benefit from special allocation money (DAK); (4) Economic growth affects the Human Development Index in 13 regencies and 1 city in Central Kalimantan; (5) Economic growth from revenue sharing funds (DBH) in 13 regencies and 1 city in Central Kalimantan does not affect the Human Development Index; (6) The general allocation fund (DAU) does not directly affect the Human Development Index in 13 regencies and 1 city in Central Kalimantan through economic growth; (7) The special allocation fund (DAK) does not directly affect the Human Development Index in 13 regencies and 1 city in Central Kalimantan through economic growth.

### KEY WORDS

Balance fund, HDI, economic growth.

The government's development aims include improving the well-being of its citizens as well as reducing poverty, increasing employment opportunities, and expanding the economy. The HDI or IPM, as it is sometimes referred to, is a composite index that takes into account three fundamental aspects of human development: the quality of life in terms of health, education, and income (welfare). One may already define the standard of living in a region by using the available HDI indicators.

The arrangement of the sectoral economic activities that form the basis of household production activities or the majority of the community, regional potentials such as natural resources, and other factors all play a role in determining the extent to which the level of welfare can be said to be prosperous. institutional circumstances that define production and marketing networks on a local, regional, and global scale natural resources, the environment, and infrastructure, all of which will impact the growth of production activities (Taslim, 2004; Sengaji et al., 2019; Astuti et al., 2022; ).

Because human development is the backbone of genuine progress, it necessitates the creation of a wide range of facilities and infrastructure to foster the growth of competent human resources. That's why money needs to be spent to make it all happen. Increased economic growth is made simpler by a high-quality population's ability to create new products and enhance current ones, hence raising consumer spending (Sukirno, 2008; Bulturbayevich, M. B., & Jurayevich, 2020; Wang, Q., & Wang, 2020; Gherghina et al., 2020; Kihombo et al., 2021).

When compared to the national average, Central Kalimantan's economic growth (graph 1.2) is significantly higher. This demonstrates the national government's and local governments' cooperative efforts to boost Central Kalimantan's economy. What the author

will dig into is how the influence of balancing money can lead to economic progress in Central Kalimantan, which in turn leads to welfare for the community.

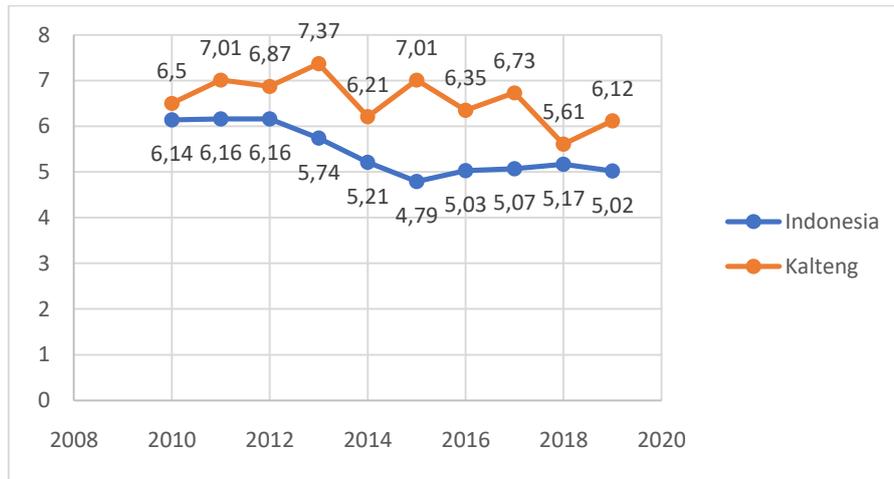


Figure 1 – Economic growth in Indonesia and Central Kalimantan

Disparities between rich and developing countries, gender gaps, a lack of precise and full data, and environmental elements that have not been accounted for in measures all contribute to the difficulties of studying the Human Development Index (HDI) on a worldwide scale. Developments in technology and innovation, a heightened understanding of HDI's role in long-term progress, a greater commitment from the business sector to funding development initiatives, and a concentration on quantifying quality of life are just some of the recent highlights in worldwide HDI studies. Disparities in HDI between Java and non-Java regions, lack of access to education and healthcare in rural areas, high rates of poverty and unemployment, and gender and intergenerational gaps are all factors that hamper HDI studies in Indonesia and Central Kalimantan. Increased government and community support for HDI improvement in underserved areas; improved availability of accurate and complete data; innovative use of technology and increased community participation in HDI-focused development efforts; these are all examples of recent innovations in HDI research in Indonesia and Central Kalimantan.

Because central government decentralizes funding for special programs to the regions, the allocation of balancing funds received by the regions will have far-reaching consequences for the regions. It is common knowledge that total consumer spending is what drives economic expansion. The distribution of government spending (government expenditure) through the realization of balanced fund expenditures is anticipated to influence regional economic growth, which in turn is predicted to have an effect on people's welfare (Mankiw, 2006).

### METHODS OF RESEARCH

This study covers a 10-year time frame, from 2011 to 2020, and covers a cross-section of all 13 regencies and 1 city in Central Kalimantan province (time series). This study is quantitative since it uses balancing funds (DBH, DAU, and DAK) as independent variables, economic growth as an intermediate variable, and the Human Development Index (HDI) as a dependent variable (IPM). The numbers and statistics used in this study are derived from other sources (Sugiyono, 2009). To test hypotheses, quantitative studies seek to establish a connection between potential factors (Gunawan, 2017). Secondary panel data, which combines cross-sectional and time series information, is employed. Central Kalimantan's cities and districts serve as our cross-section, and the years 2011-2020 as our time series. In total, 140 observations were made, with information gathered from the publicly available

websites of the Central Kalimantan Statistical Agency (BPS) and the Directorate General of Fiscal Balance (DJPB), Ministry of Finance of the Republic of Indonesia.

It is also stated that the path coefficient is used to determine the magnitude of the independent (exogenous) variable to the dependent (endogenous) variable in path analysis, which is an analytical technique used to examine the inherent causal relationships between variables arranged in a temporary order. The purpose of the path analysis employed in this study is to investigate the following: (i)the impact of the DBH, DAU, and DAK variables on economic growth; (ii)the impact of the economic growth variables on the welfare of the populace; and (iii)the impact of the DBH, DAU, and DAK variables on the welfare of the populace via economic growth. This study employed the following path analysis:

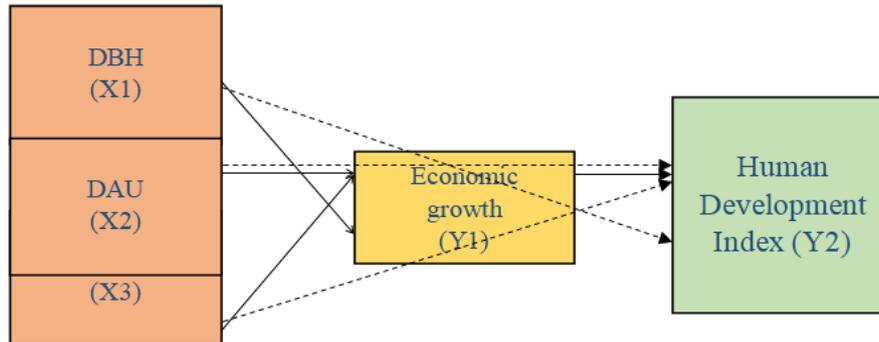


Figure 2 – Path Analysis Model

Based on the path analysis model in Figure 4.1, it can be seen the direct or indirect influence of each independent variable (DBH, DAU, DAK) on the dependent variable Human Development Index (IPM) through the intermediate variable (economic growth) which can be explained as following:

**1. Path of Direct Effect (direct Effect)**

- a. The influence of the DBH variable (X1) on Economic Growth (Y1)  
 $Y1 = \rho X1Y1 + e1$
- b. Effect of the DAU variable (X2) on Economic Growth (Y1)  
 $Y1 = \rho X2Y1 + e1$
- c. Effect of the DAK variable (X3) on Economic Growth (Y1)  
 $Y1 = \rho X3Y1 + e1$
- d. The effect of the variable Economic Growth (Y1) on HDI (Y2)  
 $Y2 = \rho Y1Y2 + e1$

**2. Path of Indirect Effect (Indirect Effect)**

- a. The effect of the DBH variable (X1) on HDI (Y2) through economic growth (Y1)  
 $Y2 = (\rho X1Y1) (\rho Y1Y2) + e2$
- b. The influence of the DAU variable (X2) on HDI (Y2) through economic growth (Y1)  
 $Y2 = (\rho X2Y1) (\rho Y1Y2) + e2$
- c. The influence of the DAK variable (X3) on HDI (Y2) through economic growth (Y1)  
 $Y2 = (\rho X3Y1) (\rho Y1Y2) + e2$

Based on the path analysis used above, the research path analysis equation model is as follows:

$$Y1 = \rho X1Y1 + \rho X2Y1 + \rho X3Y1 + e1 \quad (1)$$

$$Y2 = \rho X1Y2 + \rho X2Y2 + \rho X3Y2 + \rho Y1Y2 + e2 \quad (2)$$

Where:  $\rho$  = Path Coefficient; Y1 = Economic growth; Y2 = HDI; X1 = DBH; X2 = DAUs; X3 = DAK; e1, e2 = Error Term (interference error).

## RESULTS OF STUDY

To determine the direct effect of the variable profit sharing funds (X1), general allocation funds (X2), special allocation funds (X3) on economic growth (Y1) the structural equation model I is used, namely:

$$Y1 = \rho_1 X1 Y1 + \rho_2 X2 Y1 + \rho_3 X3 Y1 + e1 \quad (1)$$

So with the help of SPSS software the output is obtained as follows.

Table 1 – Path coefficient value I

Coefficients <sup>a</sup>					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	std. Error	Betas		
(Constant)	-915,768	306,117		-2,992	.003
1 X1	.710	.194	.266	3,659	.000
X2	1,707	.290	.455	5,881	.000
X3	.129	.091	.103	1,424	.015

a. Dependent Variable : Y1

Source: SPSS Output 2022.

Based on Table 1 output above, it can be written the path analysis equation model I becomes:

$$Y1 = \rho_1 X1 Y1 + \rho_2 X2 Y1 + \rho_3 X3 Y1 + e1$$

$$Y1 = 0.266 Y1 + 0.455 Y1 + 0.103 Y1 + 0.634$$

The equation model above can be described that the regression coefficient of profit-sharing funds is 0.266 which states that every increase in realization of profit-sharing funds by 1% will increase economic growth by 0.266% (the coefficient is positive), while the general allocation fund regression coefficient is 0.455 which states that each increase in realization of general allocation funds by 1% will increase economic growth by 0.455% (coefficient marked positive), while the regression coefficient for special allocation funds is 0.103 which states that each increase in realization of special allocation funds of 1% will increase economic growth by 0.103% (coefficient positive sign).

Table 1 is the output of the SPSS software regression results which provide information on partial test results for the variables of profit-sharing funds, general allocation funds and special allocation funds on economic growth which are explained as follows:

- The regression output shows that the profit-sharing variable (X1) has a significance value of 0.000 less than 0.05 which means that the revenue-sharing variable (X1) has a direct and significant effect on economic growth (Y1), so that the first hypothesis which states that the fund is suspected profit sharing has a direct and significant effect on economic growth received;
- For the general allocation funds variable (X2) it is also seen to have a significance value of 0.000 less than 0.05 which means that the general allocation funds variable (X2) has a direct and significant effect on economic growth (Y1), so that the second hypothesis which states that it is suspected that the allocated funds generally accepted direct and significant effect on economic growth;
- For the variable special allocation funds (X3) it is also seen to have a significance value of 0.015 which is less than 0.05 which means that the special allocation funds variable (X3) has a direct and significant effect on economic growth (Y1), so that the third hypothesis which states that it is suspected that allocated funds specific direct and significant impact on economic growth is also accepted.

Simultaneous test results on the path analysis model I can be seen in Table 2 as follows.

Table 2 – The results of the simultaneous test for line I

ANOVA<sup>a</sup>

Model		Sum of Squares	df	MeanSquare	F	Sig.
1	Regression	176991.121	3	58997040	30,663	.000b
	residual	261674.022	136	1924074		
	Total	438665.143	139			

a. Dependent Variable : Y1

b. Predictors: (Constant), X1, X2, X3

Based on Table 2 shows that the significance value of 0.000 is less than 0.05, it can be interpreted that simultaneously there is a significant influence of the variables of profit-sharing funds, general allocation funds and special allocation funds on economic growth in 13 districts and 1 city in Central Kalimantan Province.

Meanwhile, the test results for the coefficient of determination for path I analysis are shown in table 4.3 as follows.

Table 3 – Test results for the Coefficient of Determination of path I

Summary models

Model	R	R Square	Adjusted R Square	std. Error of the Estimate
1	.635a	.403	.390	43.86426

a. Predictors: (Constant), DAK, DBH, DAU

d. Source: SPSS Output 2022.

This section summarizes the findings of the determination test used to calculate the independent variable's concurrent contribution to the dependent variable, as shown in Table 3. This coefficient illustrates the sensitivity of GDP growth to changes in the percentages allocated to profit sharing, general allocation, and special allocation in the model. The result of R Square indicates that the independent variable has a 40.3% effect on itself. While additional factors, outside the scope of this study, account for the remaining 59.7 percent. One may also derive  $e1 = 1 - 0.403 = 0.634$  from the R-Squared value.

To find out the indirect effect of profit sharing funds (X1), general allocation funds (X2), special allocation funds (X3) and economic growth (Y1) on community welfare (Y2) the structural equation model II is used, namely:

$$Y2 = \rho_1 X1Y2 + \rho_2 X2Y2 + \rho_3 X3Y2 + \rho_4 Y1Y2 + e2 \quad (2)$$

By using the help of SPSS software, the research results are obtained as shown in Table 4.

Table 4 – Path coefficient value II

Coefficients<sup>a</sup>

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	std. Error	Betas			
1	(Constant)	-822,409	120,146		-6,845	.000
	X1	.545	.077	.505	7.055	.000
	X2	.011	.124	.764	.089	.929
	X3	.056	.035	.109	1,597	.112
	Y1	.275	.033	.679	8,441	.000

a. Dependent Variable: Y2

Source: SPSS Output 2022.

Table 4 summarizes the impact of four independent variables on the dependent variable (IPM): profit sharing funds, general allocation funds, special allocation funds, and economic growth.

As a fourth hypothesis test, we can examine the results of the regression of the economic growth variable (Y1), and since the significance value of economic growth is 0.000, which is less than 0.05, we accept the fourth hypothesis, which states that it is hypothesized that economic growth has a direct and significant effect on people's well-being.

b. To examine the indirect effect of X1, X2, and X3 on Y2 and Y1, as specified by the fifth through seventh hypotheses. The beta value of X1 to Y1 is 0.266, and the beta value of Y1 to Y2 is 0.679, so we know that X1 has a direct effect of 0.505 on HDI (Y2), and that the indirect effect of X1 on Y2 through Y1 is calculated by multiplying these two values. This computation shows that the direct influence value, at 0.505, is larger than the indirect effect, at 0.1806.

The beta value of X2 to Y1 is 0.455, and the beta value of Y1 to Y2 is 0.679, therefore the direct influence of X2 on Y2 is 0.764; to obtain the indirect effect of X2 on Y2 via Y1, multiply the beta value of X2 to Y1 by the beta value of Y1 to Y2, which is 0.308. The calculation shows that the direct effect value, at 0.764, is larger than the indirect effect value, at 0.308, and so the sixth hypothesis is rejected, which states that it is suspected that general allocation funds have an indirect and significant effect to the welfare of society through economic growth.

The direct effect of special allocation funds (X3) on HDI (Y2) is 0.109, as shown in the Coefficients table's beta column for standardized coefficients; the indirect effect of X3 on Y2 via Y1 can be calculated by multiplying the beta value of X3 to Y1, which is 0.103, by the beta value of Y1 to Y2, which is 0.0679. Based on this calculation, we can conclude that the direct effect value of 0.109 is higher than the indirect effect value of 0.0699, thereby rejecting the seventh hypothesis, which claims that the purported special allocation funds contribute nothing directly and significantly to the welfare of society by means of economic growth.

Model II of the path analysis equation is given by:  $Y_2 = 1X_1Y_2 + 2X_2Y_2 + 3X_3Y_2 + 4Y_1Y_2 + e_2$   
 $Y_2 = 0.505 Y_2 + 0.764 Y_2 + 0.109 Y_2 + 0.679 Y_2 + 0.721 Y_2 + e_2$

The above equation model reveals that an increase in the realization of profit-sharing funds by IDR 1 billion leads to a 0.505-point increase in the HDI value (coefficient marked positive), while an increase in the realization of general allocation funds by IDR 1 billion leads to a 0.764-point increase in the HDI value (coefficient marked positive) (coefficient marked positive).

Table 5 – Line II simultaneous test results

ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	34451.573	4	8612893	30,971	.000b
	residual	37542599	135	278,093		
	Total	71994.171	139			

a. Dependent Variable: Y2

b. Predictors: (Constant), Y1, X1, X2, X3

Source: SPSS Output 2022.

Based on table 5 shows that the significance value of 0.000 is less than 0.05, it can be interpreted that simultaneously there is a significant influence of the variable revenue sharing funds, general allocation funds, special allocation funds and economic growth on people's welfare in 13 districts and 1 city in Central Kalimantan Province.

While the test results for the coefficient of determination for path II analysis are shown in Table 6 as follows.

Based on table 6 provides information on the results of the determination test used to determine the percentage contribution of the independent variable simultaneously on the dependent variable. This coefficient shows how much the variable percentage of profit-sharing funds, general allocation funds, special allocation funds and economic growth

variables used in the model can affect the community welfare variable. It is known that the value of R Square is 0.479 which means that the effect of the independent variable on the independent variable is 47.9%, while the remaining 52.1% is influenced by other variables outside this research model. Based on the R Square value, the value of  $e_2 = \sqrt{1 - 0.479} = 0.721$ .

Table 6 – Test results for the Coefficient of Determination of path II

Summary models				
Mode	R	R Square	Adjusted R Square	std. Error of the Estimate
1	.692a	.479	.463	16.67613

a. Predictors: (Constant), Y1, X1, X2, X3  
 Source: SPSS Output 2022.

Based on the results of the calculation analysis on the path equation model I and path equation II, it can be obtained the results of the direct and indirect influence path analysis between the variables of revenue sharing funds, general allocation funds and special allocation funds on community welfare in 13 districts and 1 city in Central Kalimantan through economic growth in 2010-2019 can be displayed as follows:

Table 7 Direct Influence Path Coefficient

No.	Variable Influence	Analysis Results		Information
		Coefficient	Significance	
1	X1 → Y1	0.266	0.000 < 0.05	Influenced directly and significantly
2	X2 → Y1	0.455	0.000 < 0.05	Influenced directly and significantly
3	X3 → Y1	0.103	0.015 < 0.05	Influenced directly and significantly
4	Y1 → Y2	0.679	0.000 < 0.05	Influenced directly and significantly

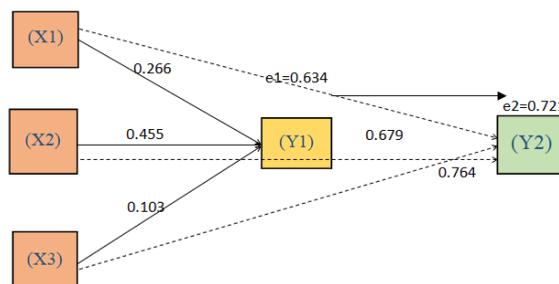
Source: SPSS Output 2022 (Processed).

Table 8 – Indirect Influence Path Coefficient

No.	Variable Influence	Analysis Results		Information
		Direct	Indirectly through Economic Growth	
1	X1 → Y1	0.266	$(0.266) \times (0.679) = 0.1806$ $0.505 > 0.1806$	Not significant
	Y1 → Y2	0.679		
	X1 → Y2	0.505		
2	X2 → Y1	0.455	$(0.455) \times (0.679) = 0.308$ $0.764 > 0.308$	Not significant
	Y2 → Y2	0.679		
	X2 → Y2	0.764		
3	X3 → Y1	0.103	$(0.103) \times (0.679) = 0.0699$ $0.109 > 0.0699$	Not significant
	Y3 → Y2	0.679		
	X3 → Y2	0.109		

Source: SPSS Output 2022 (Processed).

Based on the data and results of the calculations that have been done above, it can be seen that the path value is related to the variables of profit-sharing funds, general allocation funds, special allocation funds and economic growth on community welfare as shown:



The following is what we find when we put this theory to the test:

- First, X1 shows that profit sharing funds have a direct impact on economic expansion (Y1). When the p-value of a study's hypothesis is less than five percent, we may confidently call it a success. If the probability value is more than or equal to 5%, then the data hypothesis is not significant. The calculated significance of X1 is 0.000 0.05, which suggests that Ho is rejected and Ha is approved. Consequently, it is found that in 13 regencies and 1 city in Central Kalimantan, revenue sharing (X1) has a direct and significant effect on economic growth (Y1);
- Variable X2 of the general allocation fund has a direct impact on economic expansion (Y1). If the p-value of a study hypothesis is less than or equal to 5%, then it is significant. A null effect of the hypothesis on the data is predicted if the significance level is greater than or equal to 5%. The significance of X2 is calculated to be 0.000 0.05, rejecting Ho while accepting Ha. Hence, it can be inferred that in 13 regencies and 1 city in Central Kalimantan, the general allocation fund (X2) significantly contributes to economic growth (Y1);
- Third, X3 is a direct causal factor in economic expansion (Y1). If the p-value of a study hypothesis is less than or equal to 5%, then it is significant. A null effect of the hypothesis on the data is predicted if the significance level is greater than or equal to 5%. At a calculated significance level of X3 of 0.015 0.05, Ho is rejected and Ha is approved. From this, we may infer that the special allocation fund (X3) significantly contributed to economic expansion (Y1) across 13 districts and 1 municipality in Central Kalimantan;
- Fourth, the causal relationship between GDP growth (Y1) and quality of life (Y2). If the p-value of a study hypothesis is less than or equal to 5%, then it is significant. A null effect of the hypothesis on the data is predicted if the significance level is greater than or equal to 5%. Because Y1 is statistically significant at the 0.000 0.05 level, we can rule out Ho and accept Ha. As a result, it was determined that in 13 regencies and 1 city in Central Kalimantan, economic expansion (Y1) significantly impacted the well-being of the local population (Y2);
- Five, by multiplying Beta ( ) between X1 and Y1 and Y2 and X2, we can see how profit sharing (X1) indirectly affects social welfare (Y2) via economic growth (Y1). It can be written as:  $\text{Beta}(X1\ Y1\ Y2) = \text{Beta}(X1\ Y1) \times \text{Beta}(Y1\ Y2) = (0.266) \times (0.679) = 0.1806$ ;
- According to the numbers, X1 and Y2 have a direct influence of 0.505 and an indirect effect of 0.1806, with the former being significantly higher than the latter. In 13 municipalities and one city in Central Kalimantan, our findings show that revenue-sharing (X1) has no appreciable impact on social welfare (Y2);
- Multiplying Beta ( ) from X2 to Y1 and Y1 to Y2 reveals the general allocation fund variable's (X2) indirect effect on social welfare (Y2) via economic growth (Y1).  $\text{Beta}(X2\ Y1\ Y2) = \text{Beta}(X2\ Y1) \times \text{Beta}(Y1\ Y2)$ ;
- $\text{Beta}(X2\ Y1)$  multiplied by  $\text{Beta}(Y1\ Y2)$  equals  $(0.455) \times (0.679) \times (0.308)$ ;
- The calculated findings show that the direct effect of X2 and Y2 is 0.764 while the indirect effect is only 0.308, indicating that the direct effect is larger. Our findings suggest that in 13 districts and 1 city in Central Kalimantan, the general allocation fund (X2) does not significantly affect people's wellbeing (Y2);
- Multiplying Beta ( ) from X3 to Y1 and Y1 to Y2 determines the indirect impact of the special allocation fund variable (X3) on social welfare (Y2). The formula for beta (X3 Y1 Y2) is:  $\text{beta}(X3\ Y1) \times \text{beta}(Y1\ Y2) = 0.103 \times 0.679\% = 0.0699$ .

By comparing the calculated values, we find that X3 and Y2 have a direct influence of 0.109 and an indirect effect of 0.0699. This indicates that the direct effect is larger than the indirect effect. Our findings suggest that in 13 municipalities and 1 city in Central Kalimantan, the special allocation fund (X3) has no appreciable indirect impact on the quality of life (Y2).

## DISCUSSION OF RESULTS

Receipts from the balance funds are the most important source of money in the Regional Revenue and Spending Budget's income position. Ultimately, it can effect regional economic growth, which is expected to have ramifications for social well-being, because of its impact on total spending. The following conclusions were reached by statistically analyzing data on the effect of balance funds on public welfare through the lens of economic growth.

The regression result showed that the profit sharing variable (X1) had a significance value of 0.000 less than 0.05, which is consistent with the first hypothesis that profit-sharing funds had a direct and substantial effect on economic growth (Y1).

Growth in the economy is directly proportional to government spending (Sukirno, 2008). Realizing fiscal parity via profit-sharing funds has been directly correlated with economic growth in thirteen regencies and one city in Central Kalimantan Province. The data shows that among the regencies/cities in Central Kalimantan, the Murung Raya district has the greatest average rate of realizing profit-sharing funds, but its economic growth appears to be lower than that of the other existing regencies/cities, at just 6.46% per year. This is not the worst rate, but it is also not the best; the Kotawaringin Timur district has the highest rate in the country at 7.40% annually. Although the profit-sharing payments are not the largest, they have a significant effect on the Murung Raya area. Even though Pulang Pisau receives the smallest share of revenue, its economy grows by an average of 6.35 percent per year. Notwithstanding the fact that the fastest-growing region, Murung Raya, also benefits from the most revenue-sharing funds, this is the case. This finding lends credence to the first hypothesis that profit-sharing funds will significantly contribute to economic expansion in thirteen Central Kalimantan regencies and one city.

Public expenditures are typically justified in terms of Keynesian theory, the preeminent macroeconomic paradigm. In this theory, effective aggregate demand is singled out as a critical strategic determinant in the fight against the stagnation of production factors. The government plays a significant role in encouraging or promoting economic growth since it is the only entity with the resources to make such large purchases of goods and services.

A significant correlation between regional economic growth and revenue-sharing funds received and realized was found for the period 2010-2019. Thirteen provinces and one city in Central Kalimantan were the primary foci of the research. The first hypothesis, that profit-sharing funds had a direct and significant effect on economic growth, was confirmed; this is because if the revenue-sharing funds received by the region are small, then the rate of economic growth will slow down and may even decrease because government spending through shared funds did not produce optimal results.

Comparable positive and significant effects were reported by Lian Arke Mokorowu in his journal article titled Effects of Local Own Revenue (PAD), Revenue Sharing Funds (DBH), General Allocation Funds (DAU), and Special Allocation Funds (DAK) on Economic Growth in Southeast Minahasa Regency.

A separate study by Nurfadilah Aris, also published in the same journal, showed the opposite when it examined the effect of balancing budgets on economic growth in three cities in South Sulawesi province. The author of this study discovered that the allocation of general funds, special funds, and profit-sharing funds all had significant effects on economic expansion. In South Sulawesi, three cities have benefited greatly from both the general allocation money and the special allocation funds, but from the profit-sharing funds, there has been little to no noticeable change. Increase in Gross Domestic Product as a Direct Result of General Funds Allocation.

In addition, the second hypothesis, which states that it is suspected that general allocation funds have a direct and significant effect on economic growth (Y1), appears to be supported by the data, as the significance value of the general allocation funds variable (X2) is 0.000, which is less than 0.05. The basic human right to receive basic public services like healthcare and education is guaranteed by the DAU, which is supported by the category of justice. The APBN doles out national funds in accordance with Law 32 of 2004, which

stipulates that regional needs and opportunities be taken into account in the process of assigning funds. At least 25% of national income must go into DAU.

Findings from this study indicate that in 13 regencies and 1 city in Central Kalimantan Province, achieving fiscal balance via general allocation funds can have a positive impact on economic growth. Kapuas district in Central Kalimantan has the highest average realization of general allocation funds, at 760.69 billion rupiahs each year. Administration in Kapuas district must spend a lot on workers because it employs more people than any other district or city in Central Kalimantan. The greatest segment of the public sector consists of elementary and secondary school educators (SMA). Those who work in health care, like teachers, play a crucial role in society. Now that people in the Kapuas district who work have access to more resources, they can help boost the economy. The Kotawaringin Timur district is in second position; it, like the rest of the province, is divided into a large number of smaller administrative entities, all of which require the employment of locals. Kotawaringin Timur received an average of 720.35 billion rupiah per year from 2010 to 2019, second only to the Kapuas district, as a result of regionalization's effects on the expansion of educational and medical facilities. Katingan is the third most productive area of Java, with an annual average of 610.08 billion rupiah in revenue from 2010 to 2019. The number of government employees needed in each government administrative area, the number of teachers needed in schools, and the number of health professionals needed at each government-owned health facility are all factors in the current condition of affairs in the Katingan district. As with the rest of Katingan, the national government has contributed a sizable sum. Overall, the district only averages 544.97 billion rupiahs per year from its general allocation funds, which is significantly less than the average obtained by other districts.

General allocation funds are one of the core capital for regional governments to gather cash to satisfy regional expenditures, along with profit-sharing funds and special allocation funds. Community members will profit from regional government expenditure if and only if the government is able to allocate funds in a way that increases aggregate demand, and if the resulting revenue is more than the amount spent. The excess, together with the regional government's general allocation money, should be spent to stimulate growth in the regional economy. Increases in general allocation funds are expected to stimulate regional economies across the country and have a larger impact on national GDP. (Halim, 2013).

General allocation provides the bulk of the budget and can be redirected to meet the needs of the public. Accelerating development and economic growth are essential to decentralization's rationale. Based on the data presented here, it appears that there is a positive coefficient linking GDP expansion with general allocation funds. Hence, the second hypothesis is supported; the general allocation fund has a considerable impact on economic growth.

Similar results were found in a study by Yani Rizal (2021) published in the Ocean Economics Journal and titled Investigation of the Effects of Regional Original Income (PAD), General Allocation Funds (DAU), and Special Allocation Funds (DAK) on Economic Growth and Unemployment in the Province of Aceh. The results of this study suggest that the DAU variable has a positive and statistically significant impact on economic growth. Results similar to these can be found in "Influence of Local Own Revenue (PAD), Revenue Sharing Funds (DBH), General Allocation Funds (DAU), and Special Allocation Funds (DAK) on Economic Growth Southeast Minahasa Regency" by Lian Arke Mokorowu (2020) in the journal regional economic and financial development.

The output of the SPSS line II regression showing the indirect effect of profit-sharing on the Human Development Index through economic growth shows that the direct effect of the profit-sharing variable (X1) on HDI (Y2) is 0.505, while the indirect effect of X1 on Y2 through Y1 is the product of the value of X1 to Y1 and the beta value of Y1 to X2, which is:  $0.266 \times 0.764 = 0.1806$ .

The analysis shows that profit-sharing funds don't make a big difference to economic growth in 13 regencies and one city in Central Kalimantan. This means that they don't have a positive effect on the Human Development Index. Even though the city of Palangka Raya only gets about 47.59 billion rupiah in profit-sharing payments on average each year, it has

the highest HDI of any city or regency in the Central Kalimantan region, at 78.61 on average from 2010 to 2019. Even though the Murung Raya district in Central Kalimantan got the most revenue sharing of any regency or city, with an average of 172.09 billion rupiahs per year, its people still had a moderately high human development index of 66.02, which is a measure of how well people are doing in life. So, it can be concluded that in 13 regencies and one city in Central Kalimantan, sharing money does not indirectly improve people's well-being through economic growth.

When broken down by municipality, we can see that only four (4) regencies have made at least Rp 100 trillion in revenue-sharing funds. Not surprisingly, these are big areas in Central Kalimantan that produce a lot of natural resources. Murung Raya, Seruyan, North Barito, and Kapuas, all in Central Kalimantan, have gotten a lot of money from revenue-sharing. In 2019, Kapuas, the largest district in Central Kalimantan, even got IDR 241,976,984,119.00.

Since the direct effect of DBH on HDI is bigger than the indirect effect of DBH on HDI through economic growth, the data in this study do not support the fifth hypothesis, which says that DBH has a significant indirect effect on HDI through economic growth.

The results of this study, which show that PSFs have a big effect on HDI, contradict those of a study by Rezha Hanantoko that was published in *Economie* (2020) and called Effects of Regional Original Income (PAD), Balancing Funds, and Capital Expenditures on the Human Development Index of East Java Province, 2014–2018.

In another study, Analysis of the Influence of DAU, DAK, and DBH on IPM in the Former Kedu Residency District in 2012-2016, by Puji Lestari, the same results were found. This study was published in the *Directory Journal of Economics*. The Special Allocation Fund and Sharing Fund helped the district's IPM rates, according to this study. Some of the effects are good for the human development index.

The output of the SPSS line II regression showing the indirect effect of general allocation funds on the Human Development Index through economic growth shows that the direct effect of the general allocation fund variable (X2) on HDI (Y2) is 0.764, while the indirect effect of X2 on Y2 through Y1 is the product of the value of X2 to Y1 and the beta value of Y1 to Y2, which is:  $0.455 \times 0.679 = 0.308$ , so that the value of of

The analysis shows that in 13 regencies and one city in Central Kalimantan, general allocation funds have no effect on the Human Development Index that is both indirect and significant. From 2010 to 2019, the most general allocation money went to the districts of Kapuas, Kotawaringin Timur, and Katingan. However, their average HDI is only between 60 and 70, which puts them in the middle of the HDI distribution. Even though the average HDI in Kapuas is only 66.10, the average amount of money that can be made from the general allocation fund is 760.69 billion rupiah. Palangka Raya has the highest human development index in all of Indonesia, but the government only gave it an average of 544.97 billion rupiahs. Based on this, we can figure out that having a large general allocation fund doesn't mean that the HDI rate will go up or that the local people will be rich.

It is expected that a region's residents will have a higher standard of living if its economy grows, and that general allocation funds will play a big role in making this happen. Between 2010 and 2019, Central Kalimantan's general allocation funding went up in a rather random way. From Rp. 4,911,507,590,200.00 in 2010 to Rp. 7,926,128,654,000.00 in 2014, the trend line is clearly going up. Again, it went down in 2015, to Rp. 7,680,167,955,600., but it went back up in 2016 and hit its all-time high of IDR 8,825,269,693,000.00 in 2019.

Since the regions in the districts and cities of Central Kalimantan often get more than 200 billion a year on average from the general allocation fund, it can be said that the general allocation fund is the most important or has the most impact of the balancing funds. In 2010, Kapuas district got the most general allocation funds (Rp. 503,442,055,000.00), while Lamandau district got the least (Rp. 257,428,838,000.00). Palangka Raya, as a municipality, got a total of IDR 341,320,280,000.00 for its general allocation budget in 2010. In the last ten years, the most money from the general allocation fund went to the Kapuas district, which got a total of IDR 892,581,953,000.00. This is a huge increase over ten years, and it's almost double what it got in 2010. Central Kalimantan's general allocation funds have gone to the

Kapuas district the most over the past ten years, from 2010 to 2019. In 2019, Sukamara district got the least amount of money from the general allocation budget. It got Rp. 432,962,550,000.00, while Palangka Raya as a whole got Rp. 673,278,638,000.00. From 2010 to 2019, Kapuas District in Central Kalimantan Province got the most money from the general allocation fund. In 2019, Sukamara district got the least amount of money from the general allocation budget, which was Rp. 432,962,550,000.00. The most money, Rp. 673,278,638,000.00, went to the city of Palangka Raya. In the ten years between 2010 and 2019, the most general allocation funds went to Kapuas District in Central Kalimantan Province. In 2019, Sukamara district got the least amount of money from the general allocation budget. It got Rp. 432,962,550,000.00, while Palangka Raya as a whole got Rp. 673,278,638,000.00.

The beta coefficient of the direct effect given by general allocation funds on HDI is 0.764, which is greater than the indirect effect of general allocation funds on HDI through economic growth, which is equal to 0.308. This means that the direct effect of general allocation funds on HDI is bigger than the indirect effect, so general allocation funds do not have a statistically significant effect on HDI.

The results of this study, which show that DAU has a big impact on HDI, contradict those of a study by Rezha Hanantoko that was published in the journal *Economie* (2020) and called *Effects of Regional Original Income (PAD), Balancing Funds, and Capital Expenditures on the Human Development Index of East Java Province for 2014–2018*.

But a study by Puji Lestari in the *Directory Journal of Economics* called *Analysis of the Influence of General Allocation Funds, Special Allocation Funds, and Revenue Sharing Funds on HDI in the Ex-Kedu Residency District in 2012-2016* found that DAU had a positive and significant effect on HDI.

Using SPSS line II regression, we can see that the direct effect of the special allocation fund variable (X3) on HDI (Y2) is 0.109, while the indirect effect of X3 on Y2 through Y1 is calculated by multiplying the value of X3 to Y1 by the beta value of Y1 to Y2, which is:  $0.103 \times 0.679 = 0.0699$ .

Based on the data, it is clear that special allocation funds do not contribute much to economic growth in 13 regencies and one city in Central Kalimantan. This means that they do not have a positive effect on the Human Development Index. From 2010 to 2019, the most special allocation money went to the districts of Kapuas, East Kotawaringin, and Pulang Pisau, even though their average HDI is only in the 60s and 70s. just those who are in the middle of the pack. From 2010 to 2019, the average Human Development Index (HDI) was 66.10. It was 68.38 in Kotawaringin Timur and 65.70 in Pulang Pisau. This is just a small piece of the information that is out there. The average amount of special allocation money that can be made varies by district. For example, the Kapuas district can make an average of 155.12 billion rupiah, the East Kotawaringin district can make an average of 115 billion rupiah, and the Pulang Pisau district can make an average of about 109.43 billion rupiah. Despite having the highest HDI in the country, Palangka Raya has only gotten an average of 67.46 billion rupiah in special allocation funds. From this, we can see that a big special allocation fund doesn't necessarily mean that the HDI rate will go up or that the local people are very wealthy. The average amount spent from special allocation funds that have been realized for the Pulang Pisau district is roughly 109.43 billion rupiah. Palangka Raya's municipal government only got an average of 67.46 billion rupiah in special allocation money because it had the highest HDI. Since this is the case, we can conclude that a large special allocation fund is not a surefire way to raise the HDI rate or show that the local population is very wealthy. The special allocation money that the Pulang Pisau district gets is usually spent on about 109.43 billion rupiah worth of things each year. Palangka Raya has the highest Human Development Index (HDI) of any area in Indonesia, but it only got an average of 67.46 billion rupiah in special allocation funds. Because of this, we can conclude that a large special allocation fund is not a surefire way to improve the HDI rate or show that the locals have reached a high level of prosperity.

Special allocation funds from the federal government can be used by local governments to pay for building infrastructure and public facilities. To help finance essential

community service facilities and infrastructure that have not yet attained specific criteria or to speed regional development, special allocation funds are designed (Harahap, 2017). (Harahap, 2017). The area's economy will grow if the infrastructure is in good shape. This can be done by using special allocation funds to improve health facilities and infrastructure services, the quality of education, and the amount of damage to infrastructure.

Central Kalimantan's special allocation funds from 2010-2019 are the smallest of the three balancing funds (the others being profit-sharing and general allocation funds) (the others being profit-sharing and general allocation funds). Between 2010 and 2014, Central Kalimantan's special allocation funds made an average of less than \$1 billion per year. Only after 2014 did this number start to go up. Central Kalimantan's share of allocated money started to go over \$1 billion in 2015. This shows that the region's share of special allocation funds has been growing.

The beta coefficient of the direct effect of special allocation funds on HDI is 0.145, which is greater than the beta coefficient of the indirect effect of special allocation funds on HDI through economic growth, which is equal to 0.0466, so this situation indicates that the direct effect of special allocation funds on HDI is greater than the indirect effect, and thus special allocation funds do not have a significant effect on H.D.I.

The results of this study, which show that DAK has a big effect on HDI, are different from those of a study by Rezha Hanantoko that was published in the journal *Economie* (2020) and called Effects of Regional Original Income (PAD), Balancing Funds, and Capital Expenditures on the Human Development Index of East Java Province for 2014–2018.

Another study by Puji Lestari, called Study of the Impact of DAU, DAK, and DBH on HDI in the Former Kedu Residence District in 2012-2016 and published in the *Directory Journal of Economics*, finds the opposite. DAK has a positive and significant effect on the human development index.

## CONCLUSION

The research and discussion on balancing funds on community welfare through economic growth in Central Kalimantan have led to several conclusions. Firstly, revenue sharing funds (DBH), the general allocation fund (DAU), and the special allocation fund (DAK) have a direct and significant impact on economic growth in 13 regencies and 1 city in Central Kalimantan. Secondly, economic growth has a direct and significant effect on the Human Development Index in the same 13 regencies and 1 city in Central Kalimantan. Finally, revenue sharing funds (DBH), the general allocation fund (DAU), and the special allocation fund (DAK) do not have a direct and significant effect on the Human Development Index through economic growth in these 13 regencies and 1 city in Central Kalimantan.

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