The Effect of PAD and Balanced Funds on Human Development Index in Yapen Islands District

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Abstract

The growth of Regional Original Income (PAD) of Yapen Islands Regency in 2011 to 2015, has increased from year to year with an average growth of 32.33% per year. Meanwhile, the growth of the Yapen Islands District Balance Fund in 2011 to 2015, has increased from year to year with an average growth of 9.77% per year. The correlation coefficient value obtained is 0.946 or 94.6% and is close to positive one. The research method is qualitative. The results of the study show that the Regional Original Income, and the Balancing Fund has a significant influence on the Yapen Islands Regency Human Development Index (IPM) or the size of the Human Development Index (IPM) is strongly influenced by the size of the Regional Original Income and the Balancing Fund. The factors that also affect the Human Development Index (HDI) in Yapen Islands Regency are as follows; Aspects of Education (literacy and length of schooling), health aspects (life expectancy) and economic aspects (purchasing power parity).

I. Introduction

Highlighting regional finance in the reform era in Indonesia cannot be separated from the fiscal decentralization policy. Fiscal decentralization policy was chosen as a way to increase the effectiveness and efficiency of the public economy in order to increase public services and increase public welfare (Oates, 1972 in Martinez-Vazquez and McNab, 2003). With fiscal decentralization, it is hoped that there will be an increase in revenue through transfer funds from the central government to local governments, an increase in Regional Original Revenue (PAD) and savings in government spending so as to increase spending efficiency, which in turn increases regional economic growth. The simple assumption is that fiscal decentralization will increase economic efficiency, the use of APBD funds is more targeted and efficient because local governments are more aware of the conditions of their respective regional development needs and preferences (Utomo and Sumarsono, 2009). Fiscal decentralization originated from intergovernmental transfers, which have become the financial basis for local governments in many developed and developing countries. The general term "transfer" is often used to refer to a number of different types of public financing instruments, including grants, subsidies, and even tax revenue sharing between the central government and local governments. In the implementation of government politics in the regions, it is not possible to only prioritize one aspect (economics) but it is important to pay attention to other aspects, namely environmental sustainability so that the implementation of green government is very important in supporting environmental sustainability in the political process of government in the regions (Dama, 2021). The Government of the Republic of Indonesia was formed to protect the whole of the Indonesian people (Angelia, 2020).

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Intergovernmental transfers are used to promote a variety of objectives concerning public policy (Martinez-Vazquez and Boex, 1998). In its development, transfers from the central government to the regions contain the concept of equalization grants which are often interpreted as Balancing Funds, and are part of intergovernmental transfers. Looking at the various existing empirical data, the implementation of fiscal decentralization is not well established in its implementation. This can be seen from the allocation of the Balancing Fund which has increased every year but does not significantly improve public services. The dependence of local governments on the Balancing Fund is so great even though the fiscal decentralization policy that was rolled out on a large scale during the reformation period requires regional independence in financial management so that the acceleration of development and public services is more focused and evenly distributed in all regions in Indonesia. For example, the General Allocation Fund (DAU) is more than half of which is used to finance personnel expenditures and expenditures for government operational activities (TADF Ministry of Finance, 2012). Actually, the delegation of tasks to local governments in the principle of fiscal decentralization is also accompanied by financial delegation, this is in line with the principle of "money follows function". Without this delegation, regional autonomy becomes meaningless (Khusaini, 2006). UU no. 33 of 2004 in Article 3 paragraph 1 states that Regional Original Revenue (PAD) aims to give authority to regional governments to finance the implementation of regional autonomy in accordance with regional potential as a manifestation of decentralization. (Darmawan, 2013). With the provision of flexibility for regions in managing their finances, it is expected that there will be an increase in regional income. An increase in regional income also means an increase in regional budgets. The increase in regional spending will increase the development of infrastructure and economic facilities in the region which in turn will create various jobs for the community which will ultimately improve the welfare of the people of the area. The increase in the Regional Revenue and Expenditure Budget (ABPD) should be followed by an increase in the welfare of the community as reflected by an increase in per capita income and the Human Development Index (IPM) (Swandewi, 2012). In addition to improving public services, another main objective of fiscal decentralization is to achieve regional independence. Independence in a narrow sense is the ability of the government to finance its own development (Sudantoko, 2003), so that local governments are expected to be able to explore local financial sources, especially to meet the financing needs of government and development in their area through Regional Original Income (PAD). Thus, in fact, Regional Original Revenue (PAD) should ideally be a source of regional income. because other sources of income can fluctuate and tend to be outside the control of regional authorities (Mardiasmo, 2002). The increasing role of PAD can be seen from the indicators of the higher PAD figures since fiscal decentralization was implemented. The PAD figure is high, because the higher the financial authority owned by the region, the higher the role of PAD in the regional financial structure and vice versa. The Balancing Fund, in this case the General Allocation Fund (DAU), which is an unconditional grant, is expected to only be a balancer if there is a fiscal gap, but expecting PAD as the main source so that its role reaches 90% is something that is impossible. In the current system of any country in the world, there are almost no conditions where regional expenditures are fully financed by local revenues. In many cases, the transfer of funds from the center is an important source of regional revenue, especially DAU (Halim, 2001 in Nurman, 2009). To find out the revenue of Yapen Islands Regency in 2015, it can be seen in Figure 1 as follows.
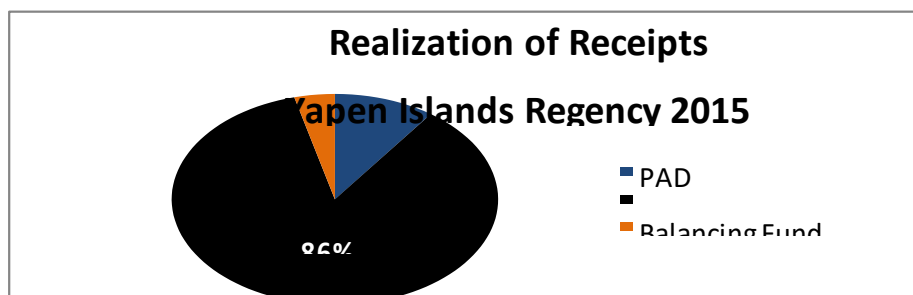
Realization of Receipts Yapen Islands Regency 2015

PAD
Balancing Fund

86%

Figure 2. *Realization of Receipts Yapen Islands Regency 2015*
Source: BPS 2016, processed

Based on the picture above, it can be seen that the realization of the Yapen Islands Regency revenue in 2015, the balancing fund contributed 86% to the total regional revenue. Regional Original Income contributes 10% to the total regional revenue. While the remaining 4% contribution to regional income is provided by other legitimate income. Regional revenue is the main factor in determining the development of a region. Both physical development (infrastructure development), as well as non-physical development (human development), which is reflected in the level of community welfare which can be seen from the human development index. However, in terms of community welfare, which is reflected through the Human Development Index (HDI) indicator for the Yapen Islands Regency, referring to the data in Figure 1. 2 from 2009 to 2015. The HDI figure for the Yapen Islands Regency is below the HDI in Jayapura City and several districts in Papua Province, and is under the National HDI. This, of course, cannot be separated from the unequal conditions of development, the results and utilization of which can be enjoyed directly by the people of the Yapen Islands Regency during this period, although there is a positive trend of increasing.
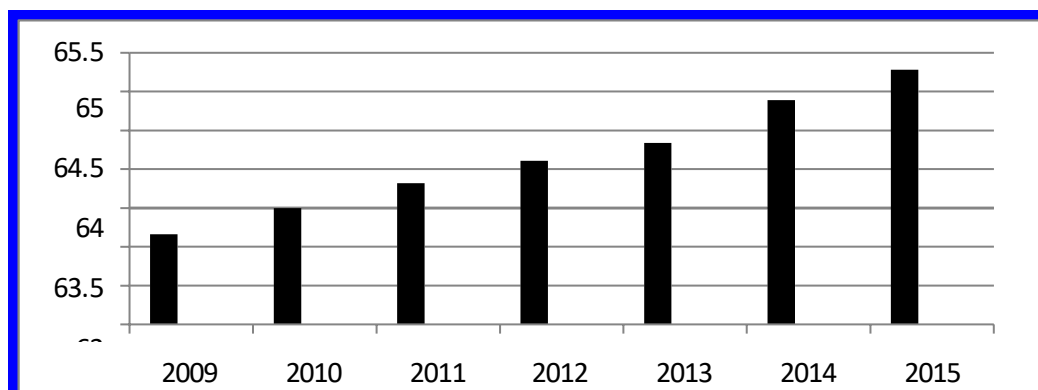

Figure 3. *Yapen Islands District Human Development Index Year 2009 - 2015*
Source: BPS 2016, processed

From figure 1.2 it can be seen that the human development index of the Yapen Islands district from 2009 to 2015 has increased from year to year.

Thus, the author's belief is to analyze the influence of Regional Original Income (PAD) and Balancing Funds on the Human Development Index (IPM). Research is also more about linking the relationship between Regional Original Income (PAD) and Balanced Funds with

community welfare through the indicators of the Human Development Index in Yapen Islands Regency from 2009 to 2015 simultaneously.Starting from this actual condition, the author is interested in researching by choosing the title: "Influence of PAD and Balanced Funds on Human Development Index in Yapen Islands District"

1.2 Formulation of the Problem

Based on the explanation of the background above, the formulation of the problem can be stated as follows:
1) How is the growth rate of Regional Original Income (PAD), and balancing funds in the Yapen Islands Regency?
2) How is the influence of Regional Original Income (PAD), and balancing funds on the human development index in the Yapen Islands Regency?
3) What factors influence the human development index of Yapen Islands Regency?

1.3 Restricting the Problem

Given the wide scope of the problem and avoiding misinterpretation, this study limits the problem, namely regarding the influence of Regional Original Income (PAD), and balancing funds on the human development index in Yapen Islands Regency.

1.4 Research Objectives and Uses
a. Research Purposes

The objectives of this research are:
1) To determine the growth rate of Regional Original Income (PAD), and balancing funds in the Yapen Islands Regency.
2) To determine the effect of Regional Original Income (PAD), and balancing funds on the human development index in the Yapen Islands Regency.
3) To find out what factors affect the human development index of the Yapen Islands Regency.

b. Research Use

a. As input for the local government of Yapen Waropen Regency and in particular the Regional Development Planning Agency (BAPPEDA) of Yapen Waropen Regency.
b. As a reference for the wider community to determine the effect of Regional Original Income (PAD), and balancing funds on the human development index in the Yapen Islands Regency.
c. As an additional reference for other researchers who want to be continued and similar in the future.

II. Research Methods

2.1 Research Sites

In accordance with the title of the writing, the location / area is the Yapen Islands Regency.

2.2 Data Source

The data used to support this writing is sourced from:
1) Primary Data, namely data obtained directly from the Office of the Regional

Development Planning Agency (BAPPEDA) of the Yapen Islands Regency.
2) Secondary Data, namely data obtained from literature review and other supporting information related to this research.

2.3 Data Collection Technique
Data collection techniques used in this study are:
1) Field research, namely data collection through field research using interviews and direct observation to the object of research, is expected to obtain a set of authentic data needed in this research.
2) Literature research, namely collecting data through library research involving a number of references relevant to this research.

2.4 Operational Definition
To cause a misunderstanding of the terms used in this operational definition, important terms related to the operational definition are put forward, namely:

Analysisare: Investigation / observation of an event or occurrence or an activity to find out the reality that happened.

Influenceare: The power or strength possessed by a variable, where changes in the variable have the potential to cause changes in other variables.

PAD (Regional Original Income) are: regional revenues obtained from sources within their own territory and collected based on regional regulations.

Balancing Fundare: Funds sourced from the State Revenue and Expenditure Budget (APBN) which can be channeled or allocated to Regional Governments in the context of implementing decentralization.

Human Development Index (HDI) are: Measurement of the composite index of the index of life expectancy, education and decent living standards.

2.5 Data Analysis Techniques
To be able to solve existing problems, the data analysis techniques used are:

a. Quantitative Analysis
In this analysis, the analytical tools used are:

1. Growth Analysis
The growth analysis model is as follows:

$$x = \frac{Xt\ Xt\ 1 \times 100\%\ Xt1}{1}$$

Where :
x : PAD Growth / Balance Fund / Human Development Index in Yapen Islands District
Xt : PAD / Balance fund / Human Development Index in year 1
Xt-1 : PAD / Balance fund / Human Development Index in the previous year.

2. Compound Linear Regression Analysis
This analysis is used to determine the model of the relationship between PAD, and balancing funds with the development index humans in the Yapen Islands Regency, with

the following model:

3. Compound Linear Regression:

$$\hat{Y} = b0 + b1X1 + b2X2 + e$$

Where :

$\hat{Y}$ = Human Development Index X1 =
X1   = PAD (Regional Original Income)
X2   = Balancing Fund
b0   = Intercep
b1, b2 = Regression Coefficient
e   = Standard Error

(Mangkuatmodjo; 2004: 197)

b. Compound Correlation Analysis
This analysis is used to determine the level of closeness of the relationship between PAD, and balancing funds with the human development index in the Yapen Islands Regency, with the following model:

1. Compound Correlation

$$r = \sqrt{\frac{n(a\sum Y + b_1 \sum X_1 Y + b_2 \sum X_2 Y - \left(\sum Y\right)^2}{n\sum Y^2 - \left(\sum Y\right)^2}}$$

(Mangkuatmodjo; 2004: 244)

Where the value of the correlation coefficient above is as follows:

- If $r = +1$ or close to $+1$, this means that PAD and balancing funds have a significant and positive influence on the human development index in the Yapen Islands Regency.

- If $r = -1$ or close to -1, this means that PAD and balancing funds have a significant effect to index of human development in the Yapen Islands Regency, but the nature of the relationship is the opposite.
- If $r = 0$ or close to 0, this means that PAD, and the balancing fund together have absolutely no effect to index of human development in the Yapen Islands Regency.

2. Qualitative Analysis
This analysis is used to analyze the factors that influence the human development index in the Yapen Islands Regency.

III. Discussion

3.1 Overview of the Yapen Islands Regency
a. Geographical Location of Yapen Kepulauan Islands Regency

Geographically, Yapen Islands Regency is located at coordinates 134o46' – 137o54' East Longitude and 01o27' – 02o58' South Latitude, with regional boundaries as follows:

- To the north is bordered : Biak Numfor District in Strait Sorenawa;

- South side bordering : Waropen Kabupaten in Strait Saireri

- Bordered on the west : Regency Manokwari in Strait Gevink Bay;

- East side bordering : Waropen District.

The total area of the Yapen Islands Regency is 2,023 Km2, and the State Forest is 785.26 Km2, consisting of twelve districts with the following details:

1. South Yapen District covers an area of 58.30 Km2, with Serui as the capital city.
2. East Yapen District covers an area of 169.00 Km2, with Dawai as the capital city.
3. West Yapen District covers an area of 243.20 Km2, with Ansus as the capital city.
4. Angkaisera District covers an area of 159.10 Km2, with Menawi as the capital city.
5. Poom District covers an area of 123.20 Km2, with the Capital City being Poom II.
6. North Yapen District covers an area of 386.40 Km2, with the capital city being Sambrawai.
7. Kosiwo District covers an area of 362.80 Km2, with Ariepi as the capital city.
8. Ampimoi Bay District covers an area of 266.00 Km2, with the capital city Warironi.
9. Raimbawi District covers an area of 179.00 Km2, with the capital city of Waindu.
10. The Ambai Archipelago District covers an area of 27.40 Km2, with the capital city Ambai
11. Wonawa District covers an area of 123.20 Km2, with the capital city of Wooi.
12. Windesi District covers an area of 222.00 Km2, with Windesi as the capital city.
13. Kurudu Island District covers an area of 21.50 Km2, with Kurudu as the capital city.
14. The district of Pulua Yerui covers an area of 90.10 Km2, with the capital city Miyosnom.

The distance between the capital of the district as well as the capital of the South Yapen district with the capitals of the other four districts is as follows:

- ❖ Menawi 6 nautical miles,
- ❖ Strings for 35 nautical miles,
- ❖ Ansus as far a32 nautical miles,
- ❖ Poom 73 nautical miles,

b. Population Situation

The total population is a parameter to calculate all the necessities of life, the amount of which is needed by the community, such as:

Housing, clothing, food and other supporting facilities. These needs are broken down based on the number of people living in the area. The number of residents in an area is closely related to the carrying capacity of the area. Equitable distribution affects economic growth, the level of community welfare, defense and security. This means that the pattern of population distribution affects the use of an area. Population growth in an area can be influenced by several factors including births, deaths, in-migration and out-migration. The population growth of Yapen Islands Regency tends to increase from year to year. To find out population growth in Yapen Islands Regency during 2011 to 2015 it can be shown in table 1 below:

Table 1. Population Growth in Yapen Islands Regency in 2011 – 2015

YEAR	AMOUNT POPULATION	PROCENTAGE
2011	77.778	
2012	79,390	2.07
2013	80,457	1.34
2014	82,951	3.09
2015	88,611	6.82

Source: Central Bureau of Statistics of Yapen Islands Regency in 2016

Statistical data shows that the population of Yapen Islands Regency has a tendency to increase every year, with an average growth rate of 3.33% per year.

The Yapen Islands Regency consists of twelve districts, so table 4.2 presents the distribution of the population and the number of households as well as the level of population density in each district, including State Forests that are not populated, but are located within the territory of this Regency.

Table 2. Population Distribution, Area and Population Density Level of Yapen Islands Regency **2015**

No	District (District)	Area (Km2)	Amount Resident (Soul)	Density (Soul/Km2)

Table 2. Population Distribution, Area and Population Density Level of Yapen Islands Regency 2015

No	District (District)	Area (Km2)	Amount Resident (Soul)	Density (Soul/Km2)
1	East Yapen	169.00	4.920	29,00
2	Pantura Yapen	386.4	2.486	6
3	Ampimoi Bay	266.0	3,649	14
4	Rambawi	179.9	1.197	7
5	Kurudu Island	21.5	1.427	66
6	Numberisera	159.1	8,596	54
7	Kep. Ambai	27.4	3.908	143
8	South Yapen	58.3	40,599	697
9	Kosiwo	362.8	4.043	11
10	West Yapen	243.2	8.378	34
11	Wonawa	123.7	3.013	24
12	Yerui Island	90.1	360	4
13	Poom	123.2	3.343	27
14	Windesi	222.0	2,710	12
	TOTAL	**2,432.5**	**88,611**	**36**

From table 2 the distribution shows that the Ambai Islands District has a relatively small area of 27.4 Km2 with a population distribution of 3,908 people from the total population of the Yapen Islands while the South Yapen District has an area of 58.3 Km2 with a population distribution of 40,599 inhabitants. of the total population of the Yapen Islands Regency. This large population has caused the population density level in South Yapen District to be relatively high, while Pantura Yapen is a district that has a relatively high population density.the largest area but the population density level is 6 km2. Based on the data above, it can be seen that the population density in the Yapen Islands area per sub-district is the densest in South Yapen District compared to other sub-districts, this is because the capital city of South Yapen, is also the center of economic and educational activities, as well as the center of government for each sub-district of the Regency. Yapen Islands.

3.2 Discussion

The discussions carried out in this study are as follows; Analysis of the Growth of Regional Original Income (PAD), and Balancing Funds in the Yapen Islands Regency, Analysis of the Effect of Regional Original Income (PAD) and Balancing Funds on the Human Development Index (IPM) of Yapen Islands Regency and Analysis of Factors Affecting the Human Development Index in the Regency Yapen Islands.

a. Analysis of Regional Original Income Growth (PAD), and Balancing Funds in Yapen Islands Regency

In the growth analysis carried out in this study are as follows; Analysis of Regional Original Income Growth (PAD) in Yapen Islands Regency and Balanced Fund Growth Analysis in Yapen Islands Regency.

b. Analysis of Regional Original Income Growth in Yapen Islands Regency

Regional Original Revenue (PAD) is one source of regional income consisting of Regional Taxes, Regional Levies, Regional Owned Company Results & Separate Regional Wealth Management and Other Legitimate PAD. In this discussion, the growth of Regional Original Income (PAD) will be explained. To find out the realization of Regional Original Income (PAD) in the Yapen Islands Regency in 2011 - 2015, it can be seen in table 4.1. In order to determine the Growth of Regional Original Income (PAD), it can be calculated using the following formula:

1. The Growth of Regional Original Income (PAD) of Yapen Islands Regency in 2015 is:

$$X = \frac{39,375,483,000}{25,873,651,000} \times 100\%$$

$$= 34.29\ \%$$

Based on the results of the calculations above, it can be seen that the growth of the Yapen Islands Regency's Original Regional Revenue (PAD) from 2011 to 2015, which is as follows:

Table 3 Growth of Regional Original Income (PAD) in Yapen Islands Regency Year 2011-2015

YEAR	PAD GROWTH		PROCENTAGE (%)
	REALIZATION (Rp)	GROWTH (Rp)	
2011	8,208,164,000	-	-
2012	12,836,363,000	4,628,199,000	36.05%
2013	19,030,863,000	6,194,500,000	32.55%
2014	25,873,651,000	6,842,788,000	26.45%
2015	39,375,483,000	13,501,832,000	34.29%

Source: BAPEDA Office of Yapen Islands Regency, data processed.

Based on the data in table 4.3 above, it can be seen that, in 2011 the realization of Regional Original Income (PAD) was Rp. 8,208,164,000, - increased to Rp. 12,836,363,000,- in 2012 or increasingof Rp. 4,628,199,000, - with a percentage increase of 36.05%. And in 2012 the realization of Regional Original Income (PAD) of Rp. 12,836,363,000,- increased to Rp. 19,030,863,000,- in 2013 or an increase of Rp. 6,194,500,000, - with a percentage increase of 32.55%. Furthermore, in 2013 the realization of Regional Original Income (PAD) was Rp. 19,030,863,000 ,- increased to Rp. 25,873,651,000,- in 2014 or an increase of Rp. 6,842,788,000, - with a percentage increase of 26.45%. And finally in 2014 the realization of Regional Original Income (PAD) of Rp. 25,873,651,000,- in 2015 or an increase of Rp. 13,501,832,000, - with a percentage increase of 34,29%.

From the explanation above, it can be seen that in 2011 to 2015 the average growth of Regional Original Income (PAD) of Yapen Islands Regency was 32.33%.

c. Analysis of the Growth of Balancing Funds in the Yapen Islands Regency

The balancing fund is one of the sources of regional income consisting of the Revenue Sharing Fund (DBH), the General Allocation Fund (DAU) and the Special Allocation Fund (DAK). Meanwhile, the components of regional income consist of the Balancing Fund, Regional Original Income (PAD) and Other Income. In this discussion, the growth of the balancing fund will be explained. To find out the realization of balancing funds in the Yapen Islands Regency in 2011 – 2015, it can be seen in table 4.2. In order to know the Growth of the Balancing Fund, it can be calculated using the formula
as follows :

$$X = \frac{XtX^{t_1}}{Xt_1} \times 100\%$$

To determine the growth of the balancing fund can be seen as follows:
1. The growth of the Yapen Islands Regency Balance Fund in 2012 is:

$$\Delta X = \frac{237,105,752,000 - 174,410,330,000}{237,105,752,000} \times 100\%$$

Table 4. Growth of Balancing Funds in Yapen Islands Regency Year 2011 – 2015

| YEAR | GROWTH OF BALANCED FUND | | PROCENTAGE (%) |
	REALIZATION (Rp)	GROWTH (Rp)	
2011	416,327,891,000	-	-
2012	456,669,769,000	40,341,878,000	8.83%
2013	486,979,895,000	30,310,126,000	6.22%
2014	592,731,399,000	105,571,504,000	17.84%
2015	631,762,087,000	39,030,688,000	6.18%

Source: BAPEDA Office of Yapen Islands Regency, data processed.

Based on the data in table 4.4 above, it can be seen that, in 2011 the realization of the balancing fund was Rp. 174.410.330.000,- increased to Rp. 237,105,752,000,- in 2012 or an increase of Rp. 62,695,422,000, - with a percentage increase of 26.44%. And in 2012 the realization of the balancing fund of Rp. 456,669,769,000, - increased to Rp. 486,979,895,000,- in 2013 or an increase of Rp. 30.310.126.000,- with a percentage increase of 6.22%. Furthermore, in 2013 the realization of the balancing fund was Rp. 486,979,895,000,- increased to Rp. 592,731,399,000,- in year 2014 or increased by Rp. 105,571,504,000, - with a percentage increase of 17.84%. And finally in 2014 the realization of the balancing fund of Rp. 592,731,399,000, - increased to Rp. 631.762.087.000,- in 2015 or an increase of Rp. 39,030,688,000, - with a percentage increase of 6.18%.

From the explanation above, it can be seen that in 2011 to 2015 the average growth of the Yapen Islands Regency balancing fund was 9.77%.

d. Analysis of the Effect of Regional Original Income (PAD), and Balancing Funds on the Human Development Index (IPM) of Yapen Islands Regency

Regional Original Income (PAD), and Balancing Funds are regional revenues that are large enough to contribute to the development of human resources. In order to find out how much influence the Regional Original Income (PAD) and Balance Funds have on the Human Development Index (IPM) of the Yapen Islands Regency, it can be explained in the following analysis.To form a Compound Linear Regression Line Equation that describes the Relationship Model between Regional Original Income (PAD), and Balancing Funds to the Human Development Index (IPM) of Yapen Islands Regency, the model of multiple linear regression line equations used is as follows:

$$\hat{Y} = a + b1X1 + b2X2 + e$$

(Mangkuatmodjo; 2004: 264)

Where :
$\hat{Y}$ = Human Development Index (IPM) X 1 =
1 = Regional Original Income (PAD)
X 2 = Balancing Fund Intercep
b1, b2 = Regression Coefficient
e = Standard Error

To facilitate the calculation, the formation of the regression line is assisted by using a computer, namely by using the Minitab 15 program.

Based on the results of data analysis using the minitab program assistance contained in Appendix 1, it can be entered in table 5 as follows:

Table 5. Model of the Relationship Between Regional Original Income (PAD), and the Balance Fund with the Human Development Index (IPM) of the Yapen Islands Regency

Variable	Coefficient
PAD constant Balancing Fund	68.5 - 0.00021 0.000322
F statistic= 17.41	F table (0.05) = 5.19

Source: Calculation Results (attachment 1).

Table 5 shows that the regression line equation formed is as follows:

$$\square = 68.5 - 0.00021\ X1 + 0.000322\ X2$$

Based on the results of calculations using the minitab program contained in table 5 it can be seen that the value of a (intercept value) of 68.5 means that if in a certain period of Regional Original Income (PAD), and Balanced Funds.

The Yapen Islands Regency did not contribute, so the Yapen Archipelago Regency's Human Development Index (IPM) for that period was estimated at 68.5.

The regression coefficient value for Regional Original Income (X1) is obtainedas big as negative 0.00021, this means that if X (Regional Original Income (PAD) increases/increases by Rp. 1.000.000,-, then the Y value or Human Development Index (IPM) will decrease by 0.00021.

The regression coefficient value for the Balancing Fund (X2) is obtained at 0.000322, this means that if X (Balancing Fund) is increased/increased by Rp. 1.000.000,- then the Y value or Human Development Index (IPM) will increase by 0.000322.

In order to measure the degree of closeness of the relationship between Regional Original Income and Balancing Funds with the Human Development Index (IPM) of Yapen Islands Regency, the value of the Compound Correlation Coefficient (r) will be used as follows:

$$r = \sqrt{\frac{n\,(a\,Y + b\,X_1\,Y + b\,X_2\,Y) - (\Sigma Y^2)}{n\,Y^2 - (\Sigma Y)^2}}$$

Based on the results of calculations using the minitab program in Appendix 1, it can be seen that the correlation coefficient is:

r = 0.946

From these results it can be seen that the value of r (Correlation Coefficient Value) obtained is 0.946 or 94.6% and is close to positive one. This means that the Regional Original Income, and the Balancing Fund have a significant influence on the Human Development Index (IPM) of the Yapen Islands Regency.

Furthermore, to measure the level of dependence (coefficient of determination) between labor, investment, government spending, and working capital credit with the economic growth of Yapen Islands Regency, then based on the calculation results in Appendix 1, it is obtainedthe result is 0.891 or 89.1% while the remaining 10.9% is influenced by other factors.

Hypothesis   Testing:
Ho: $b_1 = 0$
Ha : $b_1\,0$

Fcount = 17.41 > F table = 5.19

From these results it can be seen that the value of Fcount is greater than the value of F table with a 95% confidence level, it means that Ho is rejected and Ha is accepted. Thus, it shows that the size of the Human Development Index (HDI) is strongly influenced by the size of the Regional Original Income and the Balancing Fund.

e. Analysis of Factors Affecting Human Development Index in Yapen Islands Regency

In carrying out human development, local governments certainly do not only pay attention to one component (educational aspect) which is the benchmark in determining the Human Development Index (HDI), but there are other aspects that also affect the aspect of life expectancy and economic aspects. For this reason, in an effort to achieve prosperity as a whole, the government needs to pay attention to three aspects that are the benchmarks for the Human Development Index (IPM).

In this regard, this discussion looks at the factors that also influence the human development index in the Yapen Islands Regency, namely the education aspect, the number aspectlife expectancy and economic aspects which can be explained as follows:

f. Aspects of Education (Literacy and Years of Schooling)

Literacy or Literacy in a narrow sense is the ability to read and write. While in a broad sense literacy is the ability to identify, understand, translate, create, communicate and process the contents of a series of texts contained in printed and written materials related to various situations. It is also defined as the ability to use language and use it to understand a passage, listen to words, express them in written form, and speak. In its development this word is then interpreted as the ability to read and write at a good level to communicate with others, or to the extent that one can convey his ideas in a literate society.

Reading and writing in the Yapen Islands Regency is considered important because it involves continuous learning by a person so that that person can achieve his goals, where this is related directly how a person gains knowledge, explores his potential, and participates fully in the wider society.

The literacy rate is an important benchmark in considering the capacity of human resources in the Yapen Islands Regency. This is based on the rationale that training literate people is much cheaper than training illiterate people, and generally those who are literate have better socioeconomic status, health, and job prospects. Health is a very important element of the quality of life in national development (Najikhah, 2021). This argument also assumes that literacy also means increased job opportunities and wider access to higher education in the Yapen Islands Regency.

In order to improve the knowledge and education of the population in the Yapen Islands Regency, it is necessary to provide equitable and quality education. Education is a planned effort to create a learning atmosphere and learning process so that students actively develop their potential to have religious spiritual strength, self-control, personality, intelligence, noble character, and skills needed by themselves and society. Education includes teaching special skills, as well as something that cannot beseen but more deeply, namely the provision of knowledge, judgment and wisdom. One of the main foundations of education is to teach culture through generations.

IV. Conclusion

Life expectancy is an important indicator in measuring longevity. A person's longevity is not only a product of the effort concerned but also how much far the community in the Yapen Islands Regency with the use of available resources is trying to extend the life or lifespan of its inhabitants. In theory, a person can survive longer if he is healthy and when he is sick he should arrange to help speed up his recovery so that he can survive longer (come to a health facility / worker). Therefore, community development in Yapen Islands Regency is said to have not been successful if the utilization of community resources is not directed at health development so that it can prevent "people dying earlier than they should".

Thus, life expectancy in the Yapen Islands Regency is expected to reflect the "long life" as well as the "healthy life" of a community. This is actually "excessive", considering the numbers morbidity (illness rate) will be more valid in measuring "healthy living". However, because only a few countries have reliable morbidity data, this variable was not used for comparison purposes. In the Susenas (National Socio-Economic Survey), data on the morbidity variable has been collected every year so that it can be used for comparison purposes between provinces, districts/cities, but so far the level of accuracy has not been known so it has not been used. The procedure for calculating life expectancy from birth (AHH) in the Yapen Islands Regency is carried out using the Mortpack Life software. AfterTo get the life expectancy since birth, the index is calculated by comparing this number to the standardized figure (in this case UNDP).

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