

Fiscal Policy and Quality of Human Resources in Papua Province

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Abstract. This study aims to examine and analyze fiscal policy on the quality of human resources in Papua Province. The key to successful development is seen from the quality of human resources. This can be achieved with government support through fiscal policies that are implemented and used to optimize existing resources in the region. The method used is multiple linear regression with the help of SPSS V.26 and using secondary data. The results of this research show that partially government expenditure in the education sector and health does not have a significant effect on the quality of human resources in Papua Province. Meanwhile, the influence of regional original income on the quality of human resources in Papua is notably unfavorable, while transfer funds have a positive and substantial impact on the quality of human resources in Papua Province. Simultaneously, the allocation of government spending in the education sector and healthcare, together with regional original income and transfer funds, significantly contribute to the enhancement of human resources in Papua Province.

Keywords: Government Expenditure, Regional Original Income, Transfer Funds, Human Development Index

1. Introduction

The development of the nation in Indonesia manifests as a kind of development that is founded upon the implementation of Pancasila, wherein the comprehensive advancement of the Indonesian populace and the societal progress of Indonesia as a unified entity are integral components thereof. Indonesia's human resources (HR) are part of the methods and goals of Indonesia's national development. Humans have a very important role so it cannot be denied that the most important driving force of development is humans. According to Adam Smith, humans are the most important production factor that determines the prosperity of a nation. The thing that underlies Smith's statement is that nature (land) is meaningless if there are no human resources who are good at processing it so that it is useful for life. The process of turning humans into quality resources is a process that requires a long period of time.

Projections of the quality of human resources can be seen in the level of education, health and also government attention through the existing revenue and expenditure budget (APBD). The Human Development Index (HDI), a metric initially introduced by the United Nations Development Program (UNDP) in 1990 and consistently featured in the annual Human Development Report (HDR), serves as a means to assess the caliber of human resources. In the Indonesian context, the human development index serves as a valuable metric in gauging the efficacy of endeavors aimed at enhancing the overall well-being and livelihood of the populace. The human development index value of a region actually shows how big the region's ability is to achieve the percentage determined by the indicators of life expectancy at birth, school expectation and average length of schooling.

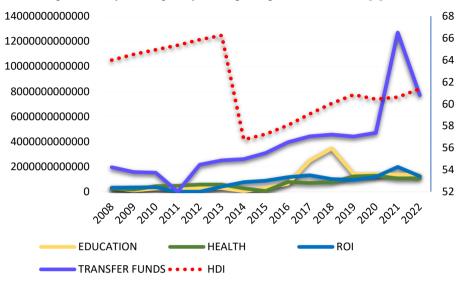
One of the sectors that is a priority for the government in terms of budget use is the education sector. Education is a form of investment in human resources. Education makes a direct contribution to national income through increasing skills and work productivity. Musgrave and Rostow in the theory of government expenditure realize the development of government expenditure with several economic development processes. The authors additionally expressed that within the realm of economic advancement, a multitude of capital endeavors are required to expedite the expansion and progress of a nation, such as the implementation of healthcare infrastructure, educational facilities, transportation systems, and road accessibility[1].

Meanwhile, Romer emphasizes the principles of endogenous theory in human capital, including knowledge, skills and training individuals. Human capital and growth have a relationship where when the economy improves they will be more inclined to invest in society by developing themselves through school. On the other hand, healthy and productive energy will lead to an advanced standard of living. The point is that this theory emphasizes the formation of human capital when the development and use of technological innovation requires skilled resources. The assumption built by Romer through this theory is that public and private sector investment in human resources can generate external economies and create increased productivity.

In connection with the demand for achieving quality human resources, the Papua Provincial government places human resource development on a priority scale. The main goal of development in Papua in general is to see that human resources throughout Papua are developed and on par with other regions in Indonesia. This should be done, of course, by looking at the supporting factors or potential that exist in Papua, such as natural resources that have not yet been explored. You can imagine if all available natural resources were managed by human resources in Papua themselves, this would certainly have a positive impact on increasing economic growth and the welfare of the community could be met, thereby reducing unemployment.

Efforts and processes to optimize human resources in Papua are carried out by the government through budget items and regional income and expenditure budget and relying on transfer funds from the central government which are intended for regional development for approximately 15 years (see figure 1). Another factor that adds to the quality of human resources is the government's expenditure in the health sector. The improvement of the quality of human capital is dependent on the importance of

health. The provision of easily accessible healthcare facilities will contribute to the increase in productivity, consequently leading to a growth in income. [2].



(Source: bpkad.papua.go.id & BPS Indonesia)

Figure 1. Data on Government Expenditures in The Education Sector, Health, ROI, Transfer Funds and HDI 2008-2022.

This comparison is actually a separate note for developments in Papua Province. The human development index has a fluctuating trend. Even though it can be said to be slowly increasing, the growth seems to be slowing down. The human development index figure in Papua has been determined to be the lowest amongst all provinces in Indonesia, falling even below the average HDI figure for the entirety of Indonesia. The low quality of human resources in Papua Province is a sign of the government's lack of role in improving community development in Papua Province by looking at three important factors, namely, education, health and the economy [3].

From Figure 1, the minimum budget that has been budgeted by the government is 41 billion rupiah and the highest budget is 3 trillion rupiah for the education budget, while for the health budget the minimum that has been budgeted is 57 billion rupiah and the maximum budget that has been released is 1 trillion rupiah. In terms of regional original income (ROI) for Papua, it is also quite large but has not been used optimally to support regional potential and development. Papua's dependence on transfer funds is also very large, this can be seen by the increasing amount of transfer funds received by Papua Province every year. This shows that there is no independence from the regions to finance sustainable development in their regions.

Based on the description above, the goal of this research is to examine and analyze the influence of government spending in education sector, health, regional original income and transfer funds on the quality of human resources in Papua Province.

2. Method

This form of investigation constitutes quantitative research, wherein the focal point is on the examination of theory through the employment of research variables and the analysis of data. The examination was executed with the aid of the Statistical Product and Service Solution (SPSS) V26 application, which facilitated multiple linear analysis tests, normality tests, classical assumption tests, as well as hypothesis tests (including the T test and F test).

The research location is in Papua Province using secondary data sources, namely time series data for the period 2008 - 2022. The data being referred to pertains to the expenditure of the government in the education sector, the expenditure of the government in the health sector, the original income of the regions, and the funds obtained through transfers by means of the Papua Province Regional Financial and Asset Management Agency website. Additionally, data on the quality of human resources, as gauged by the human development index, were procured from the Indonesian Central Statistics Agency. The data collection method used was through literature study which will then be paired with research literature that contains various data and theories collected related to the problem being studied.

This research design refers to a conceptual framework (Fig. 2) based on theoretical and empirical reviews shown in the following equation:

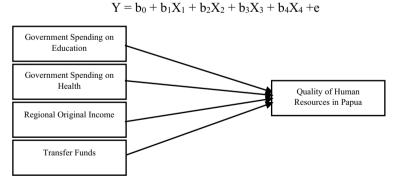


Figure 2 Conceptual Framework

Based on the conceptual framework above, the following hypothesis can be made:

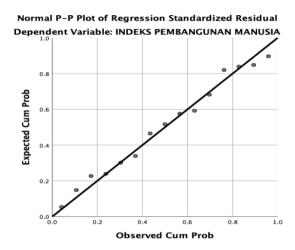
- 1. It is suspected that government spending in education sector has an effect on the quality of human resources in Papua Province
- 2. It is suspected that government spending in health sector has an effect on the quality of human resources in Papua Province

- 3. It is suspected that regional original income has an effect on the quality of human resources in Papua Province
- 4. It is suspected that transfer funds have an effect on the quality of human resources in Papua Province

3. Result

Classic Assumption Test

From Figure 3 below, it can be said that the data used is normally distributed so that the model continues to carry out research.



Source: SPPS V.26 (2023)

Figure 3 Normality Test

Table 1 explains that the data used by the research variables is valid for 15 years of data processing.

Table 1. Descriptive Statistics of Variables

	Mean	Std. Deviation	N
Quality of Human Resources	61.6953	3.22843	15

Government Expenditure (Education)	9.30E+11	9.888E+11	15
Government Expenditure (Education)	6.46E+11	3.854+11	15
Regional Original Income (ROI)	7.92E+11	5.508E+11	15
Transfer Funds	3.86E+12	3.056E+12	15

Source: SPSS V.26 (2023)

Table 2. Multiple Linier Regression Analysis

Model	Un standardized	Coeff Std.	Standar dized	t	Sig	95% Confidence Interval for B		Collinearity Statistics	
	В	Error	Coeffic			Lower	Upper	Tolerance	VIF
			ient			Bound	Bound		
			Beta						
1 (Constant)	64.214	.995		64.520	.000	61.996	66.431		
Government	2.179E-13	.000	.067	.333	.746	.000	.000	.562	1.779
Expenditure									
(Education)									
Government	2.159E-12	.000	.258	1.231	.247	.000	.000	.515	1.942
Expenditure									
(Health)									
ROI	-1.032E-11	.000	-1.761	-4.933	.001	.000	.000	.177	5.643
Transfer	1.053E-12	.000	.997	2.880	.016	.000	.000	.188	5.312
Funds									

a. Dependent varible: Quality of human resources (Source: SPSS V.26 (2023)

Based on table 2, the regression model is obtained as follows:

$$HDI = 64.214 + 2.179X1 \text{ (Sig } 0,746) + 2.159X2 \text{ (Sig } 0,247) - 1.032X3 \text{ (Sig } 0,001)$$
$$+ 1.053X4 \text{ (Sig } 0.16) + e$$

The results of data processing in this study have a constant value of 64.214. The aforementioned findings substantiate the assertion that in the absence of any impact stemming from the government's allocation of resources towards the education sector, healthcare sector, regional original income, and transfer funds, the value of the human development index is 0.64%. Government expenditure in education sector has an insignificant positive effect on the human development index. Government expenditure in health sector also has an insignificant positive effect on the human development index. Meanwhile, regional original income has a significant negative effect on the quality of human resources, and transfer funds have a significant positive effect on the quality of human resources.

Table 3. Simultaneous Test Results (F-Test)

		1			1
Model	Sum of Squares	Df	Mean Square	F	Sig.
Model	Duill of Squares	D1	Wiedli Square	1	515.

1	Regression	112.979	4	28.245	8.575	.003b
	Residual	32.940	10	3.294		
	Total	145.919	14			

Source : SPSS V.26 (2023)

a. Dependent Variable: Quality of human resources

b. Predictors: (Constant), Transfer Funds, Government Expenditure

(Education), Government Expenditure (Healt), Regional Original Income

Based on table 3 above, it can be seen that the calculated F value (8.575) has a significance of 0.003 < 0.05. Thus H0 is rejected and H1 is accepted. This means that simultaneously variables X1 (government expenditure in education sector), X2 (government expenditure in health sector),

Table 4. Determination Coefficient Test Results

Model	R	R Square	Adjusted R Square	Std.Error of the estimate
1	.880	.774	.684	1.81493

- a. Predictors: (Constant), Transfer Funds, Government Expenditure (Education), Government Expenditure (Healt), Regional Original Income
- b. Dependent Variable: Quality of human resources

Based on table 4 above, R Square shows a figure of 0.774 or 77.4% of the variation in the quality of human resources can be explained by variations in the four independent variables, namely government expenditure in education sector, government expenditure in health sector, regional original income and transfer funds. Meanwhile, the remaining 22.6% can be explained by other factors not explained in this study.

Table 5. Partial Test (T-Test)

Model	Un Coeff standardized Std. B		Coeff. Standardized Std. Coefficient Beta	t	Sig	95% Confidence Interval for B		Mollinearity Statistics	
		Error				Lower Bound	Uper Bound	Tolerance	VIF
1 (Constant)	64.214	.995		64.520	.000	61.996	66.431		
Government Expenditure (Education)	2.179E-13	.000	.067	.333	.746	.000	.000	.562	1.779
Government Expenditure (Health)	2.159E-12	.000	.258	1.231	.247	.000	.000	.515	1.942
ROI	-1.032E-11	.000	-1.761	-4.933	.001	.000	.000	.177	5.643
Transfer Funds	1.053E-12	.000	.997	2.880	.016	.000	.000	.188	5.312

Source: SPSS V.26 (2023)

4. Discussion

The Influence of Government Expenditure in Education Sector on The Quality of Human Resources In Papua Province

The impact of government spending on the education sector on the quality of human resources in Papua Province remains negligible. Consequently, the annual increment in the education budget does not yield any discernible enhancements in the quality of human resources. These results are in line with research conducted by [4] and [5] that there is no influence between government expenditure in education sector on the quality of human resources, but these results are contradictory to [6] which states that government expenditure in education sector has an influence on the quality of human resources. This could happen because the government is less objective in planning the education sector budget, besides that there is no priority plan for each program that will be implemented. Another factor that can be a trigger is the limited facilities and infrastructure, including teaching staff, resulting in suboptimal human resource development in Papua Province.

The Influence of Government Expenditure in Health Sector on The Quality of Human Resources In Papua Province

The expenditure of the government in the field of healthcare does not yield any influence on the quality of human resources in the region of Papua. Thus, any augmentation in the allocation of funds towards the healthcare sector exhibits no repercussions on the quality of human resources within the jurisdiction of Papua. These results are in accordance with research which found that government expenditure in health sector has no effect on the quality of human resources, [7] and [8]. However, different findings were put forward by [9] in his research which stated that government expenditure in health sector will have a positive and significant impact on the quality of human resources. This can happen because there is still low public awareness of healthy living standards and how to maximize existing health service centers. Apart from that, difficult geographic location can be a factor in the lack of optimization of health facilities in addition to limited health personnel.

The Influence of Regional Original Income on The Quality of Human Resources In Papua Province

Regional original income has a significant negative influence on the quality of human resources in Papua. This means that every increase resulting from regional original income will have an impact on reducing the quality of human resources in Papua Province. These results are in accordance with research conducted by [10] which states that regional original income has a negative influence on the quality of human resources. This shows that regional original income as a component in regional financial independence has not been able to be used as a factor in improving the quality of human resources in Papua Province.

The Influence of Transfer Funds on The Quality of Human Resources In Papua Province

Transfer funds have a positive and significant effect on the quality of human resources in Papua Province. This means that transfer funds are able to have a good impact on

improving the quality of human resources in Papua Province with each increase. This is in line with research conducted by [11] and [12] that transfer funds have a positive influence on improving the quality of human resources. However, this research is not in line with [13] which found that there was no influence between transfer funds on the quality of human resources. Of course, the aim of providing these transfer funds is to reduce fiscal inequality between the center and regions, but also fiscal inequality between regions and minimize inequality in terms of quantity and quality of public services in the regions. The utilization of transfer funds, as suggested by the central government, has been maximized by the Papua Provincial Government to 20% for the purpose of development with the aim of enhancing the quality of public services within the region.

5. Conclusion

This research aims to determine the influence of fiscal policy on the quality of human resources in Papua Province. From the results of the regression test it was found that:

- 1. Simultaneously through the F test, variables X1 (government expenditure in education sector), X2 (government expenditure in health sector), X3 (regional originl income), X4 (transfer funds) has postive and significant effect oh the quality of human resources in Papua Province
- 2. Government expenditure in education sector has an insignificant positive effect on the quality of human resources in Papua Province
- 3. Government expenditure in health sector has an insignificant positive effect on the quality of human resources in Papua Province
- 4. Regional original income has a significant negative effect on the quality of human resources in Papua Province
- 5. Transfer funds have a significant positive effect on the quality of human resources in Papua Province.

References

- G. E. Edame and W. M. Fonta, "The impact of government expenditure on infrastructure in Nigeria: A co-integration & error correction specification," Int. J. African Asian Stud., vol. 3, no. 2014, pp. 50–63, 2014.
- 2. P. Lanjouw, Pradhan, F. MSaadah, H. Sayed, and R. Sparrow, "Poverty, Education Health in Indonesia: Who Benefits from Public Spending?," Washington D C, 2739, 2001.
- 3. R. D. Kacaribu, "Analisis indeks pembangunan manusia dan faktor-faktor yang memengaruhi di Provinsi Papua," Dep. Ilmu Ekon. Inst. Pertan. Bogor, 2013.
- 4. T. O. M. Palenewen, E. N. Walewangko, and J. I. Sumual, "Pengaruh pengeluaran pemerintah sektor pendidikan dan sektor kesehatan terhadap IPM dan dampaknya terhadap kemiskinan di sulawesi utara," J. Berk. Ilm. Efisiensi, vol. 18, no. 4, 2018.
- D. A. Meydiasari and A. Soejoto, "Analisis pengaruh distribusi pendapatan, tingkat pengangguran, dan pengeluaran pemerintah sektor pendidikan terhadap IPM di Indonesia," JPEKA J. Pendidik. Ekon. Manaj. dan Keuang., vol. 1, no. 2, pp. 116–126, 2017.
- 6. S. Sidabutar, E. Purba, and P. D. Panjaitan, "Pengaruh Pengeluaran Pemerintah Bidang Pendidikan Dan Kemiskinan Terhadap IPM Kabupaten Simalungun," J. Ekuilnomi, vol. 2, no. 2, pp. 86–101, 2020.

- 7. J. C. Karwur, A. G. Kumenaung, and A. L. C. P. Lapian, "Pengaruh Pengeluaran Pemerintah Sektor Pendidikan dan Kesehatan Terhadap Indeks Pembangunan Manusia di Provinsi Sulawesi Utara," J. Pembang. Ekon. dan Keuang. Drh., vol. 20, no. 4, pp. 106–122, 2021.
- 8. C. Laisina, V. Masinambow, and W. Rompas, "Pengaruh Pengeluaran Pemerintah Di Sektor Pendidikan Dan Sektor Kesehatan Terhadap Pdrb Melalui Indeks Pembangunan Manusia Di Sulawesi Utara Tahun 2002-20013," J. Berk. Ilm. Efisiensi, vol. 15, no. 4, 2015.
- 9. W. Mahuze, V. Masinambow, and A. Lapian, "Pengaruh Pengeluaran Pemerintah Pada Bidang Pendidikan Dan Kesehatan Terhadap Indeks Pembangunan Manusia Di Kabupaten Boven Digoel," J. Berk. Ilm. Efisiensi, vol. 22, no. 3, 2022.
- 10. F. Fadillah, F. Erwita, F. Azzahra, L. R. Jambak, and R. Yolanda, "Pengaruh Pendapatan Asli Daerah dan PDRB terhadap Belanja Daerah dan Indeks Pembangunan Manusia di Provinsi Aceh," J. Sociohumaniora Kodepena, vol. 4, no. 1, pp. 1–12, 2023.
- 11. O. Suhyanto, B. Juanda, A. Fauzi, and E. Rustiadi, "Pengaruh Dana Transfer Dana Desa dan PAD Terhadap Indeks Pembangunan Manusia di Provinsi Jawa Barat," EKUITAS (Jurnal Ekon. dan Keuangan), vol. 4, no. 3, pp. 285–305, 2020.
- 12. S. Alam and B. H. Simanjuntak, "Effect of Fund Transfer, Revenue on Development Index as Moderation Variables," J. Bus. Soc. Technol., vol. 4, no. 1, pp. 32–42, 2023.
- 13. A. Sukri, B. Baharuddin, M. Azis, L. Y. Prakoso, A. Lionardo, and M. C. B. Umanailo, "The Effect of Regional Original Income (PAD), Balancing Funds on Economic Growth through the Human Development Index (IPM) in Central Mamuju Regency."

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