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THE ROLE OF FINANCIAL PERFORMANCE OF LOCAL GOVERNMENTS IN MODERATING THE FUNDS IN THE EDUCATION AND HEALTH SECTORS ON THE HUMAN DEVELOPMENT AND COMMUNITY WELFARE INDEX

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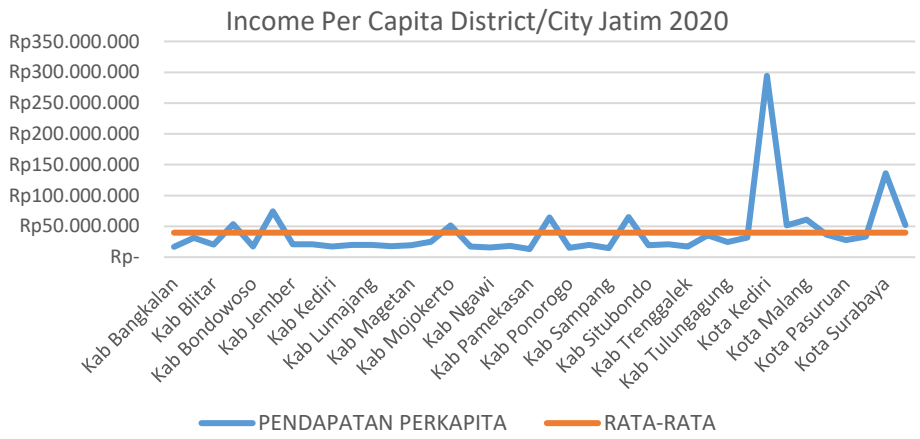
ABSTRACT

This research is motivated by the fact that there is still an inequality in the level of Human Development and Community Welfare Index in Regencies/Cities in East Java. The Human Development and Community Welfare Index (HDWI) is one of the government's objectives for managing its regions. The purpose of this study is to analyze the ability of the Financial Performance of Local Governments to become a mediator for the allocation of funds in the education and health sectors to the HDWI. This study uses a quantitative method with panel data regression analysis through the Random Effect Model approach as the result of selecting the best model. The sample used in this study includes 38 regencies/cities located in East Java. The results obtained in this study are (1) the allocation of funds in the education sector directly affects the HDWI. (2) the allocation of funds in the health sector does not directly affect the HDWI. (3) The role of local government financial performance plays a significant role in moderating the influence of education funding on the HDWI, although it has a negative coefficient. Then, local government financial performance has not been able to moderate health funding in influencing the HDWI. (4) The Financial Performance of the Regional Government has not been able to moderated the Health Fund in influencing the HDWI.

Keywords: Education Fund; Health Fund; Effectiveness; Human Development and Community Welfare Index.

INTRODUCTION

The Human Development and Community Welfare Index is a major goal that must be achieved by the government, especially at the district/city level in Indonesia. When it can be achieved, the government's performance can be assessed as good. This is under Law Number 25 of 2004 concerning the National Development Planning System which aims to improve the quality of human life physically, mentally, and spiritually. Conceptually, one of the ways that can be done to improve the Human Development Index and Community Welfare is to look at the Financial Performance of the Regional Government. Several references state that the transfer of funds from the central to the regions will be able to help and motivate local governments to carry out economic activities and improve the quality of life of the community. This means that the source of funds from the central government can support and encourage the level of quality of life and productivity of a region.



Source: BPS, 2024

Graph 1.
Income per capita

However, to achieve the Human Development and Community Welfare Index, there are still challenges and obstacles faced by district/city governments, one of which is in East Java. This is shown by the following data

Based on this phenomenon, there are 38 districts/cities in East Java, with an average per capita income of 39,710,000 rupiahs, but there is still inequality visible. Several factors cause income inequality in an area, one example is inequality that occurs due to differences in economic growth, population, and poverty. There are still 30 regencies/cities that are below the average and have a tendency to have a low level of welfare. This shows that the Regency/City has allocated transfer funds from the center to be used for economic activities in improving welfare but this has not been achieved optimally. From this phenomenon, a statement of problems emerges

that it turns out that the allocation of central transfer funds to the regions does not necessarily have a significant impact on improving welfare as explained in the figure above. Then what factors can improve the quality of life of the community?

According to several previous studies, the factors that affect the Human Development Index and Community Welfare are varied (Yogas Andi Prima; Faisol; Erna Puspita, 2023). Several studies show that transfer fees in the field of education contribute to education, science and so on which indirectly affect the quality of life (Faisol, Pudjihardjo M, 2020), (Manesanulu, 2024). This means that the higher the level of education, the more it affects the quality of life of the community so that it can create economic activities to increase their income. Higher-income will increase welfare. Another study by (Apriska et al., 2024) states that the factor that improves welfare is government spending in the health sector. By funding facilities and infrastructure for health services, it can increase the number of healthy communities. With the existence of a healthy society, it will create productive economic activities to increase regional income.

However, other studies have different results, such as my study (Nelsi et al., 2024), saying that spending in the health sector does not affect the Human Development Index. Another study (Siregar, 2023) conducted in Regencies/Cities in Aceh argues that expenditure in the education sector harms the Human Development Index. This is because the education budget of the Aceh Provincial Regency/City government is still focused on physical development, while human resources such as teachers and students are still not maximized.

RESEARCH METHODS

Based on the problems and some previous research results, this study aims to analyze the role of local government financial performance in influencing education and health funds on the human development index and community welfare. It is hoped that the results of this research will contribute to local governments, researchers, and policymakers to improve the human development index and community welfare.

From the relationship of these variables, a conceptual framework can be derived by combining elements with the following concepts:

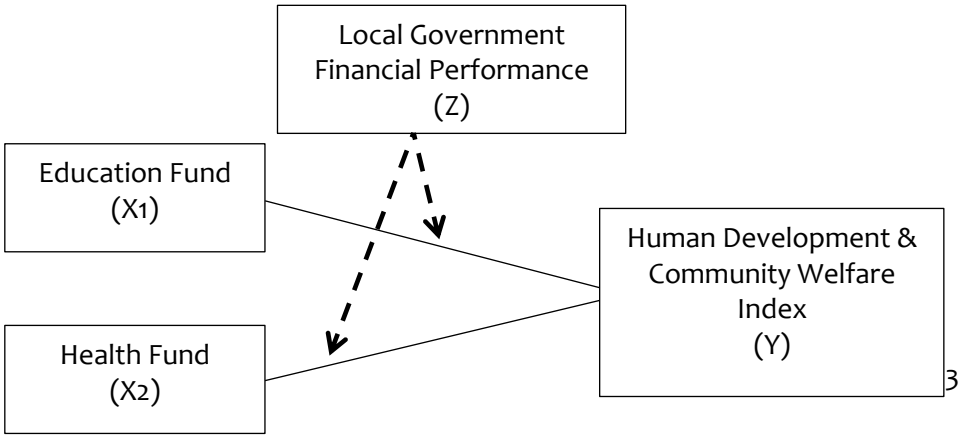


Figure 1.

Conceptual Framework

In this study, the Human Development and Community Welfare Index is a dependent variable (Y) measured by the per capita income of Regencies/Cities in East Java. The independent variables in this study are the Education Fund (X1) and the Health Fund (X2) which are measured by the ratio of Education and Health funds to the total regional expenditure in districts/cities in East Java. The moderation variable in this study is the Financial Performance of the Regional Government (Z) which is measured by the level of effectiveness of the financial performance of the district/city government in East Java.

Table 1. Operational Variables

No	Research Variables	Definition	Formula	Source
1	Community Welfare (Y)	Community welfare is the goal of the government's success in managing its region. Community welfare is presented with Per Capita Income.	$\frac{GRDP\ Constan\ Price}{Total\ Population}$	(Sihite, 2022)
2	Local Government Financial Performance (Z)	The financial performance of the regional government is a measure of the region's financial performance. This	$\frac{Income\ Realization}{Income\ Budget}$ x 100%	(Pradana & Handayani, 2023)

		variable is presented by the effectiveness ratio		
3	Education Fund (x1)	The Education Fund is a regional expenditure in the field of Education	$\frac{Total\ Education\ Spending}{Total\ Regional\ Expenditure}\ x\ 10$	(F. Faisol, 2017), (Pratama & Sumiyarti, 2024)
4	Health Fund (X2)	The Health Fund is a regional expenditure in the health sector	$\frac{Total\ Health\ Spending}{Total\ Regional\ Expenditure}\ x\ 10$	(Faisol; Pudjihardjo M; Dwi Budi Santoso, 2018)(Pratama & Sumiyarti, 2024)

The research method used in this study is quantitative. The population in this study is Regencies/Cities in East Java. Based on the https://djpk.kemenkeu.go.id website, there are 38 regencies/cities in East Java as the population of this study in the 2020-2022 period. The data used in this study is secondary data obtained through the official websites of https://djpk.kemenkeu.go.id and https://www.bpsjatim.go.id/id. The technique used in this study is panel data regression analysis using STATA-14 software. The equation of panel data regression analysis used is as follows:

$$Y_{it} = \beta_0 + \beta_1 X1_{it} + \beta_2 X2_{it} + \beta_3 X1_{it} * Z_{it} + \beta_4 X2_{it} * Z_{it} + e_{it}$$

Note:
Y_{it}: Human Development and Community Welfare Index
X_{it}: Education Fund and Health Fund
Z_{it}= Local Government Financial Performance
β - Koefisin Slope atau Koefisien Arah
e_{it}: error

RESULTS AND DISCUSSION

There are three models to understand panel data analysis, namely the Common Effect Model, the Fixed Effect Model, and the Random Effect Model (A. S. Faisol,

2020). It is necessary to conduct tests to choose the best model in this study, such as the Chow Test, Hausman Test, and Lagrange Multiplier Test.

Table 2. Chow Test Results

```
F test that all u_i=0: F(37, 72) = 1094.68                     Prob > F = 0.0000
```

Data Processed, 2024

The Chow test is a test used to determine the model between the Common Effect Model and the Fixed Effect Model. Based on Table 1 above, it shows that the value of Prob > F is 0.0000 < 0.05 which shows that the right model to use is the Fixed Effect Model.

Table 3. Hausman Test Results

```
. hausman re fe

                 ---- Coefficients ----
                 (b)          (B)            (b-B)     sqrt(diag(V_b-V_B))
                  re           fe          Difference          S.E.
-------------------------------------------------------------------------------
pendidikanln     .188679     .1934754       -.0047964        .0299926
kesehatanln     -.0853034    -.0842205       -.001083         .0240243
  mediasi_1     -1.267862    -1.257462       -.0104005        .1065288
  mediasi_2      .6390101     .6084949        .0305152        .1408538
-------------------------------------------------------------------------------
                           b = consistent under Ho and Ha; obtained from xtreg
            B = inconsistent under Ha, efficient under Ho; obtained from xtreg

    Test:  Ho:  difference in coefficients not systematic

                  chi2(4) = (b-B)'[(V_b-V_B)^(-1)](b-B)
                          =          0.53
                Prob>chi2 =        0.9709
```

Data processed, 2024

The Hausman test is a test used to determine the model between the Random Effect Model or the Fixed Effect Model. The results in Table 2 show that the Prob>chi2 value is 0.9709 > 0.05 which means that the Random Effect Model is the right model in this study.

Table 4. Lagrange Multiplier Test Results

```
. xttest0

Breusch and Pagan Lagrangian multiplier test for random effects

        kesejahteraanln[Region,t] = Xb + u[Region] + e[Region,t]

        Estimated results:
                             |       Var     sd = sqrt(Var)
                -------------+------------------------------
                  keseja~ln  |    .4593688        .6777675
                          e  |    .0009013        .0300214
                          u  |    .3186548        .5644951

        Test:   Var(u) = 0
                                  chibar2(01) =    85.35
                                Prob > chibar2 =   0.0000
```

Data processed, 2024

The Lagrange Multiplier test is a test used to determine the model between the Random Effect Model or the Common Effect Model. Based on the results of the test, it can be seen that the result has a Prob>chi2 value of 0.0000 < 0.05, so the appropriate model to be used in the regression of the panel data is the Random Effect Model. From the results of the chow test, hausman test, and lagrange multiplier test, it can be concluded that the Random Effect Model is the right model in this study. The random effect model uses the Generalized Least Squared (GLS) approach where GLS is the approach that best meets the classical assumption test (Basuki & Prawoto, 2016; Gujarati, 2012). Therefore, classical assumption testing was not carried out in this study.

Table 5. Regression Results of the Random Effect Model

```
Random-effects GLS regression                   Number of obs     =       114
Group variable: Region                          Number of groups  =        38

R-sq:                                           Obs per group:
     within  = 0.4023                                         min =         3
     between = 0.2932                                         avg =       3.0
     overall = 0.2160                                         max =         3

                                                Wald chi2(4)      =     44.88
corr(u_i, X)   = 0 (assumed)                    Prob > chi2       =    0.0000

------------------------------------------------------------------------------
kesejahte~ln |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
pendidikanln |    .188679    .087207     2.16   0.030     .0177564    .3596016
 kesehatanln |  -.0853034    .0699318   -1.22   0.223    -.2223672    .0517603
   mediasi_1 |  -1.267862    .3099307   -4.09   0.000    -1.875315   -.6604091
   mediasi_2 |   .6390101    .4118843    1.55   0.121    -.1682683    1.446288
       _cons |   10.63574    .1588231   66.97   0.000     10.32445    10.94703
-------------+----------------------------------------------------------------
     sigma_u |  .56449513
     sigma_e |  .03002139
         rho |  .99717957   (fraction of variance due to u_i)
------------------------------------------------------------------------------
```

Data processed, 2024

From the table above, it shows that the Education Fund Variable has a probability of 0.030 > 0.05 which means that this Education Fund has an influence on the Human Development and Welfare Index. The Health Fund variable has a probability of 0.223 > 0.05 which means that this Health Fund has no effect on the Human Development and Welfare Index. The variable of the Education Fund has a probability of 0.000 < 0.05 but the value of the coefficient is -1.267 which means that the Education Fund mediated by the Financial Performance of the Regional Government has a negative influence on the Human Development and Welfare Index. The Health Fund variable has a probability of 0.121 > 0.05 which means that this Health Fund has an indirect influence through the Financial Performance of the Regional Government on the Human Development and Welfare Index.

DISCUSSION

The results of the statistical test show that the Education Fund, when moderated by the Regional Government Financial Performance, has a significant but negative influence on the Human Development and Welfare Index (HDWI). Education fun represents the budget or financial resources allocated for educational purposes within a region. Regional Government Financial Performance could be an indicator of how well the local government is managing its finances, including revenue generation, budget allocation, and overall financial health, then the Human Development and Welfare Index (HDWI) typically measures the overall well-being and quality of life of the population, considering factors such as education, health, and income. A moderating variable is one that affects the strength or direction of the relationship between an independent variable (Education Fund) and a dependent variable (HDWI). In this case, the Regional Government Financial Performance is acting as a moderator. The p-value of 0.000 indicates that the moderation effect of the Regional Government Financial Performance on the relationship between the Education Fund and the HDWI is statistically significant. This means the effect is very unlikely to be due to random chance.

The coefficient of -1.267 suggests that for every unit increase in the Education Fund (when moderated by the Regional Government Financial Performance), the HDWI decreases by 1.267 units. This negative relationship implies that, contrary to expectations, higher Education Fund allocations (when considered in the context of the Regional Government's financial performance) are associated with a lower HDWI. The negative effect could suggest that the funds allocated for education are not being used efficiently or effectively, potentially due to mismanagement or corruption. If the Regional Government Financial Performance is poor, even substantial education funding might not lead to positive outcomes because of issues like miscalculation, delays in disbursement, or a focus on less impact initiatives. It's possible that the education funds are not being allocated in areas where they are

most needed or that they are being spent on initiatives that do not directly contribute to improving human development and welfare. The funds might be directed towards short-term projects that do not have a lasting impact on the HDWI, leading to a situation where increased funding does not correspond with improved outcomes.

This finding could indicate the need for a reassessment of how education funds are allocated and managed, particularly in relation to the overall financial performance of the regional government. There may be a need to improve the efficiency of fund utilization, ensuring that resources are directed towards programs and initiatives that have a proven impact on human development and welfare. This result is in line with the previous research such as

The statistical test results indicate that the Health Fund, when moderated by the Regional Government Financial Performance, does not have a significant influence on the Human Development and Community Welfare Index (HDWI). Here's a detailed explanation that Health fund refers to the budget or financial resources allocated for health-related services and infrastructure within a region. Regional Government Financial Performance measures how effectively the regional government manages its financial resources, including revenue collection, budget allocation, and expenditure management.

HDWI typically measures overall human development in terms of health, education, and income. Community welfare refers to the overall well-being and quality of life of the population. The p-value (0.121 > 0.05); The p-value of 0.121 indicates that the relationship between the Human Development and Community Welfare Index (HDWI), when moderated by the Regional Government Financial Performance, is not statistically significant. This means that the financial performance of the regional government does not significantly alter or influence the impact of health funding on Human Development and Community Welfare Index. Then, the interpretation of moderation; the statistical result suggests that the Regional Government Financial Performance is not an effective moderator in the relationship between the Health Fund and HDI and Community Welfare. In other words, regardless of whether the regional government manages its finances well or poorly, this management does not significantly influence how health funding impacts human development and welfare.

In the Theory of Government Expenditure posits that government spending, particularly in sectors like health, should stimulate economic activity and contribute positively to human development and welfare. The idea is that by investing in health services, a government can improve the overall health of its population, which in turn supports economic growth and enhances quality of life. Spending in the health sector is expected to lead to better health outcomes, which can improve labor productivity, reduce healthcare costs, and ultimately contribute to economic growth. This, in turn, should positively impact HDI and community welfare.

The results suggest that the financial performance of the regional government has not reached a level where it can effectively moderate the impact of health sector spending on human development and welfare. This might be due to several factors: a). **Inefficient Use of Funds:** Even if substantial resources are allocated to the health sector, they may not be used efficiently due to poor financial management or lack of capacity; b). **Poor Implementation:** The health programs and initiatives funded by the government may not be implemented effectively, reducing their potential impact on HDI and community welfare; c). **Insufficient Financial Oversight:** The regional government may lack the necessary oversight and accountability mechanisms to ensure that health funds are being used optimally.

The findings indicate that while health sector spending is intended to boost economic activities and improve human development and welfare, the current level of financial performance by the regional government has not been effective in enhancing this relationship. The government's financial management practices may still be lacking in effectiveness, leading to a situation where increased spending in health does not translate into the expected improvements in HDI and community welfare. This suggests a need for stronger financial management and more efficient use of resources to maximize the impact of health expenditures on overall development outcomes.

CONCLUSIONS

The results of the statistical tests reveal significant insights into the influence of education and health funding on the Human Development and Welfare Index (HDWI) when moderated by the Regional Government Financial Performance. Specifically:

The Education Fund, when moderated by the Regional Government Financial Performance, has a statistically significant but negative impact on the HDWI. Despite the intention for increased educational funding to enhance human development and welfare, the negative coefficient suggests inefficiencies or mismanagement in fund allocation and utilization. This may result from poor financial oversight, miscalculation of resources, or investments in short-term projects that do not have a lasting positive impact on HDWI.

Conversely, the Health Fund, when moderated by the Regional Government Financial Performance, does not show a statistically significant impact on the HDWI. This implies that the financial performance of the regional government is currently insufficient to effectively influence the positive outcomes expected from health sector investments. Inefficiencies in fund utilization, poor implementation of health programs, and lack of financial oversight may contribute to this lack of impact.

The implication; the first is reassessment of Fund Allocation and Management; The negative impact of education funding on HDWI, as well as the lack of significant

influence from health funding, indicates a need for a thorough reassessment of how funds are allocated and managed within these sectors. Regional governments should consider revising their budgeting and fund management strategies to ensure that resources are allocated efficiently and directed toward initiatives with proven impacts on human development and welfare.

The second is improvement in Financial Management; There is a pressing need to enhance the financial performance of regional governments to ensure that both education and health funds are used effectively. This could involve strengthening financial oversight, increasing transparency, and improving the capacity of local governments to manage and implement projects efficiently.

The third; is Focus on Long-Term Impact; Investments should be shifted toward long-term projects that can sustainably improve HDWI. Short-term, less impact initiatives should be minimized, and resources should be strategically directed to areas that will yield the greatest benefits in terms of human development and community welfare.

The fourth is enhancing Efficiency in Health and Education Sectors; the regional government must focus on improving the efficiency of fund utilization in both health and education sectors. This includes ensuring that funds are allocated to the most critical areas, improving the implementation of programs, and establishing mechanisms for continuous monitoring and evaluation to track the effectiveness of these investments.

The next is for Need for Further Research; The findings suggest that more research is needed to understand the underlying factors contributing to the inefficiencies in fund allocation and management. Future studies could explore the specific challenges faced by regional governments in managing education and health funds and propose solutions to enhance their effectiveness. These implications underscore the importance of effective financial management and strategic fund allocation in improving human development and community welfare, particularly in the education and health sectors.

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