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The Effect of Public Consumption, Grdp, Hdi, Investment, Regional Expenditure on Pad and its Implications on Education and Life Expectancy in Indonesia

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A B S T R A C T
Regional Original Income (PAD) is a crucial indicator reflecting a region's ability to manage its resources and economic potential. Various factors, such as public consumption, Gross Regional Domestic Product (GRDP), Human Development Index (HDI), investment, and regional spending, interact and influence each other in increasing PAD. This study uses a quantitative approach with panel data regression analysis to analyze secondary data from the Central Statistics Agency (BPS), the Ministry of Finance, and other relevant institutions. The independent variables studied are consumption, GRDP, the Human Development Index (HDI), investment, and regional spending, while the dependent variable is PAD in Indonesia. The implications for education and life expectancy are then examined. The analysis shows that the studied macroeconomic variables have a significant positive impact on local revenue (PAD). The implications of this finding suggest that increasing PAD can improve education levels and life expectancy in Indonesia. The finding that PAD impacts Education and AHH indicates that strong regional fiscal capacity is an important prerequisite for investment in social sectors that improve the quality of life of the community.

INTRODUCTION

Regional economic development is a complex process involving the management of local resources by local governments and communities to create new jobs and stimulate economic growth. The primary goal is to increase the number and types of employment opportunities for local communities, which in turn contributes to improved well-being. Provincial economic development in Indonesia is crucial for reducing development disparities between regions and improving overall community well-being.

Regional Original Revenue (PAD) is an important indicator of a region's financial independence and has a significant relationship with economic growth. PAD is sourced from regional taxes, regional levies, the results of the management of separated regional assets, and other legitimate regional original revenues. Increasing PAD is expected to encourage sustainable economic growth and improve public welfare. Studies show that economic growth, public consumption, the number of hotels and restaurants, and population density have a positive and significant influence on PAD. This indicates that increased economic activity and a dense population tend to increase the potential for regional revenue. A thorough evaluation of PAD management strategies, including effective financial planning, private sector collaboration, and infrastructure strengthening, is highly recommended to strengthen PAD's role in driving stable and inclusive economic growth.

Consumer consumption is the largest component of Indonesia's Gross Domestic Product (GDP) and a key driver of economic growth. Increased consumer consumption, particularly among the middle class, has a significant impact on tax revenues, particularly Value Added Tax (VAT). Indonesia's middle class continues to grow, both in urban and rural areas, and is a major contributor to VAT. Shifts in consumption patterns are also occurring, with the portion of spending on prepared or ready-to-eat food increasing, while the portion of raw food items decreasing as income levels rise. The government needs to pay attention to these dynamics, as the growth of the middle class could become a significant source of state revenue in the future. Infrastructure development, such as toll roads, is also expected to improve people's living standards and reduce regional disparities, ultimately driving consumption and economic growth.

Regional economic development requires careful planning and synergy between local governments, the private sector, and communities. Development policies must be based on regional characteristics (endogenous development) by leveraging local human, institutional, and physical resource potential. This includes the formation of new institutions, the development of alternative industries, increasing workforce capacity, identifying new markets, transferring knowledge, and developing new businesses.

Library Theory

1. Economic Development

Regional economic theory provides a comprehensive framework for understanding economic resource management at the regional level, particularly in the context of Indonesia's rich economic diversity. This theory not only explains how resources are managed but also outlines the factors influencing

economic growth and public financial management in each region. With diverse backgrounds, each region in Indonesia faces unique challenges and opportunities in managing public finances, which in turn impact the well-being of its residents.

In the context of regional economic theory, Musgrave, RA (1959) proposed three main functions of government: resource allocation, income distribution, and economic stabilization. The resource allocation function relates to how the government determines the use of limited resources to achieve efficiency and effectiveness in public services. For example, regions with high agricultural potential should allocate resources to developing the agricultural sector, while regions with industrial potential should focus on infrastructure and industrial development. This is important because proper management can encourage sustainable economic growth.

2. Government Spending

The Peacock and Wiseman theory is one of the important theories in the study of public economics that explains the growth of government spending from the perspective of social and political change. This theory was first introduced in their work entitled "The Growth of Public Expenditure in the United Kingdom" by Peacock, A.T., & Wiseman, J. (1961), based on an empirical study of government spending data in the United Kingdom during the period 1890–1955. In the Indonesian context, this theory has significant relevance, considering the ever-evolving social, political, and economic dynamics. Through this approach, we can understand how government spending in Indonesia is influenced by various external and internal factors.

Wagner's theory was developed by Adolf Wagner, a 19th-century German economist who studied the relationship between economic development and the expansion of government spending. Musgrave, RA, & Musgrave, PB (1989), Wagner stated that in a country's economic growth process, government spending will increase proportionally greater than the growth of national income. This theory is known as Wagner's Law of Increasing State Activities.

According to Wagner, this increase in spending is not incidental, but rather develops structurally and systematically in line with modernization and the increasing complexity of social life. In this regard, the state acts as a provider of public goods, guarantor of social stability, and facilitator of economic development.

3. Locally-generated revenue

Regional original income, or PAD, is revenue obtained by a region from regional sources within its own territory, collected based on regional regulations in accordance with applicable regional regulations or laws. The regional income sector plays a very important role because it can be seen through this sector to what extent a region can finance government activities and regional development (Baldric, 2017).

There are many ways to increase local revenue to reach or even equal its potential revenue, but generally speaking, there are two ways to maximize PAD: intensification and extensification. Intensification involves calculating potential revenue as accurately as possible for levies, thus approaching its potential

revenue target. Extensification involves exploring taxable sources or recruiting new taxpayers (Carunia, 2017).

4. Consumption

Mankiw (2006:11) defines consumption as spending on goods and services by households. Goods include household spending on durable goods, vehicles and equipment, and non-durable goods such as food and clothing. Services include intangible goods, including education.

5. Regional Shopping

Regional expenditure according to Law Number 23 of 2014 is all regional obligations recognized as a reduction in net assets in the relevant fiscal year period. Regional expenditure is prioritized to support government activities related to services that have been set in minimum service standards with guidelines on technical standards and regional price standards in accordance with laws and regulations.

According to Ilyas (1989), government expenditure concerns all expenditures to finance its activities, these expenditures aim to achieve the welfare of society as a whole. According to Susanti et al., (2017), government expenditure is all purchases or payments for goods and services for national interests, such as the purchase of weapons and government office equipment, the construction of roads and dams, salaries of civil servants, armed forces, and others. From the opinions above, it is concluded that government expenditure is expenditure incurred by the government to finance government consumption, activities and other expenditures in order to achieve the welfare of society as a whole.

6. Human Development Index

Humans are the true wealth of a nation. Human development places humans as the ultimate goal of development, not a tool of development. The primary goal of development is to create an environment that enables people to enjoy long, healthy lives and lead productive lives (United Nations Development Programme-UNDP). Human development is defined as the process of expanding choices for the population. One indicator for measuring success in development is the Human Development Index (HDI). In the book, Todaro and Smith (2011; 57) define the HDI as an index that measures the achievement of a country's socio-economic development by combining achievements in education, health, and adjusted real income per capita.

METHODOLOGY

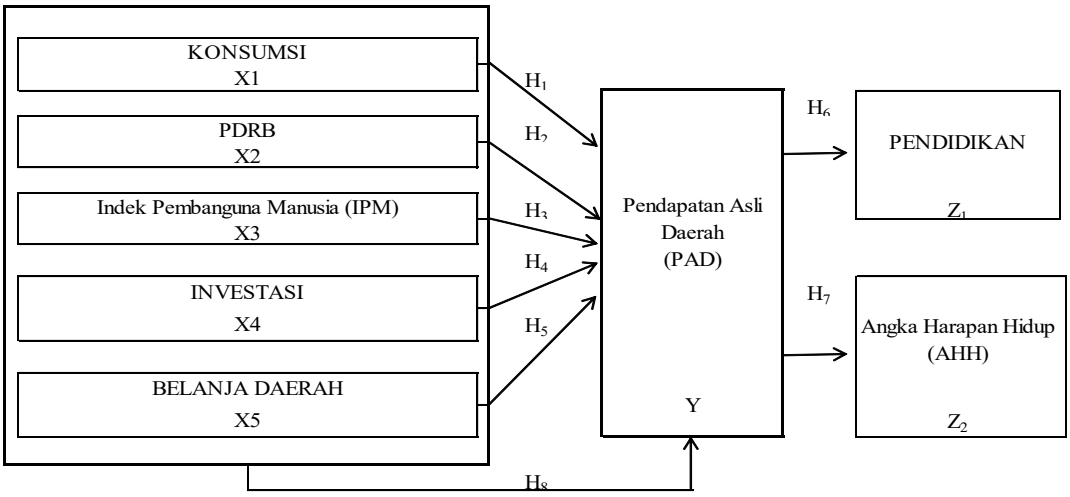
The variables of this study consist of:

1. The independent variables (X) consist of Consumption (X1), GRDP (X2), Human Development Index (X3), Investment (X4), and Regional Spending (X5).
2. The dependent variables are Regional Original Income (Y), Education (Z1), and Life Expectancy (Z2).

This study employed a quantitative approach with partial and multiple regression analysis. The data used included secondary data from the Central Statistics Agency (BPS) and time series data from 2018-2022. The cross-sectional

data covered 34 provinces in Indonesia, resulting in a total of 170 cross-sectional data.

Based on the theoretical study above, the complete scheme of the theory developed in this research is a framework for thinking about Regional Original Income, Consumption, GRDP, Human Development Index (HDI), Investment, Regional Spending, Education, and Life Expectancy in 34 Provinces in Indonesia.Figure 2.6 shows the research thinking, namely as follows:



RESEARCH RESULTS AND DISCUSSION

Based on the results of the Eviews Hypothesis Test calculations, namely as follows:

Table 4.12 Results of T-Statistic Test for Model 1

DependentVariable LNPAD	**Coefficient (Prob)**	**Hypothesis**
LNKRT (Consumption)	0.480986 (0.00000)*	Receive H2
LNPDRB (Economic growth)	0.234326 (0.00000)*	Receive H3
HDI	0.026427 (0.03130)*	Receive H4
LNINV (Investment_	0.089174 (0.00000)*	Accept H5
LNBELDA (Regional Spending)	0.236603 (0.00030)*	Receive H6

Table 4.1 T-Statistic Test Results for Model 2 and Model 3

Dependent Variable Education	Coefficient (Prob)	Hypothesis
LNPAD (Regional Original Income)	0.173466 (0.00000)*	Receive H7
Dependent Variable AHH	Coefficient (Prob)	Hypothesis
LNPAD (Regional Original Income)	0.826488 (0.00000)*	Receive H8

Source: processed results of Eviews 10

Overall, in Table 4.12, all tested independent variables (Consumption, Economic GRDP, Human Development Index, Investment, and Regional Expenditure) have a positive and statistically significant influence on the dependent variable, LNPAD. This means that an increase in any of these independent variables tends to increase LNPAD. This model appears to successfully identify key factors contributing to LNPAD, and all proposed hypotheses regarding the influence of these variables are accepted.

Overall, Table 4.15 presents empirical evidence that Locally-Owned Income (LNPAD) has a positive and significant effect on increasing education and life expectancy (AHH). The probability values close to zero for both models indicate that these results are highly reliable and did not occur by chance. Positive coefficients indicate a unidirectional relationship, where an increase in LNPAD is associated with an increase in the dependent variable. A t-statistic test is used to determine whether the estimated regression coefficients are significantly different from zero, in which case, the results are highly significant. Analysis of the Influence between Independent Variables on the Dependent Variable Model 1 Eviews Output Results

Table 4.2F-Test Results for Model 1

Dependent Variable LNPDRB	**Model 1 Estimation Results**
C	10.19043
	(0.00000)*
LNKRT (Consumption)	0.480986
	(0.00000)*
LNPDRB	0.234326
	(0.00000)*
HDI	0.026427
	(0.03130)*
LNINV (Investment)	0.089174
	(0.00000)*
LNBELDA (Regional Spending)	0.236603
	(0.00030)*
Adjusted R-squared	0.865541
F-statistic	218.5785

Dependent Variable LNPDRB	Model 1 Estimation Results
Prob(F-statistic)	0.00000
Durbin-Watson stat	2.089308

1) F Test Model 1, is used to see whether or not there is an influence of Public Consumption, PDRB, HDI, Investment and Regional Expenditure simultaneously on Regional Original Income (PAD) in thirty-four provinces in Indonesia, with a research period of 2018-2022 using a Random Effect Model that has a probability value of 0.0000, which means the probability value is smaller than alpha 5% (0.05), then reject H0, accept H1, so it can be concluded that the F test is significant for independent variables together affecting the dependent variable. This means that Public Consumption, PDRB, HDI, Investment and Regional Expenditure simultaneously have a significant effect on Economic Growth in model 1 for the period 2018-2022, this can be proven from the statistical F value of 218.5785 with a probability value <0.05 (0.0000). Economic growth has a significant impact on poverty in model 2, this can be proven from the calculated F statistic value of 72.10645 with a probability value <0.05 (0.0000).

2) F Test of Model 2 and Model 3

Table 4.3F-Test Results for Model 2 and Model 3

Dependent Variable Education	Model 2 Estimation Results
C	8.241486 (0.00000)*
LNPAD (Regional Original Income)	0.173466 (0.00010)*
Adjusted R-squared	0.676028
F-statistic	174.90594
Prob(F-statistic)	0.00000
Durbin-Watson stat	2.016091

Dependent Variable AHH	Model 3 Estimation Results

Dependent Variable Education	Model 2 Estimation Results
C	46.71686 (0.00000)*
LNPAD (Regional Original Income)	0.826488 (0.00000)*
Adjusted R-squared	0.581463
F-statistic	38.46592
Prob(F-statistic)	0.00000
Durbin-Watson stat	2.000938

Eviews 10 Data Processing Source

CONCLUSION OF MODEL 2 AND MODEL 3

Based on the F-test results and their very small probability values (0.00000) for both models, it can be concluded that both models (Model 2 and Model 3) are statistically significant. This means that Local Original Income (LNPAD) has a significant influence on Education and Life Expectancy (AHH). In addition, the Adjusted R-squared value shows that LNPAD explains most of the variation in the dependent variable in both models, with Model 2 (Education) having slightly higher explanatory power than Model 3 (AHH). The Durbin-Watson statistic for both models indicates no autocorrelation problem.

CONCLUSION

1. Based on the results of the above research, the dissertation with independent variablesConsumption, GRDP, HDI, Investment and Regional Expenditure simultaneously on Regional Original Income (PAD)in model 1 and the impact of PAD on Education in Model 2, and the impact of PAD on AHH, the researcher concluded the results as follows:
2. Based on the research results, it can be concluded that the independent variables of Consumption, GRDP, HDI, Investment, and Regional Expenditure simultaneously have a significant influence on Regional Original Income (PAD) in Model 1. Furthermore, PAD has an impact on Education in Model 2, and also has an impact on Life Expectancy (AHH). This shows the interconnection between regional macroeconomic and fiscal factors with PAD performance, which in turn affects human development indicators such as education and health.

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