

# The Effectiveness of Local Government Revenue Budgets on the Quality of Human Development: Evidence of Local Governments in South Kalimantan, Indonesia

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**Abstract:-** This study aims to investigate the effectiveness of local governments in the use of their revenue budgets to achieve human quality development goals. This effectiveness will be reflected in the role of capital expenditures as mediating the influence of local revenue and income from the central government balancing fund on the human development index (HDI). Using the SEM-PLS method, it was found evidence that local government capital expenditures were successful in mediating the effect of local revenue and special allocation funds on HDI. However, it failed to mediate the effect of the general allocation fund on HDI. It can be concluded that local governments have not been effective in using general allocation funds through capital expenditures in achieving human quality development targets in the regions. These transfer funds are more likely to be used as operational expenditures that do not support human quality development.

**Keywords:-** Local Original Revenue, Special Allocation Fund, General Allocation Fund, Capital Expenditure, Human Development Quality.

## I. INTRODUCTION

The New Public Management (NPM) has influenced the process of changing public sector organizations comprehensively in almost all the world. The emphasis of the NPM movement is on the implementation of decentralization, devolution, and modernization of public service delivery [1]. The NPM is the concept of public awareness in the form of autonomy, performance-based budgeting, productivity, efficiency, and effectiveness of public services [2], and oriented towards good governance and sustainable development ([3]; [4]; [5]; [6];[7]; and [8]).

Local Original Revenue (LOR) is an indicator of regional financial performance, Special Allocation Fund (SAF) and General Allocation Fund (GAF) which both are regional balancing funds that are distributed from the central government to the regions. The ability of a region to explore LOR depends on the ability of the region to develop

creativity and innovation, which will affect the quality of governance and services in the public sector, and the allocation together with SAF and GAF in Capital Expenditures (CE) to meet the demands of development on facilities and infrastructures [9]. If the infrastructure of an area is adequate then the investment will increase and the community can increase its productivity.

The focus of this study is to examine how LOR, SAF, and GAF affect the Capital Expenditure and Human Development Quality in a population of the Regency/Cities in South Kalimantan Province, Indonesia. The contribution of this study primarily provides a different perspective in viewing the financial performance of local governments in their role towards sustainable development goals (SDGs) in the context of human quality development in South Kalimantan.

## II. THEORETICAL FRAMEWORK AND HYPOTHESIS

### *Human Development Quality*

Human development is defined as the process of expanding one's choice in a way that allows humans to live longer, healthier, and more knowledgeable lives. Human is the wealth of the real nation. Human development places man as the ultimate goal of development, not the means of development [10]. The concept of sustainable development contains the essence of creating an environment that allows people to enjoy longevity, health, and live a productive life [11]. Therefore human development as a measure of overall development performance is shaped through a basic three-dimensional approach, namely longevity and health, knowledge, and livelihood. All indicators that represent these three dimensions are summarized in a single value, namely the Human Development Index (HDI) number [12]. [13] and [6] proves that public spending on health and education, especially women, is a very important link that determines the strength of the relationship between economic growth and human development. [14] Examine the practice of managing local government Capital Expenditures in Indonesia, finding that Capital Expenditure

is the largest share of all local government expenditures that generate productive assets. So it can be said that the allocation of Capital Expenditure is a function of effectiveness and efficiency of local government financial management performance. Research model [13] and [14] became the author's reference by re-examining the variables of Local Original Revenue, SAF, and GAF on Capital Expenditures, by developing a new model, which is to examine their implications for the quality of human development, in which case Capital Expenditures are placed as mediators.

***Local Original Revenue (LOR), Special Allocation Fund (SAF), General Allocation Fund (GAF), and Capital Expenditure (CE)***

LOR is income earned by the Area collected according to the Regional Regulation under the laws and regulations. SAF is used by local governments to fund the physical needs of basic facilities and infrastructure that are a national priority in education, health, infrastructure, and others [15]. SAF is allocated from the state budget with the aim of equity by taking into account the potential of the region, the area, the geography, the population, and the income level of the people in the region so that the income gap between regions can be minimized [16]. GAF is a fund derived from the state allocated for equitable inter-regional financing to finance expenditure needs in the context of decentralization. According to [16], [17], [18] Capital Expenditure is the expenditure of the budget to acquire fixed assets and other assets that provide benefits over one accounting period. IFAC [19] states that Capital Expenditures include land expenditures; equipment and machinery; buildings; road, irrigation, and network expenditures; other fixed assets expenditures; and other asset expenditures. Based on the theories and previous research studies, we develop some hypothesis as follow.

**Hypothesis**

**a. The relationship between LOR, CE Allocation, and HDI**

The study of [20] found that LOR influences on Capital Expenditure also influence the quality of human development as measured by HDI. The results of this study are inconsistent with the results of [21] research, which found that LOR has a positive effect on HDI through the allocation of Capital Expenditure. The allocation of the Capital Expenditure budget also proved to have a positive effect on HDI. Based on the research gap of previous research results, then need to be tested again with the formulation of the hypothesis as follows:

H<sub>1</sub>: Local Original Revenue has a direct effect on the Human Development Index.

H<sub>2</sub>: Local Original Revenue affects the Human Development Index through Capital Expenditure as a mediator.

**b. Relationship of GAF, Capital Expenditure (CE), and Human Development Index (HDI)**

[22] found that GAF affects CE, and CE affects the Human Development Index as measured by HDI. [23] show that LOR, GAF, and excess budget balance have a positive and significant effect on CE that are moderated by economic growth variables. [24] show that GAF has a negative and significant effect on CE. [21] prove the GAF has a positive effect on HDI through the allocation of CE budget. Some of these studies show inconsistent results. Based on previous studies results, the hypothesis as follows:

H<sub>3</sub>: GAF has a direct effect on the quality of human development.

H<sub>4</sub>: GAF affects the Human Development Index through Capital Expenditure as a mediator.

**c. The relationship between SAF, Allocation of Capital Expenditure, and Quality of Human Development**

[23] show that SAF does not affect Capital Expenditure. Meanwhile, research by [21] shows that SAF positively affects HDI through the allocation of Capital Expenditure. [24] proves that SAF has a positive effect on Capital Expenditure. Based on the results of previous studies, the formulation of the hypothesis as follows:

H<sub>5</sub>: SAF directly affects the quality of human development.

H<sub>6</sub>: SAF affects the Human Development Index through the allocation of Capital Expenditure as a mediator.

**III. METHOD**

The population of this study is all regency and municipal governments in South Kalimantan, Indonesia, amounting to 11 regencies and 2 cities. The entire population was studied for the 2012-2015 budget year. The data used in this study are secondary in the local government profiles and Budget Realization Report and HDI publication. This study uses Structural Equation Modeling (SEM) – Partial Least Square (PLS). As one of the multivariate analysis techniques, SEM-PLS allows for the analysis of a series of relations simultaneously making it an efficient technique [25].

**IV. MAIN RESULTS**

Based on Figure 1 is concluded that the three main indicators of quality and suitability of the model have met the criteria. The value of Average path coefficient (APC) = 0.221, P = 0.004, means significant at 0.05 and Average R-squared (ARS) = 0.295, P <0.001, indicating significant determinant coefficient at the 0.001 significance level. While the Average block VIF (AVIF) = 1.537, it means acceptable because it meets the criteria are under 5. Similarly the value of GoF (goodness of fit) 0.544, including the category large > = 0.36. this suggests that the proposed model is supported by relevant and reliable data.

Model fit and quality indices
Average path coefficient (APC)=0.221, P=0.004
Average R-squared (ARS)=0.295, P<0.001
Average adjusted R-squared (AARS)=0.254, P<0.001
Average block VIF (AVIF)=1.537, acceptable if <= 5, ideally <= 3.3
Average full collinearity VIF (AFVIF)=1.975, acceptable if <= 5, ideally <= 3.3
Tenenhaus GoF (GoF)=0.544, small >= 0.1, medium >= 0.25, large >= 0.36
Sympson's paradox ratio (SPR)=1.000, acceptable if >= 0.7, ideally = 1
R-squared contribution ratio (RSCR)=1.000, acceptable if >= 0.9, ideally = 1
Statistical suppression ratio (SSR)=1.000, acceptable if >= 0.7
Nonlinear bivariate causality direction ratio (NLBCDR)=0.714, acceptable if >= 0.7

Source: Output of model test WarpPLS 6.0

Figure 1 Model Goodness Fit Indices and P-Value

The structural equation model designed according to the conceptual framework development and hypothesis test of this research can be seen in the following diagram.

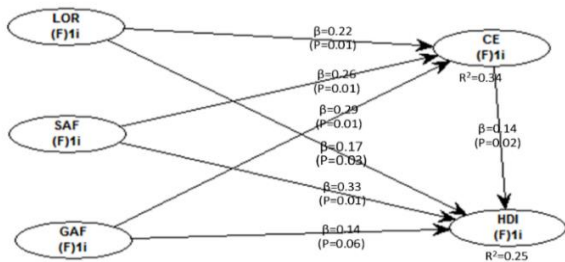


Figure 3 SEM-PLS of Direct and Indirect Effect

Based on the previous model test (Figure 3) can be calculated VAF test. If the VAF score is above 80 percent, then it indicates a full mediation role, if between 20-80 percent, then it can be categorized as partial mediation. But if less than 20 percent, indicating almost no role of mediation [25]. Based on this assumption can be calculated VAF as follows.

Table 1 VAF Value Calculated

Indirect Effect	Calculation	Total	Category
LOR→CE→HDI	Indirect Effect = 0,22X0,14 LOR→CE: 0,22 CE → HDI; 0,14 Direct Effect:0,17	0,03     0,17 (+)	
	Total Effect	<b>0,20 = 20 %</b>	Partial Mediating
SAF→CE→HDI	Indirect Effect = 0,26X0,14 SAF→HDI: 0,26 CE → HDI; 0,14 Direct Effect:0,33	0,04     0,33 (+)	
	Total Effect	<b>0,37 = 37 %</b>	Partial Mediating

GAF→CE→HDI	Indirect Effect = 0,29X0,14 GAF→CE: 0,29 CE → HDI; 0,14 Direct Effect:0,14	0,04   0,14 (+)	
	Total Effect	<b>0,18 = 18 %</b>	Almost no role of mediation.

Source: Data Proceed

Based on the analysis with the VAF method above, it was found that capital expenditure can act as partial mediation between LOR and HDI, SAF, GAF, and HDI influence, while mediation between SAF to HDI is stated almost no role of mediation [26].

V. CONCLUSION

Based on the results of the SEM-PLS model test, it was found that Capital Expenditure significantly had a role as partials mediation between LOR and HDI, SAF and HDI, but not significantly mediated between GAF and HDI. This shows that GAF (general allocation fund) is mostly allocated for government financing or expenditure, excluding Capital Expenditures. Another indication is that infrastructure development for education, health, and the environment is mainly sourced from LOR (local original revenues) and SAF (special allocation fund).

Government spending other than Capital Expenditures are operational expenditures and other expenditures. The high allocation of operational expenditures and other expenditures is an indication of the ineffectively of the government in spending local finance.

The result can be one of the points of view in assessing the financial performance of local government. In this regard, it is recommended to pay more attention to the absorption of the GAF budget to the allocation of Capital Expenditures, especially spending for education, health, environmental services, and empowerment programs that encourage local productivity, to ensure the achievement of sustainable development goals (SDG's). The results of this study are expected to provide a reference for further research, by extending the scope of research or adding other variables that have not been tested, other regions or countries.

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