

## THE EFFECT OF LOCAL TAXES ON CAPITAL EXPENDITURE ALLOCATION WITH POPULATION SIZE AS A MODERATING VARIABLE IN SAMARINDA CITY

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### Abstract

This study aims to determine the effect of local tax revenue on capital expenditure allocation with population size as a moderating variable in Samarinda City. This research is a descriptive quantitative study using secondary data in the form of time series data from 2011 to 2024. The data used includes local tax revenue, capital expenditure realization, and population data of Samarinda City. The analytical methods employed are descriptive statistical analysis, simple linear regression analysis, and moderated regression analysis (MRA). The results show that local taxes have a positive and significant effect on capital expenditure. Furthermore, population size is able to moderate the relationship between local taxes and capital expenditure. These findings indicate that increased local tax revenue increases the regional government's fiscal capacity to allocate capital expenditure, while population growth strengthens the need for infrastructure and public service financing.

**Keywords:** *Local Taxes, Capital Expenditure, Population Size*

### 1. INTRODUCTION

Indonesia implements a regional autonomy system that gives each region the authority to regulate and manage its own region. Law Number 23 of 2014 concerning Regional Government and Law Number 33 of 2004 concerning Fiscal Balance between the Central and Regional Governments serve as the basis for the implementation of regional autonomy and fiscal decentralization [1]. With regional autonomy, regional governments have greater authority to explore and utilize regional resources, including in capital expenditure budgeting. Capital expenditure is a long-term expenditure to improve public services and stimulate regional economic growth [2]. One of the main components of capital expenditure is spending on infrastructure such as the construction of buildings, roads, bridges, and other public facilities. To support this capital expenditure, local governments need a stable source of revenue, one of which is regional taxes. Regional taxes are mandatory levies imposed by local governments on individuals or businesses to support the implementation of government duties at the regional level [3]. Based on Government Regulation Number 55 of 2016, regional taxes are divided into provincial regional taxes and district/city regional taxes. The broader a region's tax base, the greater the revenue generated, thus providing greater fiscal space for regional governments to allocate capital expenditures. The Samarinda City Regional Government faces challenges in the form of reduced transfer funds from the central government, which has resulted in a narrowing of fiscal space. According to data from the Samarinda City Regional Finance and Asset Management Agency, regional tax revenues from 2011 to 2024 showed a significant increase, from Rp109.43 billion to Rp683.04 billion. However, this increase was not always accompanied by consistent capital expenditures, as capital expenditure realization experienced sharp fluctuations. This situation indicates that the relationship between regional taxes and capital expenditure allocations is not always linear.

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Furthermore, population size also plays a significant role in regional financial dynamics. Statistics Indonesia (BPS) data for Samarinda City shows a population increase from 755,630 (2011) to 858,079 (2024). This increase in population has the potential to drive increased economic activity and public demand for public services [4]. Previous research has shown inconsistent results. Muhammad Yusuf & Ajeng Kartika Galuh (2023) found that regional taxes had a negative effect on capital expenditure, while Affandi (2023) found a positive effect. Based on this phenomenon, this study aims to: (1) determine the effect of regional taxes on capital expenditure allocation in Samarinda City, and (2) determine whether population size moderates the relationship between regional taxes and capital expenditure allocation.

## 2. RESEARCH METHOD

This study uses a quantitative method with a descriptive approach. The data used is secondary data in the form of time series data from 2011 to 2024. Data sources were obtained from the Regional Revenue Agency, the Regional Financial and Asset Management Agency, and the Central Statistics Agency of Samarinda City. The population in this study is financial reports and relevant demographic data, with samples consisting of data on realized regional tax revenues, realized capital expenditures, and the population of Samarinda City for the period 2011-2024 (14 years of observation). Data collection techniques were carried out through documentation and literature studies.

Data analysis was performed using IBM SPSS version 22, including:

1. **Descriptive statistics** to provide an overview of the data.
2. **Classical assumption tests** (normality with Kolmogorov-Smirnov and heteroscedasticity with Glejser Test).
3. **Simple linear regression** to test the effect of regional taxes on capital expenditure, with the equation:

$$Y = \beta + \beta_1 X + e$$

where Y = capital expenditure allocation, X = regional tax.

4. **Moderated Regression Analysis (MRA)** to test the moderating role of population size, with the equation:

$$Y = \beta + \beta_1 X + \beta_2 Z + \beta_3 (XZ) + e$$

where Z = population.

## 3. RESULTS AND DISCUSSION

### 3.1. Research Results

**Descriptive Statistics:** The results of the descriptive statistical test show that the regional tax variable has a minimum value of 18.51, a maximum of 20.34, a mean of 19.5186, and a standard deviation of 0.49646. This indicates that regional tax data tends to be stable throughout the study period. **Classical Assumption Test:** The normality test with Kolmogorov-Smirnov shows an Asymp. Sig. (2-tailed) value of 0.200 ( $>0.05$ ), so the data is normally distributed. The heteroscedasticity test with Glejser Test shows a significance value of 0.661 for the regional tax variable and 0.468 for the population ( $>0.05$ ), so the regression model is free from heteroscedasticity. **Simple Linear Regression Test:** The correlation coefficient (R) test result is 0.727, indicating a strong and positive relationship between regional taxes and capital expenditure. The hypothesis test (t-test) produces a calculated t-value of 3.668 with a significance level of 0.003 ( $<0.05$ ). The regression coefficient is 0.765 with a positive direction. Thus, H1 is accepted, namely regional taxes have a significant positive effect on capital expenditure allocation. **Moderated Regression Analysis (MRA) Test:** The results of the MRA test show that the interaction variable of regional taxes and population has a t-value of 3.464 with a significance level of 0.005 ( $<0.05$ ). The regression coefficient is 0.000. Thus, H2 is accepted, namely that population is able to moderate the relationship between regional taxes and capital expenditure allocation.

### 3.2. Discussion

**Regional Taxes on Capital Expenditures:** The results of this study indicate that increased regional tax revenues directly impact the fiscal capacity of local governments to allocate capital expenditures. This finding aligns with agency theory, where local governments, as agents, manage financial resources for the benefit of the community as principals. This study is consistent with the findings of Widiani *et al.* (2022) and Affandi (2023), but differs from the findings of Muhammad Yusuf & Ajeng Kartika Galuh (2023), who found a negative impact. **The Moderating Role of Population:** Population growth has been shown to strengthen the relationship between regional taxes and capital expenditures. A larger population increases the public's demand for infrastructure and public services. As local governments act as agents, they are required to respond to these needs by allocating greater capital expenditures. Samarinda City, the administrative center of East Kalimantan Province, has experienced consistent population growth, making regional taxes a primary instrument for financing regional development.

#### **4. CONCLUSION**

Based on the research results and data analysis, it can be concluded that regional taxes have a positive and significant impact on the allocation of regional government capital expenditures in Samarinda City. Increased regional tax revenues directly impact the government's ability to finance capital expenditures, including infrastructure development, the provision of public facilities, and public services needed by the community. Furthermore, population size moderates the relationship between regional taxes and capital expenditure allocation. Population growth in Samarinda City strengthens the relationship between regional taxes and capital expenditure allocation. Higher population growth increases the need for development and public services, making the role of regional taxes as a source of funding increasingly important. The recommendation for the Samarinda City government is to optimize potential regional tax revenue as a source of sustainable capital expenditure financing and to align the capital expenditure budget with population growth. Academics and future researchers are advised to add other moderating variables, such as central government transfer funds or land area, to obtain a more comprehensive picture.

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