

Analysis Of The Determinants Of Economic Growth In Madura Island

Nadya Aura Wulan Savitri ¹, Mohammad Wahed ²

¹ UPN Veteran Jawa Timur, nadyaaura1611@gmail.com

² UPN Veteran Jawa Timur, muhammadwahed124@gmail.com

ABSTRACT

Regional economic growth is a fundamental indicator in assessing development performance and community welfare. Madura Island, as part of East Java Province, continues to record a relatively lower level of economic growth compared to other regions. This study aimed to analyze the effects of Local Own-Source Revenue, Intergovernmental Transfers, Capital Expenditure, and Household Consumption on economic growth in Madura Island. This study uses a quantitative method based on secondary data obtained for the period 2020–2024 across four regencies in Madura Island, namely Bangkalan, Sampang, Pamekasan, and Sumenep. Panel data regression is used as the analytical method. The results show that, partially, Local Own-Source Revenue was found to have no significant influence on economic growth in Madura, while Intergovernmental Transfers, Capital Expenditure, and Household Consumption have positive and significant effects. These findings indicate that economic growth in Madura Island remains dependent on central government transfers, the effectiveness of development expenditure, and household purchasing power, while the role of local revenue has not yet been optimal.

Keywords: *Intergovernmental Transfers; Capital Expenditure; Household Consumption; Madura Island; Local Own-Source Revenue*

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INTRODUCTION

Economic growth is a fundamental indicator for assessing development performance and the level of community welfare in a region. An increase in economic growth reflects the expansion of goods and services production activities, which ultimately leads to higher income levels in the population. In the context of regional development, economic growth serves as a primary benchmark for evaluating economic performance and the effectiveness of policies implemented by local governments. Therefore, each region must optimize its available resources and potential to achieve sustainable economic growth.

Madura Island, as part of the East Java Province, holds a strategic position because of its proximity to Surabaya the regional economic center. In addition, the existence of infrastructure such as the Suramadu Bridge is expected to enhance

¹Corresponding Author Name: Nadya Aura Wulan Savitri; Email: nadyaaura1611@gmail.com

connectivity and accelerate economic growth in the region. However, empirically, the level of economic growth on Madura Island remains relatively low and tends to fluctuate compared to other regions in East Java. This indicates that the existing economic potential has not been fully utilized to effectively support regional economic activities.

The economic structure of Madura Island, which is still dominated by primary sectors such as agriculture and fisheries, is one of the factors contributing to its relatively low economic growth. Dependence on these sectors makes the regional economy vulnerable to external factors such as weather conditions, commodity price fluctuations and market dynamics. However, limitations in infrastructure, low investment levels, and unequal regional development also pose significant challenges to achieving higher and more evenly distributed sustained economic development.

Within the framework of fiscal decentralization, local governments are granted the authority to manage regional financial resources through local own-source revenue (PAD), intergovernmental transfers, and regional expenditures, particularly capital expenditure. Local own-source revenue reflects the level of regional financial independence, while intergovernmental transfers represent financial support from the central government to reduce fiscal disparities among regions. However, in reality, most regions on Madura Island still heavily depend on intergovernmental transfers, indicating a low level of fiscal independence.

In addition to fiscal factors, household consumption is crucial in driving economic growth. In macroeconomic theory, household consumption is a major component of aggregate demand and contributes significantly to the gross regional domestic product (GRDP). Higher consumption levels reflect stronger purchasing power, which in turn stimulates economic activity and promotes overall economic growth. Therefore, alongside fiscal policy factors, household consumption must be considered when analyzing regional economic growth.

Based on these issues, this study aims to analyze the effects of local own-source revenue (PAD), intergovernmental transfers, capital expenditure, and household consumption on economic growth in Madura Island. This research is expected to provide insights into the key determinants of regional economic growth and serve as a reference for policymakers in formulating more effective strategies to promote sustainable and inclusive economic development, particularly on Madura Island.

Literature review:

Economic growth is generally defined as the increase in real output or income over time and is commonly measured using the gross domestic product (GDP) or gross regional domestic product (GRDP). According to Sukirno (2012), economic growth reflects the continuous development of economic activities that leads to an increase in real national income. In regional analyses, economic growth serves as a key indicator for evaluating economic performance and development outcomes. Various factors influence economic growth, including fiscal policies, investments, technological progress, and consumption patterns.

From a theoretical perspective, Keynesian theory emphasizes the role of aggregate demand as the main driver of economic growth. Aggregate demand comprises consumption, investment, and government expenditure. Among these components, household consumption plays a dominant role, particularly in developing regions, as

it directly affects economic activity levels. An increase in household income tends to increase consumption, which in turn stimulates production and economic growth. This relationship highlights the importance of purchasing power in supporting the regional economy.

Fiscal decentralization theory explains that the delegation of financial authority from central to local governments is expected to improve public service delivery efficiency and promote regional economic growth. Local governments are given the authority to manage their own revenues and expenditures through mechanisms such as local own-source revenue (PAD), intergovernmental transfers, and regional spending. PAD reflects the financial independence of a region, as it is generated from local sources such as taxes, retributions, and other legitimate revenues. A higher PAD indicates a greater capacity for a region to independently finance its development.

Intergovernmental Transfers, on the other hand, are funds allocated from the central government to local governments to reduce fiscal disparities and support regional development. These transfers include general allocation, special allocation, and revenue-sharing funds. While such transfers are essential for supporting less-developed regions, excessive dependence on them may indicate weak fiscal capacity and reduce incentives for local governments to optimize their revenue sources.

Capital expenditure is another important factor that influences economic growth. It refers to government spending on long-term assets such as infrastructure, buildings, and equipment that provide benefits over multiple periods. According to public finance theory, increased capital expenditure can enhance productivity, improve public services, and stimulate economic activity. Well-targeted capital expenditure is expected to create a multiplier effect that contributes positively to regional economic growth.

Previous empirical studies have shown mixed results regarding the relationships between these variables and economic growth. Several studies find that Local Own-Source Revenue and Intergovernmental Transfers have a positive and significant impact on economic growth, while others indicate that the effect of PAD may be insignificant due to its relatively small contribution in certain regions. Similarly, capital expenditure is often found to have a positive impact, although its effectiveness depends on spending quality and governance. Household consumption consistently shows a positive and significant relationship with economic growth, as it directly drives the aggregate demand.

Based on theory and previous studies, it can be understood that Local Own-Source Revenue, Intergovernmental Transfers, Capital Expenditure, and Household Consumption play an important role in supporting regional economic growth. However, the influence of these factors can differ depending on the characteristics of each region, the financial capacity of local governments, and the effectiveness of policy implementation. Therefore, further analysis is needed to examine how these variables affect economic growth, especially in regions such as Madura Island, which has unique economic conditions and developmental challenges.

METHOD

This study employs a quantitative research approach to examine the determinants of economic growth on Madura Island. This study focuses on four regencies,

Bangkalan, Sampang, Pamekasan, and Sumenep, which collectively represent the region's economic structure. The analysis is based on secondary data obtained from official reports, statistical publications and related government institutions. Official sources such as the Central Bureau of Statistics (BPS) and regional financial reports. The data cover a five-year period from 2020 to 2024, allowing for a comprehensive assessment of the region's recent economic dynamics.

The variables used in this study consisted of one dependent variable and four independent variables. The dependent variable is economic growth, which is measured using the Gross Regional Domestic Product (GRDP). The independent variables include Local Own-Source Revenue (PAD), Intergovernmental Transfers, Capital Expenditure, and Household Consumption. These variables are established through theoretical considerations and empirical findings from previous studies, which suggest that fiscal capacity and aggregate demand significantly influence regional economic performance.

This study applied panel data regression analysis to analyze the relationship between the variables. Panel data combines cross-sectional (across regencies) and time-series (over several years) data, enabling a more robust and efficient estimation than using either data type alone. The use of panel data allows the model to capture both individual heterogeneity across regions and temporal dynamics during the study period. Model selection is conducted through standard tests, including the Fixed Effect Model (FEM), Common Effect Model (CEM) and Random Effect Model (REM), to examine the most effective estimation approach.

Furthermore, classical assumption tests were conducted to ensure the validity and reliability of the regression model. These tests included normality, multicollinearity, heteroscedasticity, and autocorrelation tests. Hypothesis testing is performed using the t-test to examine the partial effect of each independent variable on economic growth and the F-test to assess the joint significance of all independent variables. The coefficient of determination (R^2) is also used to measure the model's explanatory power in explaining variations in economic growth.

Through this methodological framework, this study aims to provide empirical evidence of the influence of fiscal and consumption-related factors on regional sustained economic development, particularly in the context of Madura Island. This approach ensures that the analysis is systematic, statistically valid, and aligned with established research practices in the field of regional economics.

RESULTS AND DISCUSSION

This study uses a quantitative research approach to examine the determinants of economic growth on Madura Island. This study focuses on four regencies, Bangkalan, Sampang, Pamekasan, and Sumenep, which collectively represent the Region's economic structure. The analysis is based on secondary data obtained from official reports, statistical publications and related government institutions. Official sources such as the Central Bureau of Statistics (BPS) and regional financial reports. The data cover a five-year period from 2020 to 2024, allowing for a comprehensive assessment of the region's recent economic dynamics.

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CONCLUSION

Based on the results of the analysis, this study concludes that local own-source revenue (pad) has no significant influence on economic growth in Madura Island, indicating that the region's fiscal independence is still relatively low. In contrast, intergovernmental transfers, capital expenditure, and household consumption have positive and significant effects on economic growth. These findings suggest that economic growth on Madura Island is largely driven by external funding and demand-side factors, particularly government transfers, public investment, and household purchasing power. Therefore, the current structure of regional sustained economic development still reflects a strong dependence on central government support rather than on internally generated revenue.

In terms of proposals, it is necessary for local governments on Madura Island to strengthen their capacity to generate local own-source revenue by optimizing local tax collection, improving administrative efficiency, and developing region-specific economic potentials. Additionally, the allocation of capital expenditure should be more targeted toward productive sectors, particularly infrastructure which can directly support economic activities and improve regional competitiveness. Enhancing

the effectiveness and transparency of public spending is essential to maximize its impact on economic growth.

Furthermore, policies aimed at increasing household income and purchasing power should be prioritized because household consumption plays a significant role in driving economic activity. This can be achieved through job creation, support for micro, small, and medium enterprises (msmes), and improved access to education and skills development. Simultaneous, efforts should be made to gradually reduce dependence on intergovernmental transfers by strengthening local fiscal capacity and promoting sustainable economic development.

This study has several limitations, including the limited observation period and focus on a specific regional scope, which may affect the generalizability of the findings. Therefore, future research should include a longer time period, additional variables such as investment and human capital, and broader regional coverage to provide a more comprehensive understanding of the determinants of economic growth.

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²Corresponding Author Name: Nadya Aura Wulan Savitri; Email: nadyaaura1611@gmail.com