

ABSTRACT

This study aims to analyze the influence of population size, regional minimum wage, economic growth rate, and investment on the open unemployment rate in Central Java Province during the period of 2013–2024. The open unemployment rate is a critical indicator in assessing the success of regional economic development as it reflects the extent to which the working-age population is absorbed into productive activities. This research employs a quantitative approach using panel data regression analysis. Secondary data were obtained from the Central Statistics Agency (BPS) and processed using the EViews 13 software.

The Chow and Hausman tests indicate that the most appropriate estimation model is the Fixed Effect Model (FEM). The regression results reveal that population size has a positive and significant effect on the open unemployment rate, while regional minimum wage and economic growth rate have negative and significant effects. Conversely, the investment variable does not have a significant effect on the open unemployment rate. Simultaneously, the four independent variables significantly influence the open unemployment rate in Central Java. The adjusted R² value of 0.5609 indicates that the model explains approximately 56.09% of the variation in the open unemployment rate.

These findings imply that policies to reduce unemployment in Central Java must be comprehensive—not only through job creation but also by controlling population growth, adjusting fair minimum wages, promoting inclusive economic growth, and enhancing the quality of labor-oriented investments. This research is expected to provide valuable input for local governments in formulating effective and sustainable employment development policies.

Keywords: Open Unemployment, Population Size, Regional Minimum Wage, Economic Growth, Investment, Panel Data Regression