

ABSTRACT

This study aims to analyze the factors that are thought on the poverty rate in 23 regency/cities in Aceh Province in 2010-2023. The data used in this study is secondary data in the range of 2010-2023 originating from the Central Bureau of Statistics consisting of dependent variables (Y), namely the poverty rate and independent variables (X), namely factors that influence the poverty rate.

This research uses the Geographically Weighted Panel Regression (GWPR) model. The GWPR model is a combination of Geographically Weighted Regression (GWR) with panel data regression assuming a Fixed Effect Model (FEM). Parameter estimation of GWPR model is done using Weighted Least Square method with adaptive bisquare kernel function.

The results showed that with the Geographically Weighted Panel Regression (GWPR) approach, the model for each location and the factors that influence the percentage of poor people in Aceh Province are different for each location due to spatial heterogeneity in the relationship between the independent variable and the dependent variable. The variables of Open Unemployment Rate and Population Growth Rate have a positive and significant influence on poverty in several regions of Aceh Province. The variables Average Years of Schooling and Life Expectancy have a negative and significant effect on poverty rates in several regions of Aceh Province. The Gross Regional Domestic Product variable has no effect on the poverty rate in each region. The results of this study indicate that policy making related to poverty alleviation efforts must be adjusted to the characteristics of each region so that the program runs more effectively.

Keywords: Poverty, GWPR, Spatial Heterogeneity, Adaptive Bisquare