

ABSTRACT

This study aims to analyze the effect of human capital on economic growth in Central Java Province. This study applies an augmented Solow growth model, which posits that incorporating human capital can increase per capita income. Thus, the sources of economic growth include physical capital, population growth, and human capital.

This study employs a panel regression approach with the estimation of the Random Effect Model (REM), using data at the regency and city levels from 2010 to 2022. The REM estimation improvement in this study is conducted using cluster robust inference.

The results show that education and health, as forms of human capital, have a significant positive effect with economic growth in Central Java Province. Education has been proven to be the main contributor to the increase in per capita income, followed by health. Additionally, physical capital also has a significant positive relationship with economic growth, while population growth has a significant negative relationship.

Keywords: human capital, Solow growth, panel data, random effect model.