ABSTRACT

This study aims to analyze the influence of information and communication technology (ICT) development on economic growth in Indonesia. This study applies the Solow growth model, which states that an increase in the number of workers can increase per capita income. However, without the development of modern technology, an increase in the workforce cannot have a positive impact on economic growth in the long term.

This study uses a panel data regression approach, with modes: random effect model (REM), with data at the provincial level from 2016 to 2021. Improvements to the REM estimation in this study were carried out using Generalized Least Square (GLS).

The results showed that ICT as a form of technological progress has a significant positive relationship, besides that the growth of physical capital also has a significant positive relationship and the level of depreciation of effective capital has a negative relationship that is not significant on economic growth. The growth of physical capital has a greater influence than ICT.

Keywords: Solow growth, technology and information, panel data regression, random effect model.