ABSTRACT

The emergence of the internet and patents in technological development in the world are seen as production machines that can reduce production costs. However, the development of modern technology if it is not accompanied by sufficient knowledge and competence to take advantage of the existence of technology, it will not achieve maximum results. With the existence of technology (knowledge), natural resources and human resources owned can be transformed into potensials than can increase the economic growth of a country. Therefore, this study aims to analyse the influence of technology and education against economic growth in developing countries in Asia in 1999-2019.

This study uses secondary data consisting of economic growth as measured by Gross Domestic Product (GDP), the number of internet users, the number of patent applicants as a proxy for technology, physical capital using gross capital formation and education which is a dummy variable to measure access of education in developing countries in Asia by using the ratio of participant rate to higher education (secondary education). The analysis in this study uses fixed effect panel data regression using the weighted cross section SUR or Generalized Least Square (GLS) method.

The result show that technology which is described by the number of internet users and the number of patent applications, physical capital, and the interaction berween technology and education has a positive effect against economic growth in developing countries in Asia, but economic growth in developing countries in Asia that have good access to education are lower than the countries with low (poor) access to education.

Keywords : Technology, Internet, Patents, Education, Economic Growth, Cross Section Seemingly Unrelated Regression (SUR)