

## THE ROLE OF TECHNOLOGY IN REGIONAL DEVELOPMENT: TFP AND ECONOMETRICS ANALYSIS

Adiwan F. Aritenang\*

Regional Technology Researcher  
Agency for Assessment and Application of Technology Indonesia  
(a.aritenang@gmail.com)

### ABSTRACT

*The development in Indonesia regions has been unbalance over the years. In Indonesia, significant differences on local governance capacities and natural resources lead to variation of regional economic development. Following economic theory, technology and innovation are expected to solve regional unbalanced development through optimizing local endowments and human capital. This paper aims to explore the role of technology and knowledge in regional economic development. The total factor productivity (TFP) measurement and econometrics analysis are conducted to explore technology contributions on regional economic development in Indonesia regions. The paper finds that technology level contributes significantly to economic growth, complementary with manufacturing industry. In addition, regional expenditure on education and research and development (R&D) are insignificant to economic growth. These findings confirm the role of industries in regional economic development.*

**Keywords:** regional development, TFP, econometrics, statistic

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