

A Study on the Contribution of R&D Investment to GDP.

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- **Abstract:** This study analyzed the effect of expenditure in research and development (R&D) on the GDP (economic growth). Knowledge stock is the driver of continuous national development. However, existing studies have several limitations such as cross-sectional data, small number of countries, short-term performance of R&D investment. This research analyzed panel data included 65 countries over a period of 18 years from the World Bank 2020 World Development Indicators (WDI). The analysis conducted with the R&D investment divided into three periods: first year (t-1), second year (t-2), and third year (t-3). The analysis results show that the effect of R&D expenditure on economic growth is clearly differentiated between the short term (first year) and the long term (third year). That is, R&D investment has a positive but delayed impact on economic growth. This study is significant that the importance of R&D investment was considered on a global scale. In order to grasp the capacity and level of the industry, it is necessary to make a decision that takes into account the amount of investment in R&D and the difference in time zone.
- **Keywords:** R&D; Investment, National GDP, Economic Growth, Panel Analysis, fixed effects model