

## V. CONCLUSION AND IMPLICATIONS

### A. Conclusion

Based on the analysis of the influence of education, health, and economic infrastructure on labor productivity in Indonesia, the following conclusions can be drawn:

1. Education does not have a significant effect on labor productivity across 33 provinces in Indonesia during the 2010–2023 period.
2. Health has a significant effect on labor productivity across 33 provinces in Indonesia during the 2010–2023 period.
3. Economic Infrastructure has a significant effect on labor productivity across 33 provinces in Indonesia during the 2010–2023 period.

### B. Implications

Based on the analysis and conclusions of this study, several implications can be drawn as follows:

1. Education as measured by average years of schooling does not have a significant effect on labor productivity. Nevertheless, this finding can serve as an evaluation point for the direction of education development in Indonesia. The lack of significance may be attributed to disparities in access and quality of education across regions as well as the mismatch between educational background and job fields. Therefore, future education policy formulation should not only aim to increase the average years of schooling but also focus on improving curriculum

quality aligned with labor market needs, strengthening vocational education, and ensuring equitable education quality across provinces.

2. Health as measured by life expectancy has a significant influence on labor productivity. This finding highlights the need to prioritize improvements in healthcare services and facilities as part of national development. Accordingly, the government should expand access to quality healthcare particularly in regions with low life expectancy and increase investment in health infrastructure and the distribution of medical personnel. Such efforts are expected to directly enhance workforce performance and efficiency, ultimately contributing to higher national productivity.
3. Economic infrastructure as represented by mobile phone ownership has a significant impact on labor productivity. Therefore, it is essential for the government and policymakers to continue expanding access to information and communication technology (ICT), particularly in regions with low ownership levels. Enhancing access will not only promote more equitable productivity across regions but also accelerate digital transformation, which can improve labor efficiency and competitiveness.

### **C. Research Limitations**

This study covers the period from 2010 to 2023, which includes the COVID-19 pandemic years. During that time, restrictions on economic and social activities may have affected labor productivity in several provinces.

Some regions experienced a decline in productivity between 2020 and 2021, likely due to the pandemic's impact. As a result, the findings during the pandemic period may not fully reflect normal productivity conditions. Future researchers are advised to take the pandemic's influence into account more specifically or to separate the analysis between pre and post pandemic periods to gain a more objective understanding of labor productivity trends.

