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# GOVERMENT EFFICIENCY, DIGITAL DIVIDE, AND ICT: IMPLICATIONS FOR INCOME EQUALITY

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## Abstract

Income equality is one of the seventeen Sustainable Development Goals (SDGs) set by the United Nations, and the impact of information and communication technology (ICT) efficiency on the fair distribution of income is a crucial issue. We analyze panel data from 63 countries worldwide from 2010 to 2020 using econometrics, including mediation and moderating utility models, to study the impact of information and communication technology on income equality. The results demonstrate that advancements in ICT have a significant impact on enhancing income equity. This finding remains robust across various sensitivity analyses and alternative specifications. Notably, this effect exhibits substantial regional heterogeneity, with a more pronounced impact observed in the Americas compared to Europe. Furthermore, while ICT can potentially undermine income equality by altering labor force structures, it simultaneously promotes greater equality through changes in industrial composition. The analysis further reveals that digital divides and governance effectiveness act as significant moderating factors influencing these outcomes. Overall, this study offers valuable insights for policymakers seeking to leverage ICT to promote income equality strategically. It is recommended to promote information and communication technology infrastructure and skills training, making it a core strategy for promoting income equality and achieving inclusive growth.

*Key words:* efficiency and fairness; government governance; information and communication technology (ict); labor force structure; social income equality

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