# Towards sustainable economic growth: The role of technology readiness and foreign direct investment

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**Abstract**

This study examines the role of technology readiness in moderating the impact of foreign direct investment (FDI) on the sustainable economic development of host economies. Previous studies report inconclusive evidence on FDI spillover effects to economic growth, largely due to challenges in capturing the absorptive capacity of host countries. To address this gap, this study decomposes technology readiness into five key dimensions to identify the enablers that allow host economies to effectively internalize the benefits of FDI for economic sustainability. Using panel data from 154 countries over the period 2009-2023, the system generalized method of moments (System GMM) is employed to provide a holistic view on the role of technology readiness in moderating the spillover effects of FDIs towards economic sustainability measured by economic efficiency. The results show that FDI does not automatically enhance the economic efficiency of host countries. However, improvements in technology readiness, particularly in ICT deployment, skills development, research and development (R&D), and financial support for domestic firms significantly improve efficiency. The findings also reveal that lower-income countries benefit less from FDI, except in R&D-related activities, highlighting the importance of R&D in strengthening absorptive capacity and maximizing FDI spillover benefits. Overall, the results underscore the importance of technology readiness in mediating the FDI spillovers to enhance the country economy efficiency of the country. Policymakers therefore should invest strategically in strengthening the foundational elements of technological infrastructure.

**Keywords**

**Author Keywords:** Economic efficiency; Technology readiness; Foreign direct investment; System GMM; Sustainable development

**Keywords Plus:** RELATIVE BACKWARDNESS; PRODUCTIVITY GROWTH; PANEL-DATA; FDI; SPILLOVERS; EFFICIENCY; ENTERPRISES; OWNERSHIP; MARKET; IMPACT

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