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How Can the Fourth Industrial Revolution Change the Global Power Relations?

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ABSTRACT

Nowadays, we live in the era of the Fourth Industrial Revolution or Industry 4.0, in which the digitization, automatization and robotization process reorganizes the production systems. The Fourth Industrial Revolution develops the inventions of the previous era, so it can also be called the Second Information Revolution, enabling the wider use of information and communication technologies. Artificial intelligence, machine learning, cloud computing, Big Data, internet of things (IoT), the blockchain, cyber-physical systems, robots, and sharing economy are related to this revolution which transforms our life. We have to face new challenges, but at the same time, new possibilities arise in the economy. This empirical research aims to present the macroeconomic effects of the Fourth Industrial Revolution, comparing the countries' performance in the field of new technologies based on relevant statistical data's. Technological progress is the driving force of economic growth, so countries who can the fastest in adaption to the new techno-economic paradigm, become the leader in the new era. The research question to be analyzed is which country can be the winner of this era, as well as how can the Fourth Industrial Revolution change the global power relations. The United States dominated in the previous industrial revolution, but nowadays some developing countries, for example, China, are leaders in some industries, so competition is intensified between countries. The quantitative research aims to compare technological leading countries' performance in several fields affected by the Fourth Industrial Revolution.

KEYWORDS the Fourth Industrial Revolution; Industry 4.0; digitization; technological leading countries

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