Russian macroeconomic production function in regard to infrastructure for 1990-2020

Anton A. Afanasiev, Dr. of Sci. (Econ.), Professor
https://orcid.org/0000-0002-5680-7896; SPIN-code (RSCI): 8863-3913
Scopus author ID: 57195593552, 57221616972
e-mail: *aanton@cemi.rssi.ru*

Olga S. Ponomareva
SPIN-code (RSCI): 3796-6609
Scopus author ID: 57254950200
e-mail: *fondf@cemi.rssi.ru*

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Abstract
In the period 1990-2020, the econometric methods were used to study the national economic production function of Russia, one of the arguments of which is the transport and communication infrastructure represented by the main funds of transport and communications. The results of the study indicate a continuing decline in the elasticity of Russia's GDP in transport and communication infrastructure in 2020 at a lower rate than in previous years. The dynamics of the marginal rate of technological substitution of production factors in 2009-2020 is researched. Among the main reasons for the decline in the elasticity of GDP for transport and communication infrastructure, the economic downturn and a decrease in the volume of capital investments in transport and communication industries were highlighted. It is noted that the spread of the Wuhan coronavirus in Russia has somewhat slowed down the rate of decline in the elasticity of GDP in infrastructure due to the sharply increased role of its communication component. For the successful implementation of the policy of advanced infrastructure development announced by the President of Russia, it is necessary not only to increase the volume of investments in infrastructure bottlenecks, but also to adopt an additional set of measures aimed at stimulating economic growth, among which, in the conditions of sharply increased foreign economic and foreign policy restrictions for Russia from our Western and overseas neighbors in 2022. it is possible to highlight the weakening of the centuries-old dependence of the Russian economy on raw materials and, as academician S.Yu. Glazyev, the transition of our country's economy to a new technological order.

Keywords*: econometric study, production function, Russian economy, transport and communication infrastructure, Wuhan coronavirus, marginal rate of technological substitution.*

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About authors

Anton A. Afanasiev, Doctor of Sci. (Econ.), Associate Professor, Leading researcher, Central Economics and Mathematics Institute Russian Academy of Science, Moscow.

Olga S. Ponomareva, Senior researcher, Central Economics and Mathematics Institute Russian Academy of Sciences, Moscow.