DOI: https://doi.org/10.53486/cike2023.22

UDC: 354:[001.895:330.35]

RESEARCH OF THE IMPACT OF THE QUALITY OF GOVERNANCE ON INNOVATION AND ECONOMIC GROWTH

KATSIARYNA RAZHKOUSKAYA
PhD in economics, Assistant Professor
Department of National Economy and Public Administration,
Belarusian State Economic University
Minsk, Republic of Belarus
e-mail: E.Rozhkovskaya@mail.ru
ORCID ID: 0000-0002-0089-2331

Abstract. Modern growth theory believes that the most important determinants of the long-term sustainable economic growth are innovations and institutions that define total factor productivity. However, poor quality institutions, policy failures and ineffective governance can restrain innovation and slow economic growth. The purpose of this study is to use cross-country data for 2012 – 2021 to examine the impact of the quality of governance on innovation and economic growth. This study used methods of systemic and comparative analysis, synthesis and analogy, the method of structural analogy, the methods of regression and correlation analysis.
Among the main conclusion of this research, the following should be noted. The influence of institutions on economic growth is mediated, among other things, by the impact of government policies on innovation and technology, which determine the long-term possibilities of growth in the economy. A positive relationship has been established between the governance quality and the innovative development of the country: inefficient governments do not work well in conditions of uncertainty and often generate economic risks themselves disrupting economic stability; they cannot generate the financial resources and long-term incentives needed for the create of innovations. The state policy aimed at stimulating economic growth and increasing the innovativeness of the economy requires innovative approaches to management, modernizing the system of governance of the economic and improving the quality of government regulation.

Keywords: innovation, economic growth, institutions, quality of governance.

JEL classification: O31, O47.

Introduction

Modern growth theory believes that the most important determinants of the long-term sustainable economic growth are innovations and technologies that define total factor productivity. The issues of effectively stimulating innovative and technological development are quite complex even for developed, mature economies due to the existence of the «free-rider problem», when economic agents do not have sufficient incentives and motives to finance research and development, as well as the introduction of innovations into production. This problem is even more acute in developing countries that lack innovation and demonstrate high dependence on foreign technologies due to limited financial resources of the state, poor quality of the institutional environment, failures of economic policy, and halting of market mechanisms.

Numerous theoretical and empirical studies, for example D. Acemoglu, J. Robinson, D. Rodrik, J. Fagerberg and other [1 – 3] consider the quality of institutions as the most important factor that promotes the development of innovation and explains differences in income levels in per capita between countries. In this context, the most significant is the influence of public administration institutions, which act as the main determinant of the growth of innovation, especially in countries with emerging markets, where market mechanisms for the development of innovation systems have not yet been fully created and used. The influence of institutions of governance on innovation is realized through the implementation of an effective innovation policy, reducing resistance to innovation, maintaining fair and transparent competition, creating equal conditions for public and private innovators, and laws on the protection of intellectual property rights.

It is likely that the low level of innovation in developing countries and transition economies is associated with the low quality of the institutional environment and the weakness of government institutions, which constrains productivity growth and contributes to the economy falling into the «low/middle income trap». Therefore, the main goal of this research is to study and quantify the impact of the quality of government on innovation and economic growth, which allows government to develop more prudent and cautious state economic policies.

This study used methods of systemic and comparative analysis, synthesis and analogy, the method of structural analogy, the methods of regression and correlation analysis.

Main results

In international practice, to assess the quality of governance institutions, an approach developed by the World Bank is used, based on the identification six aggregate governance indicators: Voice and Accountability, Political Stability and Absence of Violence/Terrorism, Government Effectiveness, Regulatory Quality, Rule of Law, Control of Corruption.

In our opinion, the most significant variables that directly affect the quality of management decisions are the Government Effectiveness, Regulatory Quality and Control of Corruption indicators. These indicators reflect the ability to develop and implement a balanced economic policy, coordinate and interconnect policy instruments, coordinate its individual direction in various areas and for different perspectives (short- and long-term), balance the interests of economic agents, contributing to the effective implementation of strategic development goals.

Analysis of World Bank data shows a close connection between the quality of institutions and the level of per capita income, while the positive impact of government efficiency and the quality of regulation on the level of economic development of the state of clearly visible (Figure 1).

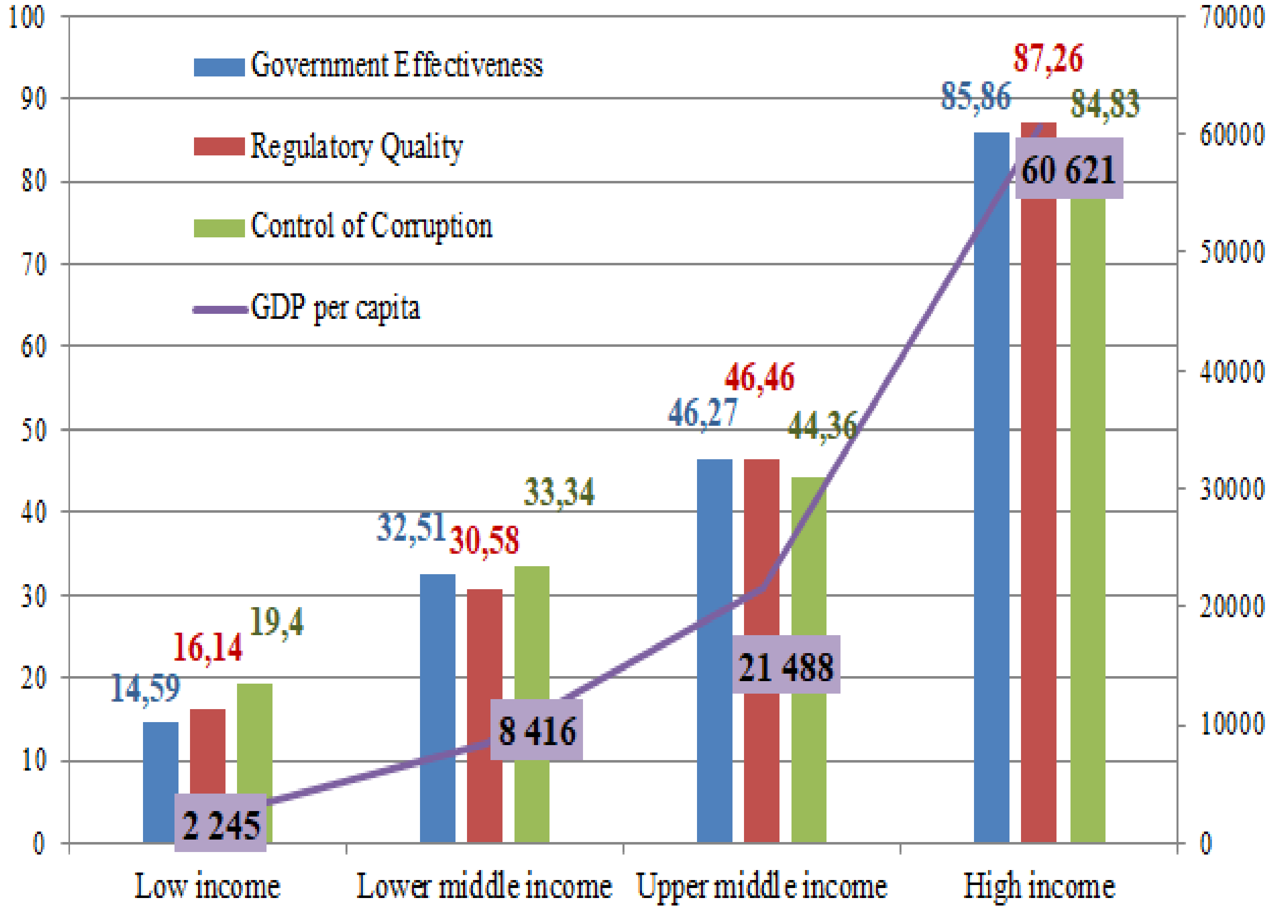

Figure 1. Worldwide Governance Indicators and GDP per capita by groups of countries with different income levels in 2021

Source: *developed based on [4 – 5]*

This interaction correspond to the main provisions of neo-institutional theory, according to which inclusive institutions ensure equal access of economic agents to resources, ensure free competition, protection of property rights, equality of citizens before the law, government accountability and have a positive impact on the economic development of the state, while extractive institutions keep economies on a low growth trajectory.

A comparison of governance indicators across countries indicates a low rate of transformation of their quality, which is a factor hindering the development of innovation and the economy as a whole. Thus, among the countries compared, significant progress in improving the quality of governance is demonstrated by Kazakhstan, Lithuania, the Czech Republic, and Estonia – for 2012 – 2021, the increase in the Government Effectiveness indicator was 19,8, 7,32, 5,91 и 12,2 percentage points, which allowed these countries to noticeably advance in the Global Innovation Index ranking (Figure 2).

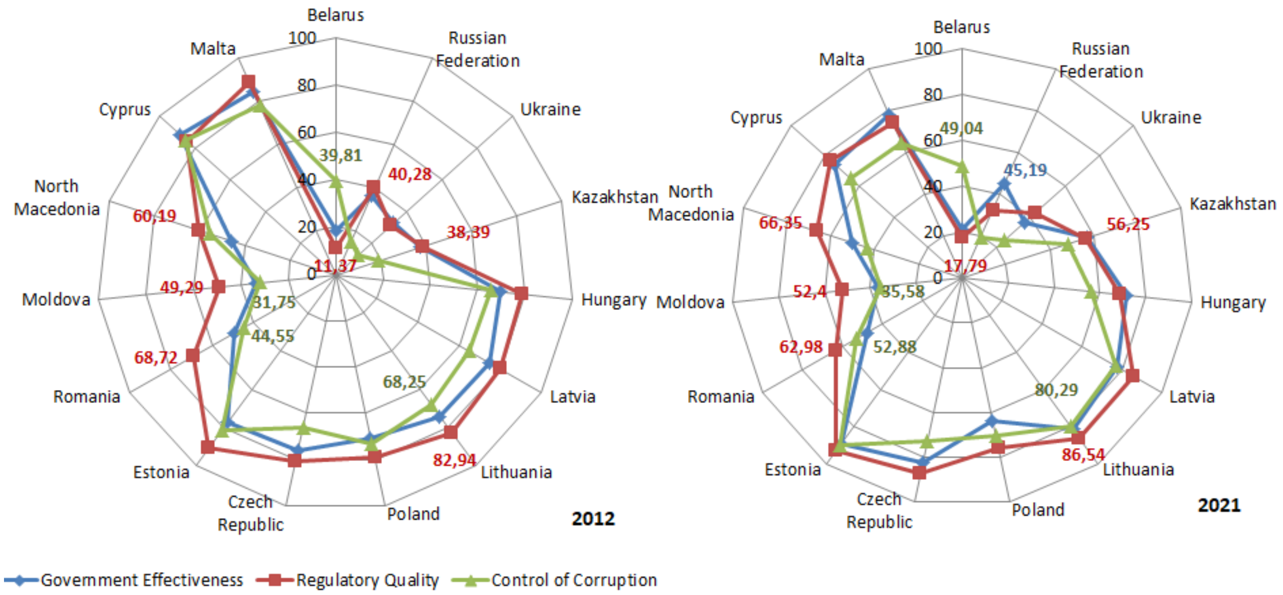

Figure 2. Quality of governance institutions in selected countries in 2021

Source: *developed based on [4]*

Low quality of government regulatory institutions, policy failures and ineffective government can restrain innovation and slow economic growth [6]. The influence of the quality of governance on innovation is carried out directly, through the implementation of effective innovation policy, which requires careful coordination of economic policy measures in different areas; and also indirectly – through the implementation of a balanced macroeconomic policy, the formation of fiscal incentives for innovation and investment, and the creation of conditions for the development of the financial sector of the economy. In addition, the quality of regulation and governance influences innovation by supporting market mechanisms and public access institutions. Institution of general access ensure non-discriminatory, equal access of economic entities to resources, including financial resources, and reduce the risks of expropriation, which has a positive effect on incentives for investment and innovation. Market institutions ensure mobility and efficient reallocation of resources (information, technology, financial resources, etc.) to sectors with the highest productivity, which contributes not only to the development of innovation, but also to economic growth.

To empirically test the relationships describing the impact of the quality of governance on the development of innovation, regression dependencies were built based on the classical least squares method on international data for 127 countries in 2012 – 2021. The Global Innovation Index (rank values) was selected as a dependent variable reflecting the development of innovation.

The study shows that the quality of governance institutions has a significant positive impact on the development of innovation. According to calculations, a one percent increase in the index of governance efficiency and quality of regulation causes an increase in the Global Innovation Index by 0,593 and 0,549% respectively. At the same time, in outsider countries that occupy low position in the Global Innovation Index ranking, the importance of governance efficiency is higher: the elasticity coefficient is 1,37 versus 1,17 for leading countries, which confirms the high importance of the quality of public administration for countries with low susceptibility to innovation.

Conclusions

Thus, the quality of institutions and in particular public administration institution has a significant positive impact on the dynamics of innovative and economic development. The influence of institution on economic growth is mediated primarily by their impact on the development of innovations and technologies, which ensure the growth of factor productivity in the economy and the possibilities of its long-term growth. Meanwhile, the quality of governance is an independent factor in the development of innovation and technology – effective government and high quality regulation in conditions of uncertainty make it possible to withstand shocks and mitigate their negative consequences for the economy, preventing volatility in financial costs for investment and innovation. High quality governance contributes to the development of the financial sector, the functioning of market mechanisms, contributes to the formation of an innovation friendly environment and the creation of long-term incentives and motives that ensure innovative development. The state policy aimed at stimulating economic growth and increasing the innovativeness of the economy requires innovative approaches to management, modernizing the system of governance of the economic and improving the quality of government regulation.

REFERENCES:

1. Acemoglu D., Robinson J.A., 2012. *Why Nations Fail: The Origin of Power, Prosperty, and Powerty*. New York: Crown Publishing Group.
2. Fagerberg J., Srholec M. 2008. Technology and development: Unpacking the relationship(s) // TIK Working papers on Innovation Studies № 20080623 of University of Oslo. 35 p.
3. Rodrik D., Subramanian A., Trebbi F. 2004. Institution rule: The primacy of institutions over geography and integration in the economic development. *Journal of Economic Growth*, 9, pp.131 – 165.
4. Worldwide Governance Indicators [online]. Available: https://www.govindicators.org
5. World Development Indicators. Data Bank of The World Bank [online]. Available: https://databank.worldbank.org/source/world-development-indicators/preview/on
6. Razhkouskaya K. 2021. Institutional aspects of inclusive economic growth in the Republic of Belarus. *Nauchnyje Trudy BGEU*, 14, pp. 402 – 412.