

Peculiarities of Innovative Development of Economy in Georgia

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Under the global economy, classical economic doctrines cannot reflect every aspect of the country's economic competitiveness as non-traditional factors of economic development play an equally important role in achieving the country's economic goals. In the view of the mentioned, knowledge and innovation are essential factors of economic development at the present stage. Consequently, at the present stage, in the process of global competitiveness, the study of innovative economics as a factor of self-establishment is also relevant for the countries with limited natural resources. Thus, the urgency and necessity of researching the existing issue are conditioned by the complex study of the existing economic, political, and institutional factors. Despite theoretical estimates, in the Georgian economic literature today there is practically no comprehensive research and analysis on the opportunities for the development of innovative economics in the country, on the basis of which the formation of the innovative economics should be carried out in Georgia. The goals of the research are to study and analyze the potential and role of Georgia's opportunities for the development of innovative economics and to determine its impact on the economic development of the country in the process of integration of the modern global economy.

The following objectives are derived from the goal mentioned above:

- Study-analysis of the theoretical-methodological aspects of the possible formation of an innovative economy;
- Determine the positioning of Georgia's innovative economy using an international index;
- Identify the advantages and disadvantages of the formation processes of innovative economics in the Eastern Partnership and EU member states and their comparative analysis;
- Identification of the optimal tool for determining the strategy of the innovative economics in Georgia;
- Analyse the process of formation of innovative economics and identify existing opportunities in Georgia;
- Identify a significant determinant of innovative economic development and determine its effects.

Attempt to conduct a complex study of the development opportunities of innovative economics in Georgia, because of which it has been established that:

- The formation of innovative economics in a country is related to the legislative and institutional factors of the country.
- The formation of Georgia's innovative economics is defined by the main factors of innovation (science, business, and state) that jointly create the country's innovation opportunities and ensure the formation of innovative economics.
- A comparative analysis of the determinants of innovative economics, while reviewing international indexes, has confirmed that Georgia has low competitiveness characteristics.

Keywords: innovative economy, the concept of innovative economy, economic cycles, economic growth, innovation variables

Theoretical-Methodological Principles of Innovative Development of the Economy

At the present stage, innovation is an important factor of economic growth, which affects the structure of production, the social situation of the country and ensures the stabilization of the socio-economic situation in the country. Innovative economics in its substantive sense provides an effective link between education, scientific research, and business innovation based on knowledge and scientific-technical progress.

The formation of the innovative economy was based on the concept of “innovation” which was first introduced by I. Schumpeter used in his works as a new economic category. The concept of “new combinations” created by Schumpeter included the processes of implementation of “new combinations” at that time, which mainly appealed to the creation of modern products, new markets, new production methods, and expansion of commercial opportunities. Later, human capital was added to it, perfecting institutions, creating high technologies.

Innovation Economics and Role of the State

The technological progress and innovative, creative thinking are often attributed to private companies and small firms, while the state with its regulatory function and tax system is considered as a disruptive power to the above. However, all the projects that are the basis of modern technologies are funded by the state. The state gives impetus to innovation and invests in it. It is the first to enter the new market, when “risky” private companies, despite adequate resources, become active only when the foundation has already been laid and major work has been done. The state implements the above-mentioned through the resources at its disposal and taxes, the reduction of which, in the long run, has a negative impact on public welfare, and the benefits of innovation fall into the hands of only a small group of people.

Innovation policy of a country is defined by the state. The innovation development strategy should be in line with the country’s socio-economic development strategy and program.

It should be noted that creating a legal framework for the formation of innovative economics in Georgia began in the 1990s of the last century. The regulatory instruments and legislative norms developed by the state to promote the development of innovative economics in Georgia are supported and approved by the state.

Table 1

Legislative, Institutional, and State Support

Year	Legislative, institutional, and state support
1994	Law of Georgia on “Science, Technology and Their Development”
1999	Patent Law of Georgia
2004	Law of Georgia on “Higher Education”
2005	Law of Georgia on “General Education”
2007	“On Vocational Education”
2010	LEPL “Shota Rustaveli National Science Foundation”
2014	“Georgia’s Innovation and Technology Agency”
2014	State Program “Produce in Georgia”
2015	“Research and Innovation Council Chaired by the Prime Minister”
2015	Strategy “Innovative Georgia 2020”
2016	The Law of Georgia on Innovation

Economic policy instruments include state subsidies, fiscal incentives, implementation of state programs, and so on. It covers research and development expenses (R&D), the number of researchers (see Figure 1), tax stimulus measures, credit, fiscal and monetary leverage, and implementation of measures to attract foreign direct investments. The state policy envisages the mobilization of factors in the initial stage of business, the introduction and absorption of new technologies, the creation of innovative infrastructure, the most common forms of which are: techno parks, business incubators, innovation-technological centers, training-business centers, etc. The part of the economic instruments also includes the ways to enhance knowledge, competence, and issues on funding and organizing the trainings and seminars.

Research and Development Expenses and the Number of Researchers Involved

The Figure 1 shows a five-year trend in research and development (R&D) expenses and the number of scientists involved in research. The table shows a growing trend. The grants issued by the state to fund research, in particular the grant programs of the Rustaveli Foundation and Georgia's Innovation and Technology Agency, are considered to be a determinant of the growing trend.

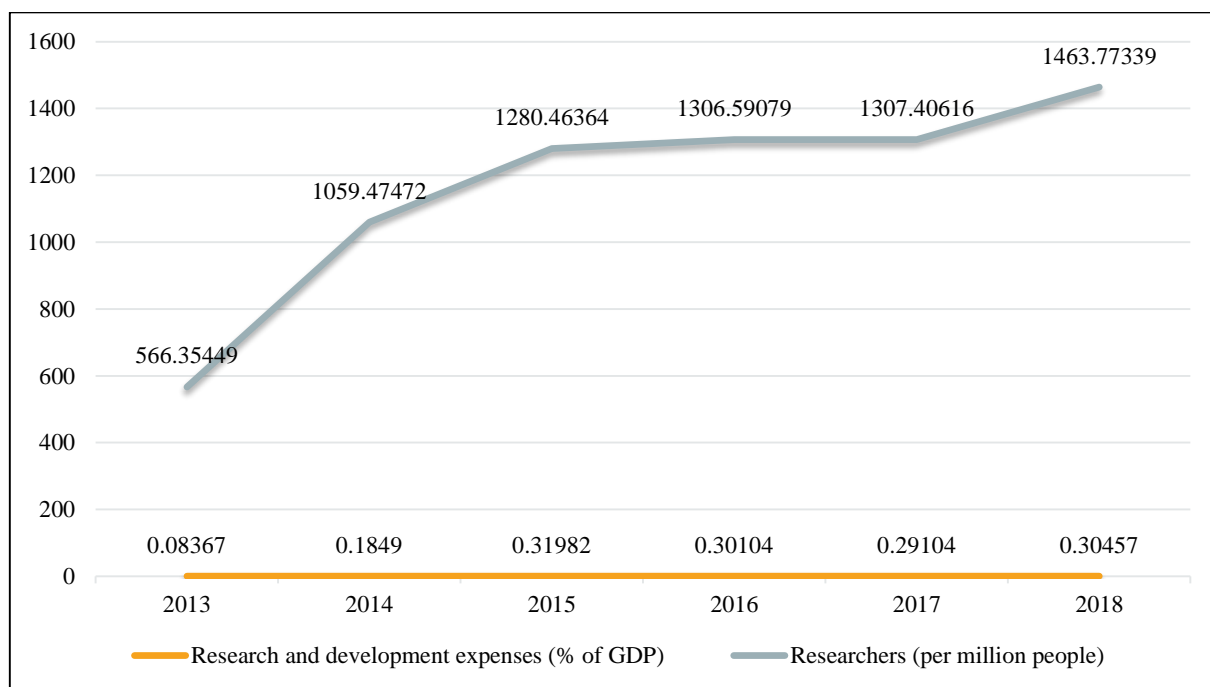


Figure 1. Research and development expenses and the number of researchers involved.

Source: World Bank www.worldbank.org/.

SRNSFG

The development of scientific research in Georgia in 2010 founded by the Shota Rustaveli National Science Foundation of Georgia (SRNSFG) supports the development of the Science, Technology, and Innovation (STI) system in Georgia. The aims of the foundation are to support a new generation of Georgian scientists, increase research potential in the scientific institutions and communities, and support Georgian scientists' integration into the international scientific area by ensuring the improvements in quality, importance, and competitiveness of the innovative scientific research.

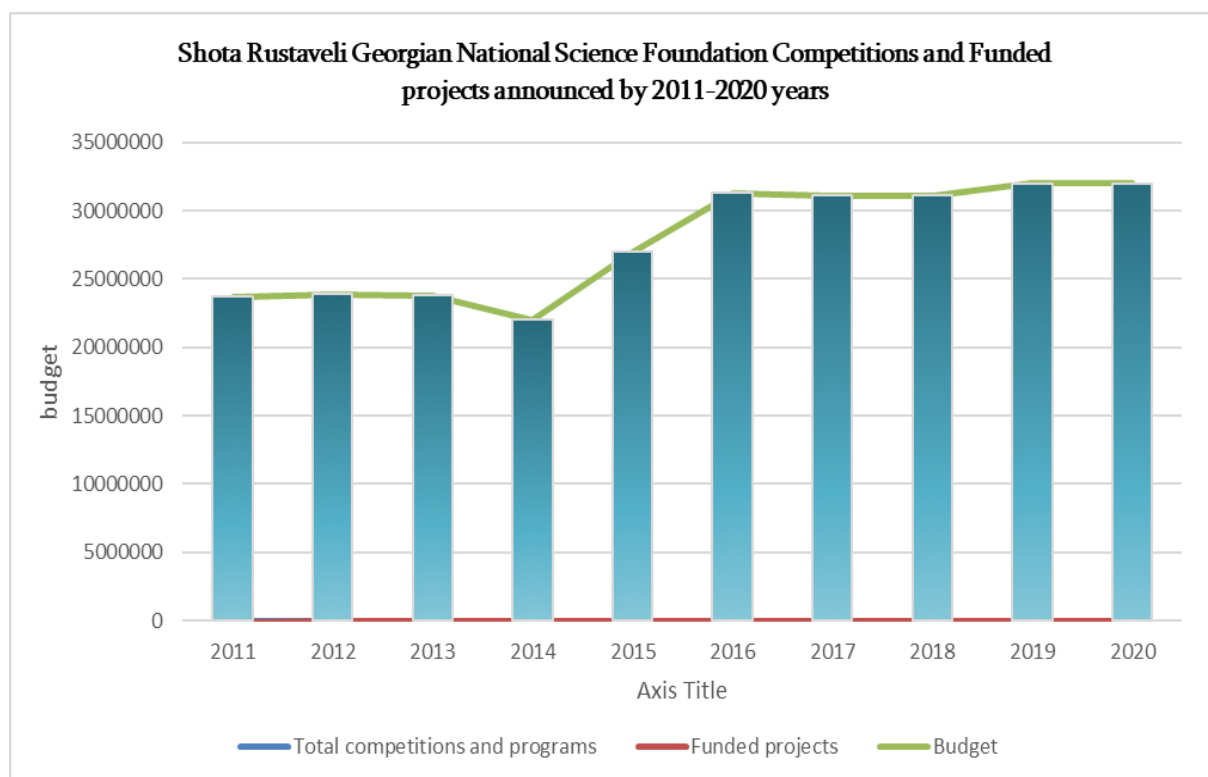


Figure 2. Shota Rustaveli Georgian National Science Foundation Competitions and funded project announced by 2011-2020 years.

Source: Shota Rustaveli Georgian National Science Foundation www.srnsg.ge.

The state institution has funded a number of projects since 2011. Figure 2 shows the number of competitions announced by the foundation, the budget, and the number of projects funded from 2011 to 2020.

Innovative Economics Formation Policies

The development of an innovative economy, first of all, requires the development of national innovation systems and defining the concept of the innovative economics policy, which is achieved through a combination of institutional, economic, and social factors. On the basis of research and analysis, the main directions of innovative economics formation policies have been identified, which are related to each other:

1. Macroeconomic policy, which implies the formation of macroeconomic factors at the stage of developing the concept of the innovative economics policy;
2. Education policy, which is one of the cores of the development of innovative economics and implies the quality management of education and the opportunity to adapt knowledge;
3. Sectoral economic policy—the development of innovation, which implies the promotion of scientific and technological projects, the supporting body of which is primarily the state. The promotion policy is implemented through long-term soft loans, tax privileges or funding of scientific and technical projects from the state budget;
4. Entrepreneurial policy implies arranging the appropriate infrastructure necessary to create a research-based project or high-tech product and the introduction of new technology, diffusion (distribution), and the formation of the issue of commercialization.

In order to develop innovative economics, it is also important to distinguish several narrow-functional areas, such as technology policy, scientific policy, research, and development policy, regional innovation policy, and their formalization, as these areas are the main basis for the development of innovative economics. Although the political system required for the development of innovative economics has achieved significant development in Georgia, the legal framework has been formed, supporting institutions have been created, and the state strategy has identified the areas necessary for the development of innovative economics, such as technology, knowledge, entrepreneurship, and innovation. The system still needs improvement as it still faces great challenges.

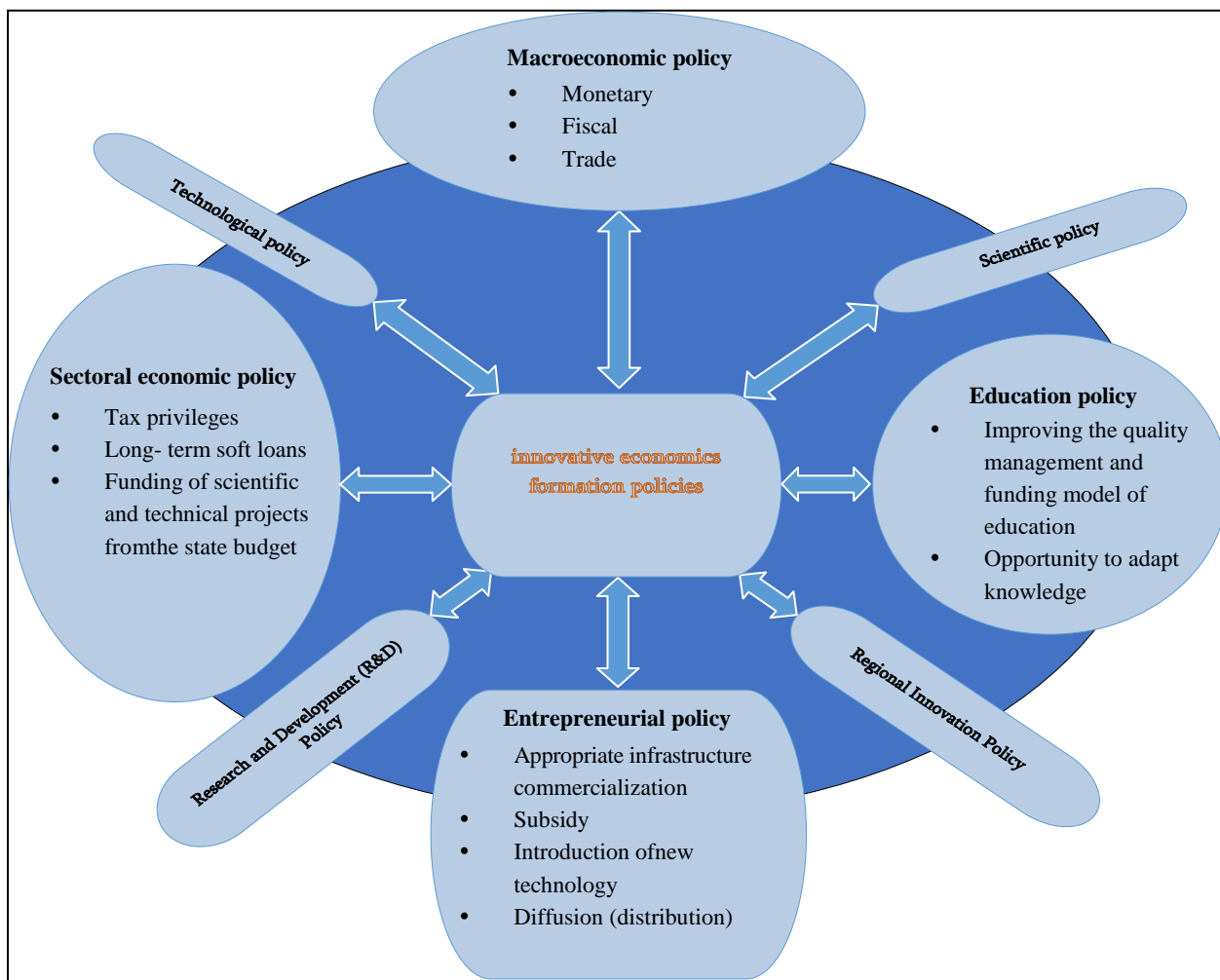


Figure 3. National innovation systems.

Source: Created by the author.

Conclusion and Recommendations

We consider it important to take into account the following recommendations for the purpose of attaining the opportunities and possibilities for innovative development of the economy in Georgia and, as a result, of increasing the competitiveness of the country.

1. Increasing access to information—It is important for the state to actively disseminate information on innovative processes in the country and provide information on issues such as start-up funding or co-financing

programs, grants, and information about technology centers. To ensure this, it is recommended to create a unified 18 information platform, where innovative ideas will be registered, which will be available both to local and foreign investors. In this case, the state will have a coordinating function and at the same time will provide the necessary infrastructure for the implementation of the project, which includes the existing industrial innovation laboratories in Georgia.

2. Creating a digital hub—The epidemic situation has intensified the need for the development of digital technologies; we believe that the potential for creating a digital hub in Georgia is high, which is due to the location of the country. It was said at the “New Silk Road Forum” that Asian countries are interested in an alternative way to access the European Internet. This is the best possibility for creating a digital hub in Georgia, as Georgia can connect Europe through the infrastructure border through the digital Silk Road. These routes to transfer international internet volumes can be implemented through two digital corridors: from Europe via Georgia towards the Middle East and from Georgia to South Asia.

3. Cluster development—We believe that decentralization is one of the key factors that support regional development, which can be achieved through cluster development. International practice proves that the cluster assists to develop small and medium-sized businesses and furthermore to create a regional innovation system. It should be noted that there is no cluster development strategy or development policy in Georgia. There are several clusters in Georgia, but they are not funded by the state and the role of the state is limited to ensuring the participation of cluster members in the international exhibition.

4. Human capital—Human capital plays a crucial role in the process of innovative development, as it is the creator of innovations. Accordingly, it is necessary to improve the quality of education and create highly qualified personnel who will meet the growing demands of the market and create opportunities for the development of the knowledge-based economy. It is true that within the framework of the Association Agreement between Georgia and the European Union, Georgia is approaching the European standard of educational quality, although many issues need to be improved. It is necessary for the state to promote fundamental research and stimulate students to participate in scientific activities.

Thus, in the light of foregoing, the formation of an innovation system together with theoretical research is possible on the basis of effective management of the processes of forming the innovative economics by the state.

References

- Abesadze, R. (2016). Innovations—A key factor in economic development. *The collection of the International Scientific-Practical Conference materials, current problems in the economics and development of economic science*. Tbilisi: TSU, Publishing House of PaataGugushvili Institute of Economics.
- Bakhtadze, L., & Danelia, S. (2019). The major determinants of innovative environment formation in Georgia. *Economic Alternatives*, 2, 243-249.
- Danelia, S. (2020). The importance of knowledge-based economy index in Georgia. *Journal of Economics*, 6-9, 54-68.
- Freeman, C. (1995). The national innovation systems in historical perspective. *Cambridge Journal of Economics*, 19(1), 5-24.
- Freeman, C. (2002). Continental, national and sub-national innovation systems complementarity and economic growth. *Research Policy*, 31, 191-211.
- Freeman, C. (2008). *Innovation and long cycles of economic development*. Cheltenham: Edward Elgar Publishing.
- Gvelesiani, R. (2014). The main reasons for distancing from the reality of the concept of economic policy and the possibilities of their elimination. *Journal—Economics and Business*, (4), 11-24.
- Lundvall, A. (2007). National innovation systems. Analytical concept and development tool. *Industry & Innovation*, 14, 95-119.

Nelson, R. (1993). *National innovation systems: A comparative study*. Oxford: Oxford University Press.

Papava, V. (2018). Downward and backward growth—The experience of EU post-communist countries and Georgia. *GFSIS Expert Opinion No. 99*. ISBN:978-9941-27-876-1 Retrieved from <https://ssrn.com/abstract=3147059>

Pavitt, K. (1984). Sectoral patterns of technical change: Towards a taxonomy. *Research Policy*, 13, 343-373.

Schumpeter, J. A. (1942). *Capitalism, socialism, and democracy*. New York: Harper and Brothers.

Solow, R. (1957). Technical change and the aggregate production functions. *Review of Economics and Statistics*, 39, 312-320.