***Vitalii Gryga*[1]**

FOREIGN PRACTICES OF SMART SPECIALISATION[2] AND POSSIBILITIES OF ITS IMPLEMENTATION IN UKRAINE

The paper is devoted to the issues of implementation of smart specialisation concept into the regional development policy of Ukraine. The relevance of the issue is related to the need of harmonization of the regional and innovation policies of Ukraine with the EU standards, on the one hand, and to forced incorporation of smart specialisation concept into the regional development strategies, on the other hand. The experience of the EU regions reveals certain peculiarities of the implementation of smart specialisation in regions with low institutional capacity, and therefore, their experience for Ukraine is the most useful. Therefore, the aim of the paper is to identify specific features of the implementation of smart specialisation in countries and regions with low institutional capacity and to provide recommendations for its implementation in Ukraine. Thus, the paper studies prerequisites for the emergence of smart specialisation in the EU, which is related to shortcomings in development and implementation of regional innovation strategies that did not sufficiently considered needs of the regions, or were focused on traditional sectors of industry.

The peculiarities of the implementation of smart specialisation in countries/regions with low institutional capacity are also identified. They are related to strong focus of strategies on building links between innovation development actors, but insufficient attention was paid to the final stages of the innovation process. It is shown that such countries and regions need to make greater efforts in the implementation of smart specialisation through a substantial modification of the existing processes or initiating new processes in the domains of innovation and regional development policy making. Since the choice of policy tools is a serious problem for regions and countries with low institutional capacity, the paper provides a number of recommendations from European experts on this issue.

In particular, it concerns the use of mini-mixes aimed at coping with a specific challenge or at developing a certain smart priority through the synergy / complex actions of various types of policy instruments (regulation, fiscal incentives, grants, human development and mobility). Considering the experience gained in the EU regions, some policy recommendations on the implementation of smart specialisation concept in Ukraine were developed. The recommendations are aimed at minimizing the risk of distortion of the smart specialisation concept and at the development of more effec-

[1] **Gryga, Vitalii Yuriyovych** – PhD in Economics, Senior Researcher, State Institution "Institute for Economics and Forecasting, NAS of Ukraine" (26, Panasa Myrnoho St., Kyiv, 01011, Ukraine), v.gryga@gmail.com

[2] The term "smart specialisation" is spelled in accordance with the European Commission' spelling (see https://s3platform.jrc.ec.europa.eu/home)

tive action plans, in particular through broader involvement of European experts in the process of the implementation of smart specialisation in Ukraine on national and regional levels.

K e y w o r d s : smart specialisation, innovation policy, countries with low institutional capacity

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Nowadays, much more discussions among scientific and expert communities are centered around the introduction of smart specialisation in Ukraine's economic policy. On the one hand, it follows from the EU-Ukraine Association Agreement that defines the need to approximate national policy to the European one. EU has already introduced the principles of smart specialisation. On the other hand, it is related to the processes of decentralization in Ukraine, which increases independence of regions in developing their regional strategies [1, 2]. Another factor of increasing interest in this topic is the intensification of the EU activities through the Joint Research Center (as well as other international organizations such as the OECD, World Bank, UNIDO) to promote smart specialisation in the world and the activities of international technical assistance projects that stimulate the use of "smart specialisation" when developing new strategies for regional development in 2021–2027 [3, 4]. The idea of smart specialisation was being developed in the Ministry of Economic Development and Trade of Ukraine during the preparation of Strategy of the Development of the Industrial Complex of Ukraine for the period up to 2025. According to some experts, narrowing the area of application of "smart specialisation" to the industrial sector is natural but it does not prevent the implementation of important provisions of this concept [5].

On the other hand, many questions and complaints of experts are caused by the poor implementation of the approved strategies and similar documents, including: the programs of development of certain industries. In our opinion, one of the reasons is rather low institutional capability of the Ukrainian authorities. The institutional capability determines the state's ability to set strategic priorities, to coordinate the activities of different public authorities, to ensure coordination of different types of policies, to conduct quality monitoring and evaluation [6, 7]. Due to the absence of quantitative indices to measure this phenomenon, OECD experts use World Bank governance indicators, World Economic Forum institutional indicators, etc. It should be noted that Ukraine belongs to the group of countries with low average gross national income ([8]) with low efficiency of the institutions' functioning. In particular, in 2016–2017 Ukraine was ranked 129th on government expenditures efficiency and 99th on transparency of the policy-making process [9].

Considering this, **the aim of the article** is to study and systematize the foreign experience of implementing "smart specialisation" in countries similar to Ukraine in terms of institutional capacity and to identify opportunities for their application in Ukraine. Smart specialisation is one of the modern concepts of innovation policy [10].

The prerequisites for the implementation of smart specialisation in Europe. The introduction of "smart specialisation" in Europe began in 1980s, when the first official documents appeared where the European Commission focused on the reasonability of incorporating innovation into regional policy (see [11]). And at the beginning of 1990s, the EC launched the STRIDE program – Science, technology and innovation in Europe [12].

The increasing of economic development unevenness (as a result of the EU enlargement, the accession of new member states and the global economic crisis of 2007–2008) as well as problems with regional innovation strategies implementation [13] actualized the need to strengthen the regional dimension in science, technology and innovation policy particularly. This is stated in almost all EU strategic documents, in particular the Communication from the EC on innovation policy: updating the Union's approach in the context of the Lisbon strategy [14], and the Europe 2020 Strategy: A European strategy for smart, sustainable and inclusive growth [15]. The key task for member states on national level are:

– to reform national (and regional) R&D and innovation systems to foster excellence and smart specialisation,
– to reinforce cooperation between universities, research and business,
– implementing of joint programming and cross-border cooperation,
– to ensure the diffusion of technologies across the EU.

As a result, the concept of "smart specialisation" was proposed. It is based on the use of available opportunities and potential of the region for the development of new activities arising from the interaction between entrepreneurs, universities, scientific organizations, etc. [1].

The peculiarities of smart specialisation. While implementing the EU cohesion policy in 2014–2020, the processes of "smart specialisation" implementation in the EU regions have been significantly intensified, a number of relevant guides and training materials were developed that explain in detail the process of smart specialisation strategy formulation and implementation [16].

In contrast to the traditional approach to innovation policy, "smart specialisation" has to consider the following aspects [17]:

• the idea of smart specialisation is based on a comprehensive and integrated approach to the identification and implementation of priorities that go beyond scientific, technological and innovation policies. Thus, a smart specialisation strategy should stipulate a governance model that ensures the development and implementation of a set of different actions aimed at supporting the priorities chosen;

• overcoming the path dependence as a common barrier to develop an effective and balanced set of policy tools. On the one hand, informal norms and customs are characterized by inertia and opposition to new initiatives and reforms. On the other hand, there is increased resistance from those sectors or activities that have not been prioritized but still have levers of influence. Therefore, when developing a "smart specialisation" strategy, it is necessary to analyze the current types of policy

in terms of formulating new goals and introducing new tools according to the priorities chosen;

• increasing interdependence of national / regional economies. Integration and globalization processes lead to increased international economic links, so a justified choice of smart specialisation priorities will determine the possible place of the region in the global value-added chains. Therefore, smart specialisation strategies should take into account the features of foreign direct investment, include measures to encourage the inflow of innovative talents, the establishment of cross-border (interregional) clusters, as well as measures to internationalize the activities of enterprises and companies;

• active search and cooperation with regions which have complementary priorities, the creation of interregional partnerships and networks to enhance the role of regions in international value-added chains. At the same time, the regions need to be aware of the potential negative effects in some areas caused by the focus on new priorities;

• transition from operational management to strategic policy. However, each priority area can have different goals and obstacles to achieving them and a set of policy tools must be developed for each area separately.

These aspects complicate the process of scientific and technological and innovation policy development, especially in less-developed regions. On the one hand, these regions have a much lower capabilities of innovative actors – universities, scientific institutions, enterprises. On the other hand, they have a lower level of institutional capacity and efficiency of public authorities [18]. This underlines the need to anticipate, in the innovation policy of the less-developed regions, the tools and mechanisms for the building-up of innovation systems in sectors and areas that correspond to the chosen priorities.

Smart specialisation in less developed regions with low institutional capacity. The experience of implementing smart specialisation in EU countries allows us to highlight the inherent particularities in such regions. In particular, I. Rotaru points out that in less developed regions the focus is predictably on the links between business and research institutions and universities. The issues of financial support for appropriate steps, ways of attracting private resources to their implementation, as well as the problem of lack of competence of national experts in international issues are of extremely importance. However, in such countries, the implementation of smart specialisation strategies usually requires formalized mechanisms [19]. This finding is correlated with the results of a survey conducted in the EU regions among the public authorities responsible for the implementation of smart specialisation strategies in mid-2013 [20]. According to these findings, the new EU member states (they are mostly less developed) implemented smart specialisation through a substantial modification of the existing policy-making processes. To some extent, this is due to a lower level of institutional development, as initiating and introducing completely new processes is a more complex task. Another problem for less developed countries is the lack of focus on science and technology pol-

icy on the final stages of the innovation process: engineering, the developing of industrial design, etc. At the same time, it is important to balance between the need to change focus and the risks that result from such changes. In general, research policy must be harmonized with other policies: industrial, foreign investments policies, etc. [6]. Therefore, S. Radosevic advises to use policy instruments that are not as effective in developed countries (best practice) as they correspond to the level of institutional capacity of the country / region (best match). It is useful to involve external experts for identification of such instruments and their relevance to the institutional capacity [6].

However, in our opinion in Ukraine this does not even guarantee the improvement of the quality of innovation policy because the involvement of external experts requires adequate implementation of the recommendations provided. In Ukraine there is a practice when such recommendations are not implemented or are implemented slowly. An example of this is the slow implementation of the provisions of the Law of Ukraine "On Scientific and Technical Activities" and the implementation of the recommendations of European experts provided in the Peer Review report on the Ukrainian Research and Innovation System prepared under the EU Framework Programme for Research & Innovation "Horizon 2020" in 2017 [21]. However, in January 2019, the Ministry of Education and Science of Ukraine reported about significant progress on most of the recommendations.

The introduction of smart specialisation provides for the involvement of a wide range of stakeholders to identify priorities and to develop activities for their implementation. According to the European experience, about 60% of these stakeholders are in the business and science sectors and independent experts. The representatives of other stakeholder groups with a specific interest are involved slightly less often [20]. In addition, the dominance of science representatives and the low level of involvement of civil society actors and business from peripheral areas [22] reduce the quality of the process of entrepreneurial discovery (in other words, search for new activities and opportunities arising while stakeholders are interacting). The entrepreneurial discovery is among crucial stages in identifying priority areas of smart specialisation in the region and country. Also, low involvement of businesses representatives hampers the shift from the development of science to innovation and the use of existing knowledge and technology in the economy. This fact is emphasized by the developer of the European concept of smart specialisation D. Foray with colleagues [23].

Stakeholder involvement in the process of smart specialisation implementation in the vast majority of regions in the EU has been achieved through the creation of working groups and holding focus groups, expert meetings and public consultations, etc. The methods like roadmapping and foresight were used in about 30% of the regions.

The tools for implementing smart specialisation. When choosing the tools, the European experts advise avoiding a sectoral approach, focusing on more detailed level of economic activities, especially those of a multidisciplinary nature. Due to

the large number of the policy tool types for smart specialisation (Table 1) and to facilitate the task of developing and shaping innovation policy tools, the EU experts recommend the use of policy mini-mixes [17]. They are focused at specific area or solution of a particular problem through synergy / integrated action of different types of instruments (regulation, fiscal incentives, grants, etc). At the same time, this set of tools may include those that are not directly related to science, technology or innovation policy [25].

Table 1

The types of policy tools for implementing a "smart specialisation" strategy

Policy tools		Remarks
Traditional	Institutes, competence centers dealing with selected areas in particular spheres	The most common tool to serve needs of actors in smart specialisation. They can be created as new organizations (for example, a new specialized center for food-oriented biotechnology) or emerge from the evolution of existing ones (for example, in reorienting university missions to serve new regional areas of specialisation)
	Thematic R&D funded programs	This tool is increasingly being used, along with others, to stimulate specific research topics in line with the priorities of smart specialisation
	Bonus systems	Incentive systems under R&D funding programs that provide better conditions for projects in priority areas (less frequently used than thematic programs)
	Cluster policy	It is used with the caveat that it should not be identified with a set of smart specialisation tools and should follow face conditions to be effective [24]
A-typical	Special pilot and search projects	Useful for improving entrepreneurial discovery process in a more experimental way. However, there is a risk that they will be converted into one-time stocks that have little effect on existing sets of instruments. Thus, the ability of the authorities to create the conditions and mechanisms to upscale successful experiments is essential

Source: is based on [17].

As the low level of interaction between science, universities and business is one of the key problems of less-developed regions, it is advisable to use a policy mini-mix to stimulate public-private partnerships in the field of R&D. It has been developed by EU experts on the results of evaluating the effects of the use of various innovation and scientific and technological policy instruments. It includes [25]:

- the establishment of competence centers and centers for joint applied R&D;
- the programs of joint R&D between science and business;
- the formation of technology transfer units in scientific institutions and universities;

• the mobility programs between industry and science / universities;
• the establishment of business-related offices / offices in universities;
• supporting clusters and competitiveness poles, as well as science and technology parks.

A number of caveats should be made about the last item, because in the classical sense, clusters are designed to increase the effectiveness of the companies involved only. However, under certain conditions clusters can promote smart specialisation, so they should not be discarded from the policy agenda. Such conditions are: the activity of the cluster in the new perspective directions that are defined as priorities of smart specialisation; stimulating the circulation of new knowledge between cluster members representing different activities, etc. [24].

The Republic of Slovenia as an example of best match in the use of "smart specialisation". In our view, Slovenia is one of the most interesting examples of selection and developing of innovative policy instruments based on the principles of smart specialisation. When smart specialisation was introduced in the EU, the quality of public administration in this country was considered relatively low [26]. According to the level of economic development, Slovenia is a middle-income country (GDP per capita in 2017 was 85% of the EU-28 average) [27].

In 2015, Slovenia developed its own Slovenian Smart Specialisation Strategy (S4) that combined a number of strategic documents and a list of necessary activities, including: Slovenian Development Strategy (SDS), Research and Innovation Development Strategy, Slovenian Industry Policy and the Digital Agenda. The main purpose of S4 is to develop and implement sustainable technologies and services for healthy living based on medium- and high-tech solutions in niche segments. In this respect, clear quantitative indicators are set up that are planned to be achieved by 2023 [28]. It should be noted that the first principle of S4 implementation is that the set of necessary tools should be consistent with technological development, time intervals and project size.

Slovenia is planning to achieve its objectives by using two groups of instruments: direct actions and actions to build an innovative ecosystem [29]. The first ones should be tax credits in the amount of 100% of R&D expenditures and 40% of investments in equipment and intangible assets. In addition, there are such programs as:

- joint projects at stages 3–6 according to Technology readiness levels (TRLs) funded by the Ministry of Education, Science and Sport;

- scientific and technological developments at stages 6–9 of TRLs funded by the Ministry of Economic Development and Technology;

- the support of small innovative projects from 50 to 200 thousand euros; loan program from the Slovenian Export and Development Bank for projects of scientific, technological and innovative character, etc.

The program of support for pilot and demonstration projects as well as support measures for small and medium-sized entrepreneurship (SME) is being developed too.

Direct action also includes supporting research infrastructure in priority areas of smart specialisation and funding young researchers in collaborative projects (started in mid-2018).

Support for strategic research and innovation partnerships has been included in the development of innovative ecosystems in Slovenia. Nine partnerships have already been formed in the priority areas of smart specialisation, namely [30]:

- "smart cities and communities" (156 participants);
- "smart homes", including wooden ones (73 participants);
- a network for the transition to a circular economy (67 participants);
- sustainable food production (182 participants);
- sustainable tourism (45 participants);
- factories of the future (76 participants);
- health – medicine (50 participants);
- mobility (97 participants);
- the development of materials as goods (37 participants).

These partnerships bring together business (more than 80% of participants), research institutions (including universities), government and municipal authorities and innovation intermediaries, consumers of innovation and civil society organizations and have the long-term relationships.

In the field of education, Slovenia envisages measures such as the introduction of national scholarships according to the smart specialisation priorities, updating of educational programs in line with business needs and priorities, especially in the field of vocational education; aligning career centers with smart specialisation priorities through close partnerships; and systematic stimulation of entrepreneurship and creativity at all levels of the educational vertical.

Special attention is paid to mechanisms, including financial support, stimulating breakthrough innovation and creating an enabling innovation environment. These include the creation of the Centre for Creativity that was launched at the end of 2017. It is also planned to create a Future Laboratory that will bring together multidisciplinary teams of cutting-edge, thinkers, designers and artists from Slovenia and abroad to envision the needs, explore the alternatives and inspire both developers and customers. In the same direction, other actions will be developed to implement services for commercialization of development on the priorities of smart specialisation and the development of startup culture in general.

What should we consider when implementing smart specialisation in Ukraine? In the light of the recommendations of European experts and the experience of developing countries it is advisable to take the following into account when developing and implementing the principles of smart specialisation in the socio-economic policies of Ukraine and its regions.

Firstly, since the smart specialisation is based on R&D and innovations, the relevant principles should be incorporated into the strategies and programs of scientific and technological and innovative development of Ukraine and the regions.

Secondly, the development of a smart specialisation strategy should be undertaken by at least three line ministries: the Ministry of Education and Science (MES) of Ukraine – it should be responsible for education, science and innovation policy; the Ministry of Regional Development, Construction and Housing and Communal Services of Ukraine – it should be responsible for regional policy; the Ministry of Economic Development and Trade of Ukraine – it should be responsible for industrial and economic policy, SME development policy, etc. It is also advisable to involve in smart specialisation the Ministry of Social Policy of Ukraine because it deals with issues of labor markets development. In principle, the first three ministries are currently involved in discussing the issues of smart specialisation and developing institutional capacity, but each of them has a slightly different vision of smart specialisation. For example, while considering smart specialisation in the context of an industrial development strategy, the Ministry of Economic Development and Trade of Ukraine mainly refers to sectors or types of industrial activity. The Ministry of Regional Development, Construction and Housing and Communal Services of Ukraine considers that smart specialisation is an integral part of the regional development strategy that is reflected in the changes to the Methodology for development, monitoring and evaluation of performance of regional development strategies and plans for their implementation, approved by the Decree of the Ministry of Regional Development, Construction and Housing and Communal Services of December 27, 2018 No. 373. While the MES assumes that the regions will prioritize innovation based on smart specialisation according to current global trends.

Thirdly, smart specialisation involves the coordination of different types of policies and their orientation towards economic development due to the selected priorities of smart specialisation. These priorities can be considered as the next generation of priorities of innovation activity, including the regional one. The implementation of these priorities unlike the current approach will entail the efforts of all stakeholders to innovation development. However, the priorities of smart specialisation should be consistent with the priorities of the state development.

By now, Ukraine has not identified a system of strategic priorities, but there is a system of priority areas for innovation by 2021 and for the development of science and technology by 2020, including thematic areas. It should be noted that strategic priorities are set for a ten-year period while medium-term priorities are set for a five-year period. In December 2016, the respective priority directions of innovation activity on the national level for the period 2017–2021 were approved and in October 2017 – those on the industry-specific levels. There are provisions for the regional level priorities; however, the regions did not actually determine *the medium-term priority directions of innovation activity of the regional level* on the basis of strategic and national medium-term priorities of innovation activity [31].

Another issue that needs to be considered when implementing smart specialisation in Ukraine is the large variety of poorly coordinated strategic documents. From time to time, measures to implement one strategy may relate to the scope of another, but such identities are not properly reflected in the texts of the documents

(unlike in European practice). The following strategies may be involved in innovative development such as: The Energy Strategy of Ukraine until 2035, the Strategy for Small and Medium-sized Enterprise Development in Ukraine until 2020, the Strategy of the state migration policy of Ukraine for the period up to 2025, the State Strategy of Regional Development for the period until 2020, the State Policy Strategy for Healthy and Active Longevity of the Population till 2022, the Strategy of the Military and Industrial Complex of Ukraine development till 2028, the National Transport Strategy of Ukraine 2030, Ukraine High-Tech Industries Development Strategy till 2025, and the Strategy for Innovation Development that are endorsed or approved by the government. All these and other strategic documents should be considered when setting priorities for smart specialisation, especially at national level.

There are also initiatives from the business to develop strategic documents. In particular, in January 2019 the draft Strategy for the development of the chemical industry up to 2030 was presented. It was developed with the assistance of the Federation of Employers of Ukraine and the Ukrainian Chemists Union. The draft of the National Strategy Industry 4.0, was developed by Association of Industrial Automation of Ukraine. It was developed under the request from the government but still is not adopted. In identifying areas of smart specialisation, such initiatives should be given some preference, as it presents a business position that increases its chances of participating in initiatives and this will have a positive impact on the development of relevant sectors and regions.

Fourthly, in the case of Ukraine, it is necessary to take into account not only the best practices, but also the experience of countries with a similar level of institutional capacity, in particular, the experience of Slovenia in developing a smart specialisation strategy at the national level. In addition, it is advisable to study the experience of regions with low levels of innovative development and scientific potential, as majority of Ukrainian regions have low level of the scientific, technical and innovative activity. For example, in Volyn, Zhytomyr, Transcarpathian and Khmelnytsky regions, the number of organizations conducting scientific research ranged from 8 to 9 units. On the other hand, almost 60% of all scientific institutions of Ukraine are located in only 4 regions. With this in mind, it is advisable to consider the issue of interregional co-operation in relation to joint R&D when developing and implementing smart specialisation. The experience of some Polish regions, by the way, testifies to the risks of simplifying and narrowing the priorities of smart specialisation to the areas of local companies' R&D [32].

The success of the smart specialisation development and implementation in Ukraine will depend primarily on several key institutional factors:

• the political will of the Government and regional leaders to develop an effective strategy. Most of the strategies that have been developed and adopted in Ukraine were not implemented or fully implemented due to insufficient funding. E.g. the Concept for the Development of Digital Economy and Society in Ukraine is being implemented selectively and continues to face delays;

• the allocation of sufficient resources to implement the strategy. This is not just about the financial resources needed to finance specific projects and R&D, stimulating innovation, training for new priority areas, but also about institutional resources, and those people who will develop certain regulatory acts for the implementation of smart specialisation" The sources of funding of activities and projects of smart specialisation by the state may be the funds of the State Regional Development Fund (with the appropriate amendments to the regulatory acts), those of regional and city budgets, amalgamated territorial communities, etc;

• the involvement of professional facilitators among European experts who have experience in developing or implementing smart specialisation in countries / regions with low quality institutional environment. This is quite important considering the risk of misunderstanding or incomplete understanding of the smart specialisation concept and ensuring the high quality of the process of developing smart specialisation strategies and the corresponding action plans for their implementation. For example, the government requires regions to develop regional development strategies based on smart specialisation in 10 months. At the same time, the country does not even have a draft of the State Regional Development Strategy and strategic priorities as well. There is no methodological base and priorities of smart specialisation. On the other hand, The Reforms Delivery Office of the Cabinet of Ministers of Ukraine and the Reform Support Team of the Ministry of Economic Development and Trade have taken the role of the coordinators of smart specialisation process in Ukraine. They communicate with European experts on behalf of the Government. However, the shift in focus towards industrial activity restricts and in some ways distorts the concept of smart specialisation that is being actively implemented in EU countries.

Summarizing the main points of the paper, it can be concluded that the implementation of smart specialisation in Ukraine will not be easy task and require considerable efforts of experts and authorities to find an effective way of setting priorities and implementing the appropriate plan of actions.

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Грига, Віталій Юрійович
канд. екон. наук, старший науковий співробітник
ДУ "Інститут економіки та прогнозування НАН України"
вул. Панаса Мирного, 26, Київ, 01011
v.gryga@gmail.com

ЗАРУБІЖНА ПРАКТИКА ВПРОВАДЖЕННЯ "РОЗУМНОЇ СПЕЦІАЛІЗАЦІЇ" ТА МОЖЛИВОСТІ ЇЇ ЗАСТОСУВАННЯ В УКРАЇНІ

Розглядається проблема запровадження принципів "розумної спеціалізації"[3] у політику регіонального розвитку України, що актуалізується через необхідність наближення підходів із формування відповідної політики в Україні до європейської практики, з одного боку, та форсування процесу впровадження нової для України концепції до стратегій регіонального розвитку – з іншого. Досвід регіонів ЄС засвідчує існування певних особливостей впровадження "розумної спеціалізації" у регіонах з низькою інституційною спроможністю, тож він для України є найбільш корисним. Зроблено огляд передумов виникнення "розумної спеціалізації" в ЄС, які були пов'язані з недоліками розроблення та реалізації регіональних інноваційних стратегій, які недостатньо врахували специфіку регіонів або були сфокусовані на традиційних секторах промисловості. Також виявлено особливості імплементації розумної спеціалізації у країнах з низькою інституційною спроможністю, зок-

[3] Термін "розумна спеціалізація" у цій статті використовується як синонім до терміна "смарт-спеціалізація", проте, на нашу думку, краще характеризує його зміст.

рема такі, що головна увага зосереджувалася на розбудові зв'язків між суб'єктами інноваційної діяльності, а от кінцевим етапам інноваційного процесу її приділяли недостатньо. Тож таким країнам і регіонам необхідно докладати більше зусиль у процесі впровадження "розумної спеціалізації" – передусім шляхом суттєвої модифікації чинних процесів або ініціювання нових процесів. Оскільки для регіонів та країн з низькою інституційною спроможністю серйозну проблему становить вибір інструментів політики, наведено низку рекомендацій європейських експертів щодо такого вибору. Зокрема це використання міні-наборів, які спрямовуються на розвиток конкретного напряму за рахунок синергії / комплексної дії різних типів інструментів (регулювання, фіскальних стимулів, грантів, розвитку людського потенціалу та мобільності). З урахуванням досвіду, набутого європейськими регіонами, запропоновано практичні рекомендації з імплементації розумної спеціалізації в Україні, які орієнтовані на мінімізацію ризиків спотворення ідеї розумної спеціалізації та розроблення більш ефективних планів заходів, у т.ч. шляхом залучення до процесу розроблення європейських експертів.

Ключові слова: *"розумна спеціалізація", інноваційна політика, країни з низькою інституційною спроможністю*

Грига, Виталий Юрьевич
канд. экон. наук, старший научный сотрудник
ГУ "Институт экономики и прогнозирования НАН Украины"
ул. Панаса Мирного, 26, Киев, 01011
v.gryga@gmail.com

ЗАРУБЕЖНАЯ ПРАКТИКА ВНЕДРЕНИЯ "УМНОЙ СПЕЦИАЛИЗАЦИИ" И ВОЗМОЖНОСТИ ЕЕ ПРИМЕНЕНИЯ В УКРАИНЕ

Рассматривается проблема внедрения принципов "умной специализации" в политику регионального развития Украины, которая актуализируется с необходимостью приближения подходов по формированию соответствующей политики в Украине к европейской практике, с одной стороны, и форсированием процесса внедрения новой для Украины концепции в стратегии регионального развития – с другой. Опыт регионов ЕС свидетельствует о существовании определенных особенностей внедрения "умной специализации" в регионах с низкой институциональной способностью, поэтому он для Украины наиболее полезен. Сделан обзор предпосылок возникновения "умной специализации" в ЕС, связанных с недостатками разработки и реализации региональных инновационных стратегий, которые слабо учитывали специфику регионов или были сфокусированы на традиционных секторах

промышленности. Также выявлены особенности имплементации "умной специализации" в странах с низкой институциональной способностью, – такие, что главное внимание сосредотачивалось на развитии связей между субъектами инновационной деятельности, а вот конечным этапам инновационного процесса его уделяли недостаточно. Поэтому таким странам и регионам необходимо прилагать больше усилий в процессе внедрения "умной специализации" – прежде всего путем существенной модификации действующих процессов или инициирования новых процессов. Поскольку для регионов и стран с низкой институциональной способностью серьезную проблему составляет выбор инструментов политики, приведен ряд рекомендаций европейских экспертов относительно такого выбора. В частности это использование мини-наборов, которые фокусируются на развитии конкретного направления за счет синергии / комплексного действия различных типов инструментов (регулирования, фискальных стимулов, грантов, развития человеческого потенциала и мобильности). С учетом опыта, приобретенного европейскими регионами, предложены практические рекомендации по имплементации "умной специализации" в Украине, ориентированные на минимизацию рисков искажения идеи "умной специализации" и разработку более эффективных планов мероприятий, в т.ч. путем вовлечения в процесс разработки европейских экспертов.

Ключевые слова: *"умная специализация", инновационная политика, страны с низкой институциональной способностью*