SMART SPECIALISATION AND INGOs IN IMPLEMENTING THE REGIONAL INNOVATION DEVELOPMENT POLICY: LEGAL AND ECONOMIC ASPECTS

Vladlena LISENCO

Doctor of Law, Researcher, European University of Moldova, Chisinau, Republica Moldova e-mail: *vlada.lisenco@gmail.com* https://orcid.org/0000-0001-5858-4924

The development of states and regions based on innovation and knowledge is the main direction in the modern economy and law. The article discusses the main provisions of the European agenda for the strategy of «smart specialization», tools and experience of its implementation. The directions for the development of regional strategies for «smart specialization» in the EU and Moldova are determined. The important role of International Non-governmental organizations is in promoting sustainable development and regional economical development. They play an important role in the formation and implementation of democratic structures. They also play a serious role in economic development and promotion of innovations. The article concluded that the introduction of the smart specialization methodology in the regions of Moldova will have a positive effect on harmonizing the structure of the economy in accordance with the global challenge of accelerating technological development, if lessons from European practice are taken into account, such as the integration of regional innovation ecosystems into interregional and international context, strict consideration of local specifics and competitive advantages, which is achieved in close cooperation with the business community.

Keywords: regional policy, international organizations, innovation policy, smart specialization, regional development strategy, European Union.

SPECIALIZAREA INTELIGENTĂ ȘI ONGI-URILE ÎN IMPLEMENTAREA POLITICII REGIONALE DE DEZVOLTARE INOVAȚIONALĂ: ASPECTE JURIDICE ȘI ECONOMICE

Dezvoltarea statelor și a regiunilor bazate pe inovație și cunoaștere este direcția principală în economia și dreptul modern. Prezentul articol analizează principalele prevederi ale agendei europene pentru strategia de "specializare inteligentă", instrumentele și experiența implementării acesteia. Sunt determinate direcțiile de dezvoltare a strategiilor regionale de "specializare inteligentă" în UE și Moldova. Rolul important al organizațiilor neguvernamentale internaționale este în promovarea dezvoltării durabile și a dezvoltării economice regionale. Acestea ocupă un loc important în formarea și implementarea structurilor democratice. Ele joacă, de asemenea, un rol semnificativ în dezvoltarea economică și promovarea inovațiilor. Autorul a concluzionat că introducerea metodologiei de specializare inteligentă în regiunile Moldovei va avea un efect pozitiv asupra armonizării structurii economiei în conformitate cu provocarea globală de accelerare a dezvoltării tehnologice, dacă se iau în considerare lecțiile din practica europeană, cum ar fi integrarea ecosistemelor regionale de inovare în contextul interregional și internațional, specificul local și avantajele competitive, care se realizează în strânsă cooperare cu comunitatea de afaceri.

Cuvinte-cheie: politică regională, organizații internaționale, politică de inovare, specializare inteligentă, strategie de dezvoltare regională, Uniunea Europeană.

SPÉCIALISATION INTELLIGENTE ET ONGI DANS LA MISE EN ŒUVRE DE LA POLITIQUE RÉGIONALE DE DÉVELOPPEMENT DE L'INNOVATION: ASPECTS JURIDIQUES ET ÉCONOMIQUES

Le développement des états et des régions basé sur l'innovation et la connaissance est la direction principale de l'économie et du droit modernes. L'article traite des principales dispositions de l'agenda européen pour la stratégie de «spécialisation intelligente», des outils et de l'expérience de sa mise en thuvre. Les orientations pour le développement de stratégies régionales de «spécialisation intelligente» dans l'UE et la Moldova sont déterminées. Le rôle important des organisations non gouvernementales internationales est de promouvoir le développement durable et le développement économique régional. Ils jouent un rôle important dans la formation et la mise en thuvre des structures démocratiques. Ils jouent également un rôle important dans le développement économique et la promotion des innovations. L'article a conclu que l'introduction de la méthodologie de spécialisation intelligente dans les régions de Moldova aura un effet positif sur l'harmonisation de la structure de l'économie en fonction du défi mondial de l'accélération du développement technologique, si les leçons de la pratique européenne sont prises en compte, telles que l'intégration des écosystèmes d'innovation régionaux dans le contexte interrégional et international, la prise en compte stricte des spécificités locales et des avantages concurrentiels, ce qui est réalisé en étroite coopération avec le monde des affaires.

Mots-clés: politique régionale, organisations internationales, politique d'innovation, spécialisation intelligente, stratégie de développement régional, Union européenne.

КОНЦЕПЦИЯ «УМНОЙ СПЕЦИАЛИЗАЦИИ» И МНПО В РЕАЛИЗАЦИИ РЕГИОНАЛЬНОЙ ПОЛИТИКИ ИННОВАЦИОННОГО РАЗВИТИЯ: ЮРИДИЧЕСКИЕ И ЭКОНОМИЧЕСКИЕ АСПЕКТЫ

Развитие государств и регионов на основе инноваций и знаний является основным направлением в современной экономике и праве. В статье рассматриваются основные положения европейской стратегии «умной специализации», инструменты и опыт ее реализации. Определены направления развития региональных стратегий «умной специализации» в ЕС и Молдове. Отмечается важная роль международных неправительственных организаций, которая заключается в содействии устойчивому развитию и региональному экономическому развитию. МНПО играют важную роль в формировании и реализации демократических структур, а также в продвижении инноваций. Автором сделан вывод о том, что внедрение методологии умной специализации в регионах Молдовы положительно повлияет на гармонизацию структуры экономики в соответствии с глобальным вызовом ускорения технологического развития, если будут учтены уроки европейской практики, такие как как интеграция региональных инновационных экосистем в межрегиональный и международный контекст, четкий учет местной специфики и конкурентных преимуществ, что достигается в тесном взаимодействии с бизнес-сообществом.

Ключевые слова: региональная политика, международные организации, инновационная политика, умная специализация, стратегия регионального развития, Европейский союз.

Introduction

Modern priorities of the innovative development of the national economy actualize the development and implementation of regional innovative strategies aimed at increasing innovative activity, the level of scientific and technological development, deep modernization of industry and restructuring of the economies of states. In this regard, Moldova is particularly interested in the experience of the European policy of regional development, formed as part of the implementation of the strategy of

«smart specialization», which has proven its effectiveness in the development of regional innovation systems in the countries of the European Union and has proven to be in demand in Australia, South Korea, and in a number of Latin American states. In the practice of the economic development of Moldova, the key areas of regional «smart specialization» are able to ensure the transition from an equalizing regional policy to the effective development of the regions of the country based on innovation and knowledge.

Despite the extensive discussion of the problems associated with innovative development based on the principles of «smart specialization», its effective introduction into the management practice is complicated by the insufficient study of European experience and the lack of developed mechanisms for its adaptation for use in regional strategies aimed at orienting the basic industries of the specialization of the region to the introduction of intelligent technologies into production and management processes [7, pp. 494-498].

The goal of the short study is to summarize the leading European experience of the development and implementation of «smart specialization» strategies and to develop directions for the innovative development of Moldova and its regions, taking into account the lessons of European countries.

Achieving this goal requires the following tasks to be set and addressed: study the essence of the «smart specialization» strategy, identify its goals and priorities; consider the algorithm for the implementation of this strategy in the countries of the European Union; identify important lessons for the regions of Moldova that need to be taken into account when transforming the structure of the economy based on the principles of the «smart specialization»; propose directions for the development of regional strategies for the «smart specialization» in Moldova, taking into account the generalization of European experience.

The object of the research is the "smart specialization strategy" as a progressive methodology for transforming the structure of the regional economy, based on the theory of strategic management, which includes specific principles, methods, implementation tools. Studies of regional development are of an interdisciplinary nature which are described with numerous definitions that might be formulated differently, depending on the context and the area of science they derive from.

Content of the «Smart specialization strategy»

The term «smart» in relation to growth and development was first used in the Europe 2020 strategy, which identified three key priorities for the development of the European Union in response to the serious structural problems of the continent [4]:

- smart growth based on knowledge and innovation;
- sustainable growth, promotion of a more resource efficient, green and competitive economy (sustainable growth);
- inclusive growth, stimulation of an economy with a high level of employment, ensuring economic, social and territorial cohesion (inclusive growth) [5].

Regional innovation strategies of smart specialization, which represent a reasonable choice and funding from public and private funds for spheres of activity, allowing the interaction of innovation and entrepreneurial activity to create competitive advantages, were announced as a tool for achieving the goals of smart and sustainable growth at the regional level in the European Union's Innovation Program.

In 2021, regional innovation policy was 31 years old and it was fully coordinated with other types of EU innovation-related policies. In order to implement the «Europe 2020» Strategy, the flagship initiative «Digital Agenda for Europe» [3] was developed, aimed at ensuring sustainable economic growth and social benefits from the use of information and communication technologies. Thus, the «Digital Agenda for Europe» initiative is relevant for all regions and cities, as it focuses on a key element of developing «smart specialization» strategies.

The importance of regional development based on the principles of «smart specialization» is highlighted in the Communication from the Commission to the European Parliament, the Council, the European Economic

and Social Committee and the Committee of the Regions.

The European Commission introduced the Smart Specialization strategy (S3) concept in the EU Cohesion Policy 2014-2020 as an "ex-ante conditionality" for European regions to obtain funding for research and innovation from the European Regional Development Fund (ERDF). Smart Specialization strategy is a place-based innovation policy concept to support regional prioritization in innovative sectors, fields or technologies through the "entrepreneurial discovery process (EDP)", a bottom-up approach to reveal what a region does best in terms of its scientific and technological endowments [2].

The smart specialization strategy for regional innovation and innovation development focuses on promoting technologies in the fields of technology, economy and the civil society. The Smart specialization strategy aims to lead Europe to smarter, more inclusive and more sustainable growth. In particular, the S3 is an economic development strategy that aims at research and innovation and involves a gradual approach based on the development of a common vision.

In the context of the implementation of the Smart specialization strategy, the launch of regional changes is associated with the search for competitive advantages and structural changes, which can be described by the following processes [8, pp. 2125-2146]:

1. Formation of a knowledge base to move towards new opportunities. At this stage, it is important to understand the collective opportunities in research and development (R&D), engineering and production. Here it is possible to mention the experience of Austria, which had strong capabilities and competencies in mechanical engineering. However, entrepreneurs found out new opportunities by identifying pathways from fine mechanical and optical engineering to medical technologies.

- 2. Technological modernization of existing industries. This was the case in Finland, where the pulp and paper industry are traditionally strong. However, in response to new challenges, intensive modernization is underway here based on the introduction of elements of nano- and biotechnology, for which individual companies increase R&D costs and investments not only on the introduction of new technologies, but also on the study of the latest achievements.
- 3. Diversification. It is rather not about industry diversity, but about synergy achieved through the effect from the scale and positive externalities. Such synergy provides the benefits and attractiveness of the transition to new types of economic activity. An example is the French region of Toulouse, where the development of aeronautics in the Airbus valley contributed to the expansion of entrepreneurial activities in higher education and the emergence of research infrastructure in new areas such as satellites and GPS technologies.
- 4. Filling new market niches. In this case, we are talking about radical innovations (goods and technologies), the appearance of which makes it possible to fill new market niches. For example, close collaboration between researchers and entrepreneurs in the Italian region of Florence has led to the development of new IT applications for the management and maintenance of archaeological and historical heritage in Italy.

Thus, the analysis of the strategic documents of the European Union aimed at the development and implementation of regional strategies for the «smart specialization» allows us to highlight the following features:

- accumulation of critical mass and the selection of priorities on which limited resources are concentrated;
- competitive advantage by mobilizing researchers and businesses;
- development of world-class clusters and intersectoral cooperation in order to create original high-tech industries;

• joint leadership of business, universities, the state and the public in effective innovation systems.

Tools of the Smart Specialization Strategy (S3)

A key aspect of smart specialization, either on the regional or on the country level, is to promote technology, fields, population and businesses, and to create competitive advantages that would help these territories to foster their economic and social development using the principles of sustainable growth [12].

In order to put into practice, the «smart specialization» strategies by countries and regions, the European Commission has developed a special algorithm, which is a sequence of six steps on the path to transforming the regional economy towards the «smart sustainable development» [6] (see Table 1).

Table 1. Algorithm for the implementation of the Smart Specialization Strategy

Step	Tools	Purpose
Analysis of the regional context and potential for innovation		«niches» or specific areas for competi-
	Analysis of regional economic specialization, identification of clusters	
	SWOT-analysis	
	Interactive map of competitors	Identification of competitors and assessment of competitiveness
Setting up the environment and structure for inclusive management	Defining long-term and short-term goals	Formation of an effective structure for inclusive management of strategy implementation
	Analysis of the environment, debates, participatory actions, pilot projects, identification in Vision	
Formation of a common vision of the future of the region	Smart Typology of Growth	Combination of regional and international experience in order to identify the perspective with the broadest trends
Selection of a limited number of regional de- velopment priorities	Map Visualized Eye@RIS3 Priority	Positioning territory, finding potential partners for cooperation
Determination of implementation policy, roadmaps and action plan	ESIF-viewer	Visualization of planned investments using European structural and investment funds
Integration of monitoring and evaluation mechanisms	(ESIF) - Energy	Determination of funding potential, implementation of benchmarking, assessment of the level and dynamics of competitiveness in the European landscape
	(ESIF) - Digital	
	Regional benchmarking	
	Digital innovation hubs	
	Competitiveness scoreboard	

Source: [9]

To support the regions in the development and revision of national and regional strategies, the European Commission created the Smart Specialization Platform (S3 Platform), which is a set of interactive tools, among which are the following:

Eye@RIS3 is a map of priorities of all countries and regions of the European space. There is a detail breakdown by countries, regions, economic spheres, scientific areas and political goals, which allows to determine one's own place of the territory in the corresponding coordinate system, to identify potential partners for cooperation.

ESIF-viewer is a visualization tool for planned investments in the European Structural and Investment Funds (ESIF). It is intended for government bodies at the national and regional levels.

The search for potential funding within the framework of European priorities for interested parties is facilitated by such tools as (ESIF) - Energy, (ESIF) - Digital, and if the former is intended for searching within the operational programs of the European Structural and Investment Funds, then the latter allows you to assess the planned investments in information and communication technologies by country and region.

Digital innovation hubs are an interactive search tool for the European organizations whose activities are related to supporting the digital transformation of business and society. They help classify organizations by stage of development, technical competence (cyberphysical systems, the Internet of things, artificial intelligence and cognitive systems, location identification technologies, gamification, data mining, etc.), types of services provided (information, training, support of networks, scientific research, testing and validation, product consortia) [10].

The role of INGOs in innovation policy and Smart specialization

International Non-governmental organizations (INGOs) play an important role in the formation and implementation of democratic structures. They also play a serious role in economical development and promotion of innovations. Formal and informal organizations as well as grassroots movements must be recognized as partners in the implementation of Agenda 21 [2]. INGOs have recognized and diverse experience, expertise and capacity in areas that will be of particular importance for the implementation main UN common goals. Non-governmental organizations also need to develop cooperation and interaction among themselves and with state and business sector in order to increase their effectiveness as participants in sustainable development activities.

The development of information and communication technologies opens up new opportunities for citizens to participate in the processes of preparation and decision-making, communication, horizontal economic and social interactions, exchange and transfer of knowledge.

INGO work and public participation in the decision-making process is one of the priority areas of EU support for the development of INGOs in candidate countries, as well as a qualification requirement for EU membership. All levels of participation are encouraged, from the simple provision of information to consultations, dialogue and, finally, partnerships between non-governmental organizations and government bodies.

It is already possible to state the strengthening of the role of the public in political and economic processes. An important role of INGOs is in scientific, educational and innovation communities through the implementation of modern concepts of innovation policy in the innovation quadrangle model: governmentscience-education-business-civil society.

Innovation is critical for organizations wanting to meet the scale of current global challenges, increase their impact and stay relevant in a changing context. NGOs should consider the strategic objectives of their innovation efforts and how it can help improve their future-readiness [2].

Smart specialization in the regional development of the Republic of Moldova

According to Art. 107 of the Association Agreement between the European Union and the Republic of Moldova, the Parties will promote mutual understanding and bilateral cooperation in the sphere of regional policy, including methods for the development and implementation of regional policy, multi-level governance and partnership, with a particular emphasis on the development of disadvantaged areas and cooperation, aimed at creating channels of communication and improving the exchange of information and experience between national, regional and local authorities, socioeconomic actors and civil society [1].

The National Program of Moldova in the sphere of research and innovation for 2020-2023 (adopted by the Government Decision No. 381/2019) aims to adopt and transfer the principles of intellectual specialization. Based on the desire to strengthen the impact of the results of innovation and research activities on the business environment and on society as a whole, the National Program also provides for the implementation of the principles of smart specialization. Smart specialization establishes priorities, determined on the basis of participation, to create competitive advantage by developing existing research and innovation strengths, aligning them with the needs of the business environment for a coherent approach to emerging opportunities and market development, while avoiding duplication or fragmentation of efforts [11].

Thus, the National Program includes identifying niches for smart specialization in the

Republic of Moldova with the aim of promoting research based on best practices in strategic areas that are relevant and significant for the economy and society. The specific tasks approved by the strategy, in turn, provide for the following measures:

- Carrying out the process of entrepreneurial discovery.
- Approval of strategic priorities for activities in the sphere of research and innovation for 2023-2027 in accordance with the identified niches for specialization.
- Identifying areas for which new research centers need to be established.

As part of the pilot project for countries included in expansion and neighborhood partnerships, Moldova used the expertise of European experts to make a map of economic, scientific and innovation potential, and to initiate the process of developing a strategic framework in the sphere of intellectual specialization. The concept of smart specialization, smart cities and a number of its elements is extremely interesting and promising for cities and municipalities of the Republic of Moldova. Especially in terms of improving local governance and improving the quality of public services provided to local communities. In this sense, the Republic of Moldova is at the initial stage of studying, understanding and introducing some elements of this concept: introduction of the concept of e-government, widespread use of e-services and payments, e-procurement, introduction of the concept of a one-stop shop, domains, etc. At the moment, the first step has been completed - mapping in the Republic of Moldova, and the goals set for this process have been achieved.

The report «Mapping the Economic, Innovation and Scientific Potential in the Republic of Moldova» analyzes the potential sectors related to intellectual specialization at the level of 5 out of 6 development regions of the Republic of Moldova. The mapping of the economic, scientific and innovative potential of the Re-

Nº 2, 2021 — 61

public of Moldova is focused on five areas of statistics: in the development regions of North, South, Center, Chisinau municipality and the ATE of Gagauzia.

Thus, the city of Chisinau, which has the status of the capital, concentrates most of the economic activity of the Republic of Moldova. There are many priorities economic areas for Chisinau, of which the following sectors of particular interest can be considered: production of IT, electronic and optical products, telecommunications and programming, consulting and related activities, which clearly underlines the importance of the ICT sector for Chisinau. The ICT sector has been identified by Moldova Investment and Export Promotion Organization (MIEPO) as one of the main sectors of the economy that contributes to the economic development of the city of Chisinau and, obviously, the Republic of Moldova.

In the Northern Development Region, the following sectors with growth potential were identified: agriculture and food processing, identified by MIEPO as one of the main sectors of the economy, food and dairy products, as well as the production of electrical equipment, electrical devices, which can be together important as the elements of development.

For the Central Region, potentially significant economic sectors are: agriculture and food industry, identified by MIEPO as one of the main sectors of the economy, but animal farming, meat processing and canning and meat production are also of particular interest, which indicates the important role of the meat industry. In addition, in this region, the sector of textiles, clothing, footwear and leather is developed in comparison with other regions of Moldova, and the production of pharmaceuticals and the sphere of building materials are also strong economic areas.

The following potential sectors of the economy are identified for the Southern region: food industry, which includes the production of flour products, starch and starch products, the production of bakery and flour products, as well as the production of beverages, including wine.

Potentially relevant sectors of the economy for the Gagauzia are the following: food industry, with special emphasis on the production of flour-milling products, starch and starch products, as well as the production of beverages, including the production of wine.

The regional analysis shows somewhat distinctly the sectors of the economy with the potential for smart specialization. This confirms that Chisinau and the other four regions are different from each other and may have different but intercomplementary areas for intellectual specialization. For North, Centre, South and the ATE of Gagauzia, agriculture and food industry are common priority areas, but there are differences: the cultivation of annual crops is less relevant in the Northern region, which relies more on industry, meat production, including animal farming, processing and canning of meat and meat products. Forestry and timber industry are also developed in the Central region. There are various models of specialization in the production and processing of food products, and the production of beverages, including wine, is a priority in the Southern region and in Gagauzia.

Differentiation of development regions according to the resulting indicators in combination with their economic activity makes it possible to make a profile of each development region according to its economic activity.

- Chisinau municipality (E) electricity and heat, gas and water, (O) other activities for the provision of collective, social and personal services:
- Northern development region (C) mining and (A) agriculture, hunting and forestry, (F) construction;
- Central development region (G) wholesale and retail trade, repair of motor vehicles,

62 — № 2, 2021

motorcycles, household appliances and personal items, (M) education;

• Southern development region - (D) processing industry, (B) fishing and fish farming.

Conclusions

Smart specialization for Moldova is one of the prospective instruments of innovative development. It facilitates the financing issues solutions for new elaborations in terms of a lack of public investments in R&D and sufficient lobbying of domestic producers' interests, transformation of innovative achievements in region into commercially successful technologies, creating new areas of business activity with the help of targeted forms of interregional cooperation.

According to forecasts, smart specialization has potential in the Republic of Moldova and at the moment can be defined in several national documents and policies. The preliminary priority areas for innovative activities, identified for the Republic of Moldova, are the following: chemical industry, materials and nanotechnologies; agriculture and processing; energy; ICT; health, biomedicine and pharmaceuticals; electrical and electronic technologies; production of machinery and equipment; industries, services and environmental sciences.

An important element in this regard is the fact that almost the entire territory of the Republic of Moldova is covered with high-speed Internet access, which made it one of the world leaders. However, in order to accelerate and stimulate the implementation of the concept of smart specialization and/or some of its elements, as the experience of the Republic of Moldova shows, it is necessary to meet some fundamental elements:

1) The existence of an advanced and genuine administrative, economic and financial decentralization in the state is one of the main conditions for the effective implementation of the concept of smart specialization and/or some of its elements. Only a decentralized political and administrative system, in which local public administration bodies are endowed with all the necessary information, economic, financial, social instruments and can freely use them, can ensure the interest and effective implementation of such modern and complex concepts as smart cities.

- 2) Government strategies should include elements connected with regional development, such as: encouraging local business development with a focus on strong infrastructure investments and attracting investments focused on competitive advantages at the local level smart specialization.
- 3) For the Republic of Moldova, a combination of these strategies is proposed through various components of public investment of the development program, which will implement such components as: support for entrepreneurship; development of economic services of common interest: information, entrepreneurship training, coaching, mentoring; increasing the value of territorial potential by equipping cities with technical and communal equipment; improving the accessibility—infrastructure of access; support of the existing infrastructure for business support (incubators, industrial parks, economic zones) for the development of new services; growth poles of network cities (connectivity).
- 4) Regions base their development on large urban centers. To determine the specialization of cities in certain areas, it is necessary to conduct business start-up processes within the framework of an intellectual specialization strategy. In particular, at the level of each city of the growth pole, such identification can occur within the broader economic areas of niche markets with promising dynamics, for which there are good starting prerequisites and an ecosystem of really interested participants.
- 5) Creation of databases with complex, complete, relevant and high-quality information necessary for urban development and

Nº 2, 2021 — 63

all spheres of local public administration: population, heritage, communications/roads, transport, networks, technical and municipal infrastructure, etc. Moreover, it is necessary to decentralize them and ensure direct access of local authorities to this data and their compatibility. There is still a lot of work to be done in the Republic of Moldova.

6) Implementation of the goal of regional development and the concept of smart specialization requires significant funds. Funds to which the cities and municipalities of the Republic of Moldova do not have access. Therefore, it is necessary and extremely important to have access to funds for cities and local communities in the Republic of Moldova through the cities and municipalities of Romania and other EU countries. Local communities in the Republic of Moldova need support and direct access to EU development funds, and Romania is the most suitable supporter of this goal.

The smart specialization implementation in the Moldovan economy can be enhanced by:

- 1. Establishing an effective dialogue between central and local authorities, national producers and academic institutions; development of new areas of activity through targeted forms of interregional cooperation conferences, forums, advisory bodies, consulting divisions of regional authorities etc.
- 2. Business awareness campaigning about smart specialization for industrial enterprises held by regional authorities via web-portal creating. It will help to receive full information about smart specialization process, its opportunities and perspectives for certain industries.
- 3. Stimulation R&D in the smart specialization area that which be directed on domestic industrial enterprises' problems solution relying on international, and in particular, European experience.
- 4. The development of financial and administrative tools of S3 implementation support on a regional level of industrial sector.

The benefits derived from smart specialization in an industrial sector will have a multiplier effect on the whole economy.

Smart specialization of countries and regions is desirable since it might help them to better integrate into the global economic space that is market by the digitalization and interconnectedness in the universal information and communication systems. Moreover, it would help them to promote their social, economic, environmental and political development that would create favourable conditions for the life of their citizens.

Bibliography

- 1. Association Agreement between the European Union and the Republic of Moldova. Available online: https://mfa.gov.md/en/content/implementation-association-agreement (accessed 12 December 2021).
- 2. An introduction to social innovation for NGOs. Bond. 2016 https://amaniinstitute.org/wp-content/uploads/2016/08/Bond-Intro-to-Social-Innovation-for-NGOs.pdf (accessed 15 December 2021).
- 3. DAVID, Paul A. Hall, Bronwyn H. Smart specialization. From academic idea to political instrument, the surprising career of a concept and the difficulties involved in its implementation. Available online: https://infoscience.epfl.ch/record/170252 (accessed 25 December 2021).
- 4. Digital agenda for Europe. Available online: https://ec.europa.eu/digital-single-market/en/digital-agenda-europe-key-publications. (accessed 2 December 2021).
- 5. Europe 2020. A European strategy for smart, sustainable and inclusive growth. Available online: https://ec.europa.eu/info/index_en. (accessed 20 December 2021).
- 6. FORAY, D., MORGAN, K., RADOSEVIC, S.: The role of smart specialization in the EU research and innovation policy landscape. Available online: https://ec.europa.eu/regional_policy/sources/docgener/brochure/smart/role_smartspecialisation ri.pdf. (accessed 5 December 2021).
- 7. Guide to Research and Innovation Strategies for Smart Specialisations (RIS 3) 2012. Available online: https://ec.europa.eu/region-

- al_policy/sources/docgener/presenta/smart_specialisation/smart_ris3_2012.pdf. (accessed 18 December 2021).
- 8. KOGUT-JAWORSKA, M and Ociepa-Kici'nska E.: Smart Specialisation as a Strategy for Implementing the Regional Innovation Development Policy—Poland Case Study. Sustainability 2020, 12. https://www.mdpi.com/journal/sustainability (accessed 25 December 2021).
- 9. KOROLYOVA, E., KHMELYOVA, G., AGAEVA, L. (2018): Conceptual model of the formation of the «smart specialization» of the region. In: *Economics and Entrepreneurship*, 2018, No. 11 (100), pp. 494-498.
- 10. RANGA, M. (2018): Smart specialization as a strategy to develop early-stage regional innovation systems. In: *European Planning Studies*, 2018, Vol. 26:11, pp. 2125-2146.
- 11. REID, A. (2018): Smart specialization where to now? Lessons, challenges and opportunities. In: *Smart specialization: progress and future prospects.* Vilnius. Available online: https://mosta.lt/lt/renginiai/470-smart-specialisation-progress-and-future-prospects. (accessed 25 December 2021).
- 12. Smart Specialisation Platform. Strategies for research and innovation-driven growth. Available online: https://s3platform.jrc.ec.europa.eu/home (accessed 25 December 2021).