Smart Specialisation Strategy in the Post-Pandemic Times: the Evidence of Belarus

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Abstract. Innovation is recognised as one of the means of implementation for the entire 2030 Agenda for Sustainable Development. The Covid19 pandemic has resulted in slowed economic development. The innovation will have to play an essential role in recovering from the aftermath of the coronavirus. This article discusses how the application of the Smart Specialisation Strategy (S3) will allow faster recovery from the Covid-19 pandemic. The results of the study indicate that (1) S3 are place-based, innovation-led transformation policy for growth and sustainability; (2) the application of S3 allows to choose the priorities within the framework of innovative development; (3) Smart Specialisation can be an effective tool to help regions recover from the pandemic crisis and find new opportunities for more sustainable economies; (4) European Union (EU) countries have successful experience of the application S3; (5) the approach of Smart Specialisation can be applicable in Belarus for creating a competitive advantage for regions; (6) the areas of national and regional importance for the economy of Belarus were identified that could form the basis of the application of the Smart Specialisation approach in Belarus. Keywords: Smart Specialisation Strategy (S3), sustainability, Sustainable Development, Covid-19 pandemic.

1 Introduction

The World Health Organization (WHO) has declared a Public Health Emergency of International Concern (on March 11, 2020) due to coronavirus. The governments worldwide responded to the virus by severe locking down meant to flatten rates of infection.

COVID-19 has had severe negative social consequences worldwide. In addition to its impact on health, it has also significantly impaired economic activities in many countries. The pandemic has had a significant impact on businesses worldwide by lowering the demand for products.

In September 2015, the General Assembly of the United Nations adopted the 2030 Agenda for Sustainable Development to promote inclusive and sustainable economic development. The 2030 Agenda covers 17 Sustainable Development Goals (SDGs) and 169 related targets. Goal 9 calls to work together to 'build resilient infrastructure, promote

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inclusive and sustainable industrialisation and foster innovation. Innovation policies are also implicit in goal 8, including target 8.2 'Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labour-intensive sectors', and target 8.3 'Promote development-oriented policies that support productive activities, creation of decently-paid jobs, entrepreneurship, creativity and innovation…' [1].

Innovation can contribute to achieving these goals and targets, as it drives productivity growth and conserves scarce resources. Moreover, achieving most, if not all, of the sustainable development goals will require innovation.

The innovations are one of the most effective strategies that firms have at their disposal to combat the adverse effects of a crisis. The innovation provides opportunities to adapt and demand products/services following the theory of dynamic capabilities and management.

The Covid-19 pandemic causes dramatic health, social and economic consequences. At the same time, the Internet and other new technologies started playing a significant role in supporting remote working, e-teaching, online collaboration, etc. The pandemic and the related lockdown in many countries made digital work a new norm. It is establishing very effective networks for collaboration in the conditions of lockdown.

Innovation policy plays a pivotal role to tackle current dramatic social challenges. Today, the main challenge for all economies in the world is the Covid pandemic. Innovation and innovation activities should be the primary way out of the economic crisis.

To fully realise the potential of innovation for sustainable development, it is necessary to encourage and steer innovation efforts into areas critical for sustainable development and encourage the rapid and broad-based adoption and diffusion of innovations. Technology and innovation to achieve the development goals for territories allow to move and find new ways of solving current challenges of the pandemic.

The overcoming of the crisis triggered by the pandemic requires unprecedented cooperation and innovation capacities. Building efficient partnerships to deliver innovation processes is the essence of Smart Specialisation.

The present article tries to determine the list of sectoral manufacturing areas of Smart Specialisation for Belarus.

2 Smart specialisation

Smart Specialisation is a set of rules for choosing priorities within the framework of an innovative development strategy. These rules are introduced in a single EU guidance document [2].

Foray (2015) defined Smart Specialisation as 'the capacity of an economic system (a region for example) to generate new specialities through the discovery of new domains of opportunity and the local concentration and agglomeration of resources and competencies in these domains [3].

The rationalism of Smart Specialisation means that each region can find its own unique and justified way of development without copying the priorities of other territories. This requires focusing efforts and resources on a limited set of areas in which leadership can be achieved.

'Smart 'means 'unique 'concerning the strategy of the region. Uniqueness can be defined as follows: 'Being the only one of its kind; unlike anything else [4]. Uniqueness is one of the development priorities thanks to which the region's accumulated competencies and resources are channelled into new activities.

Smart Specialisation allows to identify a few areas with potentials for future growth and to define the associated transformation goals.

There are steps of developing S3 are: i) identification of priority areas (requires careful planning), ii) design of transformational roadmaps, iii) implementation with the help of an action plan. S3 priority areas consist of priority areas and transformation goals.

The main results of Smart Specialisation are structural changes that occur based on economic diversification associated with innovation. This expectation is based on growing evidence from many European and non-EU regions and countries where S3 has been used to support innovation for growth.

There is a widely shared expectation that S3 carry the substantial potential to effectuate regional and national ways to SDGs. The new concept for Sustainable Smart Specialisation has appeared [5]. It involves sustainability and inclusiveness and relates to the new EU priorities during the post-pandemic recovery. It is a research and innovation policy approach contributing to the achievement of 17 SDGs. The concept of Sustainable Smart Specialisation is a place-based agenda that aims at improving sustainability and inclusiveness through an innovation-driven policy.

3 International experience

Smart Specialisation plays an essential role in EU countries and regions. Currently, 187 regions of EU countries are registered on the online Platform of Smart Specialisation (Smart Specialisation Strategies Platform) [6]. These regions are developing and implementing strategies. In addition to the regional profile, the Platform identifies thematic areas of regional Specialisation to promote interregional networking among regions and to generate synergies.

The S3 Platform provides support in exploring and setting up international collaboration in Smart Specialisation. The S3 Platform identifies thematic areas of regional Specialisation to promote interregional networking among regions.

The European experience of Smart Specialisation has been recognised worldwide with a particular emphasis on local needs. In recent years, there has been a growing interest in adopting Smart Specialisation as a reference approach to a localised innovation transformation in some countries across the globe: 23 non-EU countries have been working on Smart Specialisation (e.g. Mexico, Australia, South Korea, Latin American, Montenegro, Serbia, Tunisia, etc.) [6].

In 2021 for the first time in Russia the Higher School of Economics conducted a comprehensive assessment of regional Specialisation based on the principles of smart Specialisation. 12 Ukrainian regions were registered on the S3 Platform [6]. The map of the modern economic Specialisation of Russian regions was compiled [7].

4 Methodology

The identification of Specialisation of regions is based on the method of determining significant cluster groups, what has been used to identify industries of Specialisation in the EU [8]. The development of the regions is determined by the specification of their trade with neighboring territories.

Industries are classified as 'traded' or 'local'. Traded industries are industries that are concentrated in a subset of geographic areas and sell products to other regions and nations. Local industries are present in most geographic areas, and primarily sell products locally.

Today there are different criteria for assigning industries to a particular category. This research is based on the approach of Michael Porter (Porter, 2003). As a criterion of trade, he used the uneven distribution of sectoral employment throughout the country [9-10].

The national level of the industry in the region is determined by the share of the region in the total sectoral employment in the country. Specialisation of national significance in a

particular region is recognised as one of the sectors that make up the first 80 per cent of all sectoral employment in the country [7].

The industry of the regional level is determined on the basis of the ratio of the share of the industry in the region to the average national level. The industry of Specialisation of regional significance in the region is recognised as one in which employment is higher than the average employment rate in this sector in the country.

5 The evidence of Belarus

International experience confirms the importance of S3 in setting innovation policy priorities. This approach can also be used to determine the list of sectoral areas of Smart Specialisation in Belarus.

The main goal of the S3 is to help regions choose sound and non-intersecting development priorities of development in perspective fields of economic Specialisation. The list of such sectors in Belarus is generated [11], which can be the first step in this way.

The study is based on the approach of Michael Porter (2003), who used the uneven distribution of sectoral employment across the country as a factor for Specialisation [9-10].

The study identified sectors of national and regional level based on employment statistics (2018-2020) [12].

The industry of the regional level is essential at the national importance since the regions with relevant specialisation form a significant proportion of the country's total sectoral employment. This is characteristic, for example, for Manufacture of essential pharmaceutical products and pharmaceutical preparations in Minsk region (70% of country employment in the industry) and Manufacture of coke and refined petroleum products in Gomel region (28% of country employment in the industry).

The sectors of regional level are basic to the economy of a particular region. Their share in regional employment is higher than the national average level (with these regions contributing little to the country's sectoral employment). An example, Manufacture of essential pharmaceutical products and pharmaceutical preparations in Minsk (at 1.5% of national employment in this industry).

Among all the regions of Belarus, the economy of the Gomel and Minsk regions, the city of Minsk has become the most diversified (with a wide range of specialisations). At the same time, the choice of development directions of the region can be based on the number of industries of Specialisation and their type of level (national level, regional level, and national and regional level at the same time). These indicators help to assess the degree of diversification of the industry structure, the role of each industry in the economy of the region/country.

The growing number of industries of Specialisation depict the level of diversification of the region's economy and reflect the importance of each sector to the economy of the region and the country as a whole.

Diversified economies should search for niches in global value chains. For territories with few specialisations, interregional cooperation could be an optimal strategy, opening up new markets, opportunities for related activities and increased industrial diversity in the future.

6 Conclusion

Given the wide sectoral diversity, it is essential to focus investment resources and support measures on a limited list of identified priorities. The areas of Smart Specialisation in Belarus were determined. Industries of national and regional level (at the same time) for the economy of Belarus have been singled out: Manufacturing of food products and other non-metallic

mineral products, Manufacture of machinery and equipment, Manufacture of textiles, Manufacture of rubber and plastic products.

A smart Specialisation is a tool for intensifying innovative development, structural modernisation and improving the competitiveness of regions. The Smart Specialisation policy can soften the Covid-19 economic crisis and promote a swift recovery.

Innovation will be critical for increasing the competitiveness of regional economic systems and developing new competencies of this foundation and recovery after the pandemic.

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