SMART SPECIALISATION ASSESSMENT IN LATVIA

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Abstract. The paper compiles different explanations and definitions of smart specialisation in Latvia. The development of smart specialization strategies (RIS3) should promote the competitiveness of countries or regions. For national level, RIS3 helps concentrate resources and support innovations. Desk research identifies lack of regional level when comparing smart specialisations in different countries. Nevertheless, some regions in Latvia have still stated RIS3 when elaborating their regional development strategy.

The research performed is mainly based on desk research by using content analysis and the monographic method. An assessment tool from the RIS3 Assessment Wheel elaborated using the S3 Platform may be also used for assessment of RIS3 development in Latvia.

The RIS3 of Latvia and Lithuania were compared and the differences were connected with transportation, usage of natural resources and society development. The RIS3 of Lithuania referred to the development of a sustainable environment, which was not present in the RIS3 of Latvia.

The development of Latvia's RIS3 has been assessed by using the RIS3 Assessment Wheel. The development of a tool for the synthetic representation of the progress made in drafting/designing a RIS3 allows condensing a huge amount of information in one visual model.

There is measured development of Latvia's RIS3 by comparing Latvian state institution official opinion with articles authors, performed as a first probation. There should be continued research on the regional level of Latvia, involving more experts and specialists particularly from the sectors representing smart specialisation priorities.

Key words: smart specialisation strategy, specialisation fields (priorities), innovation.

JEL code: Q 25; R 11; O 31

Introduction

In many European Union Member States, including Latvia, an urgent problem is how to mobilise the country's potential in a way that contributes to the reduction of disparities in average indicators between developed and other countries as well as how to catch up leaders in innovation, to make cooperation among entrepreneurs, research institutions and higher education institutions more effective and to prevent the lack of skills and the outflow of labour.

Since 2009, smart specialisation strategies, which serve as the determinant drivers of competitiveness of countries and/or regions, have been designed in the EU. The strategies envisage setting smart specialisation priorities that have the greatest potential to raise the competitiveness of national economies and mobilising resources for the purpose of implementing the priorities.

Both at national and regional levels, state administrations in particular play an important role in implementing the Europe 2020 strategy and in executing its decisions. Growth and the creation of new jobs considerably depend on the objectives and particular commitments set at the EU, national, regional and local levels. The purpose of smart specialisation strategies is to transfer innovations from theory to tangible results, namely, make the innovations understandable to producers and introduce them into production. A smart specialisation strategy is a strategic approach to economic development through targeted support for research and innovation. Investments from the European Union Structural Funds into research and innovation are directed based on it.

The aim of this research is to assess smart specialization of Latvia by benchmarking and smart specialization assessment tool.

The tasks of the research:

- to clarify content and interpretations of concept of smart specialization;
- to compare smart specialization strategies and priorities included for Latvia and Lithuania;
- to understand assessment for smart specializations;
- to test self-assessment tool - 'RIS3 assessment wheel', to find out development of smart specialization strategy in Latvia.

Research results and discussion

In 2010, the European Union adopted the notion "smart" in its new ten-year growth strategy Europe

2020 stating that Europe should become a smart, sustainable, and inclusive economy (Europe 2020, 2010). A smart specialisation strategy involves designing a vision, identifying competitive advantages, setting strategic priorities and making government policies that maximally release the knowledge-based development potential of a country or some region.

In an explanatory dictionary, the term smart refers to broad knowledge, well-developed thinking, ample experience, wisdom, ideas and deductions. The term intelligent is used along with the term smart. The uses of the terms are explained by a number of authors (Holland R.G., 2008; Wolfram M., 2012; Pardo T., Nam T., Brian Burke G., 2012). They come to a conclusion that both terms involve the same meaning. However, in the Latvian language, the concepts "prudent specialisation strategy" or "intelligent specialisation strategy" are also used along with "smart specialisation strategy". At present, all the three terms are used as synonyms in national documents, meaning the same idea; besides, their abbreviations are also used: S3 – Smart Specialisation Strategy and RIS 3, which stands for Research and Innovation Strategies for Smart Specialisation.

S3 can provide a suitable platform for that transformation, as it is fundamentally based on a process of entrepreneurial discovery — an "entrepreneurial selection" of market opportunities or a "self-discovery process" (Hausman R., Rodrik D., 2013). The objective is not about telling the innovation system actors what the right specialisations are but accompanying emerging trends and improving coordination by providing the necessary public goods and creating additional incentives at critical bottlenecks to help the new activity grow. Therefore, the outcome of the process is a structural evolution of the whole economy (Foray D., 2011).

At the early stage, when the production of an innovative product is tested, a potential producer as well as a potential investor is not interested in it, as it requires large resources and it is not possible to predict what this activity can result in. A solution has to be found regarding how to combine resources – from the part of both scientists and producers. A number of research studies point to the complicated and time-consuming process of adaptation of all stakeholders – national and local government institutions, research institutions, entrepreneurs, investors, the civil public and various experts – to each other (Sandu S., 2012; Rusu M., 2013; Paliokaite A. et al., 2015).

A number of innovation researchers have expressed an opinion that innovative growth stagnates and has low growth rates in the whole Europe. In their research studies on designing and introducing smart strategies, representatives of the new European Union Member States in particular emphasise that entrepreneurs and investors are little interested and lack motivation and a wish to promote and implement smart specialisation strategies. For example, Lithuanian scientists A.Paliokaite, Z.Martinaitis and R.Reimeris stress that the government and its institutions as customers and consumers of innovations have to think "beyond boundaries", crossing usual and traditional patterns. New patterns for growth and modernisation have to be searched for in traditional industries (Asheim B. et al., 2011).

Scientific discussions often refer to regional development problems with regard to innovation; it is frequently associated with the mobility of scientists and entrepreneurs and their wish or, on the contrary, their reluctance to work in less developed regions (Foray D. et al., 2009). Unlike Latvia and Lithuania, several EU Member States, for example, Romania and Bulgaria set their priorities in their smart specialisation strategies not at national level but at regional level, i.e. for each region. Such an approach takes into account the uneven development level of their regions and the traditional areas being developed in some region (Paliokaite A. et al., 2015; Sandu S., 2012). The territorial size of a country is also taken into consideration.

It is expected that the economic growth in Latvia in the period 2014-2020 is determined by investment in three important sectors: traditional industries, which bring changes in their output and exports; industries that develop high value-added goods and services; industries that make significant horizontal effects on and contributions to economic transformation (Smart Specialisation Strategy…, 2014). The special areas that will receive the largest amount of support in Latvia in future and that are set as priorities in the Smart Specialisation Strategy are as follows: knowledge-intensive bioeconomy; biomedicine, medical technologies, bio pharmacy and biotechnologies; information and communication technologies; smart energy; smart materials; technologies and engineering systems.

However, it has to be also noted that setting priorities does not guarantee that all the objectives are achieved in the strategy implementation period. A

strategy for smart specialisation should evolve and adjust to changes in economic and framework conditions as well as to emergence of new evidence during implementation (Martinaitis Z. et al., 2013; Foray D., Goenaga X., 2013). Some "priorities" can fail, and new prospective fields can emerge, hence intelligence and review procedures should allow for flexibility.

After analysing the smart specialisation strategies of selected European countries, one can find that the priorities set by several countries are quite similar; yet, their interpretations are different. For comparison, the priorities set by two neighbouring Member States – Latvia and Lithuania – in their smart specialisation strategies are summarised in Table 1.

Table 1 shows that although several priorities of Latvia and Lithuania overlap, the smart specialisation strategies of both countries significantly differ. The greatest differences relate to transport, exploitation of natural resources and social development. Logistics and transport are set as priorities in Lithuania, whereas in Latvia this sector is not prioritised. It is, of course, determined by the location of the country and the previous pace of development of this sector in Lithuania. In contrast, the exploitation of natural

resources by various economic sectors and complex solutions to the use of such resources in Latvia do not relate to the priority "bioeconomy". In Lithuania, agriculture and food processing are set as priorities. So, the exploitation of natural resources as a priority is defined in Latvia in a much broader context, as the bioeconomy involves the production of renewable biological sources and their transformation into food, feed, biological products and green energy. The components of bioeconomy are agriculture, forestry, fisheries, food, pulp and paper production as well as partially the chemical industry, biotechnologies and energy (Lenerts A., Strikis V., 2013). In part, these areas match with environmental sustainability referred to in Lithuania's strategy, which is not highlighted in Latvia's strategy.
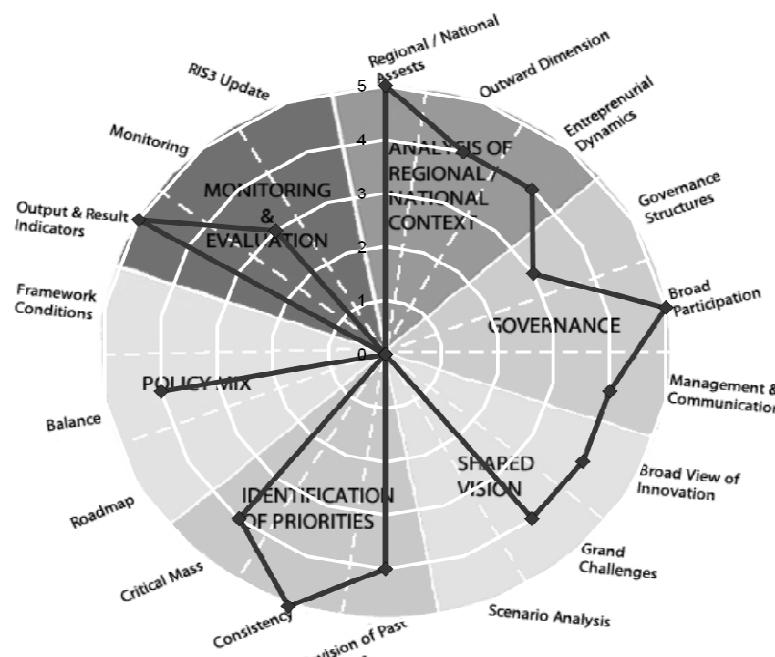
The **RIS3 Assessment Wheel** can be used performing the Smart Specialisation Strategy (RIS3). It is a synthetic tool to position a country and its RIS3. The final layout of the RIS3 Assessment Wheel was elaborated using the S3 Platform on the basis of the original contribution by Christian Saublens, Executive Manager of EURADA – the European Association of Development Agencies.

Table 1

Priorities defined in the smart specialisation strategies of Latvia and Lithuania

No	Latvia	Lithuania	Comments
1.	Smart energy	Efficient energy system and sustainable environment	Sustainable environment dimension is not set as a priority in Latvia
2.	Knowledge intensive bioeconomy and biotechnologies	Food technologies and agri-innovation	Scope of Latvia's strategy is broader
3.	Biomedicine, medical technologies, biopharmacy and biotechnologies	Health, health technologies and biopharmaceuticals	Both countries focus on medical technologies and biopharmacy
4.	Information and communication technologies	E-systems	Latvia also particularly focuses on biotechnologies
5.	-	Transport and logistics	Different explanation; Latvia focuses on ICT on the whole.
6.	-	Inclusive and learning society	In Lithuania – the e-environment
7.	Smart materials, technologies and engineering systems	New processes, materials and technologies for industry	It is not set as a priority in Latvia

Source: authors' construction based on an informative report by the Cabinet of Ministers of Latvia, 2013 and Paliokaite A. et al., 2015

Source: authors' construction based on Policy mix and implementation of the RIS3, presentation materials, 2014

Fig. 1. **Informal self-assessment on Latvia's work on the RIS3**

The development of the RIS3 Assessment Wheel for the examination of the progress made while developing the RIS3 allows fitting a huge amount of information in one model. The assessment wheel can support a number of activities, e.g. self-assessments, peer-reviews, expert contributions, presentations at dissemination, discussion and negotiation meetings etc.

A. Kiopa, a Deputy State Secretary from the Ministry of Education and Science, when discussing the topic "LATVIA: Policy Mix and Implementation of the RIS3", mentioned that this wheel can be used for an initial/informal self-assessment of Latvia's work on the RIS3 as well as presented the wheel (Figure 1).
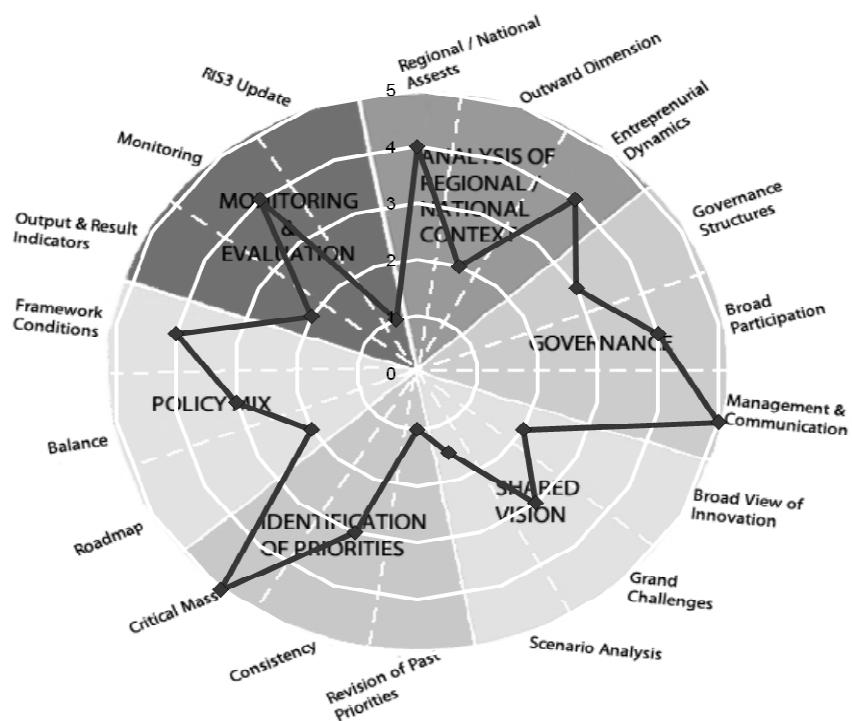
The wheel is built on the basis of the six steps described in the RIS3 Guide and the identification of three critical factors for each of the steps. The scaling tool (from 0 to 5) estimates the seriousness of the evidence provided in the process as far as each critical factor is concerned with the following meaning: 0 means no information available on the specific element, 1 means poor, 2 means to be improved,

3 means fair, 4 means strong, 5 means excellent. The Homepage Smart Specialisation Platform offers a description of the Assessment Wheel, an assessment tool and the RIS3 Guide (RIS3 Guide, s.a.).

Guidance is structured around six practical steps: analysing the innovation potential; setting out the RIS3 process and governance; developing a shared vision; identifying the priorities; defining an action plan with a coherent policy mix; monitoring and evaluating.

The final result of assessment appears in a form of "spider graph" where the strongest and weakest positioning would be easily highlighted. This immediate visual recognition of strengths and weaknesses would allow more focusing on further activities.

The authors of the research paper also tried to use the RIS3 Assessment Wheel to find out if the RIS3 could be further developed in Latvia, as this tool was tested by government officials (Figure 2).

Source: authors' construction

Fig. 2. **Self-assessment on Latvia's work on the RIS3**

When comparing the assessments, there can be seen that the authors have not valued any of the factors at zero, which means that there can be always found reasons to support the factors. In Figure 1, it is obvious that the factors such as scenario analysis, roadmap, framework conditions and RIS2 update were valued at zero. However, Figure 2 shows these factors to be a little bit higher than zero because a little less than a year has past since the first measurement. There are developed RIS3 supporting documents and organised popularisation seminars and conferences. A good example is research on Vidzeme planning region organized by the Norway Grants and the Ministry of Environmental Protection and Regional Development of Latvia which supports many of the wheel factors (Smart Specialisation Opportunities…, 2014).

In order to make an in-depth assessment of smart specialisation for Latvia, it is envisaged to adapt this assessment tool for regional evaluation – in Zemgale, Kurzeme, Latgale, Vidzeme and Riga.

Conclusions, proposals, recommendations

1) The European Union Member States have developed smart specialisation strategies in line with the objectives set in the Europe 2020 strategy. In their strategies, each Member State defines its priorities to foster economic growth by using its current potential, while at the same time promoting innovation. Some Member States, particularly small ones in terms of territory, have set priorities on a national scale, while several Member States have set priorities for their every region.

2) A comparison of the smart specialisation strategies of Latvia and Lithuania reveals that a great deal of their priorities is similar, having different definitions. However, there are some differences, particularly for transport and logistics that are prioritised in Lithuania and for the exploitation of natural resources, which is defined in Latvia's strategy in a broader sense.

3) An assessment of smart specialisation development by using a tool – the RIS3 Assessment Wheel – needs further steps to be taken, such as: upgrade of the national and/or regional RIS3; appropriate consideration of territorial features, priorities and needs in the multi-level governance process at country level; preparation and negotiation of funding programmes such as the EU cohesion policy operational programmes; reviews, comparisons and benchmarking; reflection on training/coaching activity needed in a particular defined segment; definition of co-operation activities and establishment of mutual learning / twinning tools.

4) Further research will also involve an assessment of RIS3 for separate regions of Latvia, which may give different results and emphases. This will be done by involving experts and field specialists to boost the assessment's usability and objectivity.

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