REGIONAL ABSORPTIVE CAPACITY AND REGIONAL DISPARITIES IN LITHUANIA: LINKAGES, EVIDENCES AND INSIGHTS

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Abstract: *Regions face contemporary challenges of global economy and modern society and act differently. Therefore, regional disparities occur in various fields: social welfare, economic growth, infrastructure developments, etc. Sometimes the regional retardation (as a reflection of regional disparities) inhibits the progress and brings losses; sometimes otherwise, it encourages the flexibility and the implementation of new ideas. Especially retarding regions, seeking for socio-economic welfare, must search for new (specific, adapted to the context and circumstances) ways of acting. Indisputably innovations become the core of a socio-economic progress in all regions. And the development of absorptive capacity (individual, organizational, regional) as a main precondition for any innovative activity, leading to innovations, could create favorable preconditions to gain the competitive advantage. Therefore, this article draws linkages between levels of regional absorptive capacity and regional welfare by giving some evidences from Lithuania (a small European country). It argues that regional absorptive capacity can be understood as a cause and a consequence of the regional development process and be reflected by regional disparities. Results of the research illustrate the mutual connection: region with better socio-economic results has more possibilities to develop its absorptive capacity and to reach its higher level, needed for future development.*

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JEL Classification: *O31, R11.*

Introduction

Recently the previous research works have investigated absorptive capacity in various contexts. Scholars and researchers, working in the field of innovation management, management of innovation systems and innovation policy, analyzed this phenomenon and agreed that "the concept of absorptive capacity, whose foundations were originally designed in the context of firm theory, can be extended to complex institutions, such as countries and regions" (Mason, Bishop, Robinson, 2009, p. 1363). Therefore, many studies are made in the development of innovations in particular organization, innovation system or region (Gray, 2006; Mahroum, Huggins, Clayton, Pain, Taylor, 2008; Mahroum, Alsaleh, 2012; González, Muiña, 2014, etc.), but only few of them look for linkages between absorptive capacity and socio-economic situation and their development (Narula, 2004; Autant-Bernard, Fadairo, Massard, 2013; Juknevičienė, 2015; Moutinho, 2016, etc.). The absorptive capacity can be taken as the core capacity needed for any innovative activity and tightly connected to the development of all organizations and sectors in a region. The higher level of absorptive capacity of organizations (or sectors) leads to more successful, smart and/or developed exploitation of opportunities in the environment (González, Muiña, 2014; Ali, Seny Kan, Sarstedt, 2016). And otherwise, if the region goes

through the stagnation or retardation process, regional organizations experience more challenges and problems to become equally competitive or even leading because of the lack of regional capacities, resources and support.

There emerges **a scientific problem**: how the absorptive capacity is coherent to the socio-economic situation of a region? **The aim** of the article is to present linkages between the regional absorptive capacity and regional development situation (disparities). For the implementation of the research idea, following **objectives** were used: 1) to present the concept of the development of regional absorptive capacity; 2) to identify the linkages between the regional absorptive capacity and regional disparities (the development of absorptive capacity and the regional development); 3) to present some empirical evidences of the regional disparities' reflection on regional absorptive capacity from Lithuanian regions and give some future insights. The literature analysis, theoretical systematization, statistical analysis and interpretation were used as **methods** for this scientific research.

1 Linkages between the development of regional absorptive capacity and the regional development

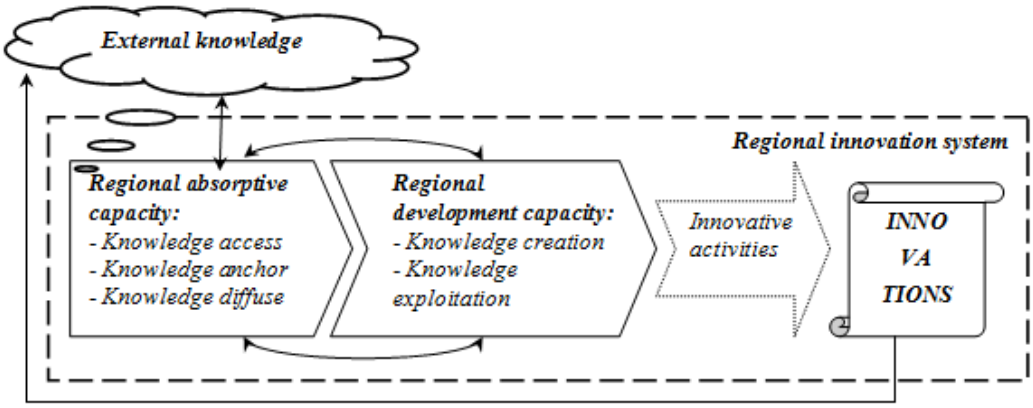
1.1 The conception of the development of regional absorptive capacity

Regional absorptive capacity (hereinafter RAC) is the phenomenon and main precondition for innovative activities, and it must be supported and maintained in a regional innovation system (hereinafter RIS). It must be understandable for all participants of a RIS (academy, business, government and business, innovation support organizations) and it should be focused on the essential task – the development of the regional socio-economic welfare.

The approach of knowledge-based view gives the emphasis for the role of knowledge (especially external one) as the main source for creation of strategic (including development) opportunities (Foss, Lyngsie, Zahra, 2013). Extracting new ideas from elsewhere (external knowledge) and combining them with existing knowledge (internal knowledge) is one of the major processes of innovation activities, and it is absolutely imperative that organizations (participants of the RIS) protect their valuable knowledge and the outcomes of processes (Seo, Chung, Woo, Chun, Jang, 2016). Despite of the protection of original ideas, knowledge becomes more and more global value, accessible from different points and for different organizations and individuals (participants of innovation systems in various levels). It is important to be able to attract good ideas from elsewhere (regional absorptive capacity RAC) and exploit them to develop new products or services (regional development capacity). These are main conditions for the enabling and enhancing the efficiency of innovative activities in a region. Scientific discussions and the analysis of scientific literature indicate several versions of the concept of the absorptive capacity and its dimensions. But the author of this research follow the modern conception of **absorptive capacity** declaring three main components (elements needed for the enabling of knowledge absorption): the capacity to access knowledge (in international networks of knowledge and innovation); the capacity to anchor external knowledge (from people, institutions and firms); the capacity to diffuse new innovation and knowledge (in the RIS as well as wider economy) (Fig. 1) (Mahroum et al., 2008; Mahroum, Alsaleh, 2012; Juknevičienė, 2015). This phenomenon comprehended two levels of absorptive capacity (individual and organizational) in early studies, but later the

third level (the regional one) was highlighted by various researches, explaining the connection between innovativeness of a region and its absorptive capacity.

Fig. 1: Regional absorptive capacity in a regional innovation system



Source: Author's own work.

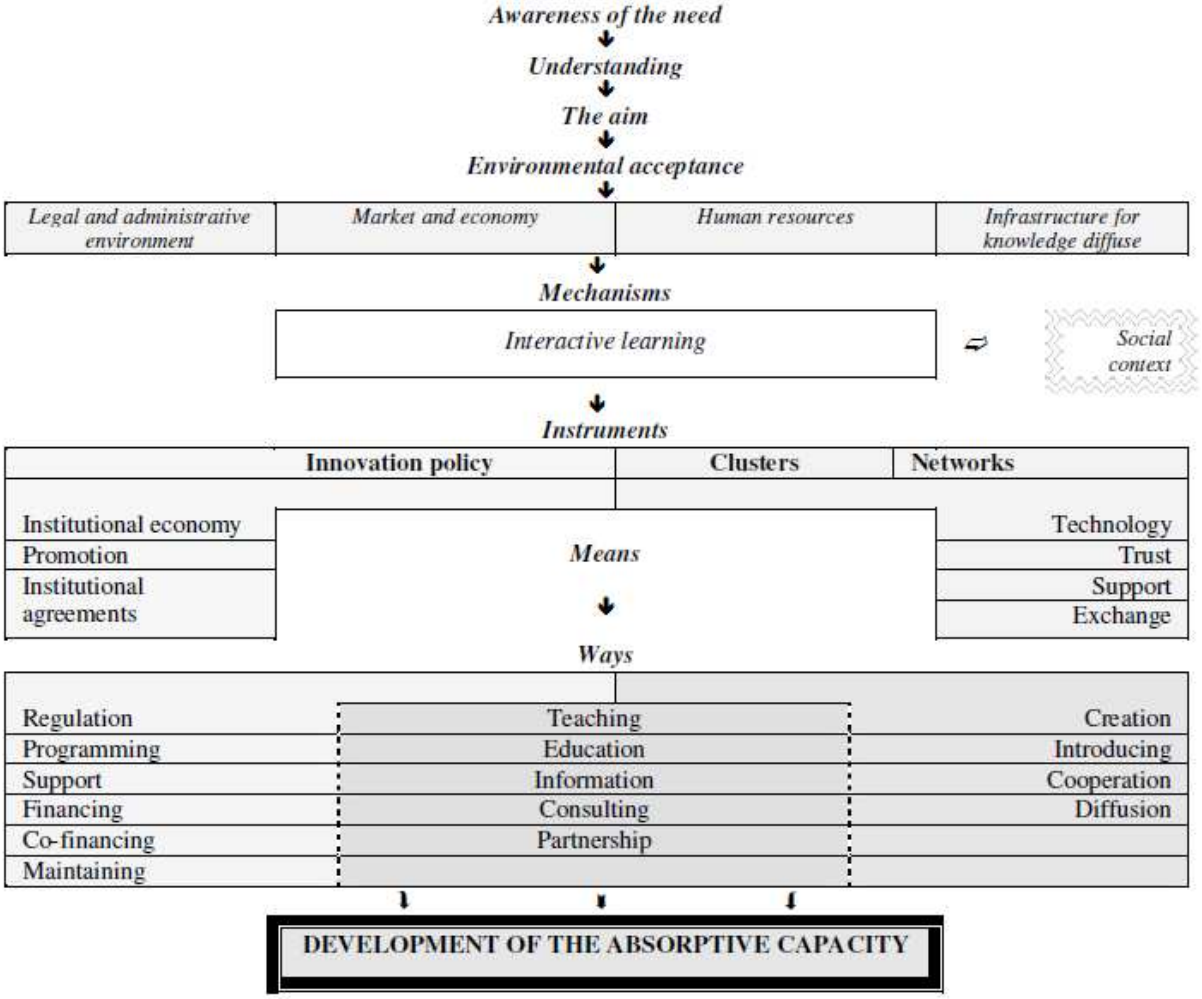
Each regional innovation system is unique; therefore, different RISs can be characterized by different scale, intensity, speed and empowerment options of the regional absorptive capacity. But all of them share a common goal – innovations. Innovations as the result of innovative activities in a RIS require for the empowerment of all its actors. The basis for the research was the Triple Helix Model (Etzkowitz, 2003; Juknevičienė, 2015), where three main elements are presented (university, industry, government). According to many insights of scientific discussions and the critique, this model was adapted to the context of a RIS in a small country and elements were renamed as academy (including universities and colleges), business (industry and service sector), government (national, because there is no regional administrative level in Lithuania), and support institutions (representing organizations, providing material as well as non-material support for business development, business-university partnership, innovation creation and development). Institutions presenting academy and business elements mainly participate in the process of the creation, exploitation and the transfer of innovations. Their ability to innovate depends on internal (regional) and external (supra-regional) knowledge sources, complementing each other. Partnership between all actors in a RIS should lead to the innovative activities. Innovations as a result of those activities can only be achieved by ensuring the continuous dynamic process – the development, which nourishes and maintains innovative activities in a RIS.

The "development" is determined as a process, enabling all actors of a RIS for many activities leading to innovations: to identify changes in the environment, to improve the organizational or sectorial situation, to contribute to the growth and/or positive changes in a particular sector, sphere or industry etc. Therefore, **the development of a regional absorptive capacity** is perceived as an acquisition, building, consolidation and enhancement of capacities of knowledge access, anchoring and diffusion liberating the potential of existing knowledge (internal and absorbed external), realise potential opportunities, integrate the learning into the behaviour (individual and organizational). In other words, the development of the RAC enables better exploitation of the potential of existing implicit and explicit knowledge, and creates needed preconditions for the generation and realization of innovative ideas.

The development of the particular RAC is possible just with the maintenance of a particular RIS environment, which consists of: a) appropriate basic infrastructure (transport lines, communication channels; basic qualified human resources; networks

of schools and hospitals, etc.); b) developed advanced infrastructure (universities, research institutes; advanced qualified human resources; banks, insurance companies, ect.); c) enterprises (local companies with appropriate material and human capital; branches of multinational companies); d) appropriate activities of formal and informal institutions (regime of intellectual property; incentives and subsidies, promoting the creation and adoption of new technologies; taxes, competition policy; schemes for the promotion and targeting of investments; promotion of economic collaboration between domestic and foreign actors, etc.) (Narula, 2004). All mentioned elements of the RIS environment (their existence and/or the level of their development) strengthens or interrupts the process of the development of the RAC. This explains the need of understanding, how the multidimensional process of the development of the RAC is composed (Fig. 2).

Fig. 2: Elements of the development of the absorptive capacity



Source: (Juknevičienė, 2015, p. 70)

First of all, the awareness of the need for the development must exist in all levels in a particular RIS. This awareness leads to the intensification of the understanding (to know who, why and how) and the clarification of the goal of this process (the final achievement of the development). Furthermore, all steps (positive changes) of the development must proceed and be maintained in a favourable environment, supported by legislation and administration (legal basis, decisions, made by public policy makers and public administration institutions), market and economy (system of taxes, stability of a market, trade policy, etc.), human resources (scientific and educational activity, number of high qualified specialists in a region, retention of high qualified specialists in a region,

the system for training, etc.), and infrastructure for knowledge diffusion (access to the Internet, networks and bridges of telecommunications, etc.). Besides, all actors of a RIS must choose appropriate instruments, means and ways for making positive changes (not only organizational, but regional as well) and going forward toward the goal of economic growth of the organization and regional socio-economic welfare. It should be emphasized, that the development must be organized in all three levels (individual, organizational and regional). Moreover, the public policy (objectives, programs, instruments, projects, etc. of the national innovation policy and regional policy) plays the crucial role in the development process at the regional level. The goal of the development could be reached only with the support of (national and local) governmental institutions. At the same time it should be emphasized that homogenous national innovation policy do not ensure a harmonious development of all regions in a country. Therefore, it is necessary to identify factors, determining the capacity to access, anchor and diffuse the knowledge, specific for a particular RIS.

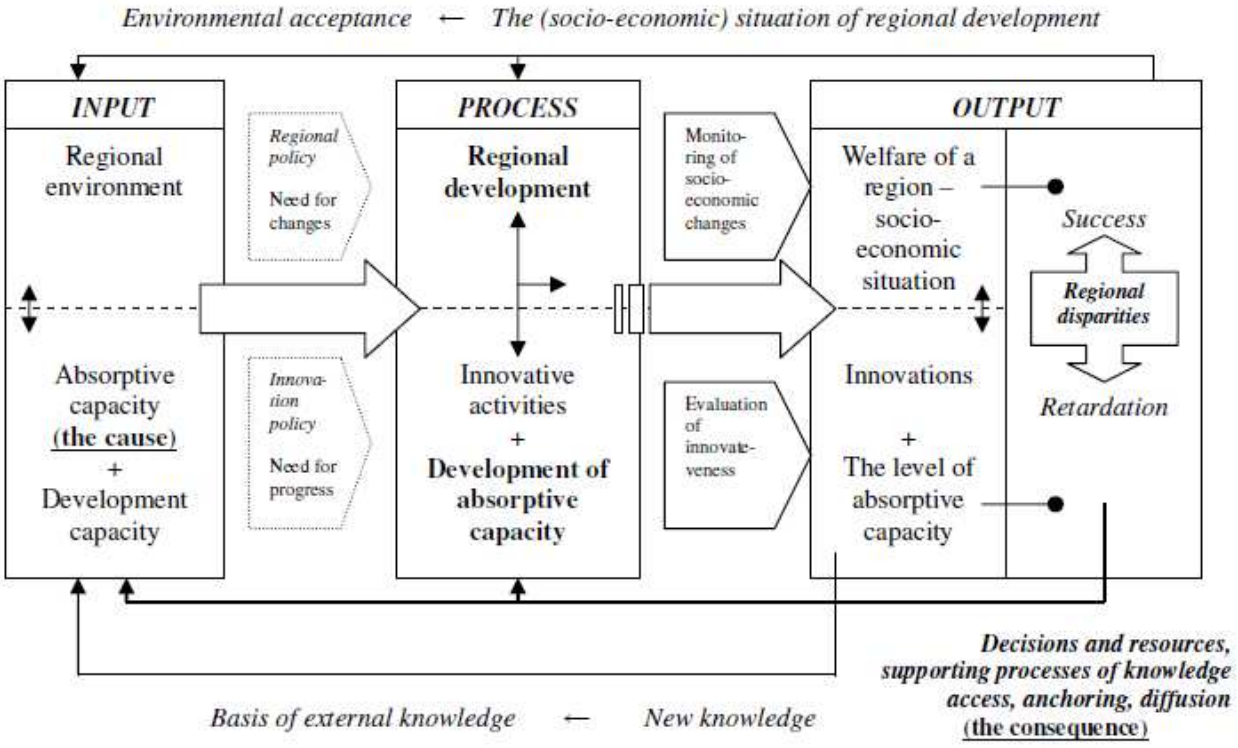
1.2 Linkages between the regional absorptive capacity and regional disparities

Regional disparities are determined as the divergence or inequality of characters, phenomena or processes, having specific territorial allocations and occurring in three types of spheres: social (relates to population, quality of life, incomes, social facilities, etc.), economic (the economic and development potential, regional outputs, employment level, etc.) and territorial (geographical, natural and technical conditions, such as natural environment, availability of markets, education, services, infrastructure, etc.) (Kutscherauer, Fachinelli, Hučka, Skokan, Sucháček, Tománek, Tuleja, 2010, p. 17). The welfare of the society and the quality of its life are depended on those spheres; therefore, the regional development is connected with regional disparities. And elimination of those disparities usually is main aim of the regional policy.

Among causes leading to regional economic disparities it can be found: the structure of economy dominated by economic sectors with a low productivity of the production factors; the low share of population having a higher education; the low research-innovation potential due to the insufficiency of the financial resources and the poor implication of the private sector in funding R&D activities; the insufficient, weakly motivated human resources; and finally, the migration of the highly qualified specialists (Talmaciu, Mioara, 2011). Even it was proved that inflows of innovators, inventors (active participants of the RIS) are “critical for wealthier regions, while it has more nuanced effects for less developed areas” (Miguélez, Moreno, 2015, p. 833), at the same time it was argued, that thriving (leading, creative, innovative) businesses are vital to the economic recovery (Mason, Bishop, Robinson, 2009), which is essential important for less developed regions after some crisis or regional stagnation period.

Absorptive capacity contributes to regional development, because it allows actors of a RIS to internalize knowledge that exists elsewhere (either within the regional economy or externally), make it available directly or indirectly to them (Narula, 2004, p. 7); therefore, it creates preconditions for the strengthening of a regional competitive advantage and for the creation of favourable environment of the socio-economic progress. But sometimes the real result of the innovativeness is far from the expected one even with a lot of resources and strong efforts of actors in a RIS. This happens because of regional differences and the multidimensionality and the complexity of the development process (Fig. 3).

Fig. 3: The model of linkages between the regional absorptive capacity and regional disparities in the context of the development process



Source: Author's own work.

The RAC is the beginning of innovative activities, leading to innovations as a reflection of the success in innovations of the region and its development. Regional policy is the targeted activities of governmental institutions influencing the socio-economic development, trying to eliminate disparities between leading and lagging behind regions and within regions as well as to promote balanced and sustainable development in the country (Burbulytė-Tsiskarishvili, 2014). This is the main branch of the public policy targeted to eliminate socio-economic gaps and to engage all resources and instruments in the process of regional development. The National Innovation Policy is more complicated, because it is not a process of long-term planning but rather one of continuous experimentation – the aim of innovation policy "is to foster the development of technologies that don't yet exist and whose business models and markets are unknowable. Organizations capable of inventing these technologies must be attracted or built, and the result of their labours must be channelled into economic growth" (Breznitz, 2014). Nevertheless, the RAC participates in the process of socio-economical growth as the stimulus (the cause) for catching up other regions (eliminating regional disparities). The final result of the process of socio-economic development (success or retardation) determines environmental acceptance, decisions and resources as well as the level of the RAC – the potential for the future knowledge absorption (the consequence). However, processes of the development of the RAC and the regional development are influenced by specifics of a RIS in a particular country.

2 Methods

The research of linkages between the RAC and regional disparities was based on the case study approach. This methodological approach enabled the researcher to combine the existing theoretical knowledge with new empirical insights (Vissak, 2010), especially when this topic in the context of small country's regions was not analysed before.

The list of indicators, presenting the situation of the RAC, is based on the scientific research, accomplished by the author (Juknevičienė, 2015), which substantiated the methodology of the assessment of the development of the RAC. Indicators, introduced in this article, were selected in accordance with the need to reflect linkages between the RAC and regional disparities. All those indicators were connected to components of the RAC: knowledge access, anchoring and diffusion. Indicators are presented in two groups of input and output (causes and consequences) of the development process.

This research included sub-national regions – counties (in accordance with NUTS classification) of Lithuania. There was a goal for sampling to select two regions similar in some environmental conditions, but different in results of innovativeness. The method of criterial selection was used to make a sample of the research. It was used 22 criteria, reflecting groups of factors: geographical (situation in a country, number of municipal areas, etc.), infrastructural (containing transport hubs – airport, seaport, etc.), social (population, education), economical (productivity, investments) and institutional (containing governmental, public institutions, formulating /implementing the innovation policy). Two regions were selected for the research: one – successfully carrying out, and the other – insufficiently successfully carrying out innovative activities (respectively Kaunas and Šiauliai regions), which differently seek for economic growth, competitive advantage and development of absorptive capacity. The comparison of the general situation and indicators' values per 1000 inhabitants in Lithuania, Kaunas and Šiauliai regions gave the opportunity to reflect regional disparities.

Due to limits of access to the regional statistics and the lack of newest data, the most recent statistical data (presenting 2012) is introduced in this research. All data was obtained from databases of two institutions: Statistics Lithuania and The State Patent Bureau of the Republic of Lithuania (Official Statistics Portal. Statistics Lithuania, 2016; State Patent Bureau of the Republic of Lithuania, 2013). After presenting some evidences from Lithuania (as a small country), the method of interpretation was used to identify main perspectives of the development of the RAC in mentioned regions.

3 Problem solving

The situation of the RAC (values of indicators in 2012) (Tab. 1) reflects some regional (socio-economic and infrastructural) disparities of Lithuanian (successful and insufficiently successful) regions.

It can be noticed, that total values of indicators show that Kaunas region exceeds the level of Šiauliai region in all areas (except the net international migration). But comparing values per 1000 inhabitants this situation differs.

Infrastructural (institutional) maintenance is needed for the region as a main source for new knowledge, innovative activities and the environment for possible exploitation. Analysing infrastructural disparities, it is mentioned that Kaunas region has 11 institutions (5 universities) of high education, Šiauliai region - only 3 (only 1 university among them). According to the value of those institutional indicators per 1000 inhabitants, Kaunas region exceeds the national level. Even the traditional industry takes the main part of Lithuanian business market; there are some evidences, that small and medium enterprises (especially, start-ups, spin-offs, etc.) could be the main power of innovative activities' progress in regions. Number of enterprises introducing innovations in Kaunas region exceeds the same number in Šiauliai region 2.7 times. But in comparison of this indicator's value

per 1000 inhabitants both regions do not seek the national level (Kaunas region still lags by 20.3 percent, Šiauliai region - 41.2 percent). Mentioned gaps show that institutional indicators reflect the tendency of regional differences and even their situation in the national level.

Socio-economic growth of the region is impossible without high qualified human resources. Number of specialists graduated from regional universities (it's a social indicator) in Kaunas region 4.6 times exceeds the number in Šiauliai region. Comparing this indicator's values per 1000 inhabitants, Kaunas region shows the high position as well (it is 60 percent higher than in Lithuania and 128 percent higher than in Šiauliai region). Similar situation is with the number of specialists, graduated from regional colleges – respectively 25 and 66.7 percent. Interesting fact is that the share of employees, involved to R&D in higher education and governmental sectors, in both regions is higher than the national level – respectively 8.5 and 2.4 times. The link between high qualified graduates and their employment in activities, requiring special knowledge in R&D, can be seen here.

Unfortunately, net international emigration is huge problem for all the country and its regions. Country lost more than twenty thousands of inhabitants only during 2012. Despite of the success/non-success in innovative activities, the net international emigration per 1000 inhabitants in both regions was higher than the national level: in Kaunas region - by 19.5 percent, in Šiauliai region - by 16 percent.

Analyzing economic indicators per 1000 inhabitants it can be seen different positions for both regions: Kaunas region (successful region) lags behind just in FDI and the share of regional GDP in the national GDP (respectively – 38.5 and 1.8 percent), when Šiauliai region (insufficiently successful region) lags behind in majority of economic indicators, except ratio of regional R&D expenditures in higher education and governmental sectors and the region's GDP, and the share of employees involved to R&D, when values 1.5 and 2.4 times exceed the national level.

Tab. 1: The situation of the regional absorptive capacity (values of indicators) of Lithuanian regions in 2012

	INPUT	*Region**	*Value*
ACCESS	Number of universities in a region (units)	Lithuania_R	23
		Kaunas_R	**5**
		Šiauliai_R	**1**
		Lithuania_1	*0.00766*
		Kaunas_1	*0.00834*
		Šiauliai_1	*0.00338*
	Number of colleges in a region (units)	Lithuania_R	24
		Kaunas_R	**6**
		Šiauliai_R	**2**
		Lithuania_1	*0.00799*
		Kaunas_1	*0.01001*
		Šiauliai_1	*0.00676*
ANCHORING	Number of specialists graduated from regional universities (units)	Lithuania_R	30333
		Kaunas_R	9517
		Šiauliai_R	2034
		Lithuania_1	***10***
		Kaunas_1	***16***
		Šiauliai_1	*7*
	Number of specialists graduated from regional colleges (units)	Lithuania_R	13044
		Kaunas_R	2672
		Šiauliai_R	897
		Lithuania_1	*4*
		Kaunas_1	*5*
		Šiauliai_1	*3*
	Number of citizens at the age of 25-64 having at least the higher education (ISCED 5-6) in a region	Lithuania_R	549666
		Kaunas_R	123525
		Šiauliai_R	41120
		Lithuania_1	***183***
		Kaunas_1	***206***
		Šiauliai_1	***139***
	State and municipal budgets for students of region's higher education institutions (universities and colleges) (million EUR)	Lithuania_R	303.793
		Kaunas_R	86.808
		Šiauliai_R	21.282
		Lithuania_1	***0.10114***
		Kaunas_1	***0.14477***
		Šiauliai_1	***0.07194***
	Ratio of regional R&D expenditure in higher education and governmental sectors and the region's GDP (percent)	Lithuania_R	0.661
		Kaunas_R	1.195
		Šiauliai_R	0.163
		Lithuania_1	***0.00022***
		Kaunas_1	***0.00199***
		Šiauliai_1	***0.00055***

	OUTPUT	*Region**	*Value*
ACCESS	Number of organizations, engaged in vocational, scientific and technical activities (excluding R&D) in a region (units)	Lithuania_R	7782
		Kaunas_R	1162
		Šiauliai_R	281
		Lithuania_1	*2.59086*
		Kaunas_1	*1.93784*
		Šiauliai_1	*0.98312*
	Share of Regional Gross Domestic Product in a structure of national GDP (percent)	Lithuania_R	100
		Kaunas_R	19.6
		Šiauliai_R	7.6
		Lithuania_1	*0.03329*
		Kaunas_1	*0.03269*
		Šiauliai_1	*0.02569*
ANCHORING	Net international migration of a region (units)	Lithuania_R	-21257
		Kaunas_R	-5076
		Šiauliai_R	-2460
		Lithuania_1	***-7.08***
		Kaunas_1	***-8.46***
		Šiauliai_1	***-8.21***
	Share of employees, involved to R&D in higher education and governmental sectors of a region, in the structure of total labour force (percent)	Lithuania_R	1.33
		Kaunas_R	2.51
		Šiauliai_R	0.44
		Lithuania_1	***0.00044***
		Kaunas_1	***0.00419***
		Šiauliai_1	***0.00149***
	Foreign direct investments in a region (million EUR)	Lithuania_R	12230.126
		Kaunas_R	1502.568
		Šiauliai_R	177.350
		Lithuania_1	***4.07177***
		Kaunas_1	***2.50579***
		Šiauliai_1	***0.55951***
DIFFUSION	Number of issued patents in a region (units)	Lithuania_R	83
		Kaunas_R	24
		Šiauliai_R	5
		Lithuania_1	***0.02763***
		Kaunas_1	***0.04002***
		Šiauliai_1	***0.00845***
	Number of registered designs in a region (units)	Lithuania_R	53
		Kaunas_R	13
		Šiauliai_R	1
		Lithuania_1	***0.01765***
		Kaunas_1	***0.02168***
		Šiauliai_1	***0.00338***
	Number of enterprises, introducing innovations in a region (units)	Lithuania_R	25354
		Kaunas_R	4033
		Šiauliai_R	1468
		Lithuania_1	*8.441*
		Kaunas_1	*6.726*
		Šiauliai_1	*4.961*
	Added value, created in a region in prices of production (million EUR)	Lithuania_R	12560.322
		Kaunas_R	3203.574
		Šiauliai_R	1116.346
		Lithuania_1	***4.18170***
		Kaunas_1	***5.34251***
		Šiauliai_1	***3.77368***

CAUSES	**CONSEQUENCES**
Means of "Regions":	
Lithuania_R – the real value of indicator of Lithuania	Kaunas_R – the real value of indicator of Kaunas region – the successful region.
Lithuania_1 – the value of Lithuanian regional indicator per 1.000 inhabitants	*Kaunas_1* – the value of indicator of Kaunas region per 1.000 inhabitants

Additional information about population in 2012: Lithuania – 3 003 641; Kaunas region – 599 638; Šiauliai region – 295 824 inhabitants.	Šiauliai_R – the real value of indicator of Šiauliai region – the insufficiently successful region *Šiauliai_I* – the value of indicator of Šiauliai region per 1.000 inhabitants

Source: concluded by the author, on the basis of (Official Statistics Portal. Statistics Lithuania, 2016; State Patent Bureau of the Republic of Lithuania, 2013)

The statistical analysis showed that Kaunas region is more successful region, when Šiauliai region lags behind almost in all areas, even in comparing values per 1000 inhabitants.

4 Discussion

All indicators of knowledge absorption reflect disparities between regions. They can be taken as the contribution as well as the final result of the development process.

Firstly, the regional institutional (infrastructural) disparities can be noticeable. The process of knowledge access, anchoring and diffusion is maintained by different number of actors of both RISs. Especially it is important, because of directly linkages between the development of the RAC and the existence and vitality of RIS actors, involved to activities, enquiring innovative behaviour (universities, colleges and enterprises, introducing innovations). Secondly, regions differ obviously according to efforts and results of the development of human resources and its involvement to innovative activities. Kaunas region has the higher potential of high qualified specialists, even with high number of emigration from the region. This fact testifies about "brain-drain" phenomena in a region, sufficiently carrying out innovative activities, which becomes a threat for future regional development. It could be stated that Lithuanian regions become more and more "regions-donors" preparing needed specialist for other regions (the region of capital – Vilnius) or even other countries. Emigration from a region can be stated both – as a cause ("brain drain" phenomenon) and the consequence of the regional retardation as well as for lower level of absorptive capacity development. Even having quite high educated population, region can not be developed without business contribution – the individual absorptive capacity can not get the explicit form because of no possibilities to enable competencies in a particular job position (no vacancies for specialists available in the regional labour market). Thirdly, the regional economic situation (Value added) reflects the tendency of disparities (leading and lagging behind) of regions. Region, successfully carrying out innovative activities, create almost one fifth of the Lithuanian GDP (it holds the national level per 1000 inhabitants). Graduates and high qualified specialists are more motivated to remain in this region, business organizations (having increased choice in specialists supply as well as better economical welfare in the region) have the interest to develop, expand their activities in the region, thereby creating more favourable environment for future development of absorptive capacity.

All those indicators and their analysis proclaim about the connection between the RAC in a particular RIS and regional (socio-economic) disparities (as causes and consequences).

The analysis of the situation in two Lithuanian regions gives some insights on future issues. The level of RAC and regional socio-economic welfare (with regional disparities) can be stated as "two sides of the same mirror". First of all, RAC can be developed only in favourable environment, when regional development process is the main instrument to create needed environment. Regional disparities reflect the socio-economic leadership and retardation, speaking about unequal preparation for innovative activities and enabling of implicit competencies. Insufficient conditions (no workplaces, especially for young

creative generation of specialists, low level of wages, low standard of living) lead to the negative regional consequences, such as huge wave of emigration (especially professionals), business relocation, unsatisfaction of regional community's needs, aging society, non-motivated personnel, etc.). Almost all regions in Lithuania experience this negative impact (both successful and non-successful). Secondly, RAC remains implicit till it gains favourable conditions to become explicit. Therefore, the potential of regional human resources must be recruited and exploited. One organization or even sector is disable to achieve such a goal, therefore, all actors of the RIS must be the part of developing the RAC and to contribute to the implementation of innovation policy.

Conclusion

Particular elements of knowledge access, anchoring and diffusion contribute to the development process (input) as well as emerge as the final result (output). The duplex connection between the RAC and the socio-economic situation in a region is identified as the theoretical and empirical approach. The smaller scale of innovative activities, determined by weaker absorptive capacity, leads to the retardation of a region (in innovations as well as economy of the insufficient successful region), what causes fewer possibilities (in terms of the acquisition of resources and the potential's empowerment) for the development of the RAC. And vice versa, the successful region with the higher level of the RAC can create the favourable environment for efficient innovative activities, giving satisfying results of regional socio-economic development, leading to the forthcoming knowledge absorption. In summary, linkages between the RAC and regional disparities in Lithuanian regions are evident. Therefore, RAC can be stated as a cause and consequence of the regional development.

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